

**Table 1. Summary of obesity, demographic, sequencing, and beta-diversity analysis data for the studies used in the meta-analysis.** NA indicates that those metadata were not available for that study.

Study (Ref.)	Subjects (N)	Obese (%)	Average BMI (Min-Max)	Female (%)	Average Age (Min-Max)	Non-Hispanic White (%)	Sequencing Method	16S rRNA Gene Region	AMOVA (P-value)
Baxter (23)	172	27.3	27.0 (17.5-46.9)	64.5	54.3 (29.0-80.0)	87.8	MiSeq	V4	0.078
Escobar (16)	30	33.3	27.4 (19.5-37.6)	46.7	38.1 (21.0-60.0)	NA	454	V2	0.047
Goodrich (19)	982	19.7	26.3 (16.2-52.4)	98.9	61.0 (23.0-86.0)	NA	MiSeq	V4	<0.001
HMP (21)	287	10.8	24.3 (19.0-34.0)	49.1	26.3 (18.0-40.0)	81.5	454	V3-V5	0.322
Ross (18)	63	60.3	31.6 (22.1-47.9)	76.2	57.0 (33.0-81.0)	0.0	454	V1-V3	0.845
Schubert (22)	104	32.7	28.2 (18.5-62.5)	66.3	52.8 (19.0-88.0)	82.7	454	V3-V5	0.180
Turnbaugh (6)	146	67.8	NA	NA	NA	51.4	454	V2	0.040
Wu (20)	64	7.8	24.3 (14.0-41.3)	53.1	26.3 (2.16-50.0)	NA	454	V1-V2	0.577
Zeevi (17)	731	21.6	26.4 (16.4-47.0)	NA	43.4 (18.0-70.0)	NA	MiSeq	V3-V4	0.135
Zupancic (15)	207	36.2	28.2 (18.2-127.0)	57.0	46.7 (20.0-79.0)	100.0	454	V3-V5	0.206