**Supplemental Digital Content 8. Hazard ratio for muscle injury according to the *COL1A1* rs1107946 genotypes in female athletes**

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| --- | --- | --- |
|  | rs1107946 genotype | *P*-value |
|  | AA (n = 22) | CC+AC (n = 99) |
| Training-exposure hours | 1226 ± 600 | 1224 ± 665 |  |
| Player-hours of training-exposure | 26,980 | 121,193 |  |
| Incidence of muscle injury, n (%) | 4 (18.2) | 7 (7.1) | 0.113a |
| Incidence per 1,000 player-hours | 0.15 | 0.06 |  |
| Unadjusted hazard ratio (95% CI) | 1.00 (Reference) | 0.36 (0.11–1.25) | 0.107b |
| Multivariable adjusted hazard ratio\* (95% CI) | 1.00 (Reference) | **0.27 (0.08–0.96)** | **0.043**b |

\*Adjusted by main sport (track & field or other). CI, confidence interval. Bold emphasis: *P* < 0.05. a *P*-value by the Fisher’s exact test, b *P*-value by the Cox proportional hazards model.