

Supplementary Table 5. MR analysis results of 11 sleep-related characteristics on DN.

outcome	exposure	method	n SNP	b	se	pval	lo_ci	up_ci	or	or_lci95	or_uci95
DM NEPHROPATHY	Accelerometer-based sleep duration	MR Egger	8	-1.0908	0.5305	0.08551	-2.1306	-0.051	0.33595	0.11877	0.95027035
DM NEPHROPATHY	Accelerometer-based sleep duration	Weighted median	8	-0.3182	0.30487	0.29666	-0.9157	0.27938	0.72748	0.40023	1.32230663
DM NEPHROPATHY	Accelerometer-based sleep duration	Inverse variance weighted	8	-0.2618	0.23087	0.25686	-0.7143	0.19073	0.76969	0.48955	1.21013553
DM NEPHROPATHY	Accelerometer-based sleep duration	Simple mode	8	0.27262	0.62706	0.67682	-0.9564	1.50166	1.31341	0.38427	4.48911499
DM NEPHROPATHY	Accelerometer-based sleep duration	Weighted mode	8	-0.7387	0.37573	0.09	-1.4752	-0.0023	0.47772	0.22874	0.9976948
DM NEPHROPATHY	Chronotype	MR Egger	111	0.21005	0.22919	0.36144	-0.2392	0.65926	1.23374	0.78728	1.93337037
DM NEPHROPATHY	Chronotype	Weighted median	111	0.11673	0.10857	0.2823	-0.0961	0.32953	1.12382	0.90841	1.39031003
DM NEPHROPATHY	Chronotype	Inverse variance weighted	111	0.06215	0.07407	0.40141	-0.083	0.20732	1.06412	0.92033	1.23038087
DM NEPHROPATHY	Chronotype	Simple mode	111	0.27383	0.29577	0.35656	-0.3059	0.85354	1.315	0.73648	2.34795395
DM NEPHROPATHY	Chronotype	Weighted mode	111	0.2323	0.25166	0.35797	-0.2609	0.72555	1.2615	0.77033	2.0658639
DM NEPHROPATHY	daytime napping	MR Egger	88	0.07262	1.29405	0.95538	-2.4637	2.60896	1.07533	0.08512	13.5848971
DM NEPHROPATHY	daytime napping	Weighted median	88	0.88757	0.46148	0.05444	-0.0169	1.79207	2.42923	0.98322	6.00186427
DM NEPHROPATHY	daytime napping	Inverse variance weighted	88	0.45812	0.3555	0.19751	-0.2387	1.1549	1.5811	0.78769	3.17371312
DM NEPHROPATHY	daytime napping	Simple mode	88	1.56799	1.02776	0.13073	-0.4464	3.58239	4.79699	0.63992	35.9595332
DM NEPHROPATHY	daytime napping	Weighted mode	88	1.34392	0.86416	0.12353	-0.3498	3.03767	3.83405	0.70481	20.8566874
DM NEPHROPATHY	daytime sleepiness	MR Egger	36	1.27423	3.20427	0.69336	-5.0061	7.55461	3.57595	0.0067	1909.51689
DM NEPHROPATHY	daytime sleepiness	Weighted median	36	1.4888	0.85942	0.08321	-0.1957	3.17325	4.43176	0.82229	23.8850817
DM NEPHROPATHY	daytime sleepiness	Inverse variance weighted	36	0.25186	0.72557	0.72851	-1.1703	1.67397	1.28641	0.31029	5.33331307
DM NEPHROPATHY	daytime sleepiness	Simple mode	36	1.80698	1.49498	0.23488	-1.1232	4.73715	6.09203	0.32524	114.108148
DM NEPHROPATHY	daytime sleepiness	Weighted mode	36	1.7457	1.22707	0.16369	-0.6594	4.15075	5.7299	0.51719	63.4813867
DM NEPHROPATHY	Insomnia	MR Egger	36	2.29917	1.29783	0.08543	-0.2446	4.84291	9.96592	0.78304	126.838293
DM NEPHROPATHY	Insomnia	Weighted median	36	0.57271	0.62713	0.36112	-0.6565	1.80189	1.77307	0.51868	6.06109079

DM NEPHROPATHY	Insomnia	Inverse variance weighted	36	0.23871	0.43637	0.58435	-0.6166	1.09399	1.26961	0.53979	2.98616306
DM NEPHROPATHY	Insomnia	Simple mode	36	0.86098	1.34845	0.52731	-1.782	3.50393	2.36548	0.16831	33.2459399
DM NEPHROPATHY	Insomnia	Weighted mode	36	1.39076	0.9573	0.15519	-0.4856	3.26706	4.01789	0.61536	26.2341893
DM NEPHROPATHY	L5Timing	MR Egger	5	0.66682	0.43304	0.22123	-0.1819	1.51558	1.94804	0.83366	4.55205982
DM NEPHROPATHY	L5Timing	Weighted median	5	0.12319	0.30455	0.68583	-0.4737	0.7201	1.1311	0.62269	2.05464359
DM NEPHROPATHY	L5Timing	Inverse variance weighted	5	0.17017	0.25005	0.49615	-0.3199	0.66028	1.18551	0.7262	1.93532789
DM NEPHROPATHY	L5Timing	Simple mode	5	-0.2174	0.59341	0.7327	-1.3804	0.94572	0.80464	0.25147	2.57465788
DM NEPHROPATHY	L5Timing	Weighted mode	5	0.56716	0.33519	0.16589	-0.0898	1.22413	1.76325	0.91411	3.40118979
DM NEPHROPATHY	No.of sleep episodes	MR Egger	19	0.79681	1.24166	0.52961	-1.6368	3.23046	2.21845	0.19459	25.291274
DM NEPHROPATHY	No.of sleep episodes	Weighted median	19	-0.0973	0.27818	0.72649	-0.6425	0.44792	0.90728	0.52596	1.56505836
DM NEPHROPATHY	No.of sleep episodes	Inverse variance weighted	19	-0.0244	0.25672	0.92435	-0.5276	0.4788	0.97592	0.59004	1.6141437
DM NEPHROPATHY	No.of sleep episodes	Simple mode	19	-0.1443	0.53125	0.789	-1.1856	0.89694	0.86562	0.30558	2.45209941
DM NEPHROPATHY	No.of sleep episodes	Weighted mode	19	-0.2511	0.47929	0.60675	-1.1905	0.68831	0.77795	0.30407	1.99034829
DM NEPHROPATHY	Self-reported short sleep	MR Egger	24	7.69986	4.61374	0.10931	-1.3431	16.7428	2208.05	0.26104	18676837
DM NEPHROPATHY	Self-reported short sleep	Weighted median	24	1.16791	1.15061	0.31009	-1.0873	3.4231	3.21527	0.33713	30.6644572
DM NEPHROPATHY	Self-reported short sleep	Inverse variance weighted	24	0.84521	0.82304	0.30445	-0.7679	2.45837	2.32847	0.46396	11.685715
DM NEPHROPATHY	Self-reported short sleep	Simple mode	24	1.50878	2.44496	0.54323	-3.2833	6.3009	4.5212	0.0375	545.060346
DM NEPHROPATHY	Self-reported short sleep	Weighted mode	24	1.80687	2.30884	0.44185	-2.7185	6.3322	6.09134	0.06598	562.390265
DM NEPHROPATHY	Self-reported long sleep	MR Egger	7	6.97304	7.43551	0.3914	-7.6006	21.5466	1067.46	0.0005	2278160660
DM NEPHROPATHY	Self-reported long sleep	Weighted median	7	-2.2939	3.08968	0.45783	-8.3496	3.76192	0.10088	0.00024	43.0309201
DM NEPHROPATHY	Self-reported long sleep	Inverse variance weighted	7	-5.0209	2.84455	0.07755	-10.596	0.55447	0.0066	2.5E-05	1.7410191
DM NEPHROPATHY	Self-reported long sleep	Simple mode	7	-1.1609	4.72041	0.81393	-10.413	8.09108	0.3132	3E-05	3265.20342
DM NEPHROPATHY	Self-reported long sleep	Weighted mode	7	-0.7749	4.08254	0.85571	-8.7767	7.22683	0.46073	0.00015	1375.85946
DM NEPHROPATHY	Self-reported sleep duration	MR Egger	60	-0.4726	0.99801	0.63757	-2.4287	1.48346	0.62335	0.08815	4.40815389
DM NEPHROPATHY	Self-reported sleep duration	Weighted median	60	-0.2564	0.316	0.41712	-0.8758	0.36295	0.77382	0.41654	1.43755779
DM NEPHROPATHY	Self-reported sleep duration	Inverse variance weighted	60	-0.1286	0.24973	0.60648	-0.6181	0.36083	0.87929	0.53897	1.43451497
DM NEPHROPATHY	Self-reported sleep duration	Simple mode	60	0.18441	0.76608	0.81061	-1.3171	1.68593	1.20251	0.26791	5.39747567
DM NEPHROPATHY	Self-reported sleep duration	Weighted mode	60	-0.406	0.59508	0.49779	-1.5723	0.76041	0.66634	0.20756	2.13914772
DM NEPHROPATHY	Sleep efficiency	MR Egger	5	-0.2519	0.63995	0.72018	-1.5062	1.00242	0.77733	0.22175	2.72486005

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DM NEPHROPATHY	Sleep efficiency	Weighted median	5	-0.8937	0.3767	0.01767	-1.632	-0.1554	0.40914	0.19553	0.85609684
DM NEPHROPATHY	Sleep efficiency	Inverse variance weighted	5	-0.958	0.31936	0.0027	-1.5839	-0.332	0.38366	0.20516	0.71745996
DM NEPHROPATHY	Sleep efficiency	Simple mode	5	-1.3074	0.59278	0.09208	-2.4693	-0.1456	0.27052	0.08465	0.86453341
DM NEPHROPATHY	Sleep efficiency	Weighted mode	5	-0.869	0.43788	0.11817	-1.7273	-0.0108	0.41936	0.17777	0.98927207

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