

Table 2. MR Estimates for the Effect of Anthropometric Measures on MS risk

Exposure	No. of SNPs	IVW			MR-Egger		Weighted median		pleiotropy assessment					MVMR-IVW		
		OR (95%CI)	pval	FDR	OR (95%CI)	pval	OR (95%CI)	pval	Q	Q pval	I^2 (%)	MR-Egger intercept	MR-Egger intercept pval	No. of SNPs	OR (95%CI)	pval
Whole body fat percentage	240	1.49 (1.25,1.78)	6.36E-06	1.34E-04	1.88 (1.01,3.5)	4.86E-02	1.6 (1.24,2.07)	3.27E-04	271.109	6.91E-02	12.2	-0.0035	0.453	224	1.48 (1.26,1.75)	2.60E-06
Leg fat percentage (left)	228	1.52 (1.21,1.9)	2.74E-04	1.17E-03	2.65 (1.15,6.14)	2.35E-02	1.64 (1.16,2.33)	5.25E-03	257.13	7.59E-02	12.1	-0.0068	0.176	217	1.41 (1.13,1.77)	2.30E-03
Leg fat percentage (right)	230	1.48 (1.19,1.84)	4.58E-04	1.38E-03	2.57 (1.15,5.74)	2.21E-02	1.6 (1.17,2.19)	3.64E-03	258.177	8.29E-02	11.7	-0.0068	0.163	215	1.33 (1.08,1.64)	7.90E-03
Arm fat percentage (right)	236	1.39 (1.18,1.64)	1.02E-04	1.07E-03	1.67 (0.98,2.84)	6.01E-02	1.58 (1.22,2.06)	5.83E-04	245.817	2.85E-01	4.8	-0.0029	0.477	223	1.49 (1.27,1.76)	1.60E-06
Arm fat percentage (left)	225	1.3 (1.1,1.55)	2.57E-03	5.39E-03	1.96 (1.14,3.37)	1.50E-02	1.51 (1.15,1.98)	2.75E-03	239.56	2.13E-01	6.9	-0.0064	0.119	212	1.23 (1.04,1.45)	1.46E-02
Trunk fat percentage	225	1.29 (1.11,1.49)	7.24E-04	1.90E-03	1.46 (0.87,2.45)	1.53E-01	1.42 (1.14,1.76)	1.67E-03	243.956	1.60E-01	8.6	-0.0023	0.622	211	1.26 (1.1,1.45)	1.22E-03
Whole body fat mass	258	1.23 (1.09,1.4)	1.15E-03	2.68E-03	1.35 (0.91,2)	1.32E-01	1.28 (1.06,1.55)	1.00E-02	289.278	7.49E-02	11.5	-0.0019	0.627	244	1.21 (1.07,1.37)	1.97E-03
Arm fat mass (left)	249	1.26 (1.11,1.42)	2.78E-04	1.17E-03	1.3 (0.9,1.86)	1.61E-01	1.3 (1.06,1.59)	1.29E-02	258.662	2.92E-01	4.5	-0.0006	0.857	237	1.24 (1.1,1.4)	6.24E-04
Arm fat mass (right)	253	1.24 (1.1,1.4)	4.40E-04	1.38E-03	1.4 (0.98,1.99)	6.80E-02	1.29 (1.06,1.56)	1.12E-02	260.027	3.34E-01	3.5	-0.0024	0.497	243	1.2 (1.07,1.36)	2.83E-03
Leg fat mass (right)	249	1.22 (1.05,1.42)	9.64E-03	1.69E-02	2.14 (1.35,3.39)	1.36E-03	1.33 (1.04,1.7)	2.51E-02	255.956	3.34E-01	3.5	-0.0094	0.0121	237	1.19 (1.03,1.38)	2.18E-02
Leg fat mass (left)	249	1.2 (1.03,1.39)	2.08E-02	3.11E-02	2.01 (1.28,3.17)	2.88E-03	1.28 (1.01,1.64)	4.22E-02	250.115	4.33E-01	1.2	-0.0086	0.0184	238	1.15 (0.99,1.34)	6.37E-02
Trunk fat mass	261	1.16 (1.03,1.31)	1.52E-02	2.46E-02	1.28 (0.86,1.89)	2.20E-01	1.26 (1.05,1.52)	1.42E-02	285.926	1.20E-01	9.4	-0.002	0.621	247	1.18 (1.05,1.33)	5.48E-03
BMI	266	1.25 (1.11,1.4)	1.89E-04	1.17E-03	1.6 (1.15,2.21)	5.25E-03	1.23 (1.01,1.5)	4.45E-02	275.14	3.06E-01	4	-0.0053	0.114	253	1.21 (1.08,1.36)	8.85E-04
Weight	304	1.2 (1.05,1.36)	5.92E-03	1.13E-02	1.3 (0.91,1.84)	1.47E-01	1.21 (1,1.46)	4.80E-02	365.459	7.20E-03	17.4	-0.0016	0.634	281	1.13 (1.01,1.28)	3.50E-02
Height	530	1.02 (0.92,1.12)	7.40E-01	7.40E-01	1.11 (0.9,1.38)	3.41E-01	1.02 (0.88,1.17)	8.25E-01	715.734	8.63E-08	26.2	-0.002	0.369			
Whole body non-fat mass	374	1.11 (0.95,1.31)	1.82E-01	2.12E-01	1.27 (0.83,1.93)	2.66E-01	1.09 (0.87,1.36)	4.57E-01	510.215	2.42E-06	27.1	-0.002	0.513			
Leg non-fat mass (left)	333	1.15 (0.98,1.37)	9.44E-02	1.32E-01	1.06 (0.68,1.67)	7.87E-01	1.16 (0.91,1.48)	2.28E-01	467.398	1.10E-06	29.2	0.0013	0.703			
Leg non-fat mass (right)	350	1.15 (0.97,1.35)	1.04E-01	1.37E-01	1.1 (0.71,1.71)	6.70E-01	1.1 (0.87,1.4)	4.36E-01	475.552	6.22E-06	26.8	0.0006	0.841			
Arm non-fat mass (right)	323	1.09 (0.91,1.31)	3.50E-01	3.87E-01	1.18 (0.71,1.97)	5.18E-01	1.1 (0.85,1.42)	4.62E-01	454.561	1.28E-06	29.4	-0.0012	0.737			
Arm non-fat mass (left)	330	1.08 (0.91,1.29)	3.79E-01	3.98E-01	1.18 (0.72,1.93)	5.18E-01	1.1 (0.85,1.42)	4.63E-01	460.522	1.82E-06	28.8	-0.0013	0.722			
Trunk non-fat mass	353	1.13 (0.96,1.32)	1.46E-01	1.81E-01	0.99 (0.65,1.51)	9.57E-01	1.09 (0.86,1.39)	4.89E-01	476.228	9.22E-06	26.3	0.0021	0.515			

FDR: false discovery rate; CI: confidence interval; BMI: body mass index; OR: odds ratio; IVW: inverse variance-weighted (multiplicative random effect); No. of SNPs: number of single-nucleotide polymorphisms that included in the analysis; OR: odds ratio; 95% CI: confidence interval; Q: Cochran's Q test; Q pval: Cochran's Q test p value; I^2 (%): expresses the level of heterogeneity as a percentage; MR-Egger Intercept pval: MR-Egger Intercept p value; MVMR: multivariable Mendelian randomisation. Bold values indicate a significance level is set at IVW $FDR \leq 0.05$.