**Supplementary Table. Associations between vitamin D biomarkers and colorectal cancer risk by time since blood draw, African American participants of the Southern Community Cohort Study.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Time between blood draw and cancer diagnosis** | | | | | | |
|  | **≤2 years** | | |  | **>2 years** | | |
| **Biomarker** | **Cases** | **OR a (95%CI)** | **P-trend** |  | **Cases** | **OR a (95%CI)** | **P-trend** |
| 25(OH)D, ng/ml |  |  |  |  |  |  |  |
| Tertile 1: ≤10.49 | 17 | 1 (Ref) |  |  | 54 | 1 (Ref) |  |
| Tertile 2: 10.50-16.08 | 16 | 0.93 (0.42-2.03) |  |  | 31 | 0.54 (0.31-0.95) |  |
| Tertile 3: >16.08 | 22 | 1.19 (0.56-2.52) |  |  | 35 | 0.60 (0.35-1.03) |  |
| Per standard deviation increase |  | 0.91 (0.66-1.26) | 0.58 |  |  | 0.78 (0.60-1.00) | 0.05 |
| VDBP, ug/ml |  |  |  |  |  |  |  |
| Tertile 1: ≤280.20 | 19 | 1 (Ref) |  |  | 55 | 1 (Ref) |  |
| Tertile 2: 280.21-320.00 | 12 | 0.61 (0.28-1.34) |  |  | 57 | 1.09 (0.69-1.72) |  |
| Tertile 3: >320.00 | 26 | 1.48 (0.75-2.94) |  |  | 55 | 0.96 (0.60-1.52) |  |
| Per standard deviation increase |  | 1.34 (1.00-1.78) | 0.05 |  |  | 0.94 (0.78-1.15) | 0.57 |
| Free 25(OH)D c |  |  |  |  |  |  |  |
| Tertile 1: ≤5.02 | 14 | 1 (Ref) |  |  | 46 | 1 (Ref) |  |
| Tertile 2: 5.03-7.77 | 17 | 1.12 (0.50-2.48) |  |  | 40 | 0.77 (0.45-1.32) |  |
| Tertile 3: >7.77 | 24 | 1.54 (0.70-3.37) |  |  | 34 | 0.62 (0.35-1.10) |  |
| Per standard deviation increase |  | 0.89 (0.65-1.23) | 0.49 |  |  | 0.79 (0.61-1.02) | 0.07 |

Abbreviations: OR=odds ratio; CI=confidence interval; 25(OH)D=25-hydroxyvitamin D; VDBP=vitamin D binding protein; Ref=reference.

a Analyses result from conditional logistic regression models where cases and controls are matched on age, race, and sex.Analyses are adjusted for week of sample collection, body mass index, education, smoking, physical activity, alcohol intake, history of colorectal cancer screening, and family history of colorectal cancer.

b Free vitamin D biomarker is calculated as 25(OH)D:VDBP molar ratio (x103) and is a proxy for free 25-hydroxyvitamin D status.