

**Supplementary Table 3.** Comparison of characteristics according to quartiles of weighted GRS and sex

| Characteristic                                       | Quartiles of GRS in male |                    |                    |                   |         | Quartiles of GRS in female |                    |                       |                    |         |
|--|--------------------------|--------------------|--------------------|-------------------|---------|----------------------------|--------------------|-----------------------|--------------------|---------|
|  | Q1                       | Q2                 | Q3                 | Q4                | P value | Q1                         | Q2                 | Q3                    | Q4                 | P value |
| Age, yr  | 55.2±9.4                 | 53.1±7.7           | 53.6±7.2           | 53.1±8.8          | 0.524   | 57.8±7.2                   | 60.0±9.3           | 58.0±8.4              | 57.4±8.7           | 0.450   |
| Rural region   | 23 (43.4)                | 20 (37.0)          | 18 (39.1)          | 26 (44.8)         | 0.828   | 25 (54.3)                  | 29 (63.0)          | 35 (67.3)             | 26 (63.4)          | 0.610   |
| Educational level                                    |                          |                    |                    |                   | 0.396   |                            |                    |                       |                    | 0.828   |
| Less than middle-school graduate                     | 20 (37.7)                | 14 (25.9)          | 17 (37.0)          | 24 (41.4)         |         | 35 (76.1)                  | 36 (78.3)          | 37 (72.5)             | 31 (75.6)          |         |
| Graduated high school                                | 19 (35.8)                | 25 (46.3)          | 17 (37.0)          | 26 (44.8)         |         | 9 (19.6)                   | 10 (21.7)          | 13 (25.5)             | 8 (19.5)           |         |
| Some college or higher                               | 14 (26.4)                | 15 (27.8)          | 12 (26.1)          | 8 (13.8)          |         | 2 (4.3)                    | 0                  | 1 (2.0)               | 2 (4.9)            |         |
| BMI, kg/m <sup>2</sup>                               | 26.2±3.3                 | 25.9±3.2           | 25.6±2.0           | 24.7±3.1          | 0.049   | 26.1±3.2                   | 25.7±3.3           | 26.4±3.1              | 26.1±3.4           | 0.803   |
| BMI ≥25.0 kg/m <sup>2</sup>                          | 36 (67.9)                | 30 (55.6)          | 27 (58.7)          | 26 (44.8)         | 0.105   | 30 (65.2)                  | 26 (56.5)          | 35 (68.6)             | 22 (53.7)          | 0.406   |
| TG, mg/dL  | 173.0<br>(114–257)       | 182.5<br>(142–262) | 146.0<br>(113–217) | 177.0<br>(97–267) | 0.610   | 155.0<br>(109–195)         | 133.0<br>(105–184) | 120.0<br>(86.5–177.5) | 147.0<br>(116–213) | 0.141   |
| TG ≥150 mg/dL  | 31 (58.5)                | 37 (68.5)          | 21 (46.7)          | 35 (60.3)         | 0.179   | 23 (50.0)                  | 17 (37.0)          | 17 (32.7)             | 20 (48.8)          | 0.230   |
| HDL-C, mg/dL   | 40.0±8.9                 | 39.8±7.0           | 40.0±12.3          | 40.4±8.9          | 0.988   | 43.7±9.8                   | 42.9±10.5          | 45.5±9.5              | 42.4±10.0          | 0.438   |
| Low HDL-C (<40 mg/dL for male, <50 mg/dL for female) | 29 (54.7)                | 31 (57.4)          | 26 (56.5)          | 27 (46.6)         | 0.647   | 34 (73.9)                  | 31 (67.4)          | 40 (76.9)             | 33 (80.5)          | 0.538   |
| Lipidemia diagnosed by a physician                   | 8 (15.1)                 | 6 (11.1)           | 10 (21.7)          | 5 (8.6)           | 0.245   | 5 (10.9)                   | 10 (21.7)          | 6 (11.5)              | 5 (12.2)           | 0.388   |
| SBP, mm Hg   | 121.6±15.6               | 122.1±13.0         | 118.8±14.1         | 121.0±16.1        | 0.714   | 120.7±15.7                 | 125.1±15.5         | 120.5±15.1            | 117.9±12.8         | 0.150   |
| DBP, mm Hg   | 79.9±9.3                 | 82.6±9.3           | 81.1±9.1           | 79.1±8.5          | 0.214   | 77.3±10.1                  | 78.3±8.5           | 78.5±8.7              | 77.2±8.2           | 0.850   |
| SBP/DBP ≥130/85 mm Hg                                | 21 (39.6)                | 22 (40.7)          | 20 (43.5)          | 22 (37.9)         | 0.952   | 19 (41.3)                  | 19 (41.3)          | 19 (36.5)             | 11 (26.8)          | 0.465   |
| HTN diagnosed by a physician                         | 18 (34.0)                | 21 (38.9)          | 20 (43.5)          | 21 (36.2)         | 0.789   | 24 (52.2)                  | 28 (60.9)          | 20 (38.5)             | 20 (48.8)          | 0.168   |
| Current smoking                                      | 21 (39.6)                | 22 (40.7)          | 16 (34.8)          | 21 (36.2)         | 0.916   | 2 (4.3)                    | 0                  | 2 (3.8)               | 1 (2.4)            | 0.687   |
| Alcohol intake, g/day                                |                          |                    |                    |                   | 0.983   |                            |                    |                       |                    | 0.967   |
| Nondrinker   | 18 (34.0)                | 15 (28.3)          | 12 (26.1)          | 15 (25.9)         |         | 31 (67.4)                  | 33 (71.7)          | 40 (76.9)             | 28 (68.3)          |         |
| <15  | 14 (26.4)                | 16 (30.2)          | 11 (23.9)          | 17 (29.3)         |         | 14 (30.4)                  | 12 (26.1)          | 11 (21.2)             | 12 (29.3)          |         |
| 15–24  | 6 (11.3)                 | 7 (13.2)           | 6 (13.0)           | 9 (15.5)          |         | 0                          | 0                  | 0                     | 0                  |         |
| ≥25  | 15 (28.3)                | 15 (28.3)          | 17 (37.0)          | 17 (29.3)         |         | 1 (2.2)                    | 1 (2.2)            | 1 (1.9)               | 1 (2.4)            |         |
| Unweighted GRS                                       | 6.9±1.2                  | 8.9±1.1            | 10.6±1.1           | 12.9±1.4          | <0.001  | 6.5±1.6                    | 8.9±1.1            | 10.8±1.2              | 13.4±1.9           | <0.001  |
| Weighted GRS   | 6.1±1.0                  | 8.5±0.6            | 10.2±0.5           | 12.8±1.2          | <0.001  | 5.7±1.3                    | 8.5±0.6            | 10.4±0.6              | 13.3±1.6           | <0.001  |

Values are presented as mean ± standard deviation, number (%), or median (interquartile range).

GRS, genetic risk score; BMI, body mass index; TG, triglyceride; HDL-C, high-density lipoprotein cholesterol; SBP, systolic blood pressure; DBP, diastolic blood pressure; HTN, hypertension.