Supplementary Table 6: **Association to insulin secretion and insulin sensitivity.**
Association of the risk variants rs7756992 (G) and rs13266634 (C) to insulin secretion, estimated by corrected insulin response (CIR), and insulin sensitivity estimated the reciprocal of HOMA (homeostasis model assessment). The table includes number of controls (n) and T2D cases (m) used, the estimated effect, standard error and a P value for heterozygous and homozygous carriers, respectively, compared to non-carriers. The results are calculated by regressing the log-transformed trait values on indicator variables for heterozygous and homozygous carriers, respectively, including sex and age as explanatory variables. When controls and T2D cases are analysed together an indicator variable for the affection status is included in the analysis. Also included is a two degree of freedom P value from a F-test of the full model against the null model of no difference between the genotypes and, for the combined group only, a corresponding P value obtained by adjusting for BMI status of the individuals in the analysis.

| | Combined group | | | | | | Controls | | | | | T2D | | | | |
| | Heterozygous | | Homozygous | | | | Heterozygous | | Homozygous | | | Heterozygous | | Homozygous | | |
Analysis Group (n/m)	Effect (se)	P	Effect (se)	P	P^a	P^b	Effect (se)	P	Effect (se)	P	P^a	Effect (se)	P	Effect (se)	P	P^a
rs7756992																
All (3715/223)	-0.029 (0.024)	0.23	-0.239 (0.040)	3.5×10^{-9}	2.5×10^{-8}	6.1×10^{-8}	-0.029 (0.024)	0.22	-0.226 (0.041)	4.0×10^{-8}	2.8×10^{-7}	-0.034 (0.130)	0.79	-0.423 (0.200)	0.035	0.098
Males (1742/139)	0.023 (0.034)	0.5	-0.201 (0.056)	0.00036	0.00041	0.0012	0.018 (0.035)	0.59	-0.201 (0.057)	0.00044	0.00067	0.062 (0.169)	0.71	-0.209 (0.260)	0.42	0.53
Females (1973/84)	-0.076 (0.032)	0.019	-0.284 (0.058)	1.1×10^{-6}	3.3×10^{-6}	4.7×10^{-6}	-0.072 (0.033)	0.028	-0.255 (0.059)	0.000015	0.000043	-0.204 (0.204)	0.32	-0.779 (0.312)	0.015	0.049
rs13266634																
All (3698/228)	-0.087 (0.037)	0.019	-0.136 (0.037)	0.00022	0.0007	0.00077	-0.091 (0.037)	0.015	-0.134 (0.037)	0.00029	0.0011	-0.042 (0.192)	0.83	-0.178 (0.195)	0.36	0.5
Males (1736/143)	-0.116 (0.052)	0.027	-0.181 (0.052)	0.00047	0.0016	0.0013	-0.090 (0.053)	0.092	-0.147 (0.053)	0.0054	0.015	-0.331 (0.223)	0.14	-0.505 (0.226)	0.027	0.057
Females (1962/85)	-0.060 (0.052)	0.25	-0.090 (0.052)	0.085	0.21	0.24	-0.092 (0.052)	0.08	-0.119 (0.052)	0.022	0.072	0.880 (0.376)	0.022	0.811 (0.382)	0.037	0.069
rs7756992																
All (4430/1164)	-0.002 (0.018)	0.91	-0.042 (0.031)	0.18	0.39	0.49	0.013 (0.018)	0.48	-0.014 (0.032)	0.66	0.64	-0.060 (0.054)	0.26	-0.139 (0.084)	0.097	0.2
Males (2062/691)	0.030 (0.027)	0.26	-0.044 (0.045)	0.33	0.22	0.24	0.054 (0.027)	0.049	0.003 (0.046)	0.95	0.13	-0.043 (0.070)	0.53	-0.173 (0.110)	0.12	0.24
Females (2368/473)	-0.033 (0.024)	0.17	-0.041 (0.043)	0.34	0.31	0.46	-0.023 (0.024)	0.34	-0.028 (0.043)	0.51	0.57	-0.089 (0.086)	0.3	-0.095 (0.130)	0.46	0.53
rs13266634																
All (4411/1166)	-0.004 (0.029)	0.89	-0.024 (0.029)	0.4	0.47	0.27	0.004 (0.028)	0.88	-0.018 (0.028)	0.53	0.46	-0.037 (0.093)	0.69	-0.058 (0.092)	0.53	0.8
Males (2058/697)	0.014 (0.043)	0.73	0.003 (0.042)	0.95	0.89	0.83	0.018 (0.042)	0.68	-0.006 (0.042)	0.88	0.68	0.010 (0.118)	0.93	0.031 (0.117)	0.79	0.98
Females (2353/469)	-0.021 (0.039)	0.6	-0.052 (0.039)	0.18	0.27	0.17	-0.007 (0.038)	0.84	-0.028 (0.037)	0.46	0.61	-0.113 (0.152)	0.46	-0.197 (0.150)	0.19	0.34

Row groups labelled (rotated, left margin): **Insulin response (CIR)** for the first two variant blocks, **HOMA** for the last two variant blocks.

[a] A 2 degree of freedom P value from a F-test of the full model against the null model of no difference between the genotypes. [b] A 2dof P value from a F-test of the full model against the null model, adjusting for BMI by including a log(BMI) term among the explanatory variables.