

COMT Diplotype Amplifies Effect of Stress on Risk of Temporomandibular Pain

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Appendix

Appendix Table. Cox Regression Models of Time-Constant and Time-Varying Influences of Psychological Stress on Hazard of First-Onset TMD: OPPERA Prospective Cohort Study.

Model	Description	No. of Subjects	df	χ^2	Interaction P Value	Parameter	Hazard Ratio (95% CL)
A1	Model 6 from Table 2, with interaction of time-varying stress and COMT LPS	2,186	103.5	19	0.24	Time-constant baseline PSS score (per 6.4 units)	1.70 (1.44, 2.02)
						Stratum with 0 copies of LPS: Time-varying average quarterly PSS score minus baseline (per 6.4 units)	2.38 (1.59, 3.58)
						Stratum with 1 copy of LPS: Time-varying average quarterly PSS score minus baseline (per 6.4 units)	1.54 (1.07, 2.22)
						Stratum with 2 copies of LPS: Time-varying average quarterly PSS score minus baseline (per 6.4 units)	1.80 (0.91, 3.56)
A2	Model 6 from Table 2, with interaction of time-varying stress and COMT HPS	2186	99.8	13	0.22	Time-constant baseline PSS score (per 6.4 units)	1.72 (1.46, 2.04)
						Stratum with 0 copies of HPS: Time-varying average quarterly PSS score minus baseline (per 6.4 units)	1.70 (1.24, 2.34)
						Stratum with 1 to 2 copies of HPS: Time-varying average quarterly PSS score minus baseline (per 6.4 units)	2.36 (1.47, 3.77)
A3	Model 1 from Table 2, with interaction of baseline stress and COMT diplotype	2186	102.2	13	0.19	Low-activity COMT stratum: Baseline PSS score (per 6.4 units)	1.57 (1.26, 1.95)
						High-activity COMT stratum: Baseline PSS score (per 6.4 units)	1.89 (1.52, 2.36)

All models include time-constant covariates of study site (4 categories), age (continuous measure), sex (2 categories), and are adjusted for population stratification using the first three eigenvectors from multidimensional scaling analysis. COMT, catechol-O-methyltransferase; HPS, high-pain sensitivity; LPS, low-pain sensitivity; OPPERA, Orofacial Pain: Prospective Evaluation and Risk Assessment; PSS, Perceived Stress Scale; TMD, temporomandibular disorder; 95% CL, 95% confidence limits for the estimated hazard ratio.

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