1   Table 4. Statistical analysis for associated factors of PEOA

Candidates associated factor	Univariate analysis		Multivariable analysis	
	Odds ratio	P value	Odds ratio	P value
Age (+10 years)	2.50 (1.89 to 3.31)	<0.001*	2.47 (1.86 to 3.27)	<0.001*
Gender (female)	0.81 (0.48 to 1.33)	0.43	0.58 (0.30 to 1.14)	0.11
BMI (+10 kg/m^2)	2.37 (1.02 to 5.50)	0.04*	2.67 (1.01 to 7.05)	0.04*
Grip strength (+10 kg)	0.61 (0.44 to 0.84)	<0.01*	–	–
Smoking history**	0.98 (0.94 to 1.01)	0.13	0.95 (0.91 to 1.00)	0.02*
Heavy manual labor	1.13 (0.60 to 2.10)	0.74	–	–
Vibrating tool users	3.32 (1.43 to 7.74)	<0.01*	1.87 (0.72 to 4.86)	0.20
Agricultural labor	1.84 (1.03 to 3.28)	0.04*	–	–
Overhead sports enthusiasts	0.99 (0.58 to 1.69)	1.00	–	–

2   PEOA, primary elbow osteoarthritis; BMI, body mass index.

3   Odds ratios are represented with 95% confidence intervals. The results of multivariable

4   analysis are only shown in selected candidates after stepwise model selection.

5   *: Significant difference (P<0.05)

6   **: +1000 packs per year × years

7