

**Electronic supplementary material**

**ESM Table 4** Genotype distributions of type 2 diabetes-associated SNPs in type 1 diabetes cases and control samples

| Gene region               | SNP        | Allele and genotype frequency, <i>n</i> (%) |                | OR (95% CI) <sup>a</sup> | <i>p</i> value   | Call rate (%) <sup>b</sup> |
|---------------------------|------------|---|----------------|--------------------------|------------------|----------------------------|
|                           |            | Cases                                       | Controls       |                          |                  |                            |
| <i>TCF7L2</i>             | rs7903146  | C   | 8,397 (71.21)  | 10,384 (70.91)           | 0.99 (0.94–1.05) | 0.744                      |
|                           |            | T   | 3,395 (28.79)  | 4,260 (29.09)            |                  |                            |
|                           |            | C/C   | 2,986 (50.64)  | 3,695 (50.46)            | 1.01 (0.93–1.08) | 0.780                      |
|                           |            | C/T   | 2,425 (41.13)  | 2,994 (40.89)            |                  |                            |
|                           |            | T/T   | 485 (8.23)     | 633 (8.65)               | 0.96 (0.84–1.09) | 0.780                      |
|                           |            |   |                |                          |                  |                            |
|                           | rs12255372 | G   | 11,131 (71.57) | 12,569 (71.04)           | 0.97 (0.92–1.02) | 0.235                      |
|                           |            | T   | 4,421 (28.43)  | 5,125 (28.96)            |                  |                            |
|                           |            | G/G   | 3,973 (51.09)  | 4,450 (50.30)            |                  |                            |
|                           |            | G/T   | 3,185 (40.96)  | 3,669 (41.47)            |                  |                            |
| T/T                       |            | 618 (7.95)                                  | 728 (8.23)     |                          |                  |                            |
| <i>CDKN2A–<br/>CDKN2B</i> | rs10811661 | T   | 12,514 (81.96) | 11,798 (82.53)           | 1.03 (0.97–1.09) | 0.354                      |
|                           |            | C   | 2,754 (18.04)  | 2,498 (17.47)            |                  |                            |
|                           |            | T/T   | 5,135 (67.26)  | 4,857 (67.95)            | 1.01 (0.94–1.09) | 0.486                      |
|                           |            | T/C   | 2,244 (29.39)  | 2,084 (29.16)            |                  |                            |
|                           |            | C/C   | 255 (3.34)     | 207 (2.90)               | 1.12 (0.93–1.36) | 0.486                      |
|                           |            |   |                |                          |                  |                            |
| <i>FTO</i>                | rs9939609  | T   | 9,212 (60.17)  | 8,720 (60.71)            | 1.03 (0.98–1.08) | 0.252                      |
|                           |            | A   | 6,098 (39.83)  | 5,644 (39.29)            |                  |                            |
|                           |            | T/T   | 2,766 (36.13)  | 2,641 (36.77)            | 1.03 (0.96–1.10) | 0.518                      |
|                           |            | T/A   | 3,680 (48.07)  | 3,438 (47.87)            |                  |                            |
|                           |            | A/A   | 1,209 (15.79)  | 1,103 (15.36)            | 1.06 (0.96–1.17) | 0.518                      |
|                           |            |   |                |                          |                  |                            |
| <i>KCNJ11</i>             | rs5219     | C   | 10,344 (64.18) | 13,401 (64.39)           | 1.02 (0.97–1.06) | 0.501                      |
|                           |            | T   | 5,772 (35.82)  | 7,411 (35.61)            |                  |                            |
|                           |            | C/C   | 3,332 (41.35)  | 4,313 (41.45)            | 1.01 (0.95–1.08) | 0.784                      |
|                           |            | C/T   | 3,680 (45.67)  | 4,775 (45.89)            |                  |                            |
|                           |            | T/T   | 1,046 (12.98)  | 1,318 (12.67)            | 1.03 (0.94–1.14) | 0.784                      |
|                           |            |   |                |                          |                  |                            |
| <i>HHEX–IDE</i>           | rs1111875  | G   | 9,567 (60.03)  | 11,308 (58.44)           | 0.94 (0.90–0.98) | 0.003                      |
|                           |            | A   | 6,369 (39.97)  | 8,042 (41.56)            |                  |                            |
|                           |            | G/G   | 2,862 (35.92)  | 3,295 (34.06)            | 0.94 (0.88–1.01) | 0.011                      |
|                           |            | G/A   | 3,843 (48.23)  | 4,718 (48.76)            |                  |                            |
|                           |            | A/A   | 1,263 (15.85)  | 1,662 (17.18)            | 0.87 (0.80–0.96) | 0.011                      |
|                           |            |   |                |                          |                  |                            |
| <i>IGF2BP2</i>            | rs4402960  | G   | 10,353 (68.53) | 9,656 (67.99)            | 0.98 (0.93–1.03) | 0.457                      |
|                           |            | T   | 4,755 (31.47)  | 4,546 (32.01)            |                  |                            |
|                           |            | G/G   | 3,551 (47.01)  | 3,273 (46.09)            | 0.97 (0.90–1.03) | 0.607                      |
|                           |            | G/T   | 3,251 (43.04)  | 3,110 (43.80)            |                  |                            |
|                           |            | T/T   | 752 (9.95)     | 718 (10.11)              | 0.98 (0.87–1.10) | 0.607                      |
|                           |            |   |                |                          |                  |                            |

| Gene region    | SNP           | Allele and genotype frequency, <i>n</i> (%) |                  | OR (95% CI) <sup>a</sup> | <i>p</i> value | Call rate (%) <sup>b</sup> |
|----------------|---------------|---|------------------|--------------------------|----------------|----------------------------|
|                |               | Cases                                       | Controls         |                          |                |                            |
| <i>CDKALI</i>  | rs7756992     |   |                  |                          |                | 97.42                      |
|                | A             | 11,243 (72.87)                              | 10,507 (72.97)   |                          |                |                            |
|                | G             | 4,185 (27.13)                               | 3,893 (27.03)    | 1.00 (0.95–1.05)         | 0.957          |                            |
|                | A/A           | 4,129 (53.53)                               | 3,864 (53.67)    |                          |                |                            |
|                | A/G           | 2,985 (38.70)                               | 2,779 (38.60)    | 1.00 (0.93–1.07)         |                |                            |
|                | G/G           | 600 (7.78)                                  | 557 (7.74)       | 1.00 (0.88–1.14)         | 0.991          |                            |
| <i>SLC30A8</i> | rs13266634    |   |                  |                          |                | 97.40                      |
|                | C             | 10,481 (68.24)                              | 9,937 (69.01)    |                          |                |                            |
|                | T             | 4,879 (31.76)                               | 4,463 (30.99)    | 1.04 (0.99–1.09)         | 0.146          |                            |
|                | C/C           | 3,605 (46.94)                               | 3,445 (47.85)    |                          |                |                            |
|                | C/T           | 3,271 (42.59)                               | 3,047 (42.32)    | 1.03 (0.96–1.10)         |                |                            |
|                | T/T           | 804 (10.47)                                 | 708 (9.83)       | 1.09 (0.97–1.22)         | 0.314          |                            |
| <i>WFS1</i>    | rs10010131    |   |                  |                          |                | 96.18                      |
|                | G             | 9,317 (60.15)                               | 10,954 (59.15)   |                          |                |                            |
|                | A             | 6,173 (39.85)                               | 7,564 (40.85)    | 0.96 (0.92–1.00)         | 0.065          |                            |
|                | G/G           | 2,760 (35.64)                               | 3,247 (35.07)    |                          |                |                            |
|                | G/A           | 3,797 (49.03)                               | 4,460 (48.17)    | 1.00 (0.94–1.07)         |                |                            |
|                | A/A           | 1,188 (15.34)                               | 1,552 (16.76)    | 0.90 (0.82–0.99)         | 0.042          |                            |
| <i>HNF1B</i>   | rs7501939     |   |                  |                          |                | 97.75                      |
|                | C             | 9,175 (59.49)                               | 8,634 (59.82)    |                          |                |                            |
|                | T             | 6,249 (40.51)                               | 5,800 (40.18)    | 1.01 (0.97–1.06)         | 0.554          |                            |
|                | C/C           | 2,716 (35.22)                               | 2,566 (35.55)    |                          |                |                            |
|                | C/T           | 3,743 (48.53)                               | 3,502 (48.52)    | 1.01 (0.94–1.09)         |                |                            |
|                | T/T           | 1,253 (16.25)                               | 1,149 (15.92)    | 1.03 (0.93–1.14)         | 0.829          |                            |
| <i>PPARG</i>   | rs1801282     |   |                  |                          |                | 97.63                      |
|                | C             | 14,578 (88.58)                              | 16,380 (87.67)   |                          |                |                            |
|                | G             | 1,880 (11.42)                               | 2,304 (12.33)    | 0.91 (0.85–0.97)         | 0.004          |                            |
|                | C/C           | 6,455 (78.44)                               | 7,191 (76.97)    |                          |                |                            |
|                | C/G           | 1,668 (20.27)                               | 1,998 (21.39)    | 0.92 (0.85–0.99)         |                |                            |
|                | G/G           | 106 (1.29)                                  | 153 (1.64)       | 0.77 (0.60–1.00)         | 0.014          |                            |
| <i>THADA</i>   | rs7578597     |   |                  |                          |                | 96.74                      |
|                | T             | 13,604 (89.49)                              | 14,950 (89.04)   |                          |                |                            |
|                | C             | 1,598 (10.51)                               | 1,840 (10.96)    | 0.94 (0.88–1.01)         | 0.113          |                            |
|                | T/T           | 6,083 (80.03)                               | 6,666 (79.40)    |                          |                |                            |
|                | T/C           | 1,438 (18.92)                               | 1,618 (19.27)    | 0.96 (0.89–1.04)         |                |                            |
|                | C/C           | 80 (1.05)                                   | 111 (1.32)       | 0.77 (0.58–1.04)         | 0.164          |                            |
|                | rs17031005    |   |                  |                          |                | 96.87                      |
|                | A             | 13,031 (89.79)                              | 15,642 (89.28)   |                          |                |                            |
|                | G             | 1,481 (10.21)                               | 1,878 (10.72)    | 0.94 (0.87–1.01)         | 0.078          |                            |
|                | A/A           | 5,850 (80.62)                               | 6,995 (79.85)    |                          |                |                            |
| A/G            | 1,331 (18.34) | 1,652 (18.86)                               | 0.95 (0.88–1.03) |                          |                |                            |
|                | G/G           | 75 (1.03)                                   | 113 (1.29)       | 0.78 (0.58–1.05)         | 0.144          |                            |

<sup>a</sup>The ORs and 95% CIs are for the minor allele using the common allele as the reference allele

<sup>b</sup>The call rate refers to the percentage of samples that were successfully genotyped