

Table e-1. Sample characteristics of the two samples derived from the Swedish Twin

Register

	HOE sample	CMC sample
Age - mean years (SD) ¹		
total	75.9 (7.0)	87.1 (7.4)
cases	83.4 (6.2)	88.9 (5.6)
controls	75.5 (6.9)	86.5 (7.8)
% female		
total	51.6	56.9
cases	49.5	67.2
controls	51.7	53.1
Source of AD case diagnosis, Ns		
Register-based only	391	190
Clinical assessment only	1	131
Clinical assessment plus register	6	265

¹ Last recorded age, either at follow-up in 2015, or at death if individuals died before 2015 and over 65 years of age.

HOE – twins with genome-wide SNP genotyping performed using the HumanOmniExpress microarray.

CMC – twins with genome-wide SNP genotyping performed using the CardioMetaboChip microarray.

Table e-2. Studies included in the two genome-wide association study (GWAS) results used in the main analysis, along with potential overlap between these consortia's samples

Full list of studies and samples sizes in each

consortium:

IGAP consortium studies ²	N cases included	N controls included *	IGF consortium studies ³	N included for IGF1	N included for IGFBP3
ACT	566	1696	BLSA	516	0
ADC1	1411	515	CHS	2615	2815
ADC2	737	160	FHS 1and 2	6368	3600
ADC3	364	570	GOOD	938	0
ADNI	268	173	HABC	339	88
AGES	78	2694	Health2006	3364	0
CHS	421	1834	InCHIANTI	1172	0
EADI	2243	6017	KORA	1671	1655
FHS	183	3151	LLS	1910	1910
GERAD (inc. some KORA participants)	3177	7277	MICROS	1189	0
GSK	669	713	MrOS Sweden	941	0
LOAD	1811	1572	NHS CGEM	1240	1239
MAYO	728	1173	NHS CHD	549	549
MIRAGE	509	742	NHS T2DM	1032	1032
OHSU	131	153	PLCO	1080	1079

ROSMAP	291	776	RS	158	158
RS	633	5238	SHIP	3889	3889
TGEN2	129	493	SHIP Trend	981	981
UMVUMSS	1070	1128	SORBS	932	0
UPITT	1271	841			
WASHU	318	187			
<i>Total</i>	17008	37103		30884	18995
<i>Those of the above that overlap between consortia:</i>					
CHS	421	1834	CHS	2615	2815
FHS	183	3151	FHS 1and 2	6368	3600
KORA (some controls in GERAD)	-	434	KORA	1671	1655
RS	633	5238	RS	158	158
<i>Total</i>	1237	10657		10812	8228

For expanded study acronyms, please refer to original GWAS publications.

* The total number of controls is slightly less than the total cited in the IGAP GWAS publication (N=37154) because the exact number of controls included from the prevalent and incident FHS and CHS studies of the CHARGE consortium is not precisely inferable.