**Supplementary TABLE 1**

|  |
| --- |
| **Odds ratio estimates for the years of blood donation at different periods (earthquake vs. non- earthquake) in Tainan and Hualien, Taiwan.** |
| Effect | Full Model\* | Final Model\* |
| OR | 95% Wald C. L. | OR | 95% Wald C. L. |
| Age |  |  |  |  |  |  |
| Years old | 0.970 | 0.961 | 0.979 | 0.970 | 0.961 | 0.978 |
| Gender |  |  |  |  |  |  |
| Female vs. male | 1.189 | 0.997 | 1.417 | - | - | - |
| Place |  |  |  |  |  |  |
| Hualien vs. Tainan | 1.345 | 1.080 | 1.675 | 1.339 | 1.076 | 1.666 |
| Blood type |  |  |  |  |  |  |
| B vs. A | 0.943 | 0.751 | 1.184 | - | - | - |
| O vs. A | 0.992 | 0.816 | 1.206 | - | - | - |
| AB vs. A | 0.799 | 0.562 | 1.135 | - | - | - |
| First-time |  |  |  |  |  |  |
| Yes vs. No | 1.707 | 1.240 | 2.351 | 1.617 | 1.201 | 2.177 |
| Occupation |  |  |  |  |  |  |
| Military vs. student | 0.845 | 0.592 | 1.206 | 0.793 | 0.561 | 1.119 |
| Civil servant/teacher vs. student | 1.678 | 1.169 | 2.409 | 1.679 | 1.172 | 2.406 |
| Laborer vs. student | 1.791 | 1.329 | 2.414 | 1.695 | 1.268 | 2.267 |
| Business vs. student | 2.218 | 1.515 | 3.248 | 2.169 | 1.489 | 3.160 |
| Agriculture/fishery vs. student | 0.671 | 0.353 | 1.276 | 0.651 | 0.345 | 1.225 |
| Technician/Specialist vs. student | 5.660 | 1.686 | 18.997 | 6.057 | 1.806 | 20.313 |
| Housekeeper vs. student | 1.512 | 0.978 | 2.338 | 1.676 | 1.098 | 2.559 |
| Service industry. student | 1.763 | 1.332 | 2.334 | 1.795 | 1.360 | 2.370 |
| Others vs. student | 1.776 | 1.307 | 2.414 | 1.795 | 1.324 | 2.433 |

\* Model was assessed by using SAS (9.4 v., PROC LOGISTIC); final model has been adjusted for gender, and blood type.

**Supplementary TABLE 2**

|  |
| --- |
| **Odds ratio estimates for the years of blood donation at different periods (2016 vs. 2015) in Tainan.** |
| Effect | Full Model\* | Final Model\* |
| OR | 95% Wald C. L. | OR | 95% Wald C. L. |
| Age |  |  |  |  |  |  |
| Years old | 0.971 | 0.961 | 0.980 | 0.971 | 0.961 | 0.980 |
| Gender |  |  |  |  |  |  |
| Female vs. male | 1.177 | 0.972 | 1.426 | - | - | - |
| Blood type |  |  |  |  |  |  |
| B vs. A | 0.978 | 0.761 | 1.256 | - | - | - |
| O vs. A | 0.993 | 0.803 | 1.229 | - | - | - |
| AB vs. A | 0.728 | 0.497 | 1.068 | - | - | - |
| First-time |  |  |  |  |  |  |
| Yes vs. No | 1.750 | 1.215 | 2.520 | 1.631 | 1.170 | 2.274 |
| Occupation |  |  |  |  |  |  |
| Military vs. student | 1.293 | 0.837 | 1.997 | 1.222 | 0.800 | 1.865 |
| Civil servant/teacher vs. student | 1.792 | 1.198 | 2.679 | 1.803 | 1.209 | 2.690 |
| Laborer vs. student | 1.994 | 1.457 | 2.729 | 1.888 | 1.392 | 2.560 |
| Business vs. student | 2.569 | 1.702 | 3.878 | 2.501 | 1.667 | 3.752 |
| Agriculture/fishery vs. student | 0.695 | 0.359 | 1.346 | 0.681 | 0.356 | 1.304 |
| Technician/Specialist vs. student | 5.776 | 1.710 | 19.513 | 6.192 | 1.834 | 20.898 |
| Housekeeper vs. student | 1.464 | 0.912 | 2.351 | 1.610 | 1.018 | 2.547 |
| Service industry. student | 1.761 | 1.303 | 2.380 | 1.790 | 1.329 | 2.411 |
| Others vs. student | 2.219 | 1.584 | 3.107 | 2.233 | 1.600 | 3.118 |

\* Model was assessed by using SAS (9.4 v., PROC LOGISTIC); final model has been adjusted for gender, and blood type.

**Supplementary TABLE 3**

|  |
| --- |
| **Odds ratio estimates for the years of blood donation at different periods (2018 vs. 2017) in Hualien.** |
| Effect | Full Model\* | Final Model\* |
| OR | 95% Wald C. L. | OR | 95% Wald C. L. |
| Age |  |  |  |  |  |  |
| Years old | 0.972 | 0.963 | 0.980 | 0.972 | 0.963 | 0.981 |
| Gender |  |  |  |  |  |  |
| Female vs. male | 1.200 | 1.005 | 1.432 | 1.195 | 1.002 | 1.425 |
| Blood type |  |  |  |  |  |  |
| B vs. A | 0.967 | 0.768 | 1.219 | - | - | - |
| O vs. A | 0.992 | 0.814 | 1.208 | - | - | - |
| AB vs. A | 0.793 | 0.558 | 1.127 | - | - | - |
| First-time |  |  |  |  |  |  |
| Yes vs. No | 1.740 | 1.265 | 2.393 | 1.640 | 1.218 | 2.208 |
| Occupation |  |  |  |  |  |  |
| Military vs. student | 0.888 | 0.624 | 1.265 | 0.900 | 0.633 | 1.279 |
| Civil servant/teacher vs. student | 1.679 | 1.169 | 2.412 | 1.687 | 1.176 | 2.419 |
| Laborer vs. student | 1.707 | 1.267 | 2.299 | 1.698 | 1.265 | 2.280 |
| Business vs. student | 2.145 | 1.464 | 3.143 | 2.131 | 1.460 | 3.111 |
| Housekeeper vs. student | 1.464 | 0.946 | 2.268 | 1.483 | 0.960 | 2.291 |
| Service industry. student | 1.774 | 1.339 | 2.349 | 1.784 | 1.350 | 2.357 |
| Others vs. student | 1.753 | 1.288 | 2.385 | 1.774 | 1.307 | 2.409 |

\* Model was assessed by using SAS (9.4 v., PROC LOGISTIC); final model has been adjusted for gender, and blood type.