

Table S5. Baseline characteristics of the study population in ELSA (n=9848).

Arthritis	No (n=6512)	Yes (n=3336)	Total (n=9848)	P
age	62.00 [56.00;69.50]	67.00 [61.00;75.00]	63.00 [57.00;72.00]	0
gender				0
- No	3214 (49.36%)	2120 (63.55%)	5334 (54.16%)	
- Yes	3298 (50.64%)	1216 (36.45%)	4514 (45.84%)	
marital_status				0
- Married	4679 (71.85%)	2058 (61.69%)	6737 (68.41%)	
- Never married/Other	1074 (16.49%)	851 (25.51%)	1925 (19.55%)	
- Separated/Divorced/Widowed	759 (11.66%)	427 (12.80%)	1186 (12.04%)	
education				0
- Primary or below	1650 (25.34%)	1345 (40.32%)	2995 (30.41%)	
- Secondary	3420 (52.52%)	1538 (46.10%)	4958 (50.35%)	
- Tertiary	1442 (22.14%)	453 (13.58%)	1895 (19.24%)	
memory_score	0.15 [-0.39;0.69]	-0.12 [-0.65;0.69]	0.15 [-0.39;0.69]	0
orientation_score	0.42 [0.42;0.42]	0.42 [0.42;0.42]	0.42 [0.42;0.42]	0
executive_score				
- -2.00630879402161	6512 (100.00%)	3336 (100.00%)	9848 (100.00%)	
cognition_total_score	1.02 [0.67;1.37]	0.90 [0.44;1.25]	1.02 [0.55;1.37]	0
drinking_status				0
- No	541 (9.68%)	465 (15.93%)	1006 (11.83%)	
- Yes	5047 (90.32%)	2454 (84.07%)	7501 (88.17%)	
smoking_status				0.945
- No	5511 (86.31%)	2826 (86.24%)	8337 (86.29%)	
- Yes	874 (13.69%)	451 (13.76%)	1325 (13.71%)	
bmi	26.89 [24.52;30.55]	29.66 [25.28;32.83]	27.26 [24.61;31.29]	0
hypertension				0
- No	4293 (65.92%)	1669 (50.03%)	5962 (60.54%)	
- Yes	2219 (34.08%)	1667 (49.97%)	3886 (39.46%)	
diabetes				0
- No	5961 (91.54%)	2916 (87.41%)	8877 (90.14%)	
- Yes	551 (8.46%)	420 (12.59%)	971 (9.86%)	
heart_disease				0
- No	5653 (86.81%)	2554 (76.56%)	8207 (83.34%)	
- Yes	859 (13.19%)	782 (23.44%)	1641 (16.66%)	
stroke				0
- No	6330 (97.21%)	3142 (94.18%)	9472 (96.18%)	
- Yes	182 (2.79%)	194 (5.82%)	376 (3.82%)	
cancer				0
- No	6007 (92.25%)	2986 (89.51%)	8993 (91.32%)	
- Yes	505 (7.75%)	350 (10.49%)	855 (8.68%)	
psychiatric_disorder				0
- No	5948 (91.34%)	2944 (88.25%)	8892 (90.29%)	
- Yes	564 (8.66%)	392 (11.75%)	956 (9.71%)	
depression_score	1.00 [0.00;2.00]	1.00 [0.00;3.00]	1.00 [0.00;2.00]	0

BMI: body mass index; ELSA: English Longitudinal Study of Ageing