

**Supplementary material of Association of single nucleotide polymorphism
rs2228570 with lumbar disc degeneration: A case-control study and
meta-analysis**

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Table S1. Results of quality assessment using the Newcastle-Ottawa Scale for
case-control studies

Table S2. Characteristics of case and control group

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Table S1. Results of quality assessment using the Newcastle-Ottawa Scale for case-control studies

First author	Selection				Comparability Control for important factor ^a	Exposure			Scores
	Adequate definition of cases	Representati- veness of the cases	Selection of controls	Definition of controls		Ascertainment of exposure	Same method of ascertainment cases and controls	Non-response for rate	
Cauci	★	★	★	★	★ ★	★	★	★	9
Serrano	★	★		★	★ ★	★	★	★	8
Colombini	★	★		★	★ ★	★	★	★	8
Kawaguchi	★	★	★			★	★	★	6
Kelempisioti	★	★	★	★	★ ★	★	★	★	9
Kitis	★	★		★	★	★	★	★	7
Mashayekhi	★	★	★	★	★ ★	★	★	★	9
Oishi	★	★		★	★ ★	★	★	★	8
Ozdogan	★	★		★	★ ★	★	★	★	8
Vieira	★	★		★	★	★	★	★	7
Yuan	★	★	★	★		★	★	★	7
Vieira	★	★				★	★	★	5
Xu	★	★	★	★	★ ★	★	★	★	9
Zawilla	★	★	★	★	★ ★	★	★	★	9
Chen	★	★		★	★	★	★	★	7
Cheung	★	★	★	★	★ ★	★	★	★	9
Withanage	★	★		★	★	★	★	★	7

^a A maximum of two stars can be allotted in this category, one for age and the other for other controlled factors.

Table S2. Characteristics of case and control group

Characteristic	Control	Case	P value
Gender(Male/Female)	22/23	22/24	1
Age(years)	52.76±13.73	50.13±14.24	0.37
Height(m)	1.68±0.095	1.66±0.085	0.36
Weight(kg)	70.24±12.49	70.96±13.17	0.79
BMI(kg/m ²)	24.88±3.56	25.63±3.77	0.34

BMI, body mass index

Table S3. Rs2228570, rs731236, rs7975232 and rs1544410's Hardy-Weinberg equilibrium test

polymorphism	Control group (n) ^b			Case group (n) ^b			P value
	11	12	22	11	12	22	
Rs2228570	6	22	17	13	24	9	0.79
Rs731236	39	6	0	44	2	0	0.63
Rs7975232	31	14	0	32	13	1	0.22
Rs1544410	41	4	0	45	1	0	0.76

^b 11 presents common homozygote, 12 presents heterozygote, 22 presents rare homozygote, 1 presents common allele, 2 presents rare allele

Table S4. Characteristics of case group

Characteristic	VAS<4	VAS≥4	P value
Gender(Male/Female)	8/11	14/13	0.51
Age(years)	50.37 ± 14.56	49.96 ± 14.29	0.93
Height(m)	1.64 ± 0.08	1.67 ± 0.09	0.28
Weight(kg)	69.97 ± 11.55	71.65 ± 14.37	0.68
BMI(kg/m ²)	25.90 ± 4.27	25.43 ± 3.45	0.68
SCOR	0.32 ± 0.09	0.37 ± 0.13	0.20
DSCR	0.23 ± 0.08	0.22 ± 0.09	0.68

VAS, Visual Analogue Scale; BMI, body mass index; SCOR, spinal canal occupation ratio($SCOR=(b1-b2)/b1 \times 100\%$, b1 is the anteroposterior diameter of the spinal canal, b2 is the shortest diameter of spinal canal); DSCR, decrease of spinal canal ratio($DSCR=b1/b4-b2/b3$, b1 is the anteroposterior diameter of the spinal canal, b2 is the shortest diameter of spinal canal, b3 is the anteroposterior diameter of intervertebral disc, b4 is the anteroposterior diameter of vertebral body)