

Table S8. Disproportionate contribution of androgen- (AR) and estrogen- (ER) responsive genes and of sex-heterogeneous markers to WTCCC diseases and GIANT anthropometric traits

Disease/Trait	AR[^]	ER[^]	Heterogeneous SNPs[^]
	P^s	P^s	P^s
AS*	NS	NS	NS
BD	NS	NS	<0.001 [#] (females)
CAD	NS	0.032 [#] (females)	<0.001 [#] (males)
CD*	0.023 [#] (all)	0.068 [#] (males)	<0.001 [#] (females)
HT	NS	NS	NS
MS*	NS	NS	NS
RA*	<0.001 [#] (all)	NS	<0.001 [#] (males)
T1D*	0.084 [#] (all)	0.016 [#] (females)	NS [#] (all)
T2D	NS	NS	<0.001 [#] (males); 0.034 [#] (females)
BMI	NS	NS	<0.001 [#] (all)
HIP	0.093 [#] (males)	NS	<0.001 [#] (all)
HIP-a	<0.001 (all)	NS	<0.001 [#] (all)
WC	NS	NS	<0.001 [#] (all)
WC-a	<0.001 [#] (males)	<0.001 [#] (all)	<0.001 [#] (all)
WHR	0.041 [#] (females)	NS	<0.001 [#] (all)
WHR-a	<0.001 [#] (all)	0.034 [#] (males)	<0.001 [#] (all)
Height	<0.001 [#] (all)	NS	<0.001 [#] (all)
Weight	0.026 [#] (males)	NS	<0.001 [#] (all)

Abbreviations: AR androgen-responsive genes; ER estrogen-responsive genes; P p-value; NS not significant

[^] The AR genes and ER genes covered 6% and 3% of the total SNPs, respectively; Heterogeneous SNPs were 0.01% of all SNPs

[#] Empirical P < 0.1 were replaced with empirical p-values estimated with 1,000 permutations