

Table S1. Comparison between 2 rivaroxaban groups.

| | Total n=73 | 10 mg OD n=39 | 15 mg OD n=34 | p-value ^f |
|--|---------------|------------------|------------------|----------------------|
| Age (year) | 74.89±7.50 | 78.92±6.34 | 70.27±5.94 | <.001* |
| Male | 37 (50.7) | 16 (41.0) | 21 (61.8) | 0.102 |
| Body weight (kg) | 61.75±11.58 | 58.12±11.38 | 66.18±10.35 | 0.003* |
| CRE (mg/dL) | 1.04±0.28 | 1.10±0.25 | 0.96±0.29 | 0.028* |
| CrCL (mL/min) | 52.39±19.48 | 42.45±15.84 | 64.49±16.57 | <.001* |
| CHA ₂ DS ₂ VASc ^a | 3.92±1.47 | 4.13±1.58 | 3.72±1.32 | 0.192 |
| HAS-BLED ^b | 2.23±0.84 | 2.23±0.93 | 2.22±0.74 | 0.982 |
| Co-morbidities | | | | |
| IS or TIA | 27 (37.0) | 12 (30.8) | 17 (50.0) | 0.150 |
| CHF | 15 (20.5) | 10 (25.6) | 5 (14.7) | 0.384 |
| Hypertension | 55 (75.3) | 27 (69.2) | 28 (82.4) | 0.277 |
| Diabetes | 20 (27.4) | 10 (25.6) | 10 (29.4) | 0.795 |
| MI or PAOD | 5 (6.8) | 2 (5.1) | 3 (8.8) | 0.659 |
| Malignancy | 10 (13.6) | 7 (17.9) | 3 (8.8) | 0.321 |
| Bleeding history | 10 (13.6) | 7 (17.9) | 3 (8.8) | 0.321 |
| ICH | 1 (1.4) | 1 (2.6) | 0 (0) | 1.000 |
| GI bleeding | 5 (6.8) | 4 (10.3) | 1 (2.9) | 0.363 |
| Other bleeding | 6 (8.2) | 3 (7.7) | 3 (8.8) | 1.000 |
| Plasma concentration | | | | |
| Trough (ng/mL) | 102.88±59.03 | 39.46±74.61 | 31.90±34.65 | 0.590 |
| Peak (ng/mL) | 221.29±116.45 | 189.80±102.77 | 182.74±100.14 | 0.775 |
| rivaroxaban use | | | | |
| Good adherence ^c | | | | |
| appropriate dose ^d | 55 (75.3) | 29 (74.4) | 26 (81.3) | 0.575 |
| Concurrent medications ^e | | | | |
| amiodarone | 16 (21.9) | 9 (23.1) | 7 (20.6) | 1.000 |
| dronedarone | 4 (5.5) | 3 (7.7) | 1 (2.9) | 0.618 |
| aspirin | 1 (1.4) | 1 (2.6) | 0 (0) | 1.000 |
| clopidogrel | 3 (4.1) | 2 (4.55) | 1 (1.64) | 0.570 |
| NSAID | 1 (1.4) | 1 (2.6) | 0 (0) | 1.000 |

Data are expressed as mean ± standard deviation or number (percentage).

¹CHA₂DS₂VASc score: To evaluate the risk for ischemic stroke among patients with atrial fibrillation. Higher score indicates higher risk of ischemic stroke. One point is assigned to congestive heart failure, hypertension, age 65-74 years, diabetes, female sex, or vascular disease, and two points was assigned to age≥75 years and previous stroke or transient ischemic attack history.

²HASBLED score: To evaluate the risk for bleeding. Higher score indicates higher risk. One point is assigned to hypertension, abnormal liver function, abnormal renal function, stroke history, bleeding history, labile international normalized ratio (INR) during warfarin therapy, age over 65 years, antiplatelet agent, non-steroidal anti-inflammatory drug or ethanol use. The item labile INR was not calculated in the present study.

³Good adherence was defined as no self-reported missed NOAC dose in past 1 week, during NOAC treatment and no reasons other than forgetting to miss taking the NOAC dose. This was evaluated by providing participants a 3-item questionnaire.

⁴Appropriate dose was defined as ordering the NOAC according to the product labeling, including correct dose and frequency per indication and appropriately adjusted renal dose.

⁵Concurrent medications: None of our patients concomitantly used verapamil, azole antifungal agents, protease inhibitors (P-glycoprotein inhibitors), and rifampin, enzyme inducing antiepileptic drugs such as phenytoin and phenobarbital (P-glycoprotein inducers).

⁶P-value between 2 rivaroxaban dose groups.

Abbreviations: CHF, congestive heart failure; CrCL, creatinine clearance (estimated by Cockcroft-Gault Formula); CRE, serum creatinine; ICH, intracranial hemorrhage; IS, ischemic stroke; MI, myocardial infarction; NSAID, non-steroidal anti-inflammatory drugs; OD, once daily; PAOD, peripheral arterial vascular disease; TIA,

transient ischemic attack.

Table S2. Comparisons between 2 apixaban groups.

| | Total n=105 | 2.5 mg BID n=61 | 5 mg BID n=44 | p-value ⁶ |
|--|----------------|--------------------|------------------|----------------------|
| Age (year) | 77.27±9.13 | 81.57±7.46 | 71.31±7.83 | <.001* |
| Male | 60 (57.14) | 33 (54.10) | 27 (61.36) | 0.550 |
| Body weight (kg) | 64.91±10.33 | 63.29±9.88 | 67.11±10.63 | 0.062 |
| CRE (mg/dL) | 1.19±0.49 | 1.31±0.56 | 1.01±0.30 | 0.001* |
| CrCL (mL/min) | 50.02±20.00 | 40.68±16.03 | 62.76±17.84 | <.001* |
| CHA ₂ DS ₂ VASc ¹ | 4.31±1.40 | 4.48±1.43 | 4.09±1.33 | 0.165 |
| HAS-BLED ² | 2.46±0.81 | 2.48±0.85 | 2.43±0.76 | 0.787 |
| Co-morbidities | | | | |
| IS or TIA | 52 (49.52) | 23 (37.70) | 29 (65.91) | 0.006* |
| CHF | 18 (17.14) | 14 (22.95) | 4 (9.09) | 0.072 |
| Hypertension | 84 (80.00) | 50 (82.97) | 34 (77.27) | 0.624 |
| Diabetes | 26 (24.76) | 16 (26.23) | 10 (22.73) | 0.820 |
| MI or PAOD | 16 (15.24) | 8 (13.11) | 8 (18.18) | 0.584 |
| Malignancy | 17 (16.19) | 9 (14.75) | 8 (18.18) | 0.789 |
| Bleeding history | | | | |
| ICH | 6 (5.71) | 4 (6.56) | 2 (4.55) | 1.000 |
| GI bleeding | 7 (6.67) | 3 (4.92) | 4 (9.09) | 0.449 |
| Other bleeding | 8 (7.62) | 6 (9.84) | 2 (4.55) | 1.000 |
| Apixaban concentration | | | | |
| Trough (ng/mL) | 102.88±59.03 | 89.10±58.58 | 121.99±54.75 | 0.004* |
| Peak (ng/mL) | 221.29±116.45 | 75.63±9.76 | 286.73±130.54 | <.001* |
| apixaban use | | | | |
| Good adherence ³ | 83 (79.05) | 47 (77.05) | 36 (81.82) | 0.632 |
| appropriate dose ⁴ | 54 (51.92) | 23 (38.33) | 31 (70.45) | 0.001* |
| Concurrent medications ⁵ | | | | |
| Amiodarone | 33 (31.43) | 22 (36.07) | 11 (25.00) | 0.288 |
| Dronedarone | 2 (1.90) | 1 (1.64) | 1 (2.27) | 1.000 |
| Aspirin | 1 (1.64) | 1 (1.64) | 0 (0) | 1.000 |
| Clopidogrel | 3 (2.86) | 1 (1.64) | 2 (4.55) | 0.570 |

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