

Appendix

Table e-1. Sensitivity analyses for HIV dementia, HIV-CAUSAL Collaboration, 1998-2013.

Model	Adjusted Hazard Ratio* for CPE score							
	Low	95 % CI	Medium	95% CI	High	95% CI		
Primary analysis	1.00	(reference)	1.01	(0.73, 1.39)	1.74	(1.15, 2.65)		
Ritonavir-boosted nelfinavir CPE rank 2 and unboosted darunavir CPE rank 3	1.00	(reference)	1.01	(0.74, 1.38)	1.74	(1.15, 2.65)		
Ritonavir-boosted nelfinavir CPE rank 1 and unboosted darunavir CPE rank 3	1.00	(reference)	1.01	(0.74, 1.38)	1.74	(1.15, 2.65)		
Ritonavir-boosted nelfinavir CPE rank 2 and un-boosted darunavir CPE rank 2	1.00	(reference)	1.01	(0.74, 1.38)	1.74	(1.15, 2.65)		
Restricted to VACS and adjusted for the VACS Index	1.00	(reference)	1.04	(0.64, 1.68)	1.59	(0.82, 3.06)		
Excluding VACS	1.00	(reference)	1.06	(0.69, 1.65)	2.15	(1.24, 3.73)		
Additionally weighted by the inverse probability of remaining alive	1.00	(reference)	1.03	(0.73, 1.45)	1.91	(1.18, 3.09)		
Restricting to those initiating therapy prior to 2008	1.00	(reference)	1.07	(0.77, 1.47)	1.77	(1.16, 2.70)		
	< 6	95 % CI	6-7	95 % CI	8-9	95 % CI	> 9	95 % CI
CPE score as a 4 category variable	1.00	(reference)	0.80	(0.51, 1.27)	0.84	(0.52, 1.37)	1.45	(0.84, 2.53)

CI, confidence interval.

Confidence intervals were obtained using robust variance estimates and are conservative.

* All hazard ratios adjusted for cohort, month of follow-up, baseline CD4 cell count, baseline HIV RNA level, sex, acquisition group, calendar year, age, geographic origin, race, years since HIV infection, and type of drug regimen, as well as time-varying CD4 cell count, RNA level, time since last measurement, and AIDS. Stabilized inverse probability weights were used to account for censoring due to infrequent follow-up.

Table e-2 HIV dementia hazard ratios when first year of follow-up excluded, HIV-CAUSAL Collaboration, 1998-2013.

CPE Score	Person-Years	No. of Events	Unadjusted		Adjusted	
			Hazard Ratio	95% CI	Hazard Ratio *	95% CI
Low	140,944	75	1.00	(reference)	1.00	(reference)
Medium	86,787	38	0.75	(0.51, 1.11)	0.83	(0.54, 1.27)
High	32,092	22	1.37	(0.85, 2.21)	1.60	(0.94, 2.75)

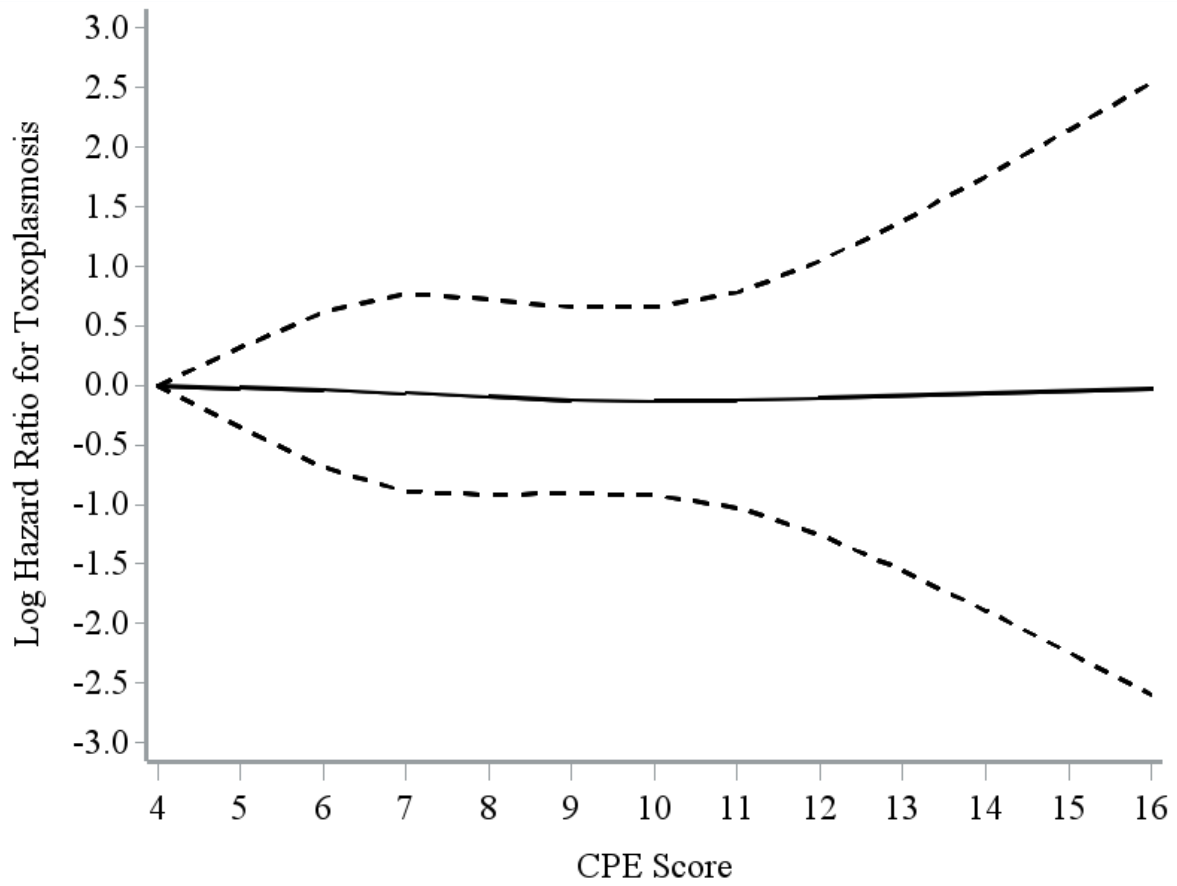
CI, confidence interval.

Confidence intervals were obtained using robust variance estimates and are conservative.

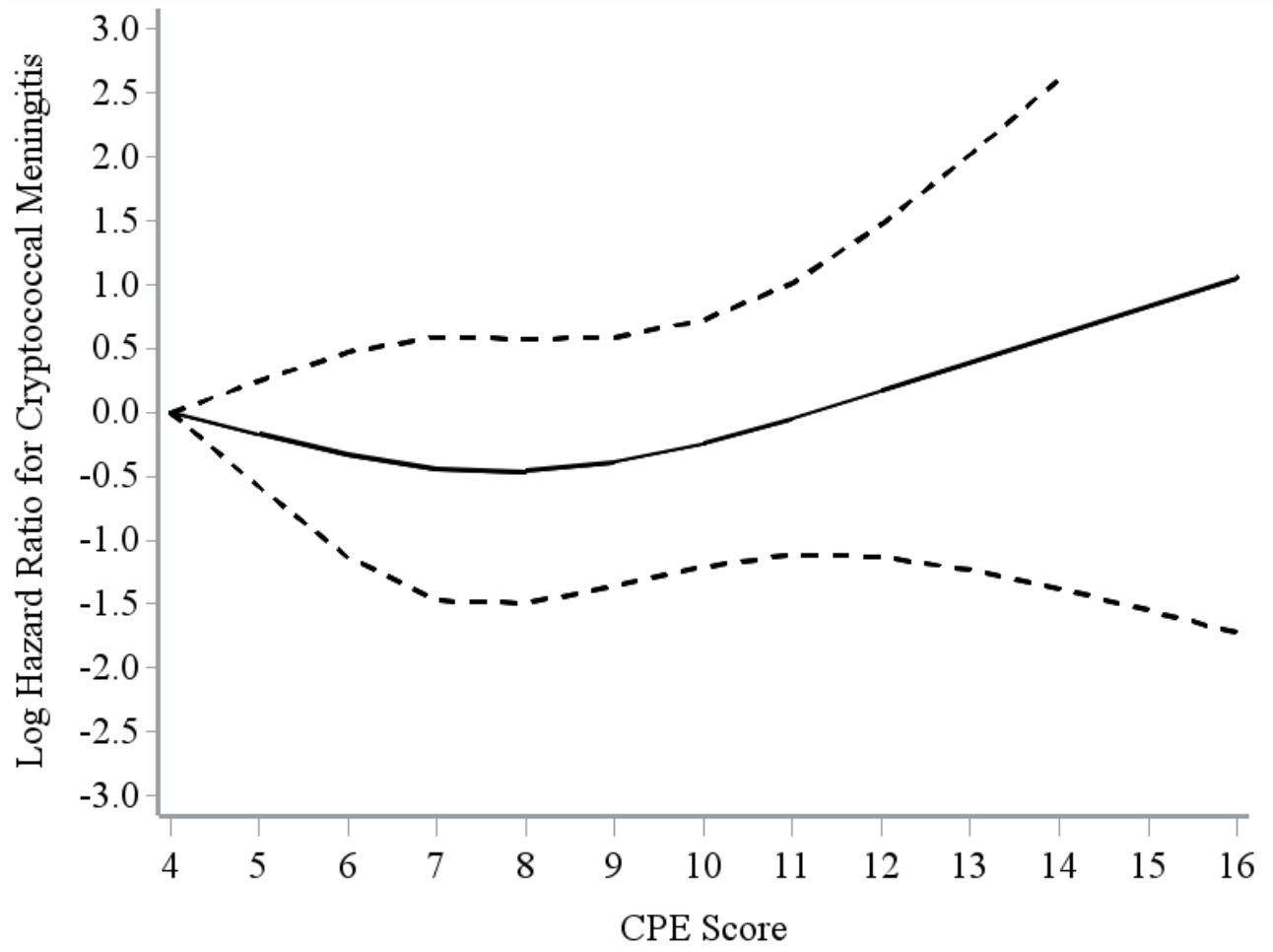
* Adjusted for cohort, month of follow-up, baseline CD4 cell count, baseline HIV RNA level, sex, acquisition group, calendar year, age, geographic origin, race, years since HIV infection, and type of drug regimen, as well as time-varying CD4 cell count, RNA level, time since last measurement, and AIDS. Stabilized inverse probability weights were used to account for censoring due to infrequent follow-up.

Figure e-1. Estimated Log Hazard Ratios and 95% Confidence Intervals

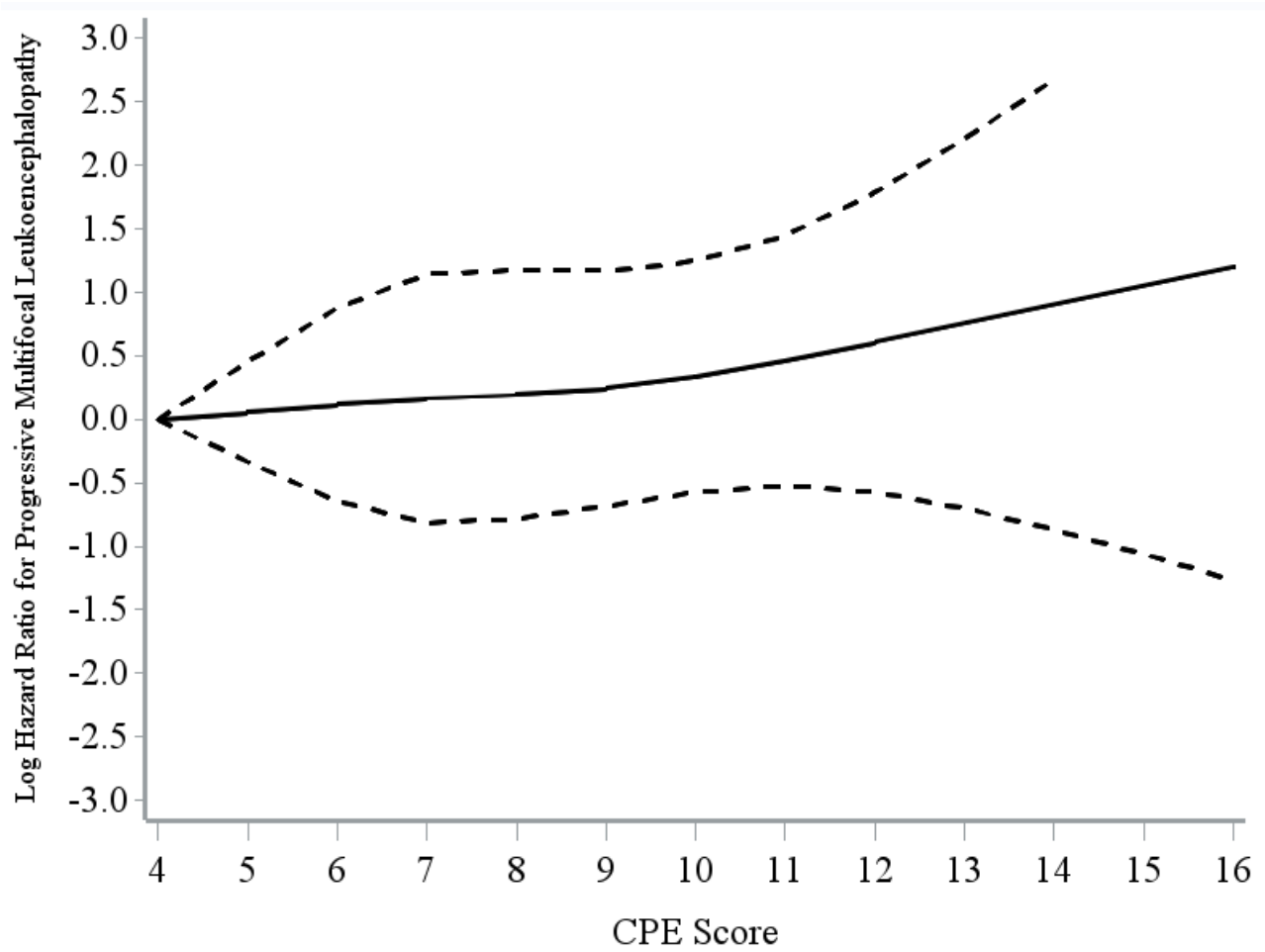
A



B



C



Estimated Log Hazard Ratios and 95% Confidence Intervals for Toxoplasmosis (A), cryptococcal meningitis (B), and progressive multifocal leukoencephalopathy (C) comparing each CPE score to a CPE score of four (lowest), HIV-CAUSAL Collaboration 1998-2013.