

Supplementary files

Table 1: Initial characteristics of the total population

	Total population n = 394			
	N*	N**	n (%) or m ± sd	(min - max)
Age at baseline (years)	394	0	66.9 ± 7.3	(42.9 - 86.9)
Sex	394	0		
Men			65 (16.5)	
Women			329 (83.5)	
Body Mass Index (kg/m²)	388	6	25.2 ± 4.4	(16.4 - 50.3)
Socioprofessional category	387	7		
1- Farmers, craftsmen, tradesmen, workers			25 (6.5)	
2- Intermediate occupations and employees			160 (41.3)	
3- Intellectual occupations			202 (52.2)	
Current tobacco consumption	389	5	27 (6.9)	
Current alcohol consumption	389	5	302 (77.6)	
Physical Activity Index (EPIC score)	374	20		
Inactive			65 (17.4)	
Moderately inactive			149 (39.8)	
Moderately active			83 (22.2)	
Active			77 (20.6)	
CRP	321	73		
< 5 mg/L			286 (89.1)	
≥ 5 mg/L			35 (10.9)	
TSH (mU/L)	364	30	1.5 ± 0.8	(0.0 - 4.7)
Albuminemia (g/L)	325	69	43.9 ± 3.1	(36.3 - 74.0)
Creatininemia (µmol/L)	386	8	78.3 ± 13.6	(45.0 - 173.0)
Vitamin D level (ng/mL)	373	21	33.2 ± 16.8	(7.9 - 152.5)
COMORBIDITIES				
Functional Comorbidity Index (0-18)	349	45		
1			148 (42.4)	
2			124 (35.5)	
≥ 3			77 (22.1)	
Modified Functional Comorbidity Index (0-17)	355	39		
1			164 (46.2)	
2			130 (36.6)	
≥ 3			61 (17.3)	
PAIN INTENSITY				
AUSCAN pain subscore (0-100), median [IQR]	367	27	20.4 [8.0 ; 39.6]	(0.0 - 100.0)
RADIOGRAPHIC SEVERITY				
Total Kellgren-Lawrence sum score (0-128), median [IQR] ***	378	16	48.0 [34.0 ; 61.0]	(4.0 - 95.0)
Total Kellgren-Lawrence sum score at the dominant hand (0-64), median [IQR] ***	387	7	24.0 [17.0 ; 31.0]	(1.0 - 49.0)

Data are n (%), mean ± sd or median [IQR 25% to 75%].

* Number of available data

** Number of missing data

*** Normal distribution but presentation of the median to homogenize the results

Figure 1: Boxplot of GS according to hand (1A), sex (1B) and age (1C)

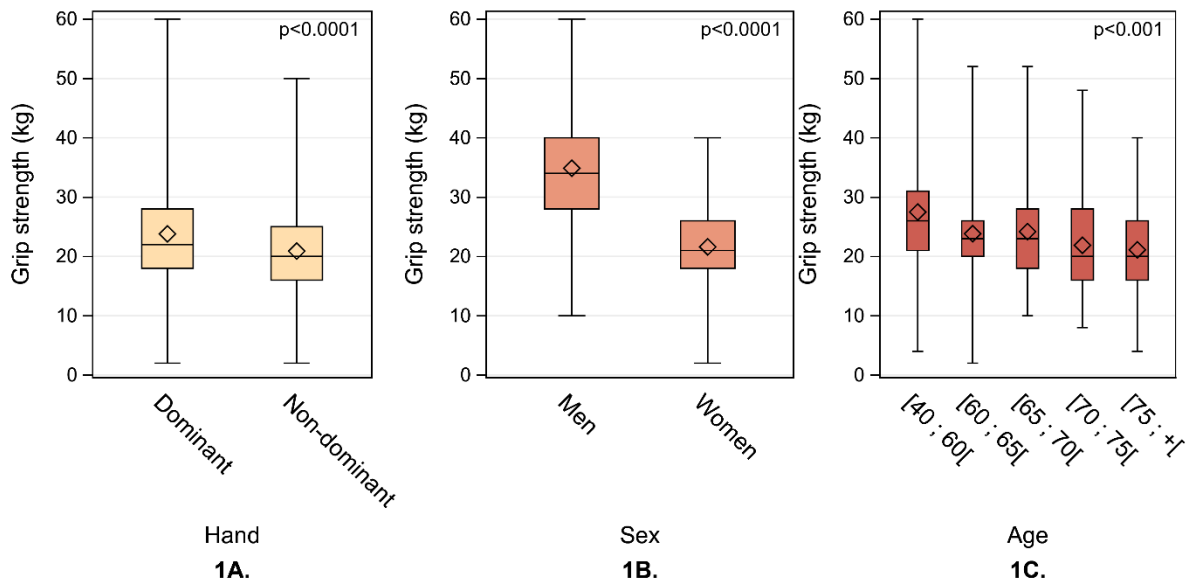


Table 2: Association between GS and patients' characteristics in women

Variable	Unadjusted analysis		Adjusted analysis*	
	Beta (95% CI)	P-value	Beta (95% CI)	P-value
Number of comorbidities (0-17)				0.289
1	0	.	0	.
2	-0.76 (-2.46 ; 0.93)	0.377	-0.58 (-2.22 ; 1.06)	0.484
≥ 3	-2.56 (-4.65 ; -0.47)	0.016	-1.56 (-3.56 ; 0.44)	0.125
Kellgren-Lawrence sum score (0-128)	-0.09 (-0.13 ; -0.05)	<.001	-0.06 (-0.10 ; -0.01)	0.012
AUSCAN Pain subscore (0-100)	-0.08 (-0.11 ; -0.04)	<.001	-0.06 (-0.09 ; -0.02)	<.001

*Adjusted for age and BMI.

Table 3: Association between GS and patients' characteristics in men

Variable	Unadjusted analysis		Adjusted analysis*	
	Beta (95% CI)	P-value	Beta (95% CI)	P-value
Number of comorbidities (0-17)				0.040
1	0	.	0	.
2	-6.04 (-11.0 ; -1.10)	0.016	-4.57 (-9.58 ; 0.44)	0.074
≥ 3	-11.6 (-18.4 ; -4.82)	<.001	-8.46 (-15.5 ; -1.43)	0.018
Kellgren-Lawrence sum score (0-128)	-0.15 (-0.29 ; -0.01)	0.035	-0.08 (-0.22 ; 0.059)	0.256
AUSCAN Pain subscore (0-100)	-0.05 (-0.18 ; 0.068)	0.383	0.003 (-0.11 ; 0.12)	0.954

*Adjusted for age and BMI.

Table 4: Association between GS and demographic and biological data in total population

Variable	Univariate analysis		Multivariate analysis	
	Beta (95% CI)	P-value	Beta (95% CI)	P-value
Socioprofessional category		0.075		0.748
1- Farmers, craftsmen, tradesmen and workers	-0.20 (-3.89 ; 3.49)	0.915	0.006 (-3.05 ; 3.07)	0.997
2- Intermediate occupations and employees	-2.11 (-3.95 ; -0.26)	0.025	-0.26 (-1.77 ; 1.26)	0.739
3- Intellectual occupations	0	.	0	.
Osteoporosis	-4.33 (-6.99 ; -1.68)	0.001	-1.36 (-3.54 ; 0.82)	0.222
Anxiety or panic access	-2.87 (-5.88 ; 0.14)	0.062	-0.15 (-2.63 ; 2.33)	0.906
Visual disorders (such as cataract, glaucoma, macular degeneration)	-2.57 (-5.67 ; 0.54)	0.106	-1.75 (-4.26 ; 0.75)	0.170
Degenerative disc disease (low back pain, narrowed spinal canal, or severe chronic low back pain)	-2.38 (-5.71 ; 0.96)	0.163	-0.39 (-3.05 ; 2.28)	0.776
Albuminemia (g/L)	0.46 (0.14 ; 0.77)	0.004	0.17 (-0.09 ; 0.42)	0.196
Creatininemia (μmol/L)	0.15 (0.088 ; 0.22)	<.001	-0.04 (-0.10 ; 0.026)	0.263
Vitamin D (ng/mL)	-0.05 (-0.11 ; 0.002)	0.061	-0.02 (-0.07 ; 0.020)	0.285
Kellgren-Lawrence sum score	-0.08 (-0.13 ; -0.03)	<.001	-0.06 (-0.10 ; -0.01)	0.013
AUSCAN Pain score	-0.10 (-0.14 ; -0.06)	<.001	-0.05 (-0.09 ; -0.02)	0.003

* Adjusted for age, sex and BMI