

Table S4. Baseline characteristics of the study population in HRS (n=23,238).

Arthritis	No (n=11,794)	Yes (n=11,444)	Total (n=23,238)	P
age	56.00 [53.00;65.00]	66.00 [57.00;75.00]	60.00 [54.00;71.00]	0
gender				0
- No	6112 (51.82%)	7337 (64.11%)	13,449 (57.88%)	
- Yes	5682 (48.18%)	4107 (35.89%)	9789 (42.12%)	
rural				0
- No	8956 (77.69%)	7834 (69.41%)	16,790 (73.59%)	
- Yes	2572 (22.31%)	3453 (30.59%)	6025 (26.41%)	
marital_status				0
- Married	7207 (61.11%)	6368 (55.64%)	13,575 (58.42%)	
- Never married/Other	2160 (18.31%)	2931 (25.61%)	5091 (21.91%)	
- Separated/Divorced/Widowed	2427 (20.58%)	2145 (18.74%)	4572 (19.67%)	
education				0
- Primary or below	1868 (15.84%)	2237 (19.55%)	4105 (17.67%)	
- Secondary	6713 (56.92%)	6991 (61.09%)	13,704 (58.97%)	
- Tertiary	3213 (27.24%)	2216 (19.36%)	5429 (23.36%)	
memory_score	0.03 [-0.50;0.56]	0.03 [-0.76;0.56]	0.03 [-0.50;0.56]	0
orientation_score	0.43 [0.43;0.43]	0.43 [0.43;0.43]	0.43 [0.43;0.43]	0
executive_score	0.34 [-0.74;0.88]	0.34 [-0.74;0.88]	0.34 [-0.74;0.88]	0
cognition_total_score	0.19 [-0.41;0.66]	0.07 [-0.63;0.54]	0.08 [-0.52;0.55]	0
drinking_status				0
- No	3979 (33.74%)	5253 (45.91%)	9232 (39.73%)	
- Yes	7813 (66.26%)	6190 (54.09%)	14,003 (60.27%)	
smoking_status				0
- No	9642 (82.02%)	9553 (83.98%)	19,195 (82.98%)	
- Yes	2114 (17.98%)	1822 (16.02%)	3936 (17.02%)	
bmi	27.40 [24.40;31.30]	28.60 [25.10;33.00]	28.00 [24.70;32.10]	0
hypertension				0
- No	6437 (54.58%)	4193 (36.64%)	10,630 (45.74%)	
- Yes	5357 (45.42%)	7251 (63.36%)	12,608 (54.26%)	
diabetes				0
- No	9789 (83.00%)	8593 (75.09%)	18,382 (79.10%)	
- Yes	2005 (17.00%)	2851 (24.91%)	4856 (20.90%)	
heart_disease				0
- No	10,355 (87.80%)	8547 (74.69%)	18,902 (81.34%)	
- Yes	1439 (12.20%)	2897 (25.31%)	4336 (18.66%)	
stroke				0
- No	11,295 (95.77%)	10,466 (91.45%)	21,761 (93.64%)	
- Yes	499 (4.23%)	978 (8.55%)	1477 (6.36%)	
cancer				0
- No	10,853 (92.02%)	9723 (84.96%)	20,576 (88.54%)	
- Yes	941 (7.98%)	1721 (15.04%)	2662 (11.46%)	
psychiatric_disorder				0
- No	10,534 (89.32%)	8842 (77.26%)	19,376 (83.38%)	
- Yes	1260 (10.68%)	2602 (22.74%)	3862 (16.62%)	
depression_score	1.00 [0.00;2.00]	1.00 [0.00;3.00]	1.00 [0.00;2.00]	0