

**Table S10. Partitioning contribution of androgen- (AR) and estrogen- (ER) responsive genes and of conserved regions to male and female heritability in GIANT anthropometric traits.**

Trait	AR			ER			Conserved regions		
	M $h^2_g$ (SE) <sup>^</sup>	F $h^2_g$ (SE) <sup>^</sup>	$h^2_{gCORR}$ (SE) <sup>^^</sup>	M $h^2_g$ (SE) <sup>^</sup>	F $h^2_g$ (SE) <sup>^</sup>	$h^2_{gCORR}$ (SE) <sup>^^</sup>	M $h^2_g$ (SE) <sup>^</sup>	F $h^2_g$ (SE) <sup>^</sup>	$h^2_{gCORR}$ (SE) <sup>^^,§</sup>
BMI	9% (1%)	7% (1%)*	0.42 (0.28)*	3% (1%)	5% (1%)	0.72 (0.32)	47% (7%)*	40% (6%)*	0.63 (0.10)**
HIP	11% (2%)	10% (2%)	0.57 (0.22)*	3% (1%)	6% (1%)	-	51% (9%)*	32% (6%)*	0.59 (0.13)**
HIP-a	14% (2%)	16% (2%)	0.77 (0.16)	5% (1%)	5% (1%)	0.55 (0.28)	30% (7%)**	37% (6%)*	0.81 (0.17)
WC	09% (2%)	08% (1%)	0.91 (0.44)	4% (0%)	6% (1%)	0.66 (0.39)	54% (9%)*	44% (8%)*	0.52 (0.12)*
WC-a	02% (2%)	16% (3%)	0.72 (0.13)*	6% (1%)	9% (2%)	0.74 (0.22)	44% (7%)*	40% (8%)*	-
WHR	09% (2%)	12% (3%)	0.59 (0.22)*	07% (2%)	5% (2%)	0.61 (0.48)	55% (8%)*	53% (9%)*	0.46 (0.12)*
WHR-a	14% (3%)	16% (3%)	0.42 (0.13)*	09% (2%)*	6% (2%)	0.48 (0.28)*	46% (9%)*	47% (9%)*	-
HEIGHT	18% (2%)*	18% (2%)*	0.66 (0.12)**	5% (1%)	6% (2%)	0.83 (0.28)	35% (6%)*	35% (6%)*	-
WEIGHT	13% (2%)	09% (2%)	0.26 (0.14)*	2% (1%)*	6% (1%)	-	44% (8%)*	41% (7%)*	0.67 (0.15)

Abbreviations:  $h^2_g$  heritability;  $h^2_{gCORR}$  genetic correlation.

<sup>^</sup> p-value on the coefficient of enrichment measured jointly with 51 known functional categories (including genic and regulatory)

<sup>^^</sup> p-value on the observed genetic correlation being different from 1.0

<sup>§</sup> reported if significant after accounting for 51 annotations tested

%  $h^2_g$  computed as ( $h^2_g$  in category) / ( $h^2_g$  total) with corresponding standard error estimated using delta method

AR and ER genes covered 6% and 3% of SNPs, respectively.