|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parameter(unit) | Model family (link) | Sample size | variable(unit) | Estimate | 95% CI | p-value | r2 |
| Recovery time(min) | Gamma(log) | 33 | Intercept | 20.96 | [8.20, 33.86] | 0.005 | 0.13 |
| Temperature(°C) | -0.48 | [-0.81, -0.15] | 0.011 |
| Etorphine start dose(mg/kg) | Gaussian (identity) | 26 | Intercept | 0.015 | [0.014, 0.017] | < 0.001 | 0.52 |
| Several injections’ group | -0.006 | [-0.008, -0.003] | < 0.001 |
| Xylazine start dose(mg/kg) | Gaussian (identity) | 26 | Intercept | 0.22 | [0.20, 0.24] | <0.001 | 0.20 |
| Several injections’ group | -0.04 | [-0.07, -0.01] | 0.022 |

 Additional file 1. Results of the regression analyses for the best models

The variable called “several injections’ group” corresponds to a categorical variable with two levels: one is the group of bison that have required more than one injection during the whole procedure and the other one is for those that got only one injection.