**eTable 1.** Distribution of Exposure, by Race/Ethnicity

|  |  |  |  |
| --- | --- | --- | --- |
| **Race/Ethnicity** | **No History of Asthma** | **History of**  **Asthma** | **p-value** |
| Non-Hispanic Black | 37,193 (86.5%) | 5,810 (13.5%) | <.0001 |
| Non-Hispanic White | 15,645 (83.4%) | 3,117 (16.6%) |  |
| Other | 1,881 (79.4%) | 489 (20.6%) |  |
| **Race/Ethnicity** | **No History of Allergies** | **History of Allergies** |  |
| Non-Hispanic Black | 34,025 (79.1%) | 8,982 (20.9%) | <.0001 |
| Non-Hispanic White | 12,825 (68.3%) | 5,942 (31.7%) |  |
| Other | 1,538 (64.8%) | 834 (35.2%) |  |

eTable 2. Combined asthma and allergy in relation to cancer risk.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exposure | Cohort  N (%) | Case  N (%) | Minimally-Adjusteda  HR (95% CI) | Multivariable-Adjustedb  HR (95% CI) |
| **Overall Cancerc** | | | | |
| Neither Allergies nor Asthma | 43,192 (67%) | 2,503 (70%) | 1.0 (Ref) | 1.0 (Ref) |
| Asthma Only | 5,146 (8%) | 293 (8%) | 1.08 (0.95,1.22) | 1.02 (0.9,1.15) |
| Allergies Only | 11,474 (18%) | 587 (16%) | 0.92 (0.84,1.00) | 0.95 (0.86,1.04) |
| Both Allergies and Asthma | 4,260 (7%) | 215 (6%) | 1.01 (0.88,1.16) | 1.00 (0.87,1.15) |
| **Lung Cancerd** | | | | |
| Neither Allergies nor Asthma | 39,059 (67%) | 404 (70%) | 1.0 (Ref) | 1.0 (Ref) |
| Asthma Only | 4,612 (8%) | 67 (12%) | 1.52 (1.17,1.97) | 1.31 (1.00,1.71) |
| Allergies Only | 10,482 (18%) | 75 (13%) | 0.73 (0.57,0.93) | 0.79 (0.62,1.02) |
| Both Allergies and Asthma | 3,826 (7%) | 34 (6%) | 0.98 (0.69,1.40) | 0.98 (0.68,1.40) |
| **Breast Cancere,f** | | | | |
| Neither Allergies nor Asthma | 21,860 (61%) | 308 (61%) | 1.0 (Ref) | 1.0 (Ref) |
| Asthma Only | 3,120 (9%) | 37 (7%) | 0.90 (0.64,1.27) | 0.88 (0.63,1.24) |
| Allergies Only | 7,830 (22%) | 123 (25%) | 1.11 (0.90,1.37) | 1.08 (0.87,1.33) |
| Both Allergies and Asthma | 3,096 (9%) | 33 (7%) | 0.83 (0.58,1.19) | 0.79 (0.55,1.13) |
| **Prostate Cancerg,h** | | | | |
| Neither Allergies nor Asthma | 17,661 (77%) | 359 (78%) | 1.0 (Ref) | 1.0 (Ref) |
| Asthma Only | 1,549 (7%) | 34 (7%) | 1.22 (0.85,1.73) | 1.21 (0.85,1.73) |
| Allergies Only | 2,851 (12%) | 58 (13%) | 1.01 (0.76,1.34) | 0.95 (0.72,1.26) |
| Both Allergies and Asthma | 820 (4%) | 11 (2%) | 0.79 (0.44,1.45) | 0.76 (0.42,1.39) |

a Adjusted for age (time axis of analysis), sex, race/ethnicity (non-Hispanic black, non-Hispanic white, other),

and enrollment source (community health center vs general population)

b Adjustment variables depend on the outcome of interest

c Analyses of overall cancer adjusted for factors listed in footnote a above, as well as household income (<15,000,

15,000-<25,000, 25,000-<50,000, 50,000+), insurance status (uninsured vs insured), time since last seen a

doctor (<3 months, 3-<12 months, 12 months+), BMI (<25, 25-<30, 30-<35, 35+), history of smoking (never

smoker, tertiles of pack-years smoked among former smokers, and tertiles of pack-years smoked among

current smokers), alcohol intake (non- drinker, and categories of g/day: 0.1-<5, 5-<15, 15-<30, 30-<45, 45+);

moderate/vigorous physical activity (sex-specific quartiles of MET-hours/week); post-menopausal hormone

use (pre-menopausal; post menopausal and never use; post-menopausal and ever use); family history of any

cancer (none, any)

d Analyses of lung cancer adjusted for factors listed in footnote c above, except for family history of any cancer.

Instead, we adjusted for family history of lung cancer (none, any) as well as history of chronic obstructive

pulmonary disease (COPD)

e Analyses of breast cancer limited to women

f Analyses of breast cancer adjusted for factors listed in footnote c above, except for sex and family history of any

cancer. Instead, we adjusted for family history of breast cancer (none, any) as well as history of mammogram

(never, not recent: >2 years, recent: ≤2 years ago).

g Analyses of prostate cancer limited to men

h Analyses of prostate cancer adjusted for factors listed in footnote c above, except for sex and family history of

any cancer. Instead, we adjusted for family history of prostate cancer (none, any) as well as prostate specific

antigen screening (never, not recent: >2 years ago, recent: ≤2 years ago) and history of digital rectal exam

(never, not recent: >2 years ago, recent: ≤2 years ago).