**TABLE S1** Baseline characteristics of SEARCH 2002-2005 incident type 1 diabetes cases by quartiles of trans palmitoleic acid1

|  |  |  |  |
| --- | --- | --- | --- |
| Characteristic | All (n) | Mean (SD) or n (%) for all participants | According to Quartiles of Trans Palmitoleic Acid |
| 1st0.01-0.0357% | 2nd0.0358-0.0698% | 3rd0.0699-0.1089% | 4th≥0.1090% |
| Age  | 826 | 10.98 ± 3.96 | 10.83 ± 4.08 | 10.78 ± 3.99 | 11.43 ± 4.02 | 10.88 ± 3.74 |
| Gender, n (% female) | 826 | 408 (49.4%) | 95 (46.1%) | 104 (50.2%) | 102 (49.3%) | 107 (51.9%) |
| Race/ ethnicity, n (%) | 826 |  |  |  |  |  |
| Non-Hispanic, black |  | 74 (9%) | 21 (10.2%) | 19 (9.2%) | 16 (7.7%) | 18 (8.7%) |
| Non-Hispanic, white |  | 653 (79.1%) | 153 (74.3%) | 159 (76.8%) | 172 (83.1%) | 169 (82%) |
| Other |  | 99 (12%) | 32 (15.5%) | 29 (14%) | 19 (9.2%) | 19 (9.2%) |
| Maximum parental education, (n, %) | 822 |  |  |  |  |  |
| Less than high school |  | 37 (4.5%) | 13 (6.4%) | 8 (3.9%) | 8 (3.9%) | 8 (3.9%) |
| High school  |  | 112 (13.6%) | 30 (14.9%) | 22 (10.6%) | 38 (18.4%) | 22 (10.7%) |
| Associate’s degree/some college |  | 276 (33.6%) | 66 (32.7%) | 73 (35.3%) | 64 (30.9%) | 73 (35.4%) |
| Bachelor’s degree or more |  | 397 (48.3%) | 93 (46%) | 104 (50.2%) | 97 (46.9%) | 103 (50%) |
| Duration of diabetes, months\*  | 826 | 10.27 ± 6.39 | 11.19 ± 5.9 | 9.78 ± 6.57 | 10.65 ± 6.77 | 9.48 ± 6.17 |
| Insulin Dose (units/kg) | 800 | 0.66 ± 0.33 | 0.68 ± 0.35 | 0.65 ± 0.33 | 0.64 ± 0.31 | 0.67 ± 0.33 |
| Insulin Regimen, n (%)\*\* | 819 |  |  |  |  |  |
| Insulin Pump  |  | 80 (9.8%) | 17 (8.4%) | 30 (14.6%) | 24 (11.7%) | 9 (4.4%) |
| Basal/Bolus-MDI  |  | 278 (33.9%) | 81 (40.1%) | 80 (38.8%) | 71 (34.5%) | 46 (22.4%) |
| Other  |  | 461 (56.3%) | 104 (51.5%) | 96 (46.6%) | 111 (53.9%) | 150 (73.2%) |
| HLA Risk group (% high/moderate) | 792 | 390 (49.2%) | 95 (49%) | 90 (45.7%) | 99 (49.5%) | 106 (52.7%) |
| IS score | 804 | 2.31 ± 0.35 | 2.32 ± 0.38 | 2.32 ± 0.36 | 2.31 ± 0.33 | 2.31 ± 0.34 |
| Triglycerides, mg/dL  | 826 | 62.3 ± 32.38 | 58.47 ± 29.09 | 65.86 ± 33.87 | 63.22 ± 32.88 | 61.64 ± 33.25 |
| LDL-cholesterol, mg/dL \* | 826 | 95.1 ± 25.64 | 90.53 ± 26.48 | 97.99 ± 23.56 | 94.69 ± 22.42 | 97.17 ± 29.13 |
| HDL-cholesterol , mg/dL  | 826 | 54.37 ± 12.51 | 53.02 ± 11.82 | 54.28 ± 12.2 | 53.97 ± 12.58 | 56.23 ± 13.27 |
| Total cholesterol, mg/dL\*\* | 826 | 161.94 ± 31.09 | 155.25 ± 31.98 | 165.45 ± 28.9 | 161.28 ± 28.49 | 165.76 ± 33.75 |
| HbA1c, %  | 825 | 7.81 ± 1.55 | 8.02 ± 1.78 | 7.74 ± 1.61 | 7.65 ± 1.34 | 7.83 ± 1.41 |
| BMI z-score  | 811 | 0.51 ± 0.96 | 0.47 ± 1.03 | 0.5 ± 0.93 | 0.51 ± 0.9 | 0.57 ± 0.96 |
| Waist Circumference, cm  | 804 | 70.18 ± 13.63 | 69.41 ± 14.49 | 70.19 ± 13.64 | 70.95 ± 13.03 | 70.19 ± 13.35 |
| SBP, mmHg  | 802 | 99.96 ± 11.48 | 99.86 ± 11.41 | 99.21 ± 12.24 | 101.39 ± 11.16 | 99.35 ± 11.05 |
| DBP, mmHg\* | 802 | 62.08 ± 10.25 | 60.55 ± 11.44 | 61.59 ± 10.02 | 62.78 ± 9.79 | 63.42 ± 9.49 |

1 Values are means ± SD unless otherwise indicated.

\**P* < .05, \*\**P* < .01