Supplementary

**Table S1.** Logistic regression analysis for the association between the rs9896052 polymorphism and PDR in the overall group of patients with T2DM.

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| **Variable.** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| CC genotype \* | 1.18 (0.86−1.62) | 0.90 (0.58−1.39) |
| Male gender | 2.37 (1.77−3.18) | 1.60 (1.08−2.36) |
| T2DM duration (years) | 1.08 (1.06−1.10) | 1.05 (1.03−1.08) |
| Daily insulin use (yes/no) | 2.81 (2.08−3.80) | 2.02 (1.35−3.02) |
| Body mass index (kg/m²) | 0.92 (0.89−0.95) | 0.95 (0.91−0.98) |
| eGFR (mL/min/1.73m²) | 0.97 (0.97−0.98) | 0.97 (0.97−0.98) |
| Active smoking (yes/no) | 0.50 (0.30−0.82) | 0.84 (0.40−1.77) \*\* |
| Age at T2DM diagnosis (years) | 0.98 (0.97−1.00) | 1.02 (0.99−1.05) \*\*\* |
| Systolic blood pressure (mmHg) | 1.01 (1.00−1.01) | 1.01 (1.00−1.02) \*\*\*\* |
| Non-white skin color | 0.96 (0.68−1.35) | 1.63 (0.86−3.09) \*\*\*\*\* |
| Glycated hemoglobin (%) | 0.91 (0.84−0.99) | 0.93 (0.82−1.04) \*\*\*\*\*\* |

Abbreviations: PDR⎯proliferative diabetic retinopathy; T2DM⎯type 2 diabetes mellitus; OR⎯odds ratio; CI⎯confidence interval; eGFR⎯estimated glomerular filtration rate. \* versus AC + AA genotypes; \*\* removed on step 2; \*\*\* removed on step 3; \*\*\*\* removed on step 4; \*\*\*\*\* removed on step 5; \*\*\*\*\*\* removed on step 6.

**Supplementary Table S2.** Clinical, laboratory, and demographic characteristics of patients with T2DM according to the rs9896052 genotypes.

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| **Variable** | **AA (*n* = 188)** | **AC (*n* = 415)** | **CC (*n* = 235)** | ***p* Value** |
| Age (years) | 58.9 ± 9.6 | 60.0 ± 9.3 | 60.9 ± 9.6 | 0.103 |
| Male gender | 79 (42.0%) | 181 (43.6%) | 115 (48.9%) | 0.294 |
| White | 111 (59.0%)a | 336 (81.0%)b | 204 (86.8%)b | <0.001 |
| Age at T2DM diagnosis (years) | 46.2 ± 9.3 | 46.7 ± 9.3 | 47.6 ± 9.6 | 0.227 |
| T2DM duration (years) | 12.7 ± 7.4 | 13.3 ± 8.0 | 13.3 ± 8.4 | 0.817 |
| Glycated hemoglobin (%) | 8.0 ± 2.2a | 7.6 ± 2.2a,b | 7.3 ± 1.9b | 0.024 |
| Daily insulin use | 47.3% | 46.3% | 46.8% | 0.976 |
| Body mass index (kg/m2) | 29.8 ± 5.6 | 29.7 ± 5.9 | 30.0 ± 6.3 | 0.828 |
| Smoking |  |  |  | 0.389 |
|  Never smoker | 51.6% | 55.2% | 53.1% |  |
|  Former smoker | 31.7% | 33.8% | 35.1% |  |
|  Active smoker | 16.7% | 10.9% | 11.8% |  |
| Hypertension | 78.0% | 74.9% | 75.0% | 0.715 |
| Systolic BP (mmHg) | 141.6 ± 22.2 | 141.8 ± 23.1 | 141.9 ± 24.4 | 0.990 |
| Diastolic BP (mmHg) | 83.9 ± 11.1 | 84.3 ± 13.6 | 84.0 ± 14.7 | 0.598 |
| eGFR (mL/min/1.73m²) | 94 (64−111)a | 91 (62−105)a,b  | 87 (55−101)b | 0.045 |
| Diabetic kidney disease | 61.2% | 56.8% | 64.3% | 0.238 |
| Total cholesterol (mmol/L) | 5.08 ± 1.44 | 5.18 ± 1.21 | 5.00 ± 1.28 | 0.267 |
| HDL cholesterol (mmol/L) | 1.09 (0.87−1.34) | 1.09 (0.88−1.34)  | 1.10 (0.93−1.29) | 0.987 |
| LDL cholesterol (mmol/L) | 2.78 (2.19−3.92) | 2.97 (2.35−3.88)  | 2.88 (2.12−3.78) | 0.387 |
| Triglycerides (mmol/L) | 1.84 (1.17−3.01) | 1.76 (1.33−2.63)  | 1.78 (1.28−2.69) | 0.888 |

Abbreviations: T2DM⎯type 2 diabetes mellitus; BP⎯blood pressure; eGFR⎯estimated glomerular filtration rate. Data are expressed as mean ± standard deviation, median (25th−75th percentiles), number of individuals (percentage), or percentage. The superscript letters indicate whether the means, medians, or percentages showed statistically significant differences between groups after the correction for multiple pairwise comparisons. Means, medians, or percentages indicated with the same superscript letter did not differ significantly (*p* > 0.05), while the means, medians, or percentages indicated with different superscript letters were significantly different (*p* < 0.05).

**Supplementary Table S3.** Logistic regression analysis for the association between the rs9896052 polymorphism and PDR in white patients with T2DM.

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| **Variable** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| CC genotype \* | 1.34 (0.95−1.90) | 1.06 (0.67−1.66) |
| Male gender | 2.39 (1.71−3.33) | 1.83 (1.20−2.79) |
| T2DM duration (years) | 1.08 (1.06−1.10) | 1.04 (1.02−1.07) |
| Daily insulin use (yes/no) | 3.14 (2.22−4.42) | 2.38 (1.55−3.65) |
| eGFR (mL/min/1.73m²) | 0.97 (0.96−0.98) | 0.98 (0.97−0.98) |
| Age at T2DM diagnosis (years) | 0.98 (0.96−1.00) | 1.02 (0.99−1.05) \*\* |
| Glycated hemoglobin (%) | 0.90 (0.82−1.00) | 0.90 (0.79−1.03) \*\*\* |
| Body mass index (kg/m²) | 0.93 (0.90−0.96) | 0.96 (0.92−1.01) \*\*\*\* |

Abbreviations: PDR⎯proliferative diabetic retinopathy; T2DM⎯type 2 diabetes mellitus; OR⎯odds ratio; CI⎯confidence interval; eGFR⎯estimated glomerular filtration rate. \* versus AC + AA genotypes; \*\* removed on step 2; \*\*\* removed on step 3; \*\*\*\* removed on step 4.

**Supplementary Table S4.** Logistic regression analysis for the association between the rs9896052 polymorphism and PDR in non-white patients with T2DM.

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| **Variable** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| CC genotype \* | 0.54 (0.22−1.32) | 1.07 (0.37−3.13) |
| T2DM duration (years) | 1.08 (1.04−1.14) | 1.05 (1.00−1.11) |
| Body mass index (kg/m²) | 0.90 (0.84−0.95) | 0.92 (0.86−0.99) |
| eGFR (mL/min/1.73m²) | 0.97 (0.96−0.98) | 0.98 (0.97−0.99) |
| Age (years) | 1.04 (1.00−1.07) | 1.01 (0.95−1.07) \*\* |
| Daily insulin use (yes/no) | 2.00 (1.06−3.78) | 1.11 (0.42−2.91) \*\*\* |
| Male gender | 2.35 (1.26−4.40) | 1.21 (0.46−3.18) \*\*\*\* |
| Having a mother with diabetes (yes/no) | 2.02 (1.03−3.96) | 1.97 (0.79−4.95) \*\*\*\*\* |
| Active or former smoking (yes/no) | 0.45 (0.23−0.87) | 0.60 (0.27−1.34) \*\*\*\*\*\* |

Abbreviations: PDR⎯proliferative diabetic retinopathy; T2DM⎯type 2 diabetes mellitus; OR⎯odds ratio; CI⎯confidence interval; eGFR⎯estimated glomerular filtration rate. \* versus AC + AA genotypes; \*\* removed on step 2; \*\*\* removed on step 3; \*\*\*\* removed on step 4; \*\*\*\*\* removed on step 5; \*\*\*\*\*\* removed on step 6.

**Supplementary Table S5.** Logistic regression analysis for the association between the rs9896052 polymorphism and PDR in those with a long duration of T2DM (≥ 10 years).

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| **Variable** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| CC genotype \* | 1.00 (0.68−1.47) | 0.73 (0.42−1.25) |
| T2DM duration (years) | 1.09 (1.06−1.12) | 1.06 (1.02−1.10) |
| Daily insulin use (yes/no) | 3.12 (2.17−4.49) | 2.55 (1.58−4.13) |
| Body mass index (kg/m²) | 0.95 (0.92−0.98) | 0.96 (0.91−1.00) |
| eGFR (mL/min/1.73m²) | 0.97 (0.96−0.98) | 0.97 (0.96−0.98) |
| Age at T2DM diagnosis (years) | 0.98 (0.96−1.00) | 1.00 (0.97−1.03) \*\* |
| Active smoking (yes/no) | 0.53 (0.30−0.95) | 0.96 (0.43−2.14) \*\*\* |
| Hypertension (yes/no) | 1.65 (1.03−2.63) | 0.79 (0.42−1.47) \*\*\*\* |
| Male gender | 1.97 (1.40−2.78) | 1.38 (0.86−2.20) \*\*\*\*\* |
| Non-white skin color  | 1.01 (0.67−1.51) | 1.67 (0.94−2.95) \*\*\*\*\*\* |

Abbreviations: PDR⎯proliferative diabetic retinopathy; T2DM⎯type 2 diabetes mellitus; OR⎯odds ratio; CI⎯confidence interval; eGFR⎯estimated glomerular filtration rate. \* versus AC + AA genotypes; \*\* removed on step 2; \*\*\* removed on step 3; \*\*\*\* removed on step 4; \*\*\*\*\* removed on step 5; \*\*\*\*\*\* removed on step 6.

**Supplementary Table S6.** Clinical, laboratory, and demographic characteristics of patients with T2DM according to the known duration of diabetes.

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| **Variable** | **< 10 years (*n* = 281)** | **≥ 10 years (*n* = 557)** | ***p* Value** |
| Age (years) | 55.9 ± 9.9 | 62.0 ± 8.6 | <0.001 |
| Male gender | 115 (40.9%) | 260 (46.7%) | 0.132 |
| White | 218 (77.6%) | 433 (77.7%) | >0.999 |
| Age at T2DM diagnosis (years) | 50.8 ± 9.7 | 44.8 ± 8.5 | <0.001 |
| T2DM duration (years) | 5.1 ± 2.4 | 17.2 ± 6.6 | <0.001 |
| Glycated hemoglobin (%) | 7.5 ± 2.2 | 7.6 ± 2.1 | 0.259 |
| Daily insulin use | 33.7% | 53.0% | <0.001 |
| Body mass index (kg/m2) | 31.2 ± 6.6 | 29.1 ± 5.4 | <0.001 |
| Smoking |  |  | 0.413 |
|  Never smoker | 51.4% | 55.0% |  |
|  Former smoker | 34.1% | 33.5% |  |
|  Active smoker | 14.5% | 11.5% |  |
| Hypertension | 66.7% | 80.2% | <0.001 |
| Systolic blood pressure (mmHg) | 138.2 ± 23.2 | 143.6 ± 23.1 | <0.001 |
| Diastolic blood pressure (mmHg) | 84.5 ± 13.2 | 84.0 ± 13.5 | 0.840 |
| eGFR (mL/min/1.73m²) | 98 (73−111)  | 85 (54−102) | <0.001 |
| Diabetic kidney disease | 65.5% | 57.4% | 0.063 |
| Total cholesterol (mmol/L) | 5.17 ± 1.28 | 5.07 ± 1.29 | 0.147 |
| HDL cholesterol (mmol/L) | 1.03 (0.85−1.27)  | 1.11 (0.93−1.34) | 0.001 |
| LDL cholesterol (mmol/L) | 3.10 (2.26−3.94)  | 2.87 (2.28−3.80) | 0.324 |
| Triglycerides (mmol/L) | 1.98 (1.40−3.01)  | 1.72 (1.21−2.45) | 0.001 |
| Proliferative diabetic retinopathy | 60 (21.4%) | 224 (40.2%) | <0.001 |

Abbreviations: T2DM⎯type 2 diabetes mellitus; eGFR⎯estimated glomerular filtration rate. Data are expressed as mean ± standard deviation, median (25th−75th percentiles), number of individuals (percentage), or percentage.