

**Table S2.** Associations of Therapeutic Concentrations With Diagnosis

| Diagnosis Code                                                       | Total | Anti-Xa Values (units/mL)* |                     |                       | p value |
|----------------------------------------------------------------------|-------|----------------------------|---------------------|-----------------------|---------|
|                                                                      |       | Subtherapeutic (<0.5)      | Therapeutic (0.5–1) | Supratherapeutic (>1) |         |
| Infectious and parasitic diseases                                    |       |                            |                     |                       |         |
| No                                                                   | 171   | 22 (12.8)                  | 101 (59)            | 48 (28)               | 0.0203  |
| Yes                                                                  | 112   | 29 (25.9)                  | 57 (50.9)           | 26 (23.2)             |         |
| Neoplasms                                                            |       |                            |                     |                       |         |
| No                                                                   | 257   | 44 (17.1)                  | 145 (56.4)          | 68 (26.5)             | 0.4628  |
| Yes                                                                  | 26    | 7 (26.9)                   | 13 (50)             | 6 (23.1)              |         |
| Endocrine, nutritional, metabolic diseases and/or immunity disorders |       |                            |                     |                       |         |
| No                                                                   | 104   | 13 (12.5)                  | 62 (59.6)           | 29 (27.9)             | 0.1833  |
| Yes                                                                  | 179   | 38 (21.2)                  | 96 (53.6)           | 45 (25.1)             |         |
| Diseases of blood and blood-forming organs                           |       |                            |                     |                       |         |
| No                                                                   | 145   | 22 (15.2)                  | 86 (59.3)           | 37 (25.5)             | 0.3625  |
| Yes                                                                  | 138   | 29 (21)                    | 72 (52.2)           | 37 (26.8)             |         |
| Mental illness                                                       |       |                            |                     |                       |         |
| No                                                                   | 213   | 38 (17.8)                  | 124 (58.2)          | 51 (23.9)             | 0.2873  |
| Yes                                                                  | 70    | 13 (18.6)                  | 34 (48.6)           | 23 (32.9)             |         |
| Diseases of the nervous system and sense organs                      |       |                            |                     |                       |         |
| No                                                                   | 148   | 28 (18.9)                  | 88 (59.5)           | 32 (21.6)             | 0.1919  |
| Yes                                                                  | 135   | 23 (17)                    | 70 (51.8)           | 42 (31.1)             |         |
| Diseases of the circulatory system                                   |       |                            |                     |                       |         |
| No                                                                   | 10    | 0                          | 4 (40)              | 6 (60)                | 0.0321  |
| Yes                                                                  | 273   | 51 (18.7)                  | 154 (56.4)          | 68 (24.9)             |         |
| Diseases of the respiratory system                                   |       |                            |                     |                       |         |
| No                                                                   | 125   | 18 (14.4)                  | 70 (56)             | 37 (29.6)             | 0.2658  |
| Yes                                                                  | 158   | 33 (20.9)                  | 88 (55.7)           | 37 (23.4)             |         |
| Diseases of the digestive system                                     |       |                            |                     |                       |         |
| No                                                                   | 118   | 15 (12.7)                  | 64 (54.2)           | 39 (33)               | 0.031   |
| Yes                                                                  | 165   | 36 (21.8)                  | 94 (57)             | 35 (21.2)             |         |
| Diseases of the genitourinary system                                 |       |                            |                     |                       |         |
| No                                                                   | 180   | 35 (19.4)                  | 101 (56.1)          | 44 (24.4)             | 0.5735  |
| Yes                                                                  | 103   | 16 (15.5)                  | 57 (55.3)           | 30 (29.1)             |         |
| Complications of pregnancy, childbirth, and the puerperium           |       |                            |                     |                       |         |
| No                                                                   | 281   | 51 (18.1)                  | 158 (56.2)          | 72 (25.6)             | 0.0582  |
| Yes                                                                  | 2     | 0 (0)                      | 0 (0)               | 2 (100)               |         |
| Diseases of the skin and subcutaneous tissue                         |       |                            |                     |                       |         |
| No                                                                   | 213   | 38 (17.8)                  | 117 (54.9)          | 58 (27.2)             | 0.7687  |
| Yes                                                                  | 70    | 13 (18.6)                  | 41 (58.6)           | 16 (22.9)             |         |
| Diseases of the musculoskeletal system and connective tissue         |       |                            |                     |                       |         |
| No                                                                   | 243   | 45 (18.5)                  | 142 (58.4)          | 56 (23)               | 0.0132  |
| Yes                                                                  | 40    | 6 (15)                     | 16 (40)             | 18 (45)               |         |
| Congenital anomalies                                                 |       |                            |                     |                       |         |
| No                                                                   | 140   | 10 (7.1)                   | 74 (52.8)           | 56 (40)               | <0.0001 |
| Yes                                                                  | 143   | 41 (28.7)                  | 84 (58.7)           | 18 (12.6)             |         |
| Conditions originating in perinatal period                           |       |                            |                     |                       |         |
| No                                                                   | 188   | 20 (10.6)                  | 101 (53.7)          | 67 (35.6)             | <0.0001 |
| Yes                                                                  | 95    | 31 (32.6)                  | 57 (60)             | 7 (7.4)               |         |
| Injury and poisoning                                                 |       |                            |                     |                       |         |
| No                                                                   | 157   | 15 (9.5)                   | 92 (58.6)           | 50 (31.8)             | <0.0001 |
| Yes                                                                  | 126   | 36 (28.6)                  | 66 (52.4)           | 24 (19.1)             |         |
| Ill-defined conditions and factors influencing health status         |       |                            |                     |                       |         |
| No                                                                   | 152   | 29 (19.1)                  | 80 (52.6)           | 43 (28.3)             | 0.5012  |
| Yes                                                                  | 131   | 22 (16.7)                  | 78 (59.5)           | 31 (23.7)             |         |
| Residual codes, unclassified codes, all E codes                      |       |                            |                     |                       |         |
| No                                                                   | 123   | 21 (17.1)                  | 72 (58.5)           | 30 (24.4)             | 0.7221  |
| Yes                                                                  | 160   | 30 (18.8)                  | 86 (53.8)           | 44 (27.5)             |         |

Anti-Xa, Anti-factor Xa

\* Data presented as n (%)