**Supplementary Table 2. Incidence of GIB in Propensity Score-Matched Patients Treated with NOACs and Warfarin Group in the Overall Cohort (n = 79,528)**

| Variable                        | All GIB (n = 2,570) | Upper GIB (n = 764) | Lower GIB (n = 322) | GIB with transfusion (n = 1,446) |
|---------------------------------|--------------------|---------------------|---------------------|---------------------------------|
|                                 | Patients  | GIB  | Event rate (%) | Patients  | GIB  | Event rate (%) | Patients  | GIB  | Event rate (%) | Patients  | GIB  | Event rate (%) |
| Warfarin                        | 39,764   | 1,440 | 3.62            | 39,764   | 415  | 1.04            | 39,764   | 168  | 0.42            | 39,764   | 862  | 2.17            |
| NOACs                           | 39,764   | 1,130 | 2.84            | 39,764   | 349  | 0.88            | 39,764   | 154  | 0.39            | 39,764   | 584  | 1.47            |
| Apixaban                        | 8,772    | 223   | 2.54            | 8,772    | 74   | 0.84            | 8,772    | 30   | 0.34            | 8,772    | 110  | 1.25            |
| Dabigatran                      | 5,857    | 178   | 3.04            | 5,857    | 50   | 0.85            | 5,857    | 32   | 0.55            | 5,857    | 77   | 1.31            |
| Rivaroxaban                     | 25,135   | 729   | 2.90            | 25,135   | 225  | 0.90            | 25,135   | 92   | 0.37            | 25,135   | 397  | 1.58            |
| Warfarin without aspirin        | 37,320   | 1,350 | 3.60            | 37,320   | 394  | 1.06            | 37,320   | 152  | 0.41            | 37,320   | 808  | 2.17            |
| Warfarin plus aspirin           | 2,444    | 90    | 3.70            | 2,444    | 21   | 0.86            | 2,444    | 16   | 0.65            | 2,444    | 54   | 2.21            |
| NOACs without aspirin           | 37,473   | 1,044 | 2.80            | 37,473   | 322  | 0.86            | 37,473   | 144  | 0.38            | 37,473   | 543  | 1.45            |
| NOACs plus aspirin              | 2,291    | 86    | 3.80            | 2,291    | 27   | 1.18            | 2,291    | 10   | 0.44            | 2,291    | 41   | 1.79            |
| Warfarin without antiplateleta  | 36,700   | 1,326 | 3.60            | 36,700   | 389  | 1.06            | 36,700   | 150  | 0.41            | 36,700   | 792  | 2.16            |
| Warfarin plus antiplateletc     | 3,064    | 114   | 3.70            | 3,064    | 26   | 0.85            | 3,064    | 18   | 0.59            | 3,064    | 70   | 2.28            |
| NOACs without antiplateletc     | 36,832   | 1,022 | 2.80            | 36,832   | 314  | 0.85            | 36,832   | 140  | 0.38            | 36,832   | 532  | 1.44            |
| NOACs plus antiplateletc        | 2,932    | 108   | 3.70            | 2,932    | 35   | 1.19            | 2,932    | 14   | 0.48            | 2,932    | 52   | 1.77            |
| Warfarin without PPI            | 17,704   | 667   | 3.80            | 17,704   | 198  | 1.12            | 17,704   | 75   | 0.42            | 17,704   | 405  | 2.29            |
| Warfarin plus PPI               | 22,060   | 773   | 3.50            | 22,060   | 217  | 0.98            | 22,060   | 93   | 0.42            | 22,060   | 457  | 2.07            |
| NOACs without PPI              | 17,965   | 527   | 2.90            | 17,965   | 162  | 0.90            | 17,965   | 78   | 0.43            | 17,965   | 287  | 1.60            |
| NOACs plus PPI                 | 21,799   | 603   | 2.80            | 21,799   | 187  | 0.86            | 21,799   | 76   | 0.35            | 21,799   | 297  | 1.36            |

*aAntiplatelets include clopidogrel, ticagrelor and prasugrel.
GIB, gastrointestinal bleeding; NOACs, non-vitamin K antagonist oral anticoagulants; PPI, proton pump inhibitor.