

Table-5: Within sib-pair association estimates for quantitative traits related to type 2 diabetes (without adjustment for BMI).

^a SNP- (Minor Allele)	Gene	^c Fasting glucose ^b N=5056	^c Fasting insulin ^b N=5054	^{c, d} HOMA-IR ^b N=5053	^{c, e} HOMA-β ^b N=5053
rs1799854 (T)	<i>ABCC8</i>	-0.001 (-0.008 to 0.006, p=0.78)	-0.009 (-0.07 to 0.05, p=0.75)	-0.009 (-0.06 to 0.05, p=0.76)	-0.004 (-0.04 to 0.03, p=0.83)
rs2641348 (G)	<i>ADAM30</i>	0.0005 (-0.007 to 0.009, p=0.89)	-0.08 (-0.15 to -0.02, p=0.009)	-0.07 (-0.13 to -0.006, p=0.03)	-0.05 (-0.10 to -0.01, p=0.01)
rs10490072 (C)	<i>BCL11A</i>	0.001 (-0.01 to 0.012, p=0.86)	-0.04 (-0.13 to 0.05, p=0.41)	-0.04 (-0.13 to 0.05, p=0.39)	-0.03 (-0.09 to 0.03, p=0.38)
rs12779790 (G)	<i>CDC123,CA MK1D</i>	0.006 (-0.004 to 0.02, p=0.23)	0.02 (-0.05 to 0.10, p=0.53)	0.02 (-0.05 to 0.10, p=0.54)	0.005 (-0.05 to 0.06, p=0.85)
rs10811661 (C)	<i>CDKN2A/B</i>	-0.003 (-0.01 to 0.006, p=0.53)	-0.09 (-0.16 to -0.02, p=0.02)	-0.09 (-0.16 to -0.02, p=0.02)	-0.05 (-0.11 to -0.004, p=0.03)
rs10946398 (C)	<i>CDKAL1</i>	0.005 (-0.003 to 0.01, p=0.23)	0.02 (-0.04 to 0.08, p=0.55)	0.02 (-0.03 to 0.08, p=0.42)	0.003 (-0.04 to 0.04, p=0.89)
rs7754840 (C)	<i>CDKAL1</i>	0.005 (-0.003 to 0.01, p=0.23)	0.02 (-0.04 to 0.08, p=0.56)	0.02 (-0.03 to 0.08, p=0.40)	-0.02 (-0.04 to 0.04, p=0.91)
rs7756992 (G)	<i>CDKAL1</i>	0.009 (0.002 to 0.02, p=0.01)	-0.02 (-0.08 to 0.04, p=0.61)	-0.008 (-0.07 to 0.05, p=0.78)	-0.03 (-0.07 to 0.01, p=0.15)
rs932206 (T)	<i>CXCR4</i>	-0.008 (-0.02 to 0.001, p=0.08)	0.03 (-0.04 to 0.11, p=0.42)	0.01 (-0.06 to 0.08, p=0.77)	0.04 (-0.01 to 0.09, p=0.15)
rs1153188 (A)	<i>DCD</i>	-0.005 (-0.013 to 0.003, p=0.24)	-0.04 (-0.10 to 0.03, p=0.32)	-0.04 (-0.10 to 0.03, p=0.26)	-0.013 (-0.06 to 0.03, p=0.57)
rs17044137 (A)	<i>FLJ39370</i>	0.004 (-0.007 to 0.01, p=0.49)	-0.02 (-0.10 to 0.06, p=0.65)	-0.02 (-0.10 to 0.06, p=0.67)	-0.02 (-0.08 to 0.04, p=0.47)
rs9939609 (A)	<i>FTO</i>	-0.006 (-0.014 to 0.0008, p=0.08)	0.03 (-0.03 to 0.08, p=0.36)	0.03 (-0.03 to 0.08, p=0.36)	0.03 (-0.008 to 0.07, p=0.12)
rs2268573 (G)	<i>GCK</i>	0.004 (-0.002 to 0.01, p=0.21)	0.04 (-0.02 to 0.09, p=0.19)	0.03 (-0.02 to 0.08, p=0.27)	0.01 (-0.02 to 0.05, p=0.55)
rs1111875 (G)	<i>HHEX</i>	0.003 (-0.004 to 0.009, p=0.45)	-0.03 (-0.09 to 0.021, p=0.24)	-0.03 (-0.09 to 0.02, p=0.20)	-0.03 (-0.06 to 0.009, p=0.14)
rs5015480 (C)	<i>HHEX</i>	-0.003 (-0.01 to 0.003, p=0.34)	0.03 (-0.02 to 0.09, p=0.23)	0.03 (-0.02 to 0.09, p=0.19)	0.03 (-0.008 to 0.06, p=0.12)

rs7923837 (G)	<i>HHEX</i>	0.003 (-0.003 to 0.009, p=0.38)	-0.03 (-0.08 to 0.02, p=0.27)	-0.03 (-0.08 to 0.02, p=0.26)	-0.03 (-0.06 to 0.01, p=0.16)
rs2237892 (T)	<i>KCNQ1</i>	0.006 (-0.02 to 0.03, p=0.70)	-0.04 (-0.28 to 0.19, p=0.71)	-0.04 (-0.26 to 0.19, p=0.75)	-0.04 (-0.20 to 0.12, p=0.61)
rs2876711 (C)	<i>KCTD12</i>	0.001 (-0.006 to 0.009, p=0.75)	-0.02 (-0.08 to 0.04, p=0.52)	-0.01 (-0.07 to 0.04, p=0.61)	-0.01 (-0.05 to 0.02, p=0.45)
rs1256517 (C)	<i>LOC646279</i>	0.006 (-0.003 to 0.02, p=0.19)	-0.04 (-0.12 to 0.04, p=0.28)	-0.04 (-0.11 to 0.04, p=0.34)	-0.04 (-0.10 to 0.01, p=0.12)
rs10823406 (A)	<i>NGN3</i>	0.0004 (-0.007 to 0.008, p=0.91)	-0.004 (-0.07 to 0.06, p=0.89)	-0.008 (-0.07 to 0.05, p=0.78)	-0.004 (-0.05 to 0.04, p=0.86)
rs10923931 (T)	<i>NOTCH2</i>	-0.000 (-0.008 to 0.008, p=0.99)	-0.06 (-0.13 to 0.005, p=0.07)	-0.05 (-0.11 to 0.01, p=0.13)	-0.04 (-0.08 to 0.004, p=0.07)
rs1801282 (G)	<i>PPARG</i>	-0.004 (-0.02 to 0.006, p=0.37)	-0.005 (-0.09 to 0.08, p=0.91)	0.003 (-0.08 to 0.08, p=0.99)	0.01 (-0.05 to 0.07, p=0.70)
rs3856806 (T)	<i>PPARG</i>	-0.005 (-0.01 to 0.005, p=0.33)	0.03 (-0.04 to 0.10, p=0.45)	0.03 (-0.04 to 0.10, p=0.38)	0.03 (-0.02 to 0.08, p=0.21)
rs13266634 (T)	<i>SLC30A8</i>	-0.005 (-0.01 to 0.003, p=0.22)	-0.005 (-0.07 to 0.06, p=0.87)	-0.01 (-0.07 to 0.05, p=0.74)	0.007 (-0.04 to 0.05, p=0.77)
rs757210 (A)	<i>TCF2</i>	-0.001 (-0.008 to 0.006, p=0.77)	0.05 (-0.008 to 0.11, p=0.09)	0.05 (-0.004 to 0.11, p=0.07)	0.04 (-0.003 to 0.07, p=0.07)
rs12255372 (T)	<i>TCF7L2</i>	0.01 (0.003 to 0.02, p=0.003)	-0.006 (-0.07 to 0.06, p=0.85)	-0.006 (-0.07 to 0.05, p=0.84)	-0.03 (-0.07 to 0.01, p=0.19)
rs7903146 (T)	<i>TCF7L2</i>	$\beta=0.007$ (-0.0005 to 0.01, p=0.07)	$\beta=0.005$ (-0.05 to 0.06, p=0.86)	$\beta=0.002$ (-0.05 to 0.06, p=0.93)	$\beta=-0.01$ (-0.05 to 0.03, p=0.58)
rs7578597 (C)	<i>THADA</i>	-0.003 (-0.013 to 0.006, p=0.47)	-0.03 (-0.11 to 0.04, p=0.42)	-0.03 (-0.098 to 0.05, p=0.48)	-0.005 (-0.06 to 0.04, p=0.84)
rs7961581 (C)	<i>TSPAN8</i>	-0.0002 (-0.007 to 0.007, p=0.95)	-0.02 (-0.08 to 0.03, p=0.41)	-0.02 (-0.08 to 0.03, p=0.44)	-0.01 (-0.05 to 0.02, p=0.44)
rs9472138 (T)	<i>VEGFA</i>	-0.002 (-0.01 to 0.007, p=0.64)	-0.03 (-0.11 to 0.04, p=0.35)	-0.02 (-0.09 to 0.05, p=0.51)	-0.02 (-0.07 to 0.03, p=0.44)
rs10010131 (A)	<i>WFS1</i>	0.001 (-0.006 to 0.009, p=0.76)	0.01 (-0.05 to 0.07, p=0.68)	0.007 (-0.05 to 0.07, p=0.81)	0.004 (-0.04 to 0.04, p=0.86)

^a**SNP**: Single nucleotide polymorphisms; ^b**N**= number of individuals; ^cWithin sib-pairs association estimate model adjusted for three covariates (age, sex and location) and all values are represented as β (95% CIs), where, β : coefficient from the linear regression on log transformed Z scores; ^dHOMA-IR: homeostasis model assessment for insulin resistance; ^eHOMA- β : beta cell function; Corrected overall critical p-value using false discovery rate for each trait = **0.002**.