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Table SI. Demographic characteristics of the study population (N = 53 373) as stratified by psoriasis

| | Psoriasis (N= 3 535) | No psoriasis (N= 49 838) |
|--|-------------------------|-----------------------------|
| Sex (N=53 373) | | |
| Female, n (%) | 1 904 (53.9) | 27 125 (54.4) |
| Male, n (%) | 1 631 (46.1) | 22 713 (45.6) |
| Age, years (SD) (N = 53 373) | | |
| | 57.3 (15.7) | 53.7 (17.6) |
| Smoking (N= 53 137) | | |
| Current daily, n (%) | 465 (13.2) | 3 933 (7.9) |
| No current daily, n (%) | 3 056 (86.8) | 45 683 (92.1) |
| Education (N= 53 024) | | |
| <10 years, n (%) | 408 (11.6) | 5 396 (10.9) |
| 10-12 years, n (%) | 1 809 (51.5) | 24 292 (49.1) |
| >12 years, n (%) | 1 296 (36.9) | 19 823 (40.4) |
| HLA-C*06:02-positive, n (%)* | | |
| | 248 (26.6) | 1818 (11.7) |
| Psoriasis duration, years (SD) (N = 3 054) | | |
| | 26.7 (17.6) | NA |
| Current use of antihypertensive drugs, n (%) (N = 50 508) | | |
| | 999 (30.0) | 10 943 (23.2) |
| Current use of cholesterol-lowering drugs, n (%) (N = 50 123) | | |
| | 749 (22.6) | 7 556 (16.4) |

*16 434 individuals were genotyped for rs4406273. Of these, 931 had psoriasis and 15 503 did not have psoriasis.

Abbreviations: SD, standard deviation; HLA, human leukocyte antigen.

Table SII. Demographic characteristics of the study population with psoriasis (N = 901)* as stratified by *HLA-C*06:02* status

| | <i>HLA-C*06:02</i> positive (N = 237) | <i>HLA-C*06:02</i> negative (N = 664) |
|---|--|--|
| Sex (N= 901) | | |
| Female, n (%) | 129 (54.4) | 347 (52.3) |
| Male, n (%) | 108 (45.5) | 317 (47.7) |
| Age, years (SD) (N= 901) | 44.6 (15.6) | 45.7 (16.6) |
| Smoking (N= 899) | | |
| Current daily, n (%) | 23 (9.7) | 99 (15.0) |
| No current daily, n (%) | 214 (90.3) | 563 (85.1) |
| Education (N= 894) | | |
| <10 years, n (%) | 16 (6.80) | 59 (8.8) |
| 10-12 years, n (%) | 112 (48.6) | 345 (51.9) |
| >12 years, n (%) | 102 (44.6) | 261 (39.2) |
| Psoriasis duration, years (SD) (N = 803) | 23.1 (14.6) | 19.9 (14.4) |
| Current use of antihypertensive drugs, n (%) (N = 844) | 36 (16.0) | 107 (17.3) |
| Current use of cholesterol-lowering drugs, n (%) (N = 842) | 23 (10.3) | 77 (12.5) |

*Individuals with psoriasis which were genotyped for rs4406273, excluding individuals of non-European descent and related individuals.

Abbreviations: SD, standard deviation; HLA, human leukocyte antigen.

Table SIII. Body composition parameters and cardiometabolic risk factors of the study population (N=53 373) as stratified by psoriasis

| | Psoriasis (N= 3 535) | No psoriasis (N= 49 838) |
|---|--------------------------------|------------------------------------|
| Body composition parameters* | | |
| Percent body fat, % (95% CI) | 33.3 (33.0, 33.6) | 31.5 (31.4, 31.6) |
| Visceral fat area, cm ² (95% CI) | 138.4 (136.4, 140.3) | 125.4 (125.0, 125.9) |
| Percent skeletal muscle mass, % (95% CI) | 36.8 (36.6, 37.0) | 37.8 (37.8, 37.9) |
| Percent soft lean mass, % (95% CI) | 62.9 (62.6, 63.2) | 64.5 (64.4, 64.6) |
| Percent fat free mass, % (95% CI) | 66.7 (66.4, 67.0) | 68.5 (68.4, 68.6) |
| Cardiometabolic risk factors† | | |
| Body mass index, kg/m ² (95% CI) | 28.3 (28.1, 28.4) | 27.3 (27.2, 27.3) |
| Waist circumference, cm (95% CI) | 100.6 (100.1, 101.1) | 97.4 (97.3, 97.5) |
| Systolic blood pressure, mmHg (95% CI) | 132.0 (131.4, 132.6) | 131.1 (131.0, 131.3) |
| Diastolic blood pressure, mmHg (95% CI) | 74.1 (73.8, 74.4) | 74.0 (73.9, 74.1) |
| Total cholesterol, mmol/L (95% CI) | 5.4 (5.3, 5.4) | 5.3 (5.3, 5.3) |
| HDL cholesterol, mmol/L (95% CI) | 1.4 (1.4, 1.4) | 1.4 (1.4, 1.4) |
| Triglycerides, mmol/L (95% CI) | 1.8 (1.8, 1.8) | 1.7 (1.6, 1.7) |
| HbA1c, mmol/mol (95% CI) | 36.4 (36.1, 36.7) | 35.3 (35.2, 35.3) |
| hsCRP, mg/L (95% CI) | 3.1 (2.9, 3.3) | 2.7 (2.7, 2.8) |

*N = Range: 49 033-49 035.

†N = Range: 50 217-51 885.

All variables are standardized for age and reported as means (95% CI).

Abbreviations: kg, kilograms; cm, centimeter; HDL cholesterol, high-density lipoprotein cholesterol; HbA1c, glycated hemoglobin; hsCRP, high-sensitivity C-reactive protein.

Table SIV. Body composition parameters and cardiometabolic risk factors of the study population with psoriasis (N = 901)‡ as stratified by *HLA-C*06:02* status

| | <i>HLA-C*06:02</i> positive (N = 237) | <i>HLA-C*06:02</i> negative (N = 664) |
|---|--|--|
| Body composition parameters* | | |
| Percent body fat, % (95% CI) | 31.9 (30.6, 33.1) | 32.5 (31.7, 33.2) |
| Visceral fat area, cm ² (95% CI) | 132.0 (124.0, 139.9) | 137.1 (132.4, 141.8) |
| Percent skeletal muscle mass, % (95% CI) | 37.9 (37.1, 38.6) | 37.5 (37.1, 37.9) |
| Percent soft lean mass, % (95% CI) | 64.2 (62.9, 64.3) | 63.6 (62.9, 64.3) |
| Percent fat free mass, % (95% CI) | 68.1 (66.9, 69.4) | 67.5 (66.8, 68.3) |
| Cardiometabolic risk factors† | | |
| Body mass index, kg/m ² (95% CI) | 27.9 (27.3, 28.5) | 28.5 (28.1, 28.9) |
| Waist circumference, cm (95% CI) | 100.1 (98.1, 102.1) | 102.0 (100.7, 103.2) |
| Systolic blood pressure, mmHg (95% CI) | 127.3 (125.0, 129.7) | 127.1 (125.8, 128.4) |
| Diastolic blood pressure, mmHg (95% CI) | 74.6 (73.1, 76.0) | 73.5 (72.8, 74.3) |
| Total cholesterol, mmol/L (95% CI) | 5.2 (5.0, 5.4) | 5.3 (5.2, 5.4) |
| HDL cholesterol, mmol/L (95% CI) | 1.3 (1.3, 1.4) | 1.3 (1.3, 1.4) |
| Triglycerides, mmol/L (95% CI) | 1.8 (1.6, 2.0) | 1.9 (1.8, 2.0) |
| HbA1c, mmol/mol (95% CI) | 34.1 (33.3, 34.8) | 34.6 (34.0, 35.1) |
| hsCRP, mg/L (95% CI) | 2.6 (2.2, 3.0) | 3.3 (2.9, 3.7) |

‡ Individuals with psoriasis which were genotyped for rs4406273, excluding individuals of non-European descent and related individuals.

*N = 860.

†N = Range: 875-899.

All variables are standardized for age and reported as means (95% CI).

Abbreviations: kg, kilograms; cm, centimeter; HDL cholesterol, high-density lipoprotein cholesterol; HbA1c, glycated hemoglobin; hsCRP, high-sensitivity C-reactive protein.

Table SV. Prevalence ratio (PR) for comorbidities of the study population (N = 53 373) as stratified by psoriasis

| | Psoriasis (N= 3535) | No psoriasis (N= 49 838) | Adjusted PR (95% CI)^a | Fully adjusted PR (95% CI)^b |
|--|--------------------------------------|---|---|---|
| Cardiovascular | | | | |
| Myocardial infarction, n (%) | 202 (6.0) | 1664 (3.3) | 1.54 (1.35, 1.76) | 1.44 (1.26, 1.66) |
| Angina pectoris, n (%) | 155 (4.6) | 1308 (2.7) | 1.55 (1.33, 1.82) | 1.53 (1.30, 1.80) |
| Heart failure, n (%) | 90 (2.7) | 762 (1.5) | 1.56 (1.27, 1.93) | 1.54 (1.24, 1.92) |
| Atrial fibrillation, n (%) | 259 (7.8) | 2430 (4.9) | 1.41 (1.25, 1.59) | 1.35 (1.19, 1.52) |
| Apoplexia, n (%) | 185 (5.5) | 1506 (3.1) | 1.63 (1.41, 1.88) | 1.56 (1.34, 1.81) |
| Respiratory | | | | |
| Asthma, n (%) | 552 (16.4) | 5612 (11.3) | 1.51 (1.40, 1.64) | 1.45 (1.34, 1.58) |
| Chronic obstructive pulmonary disease, n (%) | 175 (5.2) | 1227 (2.5) | 1.89 (1.63, 2.20) | 1.72 (1.47, 2.01) |
| Endocrine | | | | |
| Diabetes, n (%) | 336 (9.6) | 2699 (5.4) | 1.61 (1.45, 1.79) | 1.49 (1.31, 1.69) |
| Hypothyroidism, n (%) | 293 (8.8) | 3072 (6.3) | 1.32 (1.18, 1.47) | 1.27 (1.14, 1.43) |
| Hyperthyroidism, n (%) | 98 (3.0) | 886 (1.8) | 1.58 (1.29, 1.94) | 1.54 (1.25, 1.90) |
| Other | | | | |
| Migraine, n (%) | 707 (21.0) | 7622 (15.4) | 1.41 (1.31, 1.50) | 1.39 (1.30, 1.49) |
| Renal disease (non-UTI), n (%) | 188 (5.6) | 1584 (3.2) | 1.63 (1.41, 1.89) | 1.53 (1.31, 1.78) |
| Gout, n (%) | 246 (7.3) | 1778 (3.6) | 1.83 (1.61, 2.07) | 1.63 (1.44, 1.85) |

¢ Individuals with psoriasis which were genotyped for rs4406273, excluding individuals of non-European descent and related individuals.

N = Range: 52 243-53 243.

^a Adjusted for age and sex.

^b Adjusted for age, sex, BMI, education, and smoking status.

Abbreviations: CI, confidence interval; UTI, urinary tract infection; BMI, body mass index.

Table SVI. Prevalence ratio (PR) for comorbidities of the study population with psoriasis (N = 901)¢ as stratified by *HLA-C*06:02* status

| | <i>HLA-C*06:02</i> | <i>HLA-C*06:02</i> | Adjusted PR (95%CI)^a |
|--|--------------------|--------------------|--|
| | positive | negative | |
| | (N = 237) | (N = 664) | |
| Cardiovascular | | | |
| Myocardial infarction, n (%) | 6 (2.7) | 18 (2.8) | 1.09 (0.37, 3.19) |
| Angina pectoris, n (%) | 11 (4.9) | 19 (3.0) | 1.39 (0.59, 3.27) |
| Heart failure, n (%) | 3 (1.3) | 6 (0.9) | 2.06 (0.15, 28.55) |
| Atrial fibrillation, n (%) | 18 (8.0) | 26 (4.1) | 3.69 (1.85, 7.35) |
| Apoplexia, n (%) | 7 (3.1) | 21 (3.3) | 0.84 (0.28, 2.54) |
| Respiratory | | | |
| Asthma, n (%) | 31 (13.8) | 116 (18.2) | 0.80 (0.53, 1.21) |
| Chronic obstructive pulmonary disease, n (%) | 7 (3.1) | 18 (2.8) | 1.23 (0.33, 4.51) |
| Endocrine | | | |
| Diabetes, n (%) | 11 (4.8) | 41 (6.2) | 0.75 (0.34, 1.67) |
| Hypothyroidism, n (%) | 12 (5.4) | 41 (6.5) | 0.94 (0.48, 1.87) |
| Hyperthyroidism, n (%) | 5 (2.3) | 12 (1.9) | 1.24 (0.39, 3.99) |
| Other | | | |
| Migraine, n (%) | 50 (22.3) | 179 (28.1) | 0.73 (0.54, 0.98) |
| Renal disease (non-UTI), n (%) | 6 (2.7) | 27 (4.2) | 0.42 (0.13, 1.42) |
| Gout, n (%) | 10 (4.5) | 40 (6.3) | 1.17 (0.57, 2.40) |

¢ Individuals with psoriasis which were genotyped for rs4406273, excluding individuals of non-European descent and related individuals.

N = Range: 754-784.

^a Adjusted for age, sex, BMI, smoking status, psoriasis disease duration and cryptic population structure by four principal components (PCs)

Abbreviations: CI, confidence interval; UTI, urinary tract infection; BMI, body mass index.