

Table S1. Criteria for conversion of symptom frequencies recorded in NHANES to OABSS scores.

According to NHANES	According to OABSS score
Urge urinary incontinence frequency	Urge urinary incontinence score
Never	0
Less than once a month	1
A few times a month	1
A few times a week	2
Every day and/or night	3
Nocturia frequency	Nocturia score
0	0
1	1
2	2
3	3
4	3
5 or more	3

NHANES, National Health and Nutrition Examination Survey; OABSS, overactive bladder symptom score.

Table S18: The complete results of MR analysis

Exposure	Outcome	Method	nSNP	Beta	SE	OR	OR_lci95	OR_uci95	P_val	P_adj	
Mets	BCCO	MR Egger	210	-0.005	0.002	0.9952	0.9904	1.0001	0.056	0.589	
		Weighted median	210	0.000	0.001	0.9997	0.9971	1.0023	0.804		
		Inverse variance weighted	210	0.001	0.001	1.0007	0.9990	1.0025	0.405		
	UFI	MR Egger	173	0.000	0.003	0.9998	0.9945	1.0051	0.942	0.581	
		Weighted median	173	-0.001	0.001	0.9993	0.9969	1.0017	0.563		
		Inverse variance weighted	173	0.001	0.001	1.0008	0.9991	1.0025	0.363		
	Hypertension	BCCO	MR Egger	144	0.000	0.001	0.9998	0.9974	1.0022	0.873	0.074
			Weighted median	144	0.000	0.000	1.0003	0.9994	1.0012	0.550	
			Inverse variance weighted	144	0.001	0.000	1.0007	1.0001	1.0013	0.023	
UFI		MR Egger	124	0.000	0.001	0.9998	0.9977	1.0020	0.885	0.392	
		Weighted median	124	0.000	0.000	1.0002	0.9994	1.0011	0.603		
		Inverse variance weighted	124	0.000	0.000	1.0004	0.9998	1.0009	0.196		
T2DM	BCCO	MR Egger	123	0.000	0.001	1.0002	0.9991	1.0013	0.726	0.283	
		Weighted median	123	0.000	0.000	1.0001	0.9992	1.0009	0.882		
		Inverse variance weighted	123	0.000	0.000	1.0004	0.9999	1.0008	0.124		
	UFI	MR Egger	100	0.000	0.000	1.0003	0.9993	1.0013	0.564		

BMI	BCCO	Weighted median	100	0.000	0.000	0.9998	0.9990	1.0005	0.565	0.617
		Inverse variance weighted	100	0.000	0.000	1.0001	0.9997	1.0006	0.527	
		MR Egger	301	0.000	0.002	1.0004	0.9972	1.0036	0.809	
	UFI	Weighted median	301	0.002	0.001	1.0016	0.9996	1.0036	0.116	0.074
		Inverse variance weighted	301	0.001	0.001	1.0013	1.0002	1.0025	0.020	
MR Egger		258	0.000	0.001	1.0002	0.9973	1.0031	0.890		
WC	BCCO	Weighted median	258	0.002	0.001	1.0018	1.0000	1.0036	0.046	0.016
		Inverse variance weighted	258	0.002	0.000	1.0017	1.0007	1.0027	0.001	
		MR Egger	200	0.001	0.002	1.0008	0.9963	1.0052	0.739	
	UFI	Weighted median	200	0.002	0.001	1.0023	0.9997	1.0048	0.079	0.093
		Inverse variance weighted	200	0.002	0.001	1.0016	1.0001	1.0031	0.035	
MR Egger		181	0.003	0.002	1.0034	0.9995	1.0074	0.092		
FBG	BCCO	Weighted median	181	0.003	0.001	1.0031	1.0010	1.0052	0.004	0.074
		Inverse variance weighted	181	0.002	0.001	1.0015	1.0002	1.0028	0.020	
		MR Egger	53	0.002	0.002	1.0025	0.9992	1.0058	0.140	
	UFI	Weighted median	53	0.002	0.002	1.0019	0.9989	1.0050	0.217	0.906
		Inverse variance weighted	53	0.000	0.001	0.9999	0.9980	1.0018	0.906	
MR Egger		44	0.003	0.002	1.0032	1.0001	1.0062	0.048		
		Weighted median	44	0.002	0.001	1.0018	0.9992	1.0045	0.175	

TG	BCCO	Inverse variance weighted	44	0.002	0.001	1.0022	1.0004	1.0039	0.015	0.074
		MR Egger	314	-0.001	0.001	0.9993	0.9974	1.0013	0.497	
		Weighted median	314	0.000	0.001	0.9997	0.9980	1.0014	0.729	
	UFI	Inverse variance weighted	314	0.000	0.001	1.0003	0.9992	1.0013	0.611	0.652
		MR Egger	252	0.000	0.001	1.0004	0.9984	1.0025	0.690	
		Weighted median	252	0.001	0.001	1.0008	0.9991	1.0026	0.345	
	BCCO	Inverse variance weighted	252	0.001	0.001	1.0006	0.9996	1.0016	0.261	0.464
		MR Egger	329	0.000	0.000	1.0002	0.9997	1.0006	0.490	
		Weighted median	329	0.000	0.000	1.0001	0.9995	1.0007	0.806	
HDL-C	BCCO	Inverse variance weighted	329	0.000	0.000	1.0001	0.9998	1.0005	0.461	0.615
		MR Egger	276	-0.000	0.000	1.0000	0.9996	1.0004	0.913	
		Weighted median	276	-0.000	0.000	0.9999	0.9994	1.0004	0.598	
	UFI	Inverse variance weighted	276	-0.000	0.000	0.9999	0.9996	1.0002	0.540	0.617
		MR Egger								
		Weighted median								