

**Supplementary Table 1.** Vitamin D Concentrations and Relative Odds of Crohn's Disease at Each Time Point Using Original Cohort (N = 390 Cases and 390 Matched Controls)

	Serum Pre-2 OR (95% CI) <sup>a</sup>	Serum Pre-1 OR (95% CI) <sup>a</sup>	Serum Pre-0 OR (95% CI) <sup>a</sup>
Predefined thresholds			
Deficiency ( $\leq 20$ ng/mL)	1.0	1.0	1.0
Insufficiency (21–29 ng/mL)	0.83 (0.48–1.43)	0.93 (0.56–1.55)	0.62 (0.38–1.03)
Sufficiency ( $\geq 30$ ng/mL)	0.95 (0.57–1.58)	1.02 (0.62–1.68)	0.62 (0.38–1.00)
P trend	.96	.80	.10
Equal tertile distribution			
5.84–27.57 ng/mL	1.0	1.0	1.0
27.58–35.60 ng/mL	0.86 (0.59–1.27)	1.05 (0.72–1.54)	0.84 (0.58–1.23)
35.61–71.96 ng/mL	1.17 (0.75–1.83)	0.93 (0.61–1.40)	0.62 (0.41–0.93)
P trend	.46	.72	.02
Equal quintile distribution			
5.84–23.25 ng/mL	1.0	1.0	1.0
23.26–29.09 ng/mL	0.79 (0.47–1.31)	1.23 (0.77–1.96)	0.66 (0.42–1.05)
29.10–34.10 ng/mL	0.89 (0.54–1.48)	1.41 (0.86–2.32)	0.96 (0.59–1.57)
34.11–39.19 ng/mL	0.87 (0.51–1.48)	0.85 (0.51–1.42)	0.58 (0.35–0.98)
39.20–71.96 ng/mL	1.29 (0.71–2.32)	1.46 (0.84–2.52)	0.59 (0.35–1.01)
P trend	.42	.52	.06

CI, confidence interval; OR, adjusted conditional odds ratio.

<sup>a</sup>Cases and controls were matched by age, sex, race, service branch, and geography at the index time. Models were also adjusted for rank, highest degree achieved, smoking, deployment history, and quarter of serum collection.

**Supplementary Table 2.** Vitamin D Concentrations and Relative Odds of Crohn's Disease Using Redefined Pre-0 Samples (Only After Time of Diagnosis)

	Serum Pre-0 OR (95% CI) <sup>a</sup>
Predefined thresholds	
Deficiency ( $\leq 20$ ng/mL)	1.0
Insufficiency (21–29 ng/mL)	0.91 (0.44–1.89)
Sufficiency ( $\geq 30$ ng/mL)	0.46 (0.22–0.94)
P trend	.01
Equal tertile distribution	
5.84–27.57 ng/mL	1.0
27.58–35.60 ng/mL	0.54 (0.30–0.95)
35.61–71.96 ng/mL	0.48 (0.26–0.89)
P trend	.02
Equal quintile distribution	
5.84–23.25 ng/mL	1.0
23.26–29.09 ng/mL	0.91 (0.46–1.78)
29.10–34.10 ng/mL	0.54 (0.27–1.10)
34.11–39.19 ng/mL	0.35 (0.16–0.75)
39.20–71.96 ng/mL	0.59 (0.26–1.32)
P trend	.03

CI, confidence interval; OR, adjusted conditional odds ratio.

<sup>a</sup>Cases and controls were matched by age, sex, race, service branch, and geography at the index time. Models were also adjusted for rank, highest degree achieved, smoking, deployment history, and quarter of serum collection.