

Table S1. Sensitivity Analysis: Excluding data with unknown alcohol use history.

| Risk factors | panNEN Cases (n=674) | Cancer-free Controls (n=1666) | Fully-adjusted OR (95% CI) ^a |
|--|----------------------------|----------------------------------|--|
| | N (%) | N (%) | |
| Race | | | |
| White | 659 (98) | 1626 (98) | (ref) |
| Other | 15 (2) | 40 (2) | 0.84 (0.44-1.53) |
| BMI, kg/m² | | | |
| ≤24.9 | 168 (25) | 508 (31) | (ref) |
| 25-29.9 | 272 (40) | 694 (42) | 1.12 (0.89-1.42) |
| ≥30 | 234 (35) | 464 (28) | 1.18 (0.92-1.53) |
| Continuous (mean ±SD) | 28.9 ± 5.6 | 28.0 ± 5.7 | 1.01 (0.99-1.02) |
| Family history of pancreatic cancer^b | | | |
| No | 635 (94) | 1600 (96) | (ref) |
| Yes | 39 (6) | 66 (4) | 1.46 (0.96-2.21) |
| Smoking history | | | |
| Never | 400 (59) | 990 (59) | (ref) |
| Former | 238 (35) | 601 (36) | 1.01 (0.83-1.23) |
| Current | 36 (5) | 75 (5) | 1.16 (0.75-1.75) |
| Pack-years of smoking | | | |
| Never smokers | 435 (65) | 1069 (64) | (ref) |
| < 10 | 95 (14) | 231 (14) | 1.11 (0.84-1.45) |
| 10-19 | 46 (7) | 121 (7) | 1.00 (0.69-1.43) |
| ≥20 | 98 (14) | 245 (15) | 0.98 (0.74-1.28) |
| Pack-years of smoking within smoking category | | | |
| Never | 435 (65) | 1069 (64) | (ref) |
| Former | | | |
| < 10 | 91 (14) | 227 (14) | 1.09 (0.83-1.43) |
| 10-19 | 43 (6) | 111 (7) | 1.03 (0.70-1.49) |
| ≥20 | 81 (12) | 206 (12) | 0.95 (0.71-1.28) |
| Current | | | |
| < 10 | 4 (0.6) | 4 (0.2) | 2.05 (0.47-8.98) |
| 10-19 | 3 (0.4) | 10 (0.6) | 0.70 (0.15-2.38) |
| ≥20 | 17 (3) | 39 (2) | 1.10 (0.60-1.95) |
| History of T2DM | | | |
| No | 506 (75) | 1435 (86) | (ref) |
| Yes | 168 (25) | 231 (14) | 1.95 (1.53-2.47) |
| Duration of T2DM^c | | | |
| No T2DM | 506(75) | 1435 (86) | (ref) |
| ≤ 1 year | 83 (12) | 59 (4) | 3.71 (2.58-5.36) |
| 1-4 years | 22 (3) | 42 (3) | 1.40 (0.81-2.38) |
| 5+ years | 63 (9) | 130 (8) | 1.31 (0.94-1.82) |

Table S1. (Continued)

| Risk factors | panNEN Cases (n=674) | Cancer-free Controls (n=1666) | Fully Adjusted OR (95% CI) ^a |
|---|-------------------------|----------------------------------|--|
| | <i>N</i> (%) | <i>N</i> (%) | |
| Number of aspirin pills taken regularly | | | |
| Non-users/< 1 per month | 443 (66) | 1055 (63) | (ref) |
| 1-2 per day | 190 (28) | 502 (30) | 0.97 (0.78-1.19) |
| ≥ 3 per day | 41 (6) | 109 (7) | 1.01 (0.68-1.47) |
| Ever alcohol use | | | |
| No | 173 (26) | 247 (15) | (ref) |
| Yes | 501 (74) | 1419 (85) | 0.53 (0.42-0.66) |
| Alcoholic drinks per day | | | |
| Non-users | 173 (26) | 247 (15) | (ref) |
| < 1 | 349 (52) | 984 (59) | 0.52 (0.41-0.65) |
| 1-2 | 103 (15) | 236 (14) | 0.68 (0.50-0.93) |
| ≥3 | 49 (7) | 199 (12) | 0.39 (0.26-0.56) |

^aAdjusting for matching factors: Age (continuous), sex, regions of residence (Midwest, other), race (white, other), BMI (continuous), family history of pancreas cancer (yes, no), smoking status (never, former, current), type II diabetes mellitus (yes, no), and alcohol use (yes, no). We did not adjust for any of the BMI variables in models examining associations for BMI. Similarly, we did not adjust for any of the diabetes variables in models examining associations for diabetes; same with alcohol, smoking, and aspirin use.

^bFamily history of pancreatic cancer (either pancreatic ductal adenocarcinoma or pancreatic neuroendocrine neoplasm)

^cDuration of T2DM prior to the diagnosis of pancreatic neuroendocrine neoplasm for cases or prior to recruitment for controls.

Abbreviations: BMI, body mass index; CI, confidence interval; T2DM, type II diabetes mellitus; OR, odds ratio; panNEN, pancreatic neuroendocrine neoplasm