Appendix

Supplemental Figure I: Baseline endogenous Factor Xa activity according to dose-reduction criteria in men and women.

The difference between men and women was tested using the non-parametric Wilcoxon rank-sum test. DR = dose reduction
Supplemental Figure II: Endogenous Factor Xa activity with higher-dose (HDER) and lower-dose edoxaban regimen (LDER) according to dose-reduction criteria.

The difference between men and women was tested using the non-parametric Wilcoxon rank-sum test.
Supplemental Figure III: Edoxaban concentrations with higher-dose (HDER) and lower-dose edoxaban regimen (LDER) according to dose-reduction (DR) criteria.

The difference between men and women was tested using the non-parametric Wilcoxon rank-sum test.
Supplemental Figure IV: Exogenous Factor Xa Concentrations with higher-dose (HDER) and lower-dose edoxaban (LDER) regimen. The difference between men and women was tested using the non-parametric Wilcoxon rank-sum test.
Supplemental Figure V: Exogenous Factor Xa concentrations with higher-dose (HDER) and lower-dose edoxaban regimen (LDER) according to dose-reduction (DR) criteria.

The difference between men and women was tested using the non-parametric Wilcoxon rank-sum test.
Supplemental Figure VI: Efficacy and safety of edoxaban versus warfarin stratified by sex using multivariable adjusted* Cox model. (The x-axis of the forest plot represents hazard ratio.)

*Adjusted for age, body mass index, race, smoking, history of stroke or TIA, diabetes, heart failure, hypertension, coronary artery disease, peripheral artery disease, dyslipidemia, hepatic disease, non-ICH bleed, AF type
Supplemental Figure VII: Efficacy and safety of higher dose edoxaban regimen (HDER) and lower dose edoxaban regimen (LDER) versus warfarin in patients who met criteria for dose reduction stratified by sex (i.e., HDER 30 mg, LDER 15 mg). (The x-axis of the forest plot represents hazard
Supplemental Figure VIII: Efficacy and safety of higher dose edoxaban regimen (HDER) and lower dose edoxaban regimen (LDER) in patients who did not meet criteria for dose-reduction versus warfarin stratified by sex (i.e., HDER 60 mg, LDER 30 mg). (The x-axis of the forest plot represents hazard ratio.)

| Primary Endpoint | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
| Stroke/SEE       | Female| 5112| 1.6                            | 1.5                         | 1.6                         | 0.58              |
|                  | Male  | 10637| 1.5                            | 1.3                         | 1.6                         |                   |

| Secondary Endpoints | Any stroke | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|---------------------|-------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                     | Female      | 5112  | 1.5 | 1.4                            | 1.8                         |                             | 0.68              |
|                     | Male        | 10637 | 1.4 | 1.2                            | 1.5                         |                             |                   |

|                    | Hemorrhagic stroke | Female | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|---------------------|--------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female              | 5112   | 0.4 | 0.1                            | 0.2                         |                             | 0.53              |
|                    | Male                | 10637  | 0.4 | 0.3                            | 0.2                         |                             |                   |

|                    | Ischemic stroke    | Female | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|---------------------|--------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female              | 5112   | 1.2 | 1.3                            | 1.6                         |                             | 0.64              |
|                    | Male                | 10637  | 1.0 | 1.0                            | 1.3                         |                             |                   |

|                    | Myocardial infarction | Female | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|-----------------------|--------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                | 5112   | 0.5 | 0.5                            | 0.6                         |                             | 0.64              |
|                    | Male                  | 10637  | 0.8 | 0.0                            | 1.0                         |                             |                   |

| Death              | All-cause death      | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|----------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female               | 5112  | 2.4 | 2.5                            | 2.4                         |                             | 0.52              |
|                    | Male                 | 10637 | 3.7 | 3.5                            | 3.3                         |                             |                   |

|                    | CV death             | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|----------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female               | 5112  | 1.8 | 1.7                            | 1.9                         |                             | 0.67              |
|                    | Male                 | 10637 | 2.8 | 2.4                            | 2.2                         |                             |                   |

| Safety Endpoints   | Major bleeding       | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|----------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female               | 5095  | 2.7 | 2.5                            | 1.7                         |                             | 0.63              |
|                    | Male                 | 10601 | 3.2 | 2.8                            | 1.6                         |                             |                   |

|                    | Major and CRNM bleeding | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|-------------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                  | 5095  | 11.6| 10.4                           | 7.5                         |                             | 0.44              |
|                    | Male                    | 10601 | 11.6| 10.9                           | 7.9                         |                             |                   |

|                    | Intracranial hemorrhage | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|-------------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                  | 5095  | 0.1 | 0.1                            | 0.3                         |                             | 0.045             |
|                    | Male                    | 10601 | 0.7 | 0.4                            | 0.3                         |                             |                   |

|                    | Life threatening or fatal | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|---------------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                    | 5095  | 1.0 | 0.2                            | 0.4                         |                             | 0.005             |
|                    | Male                      | 10601 | 1.0 | 0.7                            | 0.4                         |                             |                   |

|                    | Any bleeding             | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|--------------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                   | 5095  | 14.8| 13.3                           | 10.0                        |                             | 0.46              |
|                    | Male                     | 10601 | 14.8| 14.0                           | 10.5                        |                             |                   |

|                    | Major GI bleed           | Sex   | N  | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | P for interaction |
|--------------------|--------------------------|-------|----|--------------------------------|-----------------------------|-----------------------------|-------------------|
|                    | Female                   | 5095  | 0.9 | 1.6                            | 0.6                         |                             | 0.23              |
|                    | Male                     | 10601 | 1.3 | 1.5                            | 0.8                         |                             |                   |

Favors Edoxaban $\rightarrow$ Favors Warfarin Favors LDER $\rightarrow$ Favors Warfarin
Supplemental Figure IX: Edoxaban versus warfarin on stroke and systemic embolic events in women by major subgroups. (The x-axis of the forest plot represents hazard ratio.)

| Age (yrs) | Total N | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | HDER x Subgrp P for interaction | LDER x Sex P for interaction |
|-----------|---------|--------------------------------|---------------------------|---------------------------|--------------------------------|-----------------------------|
| <65       | 1510    | 1.1                            | 0.9                       | 1.6                       | REF                            | REF                         |
| 65-<75    | 2753    | 1.8                            | 1.5                       | 2.1                       | 1.00                           | 0.48                        |
| >75       | 3777    | 2.5                            | 2.3                       | 2.8                       | 0.06                           | 0.44                        |
| Weight (kg) |        |                                |                           |                           |                                |                             |
| <74       | 3914    | 2.5                            | 2.2                       | 2.9                       | REF                            | REF                         |
| >=74      | 4126    | 1.5                            | 1.3                       | 1.8                       | 0.99                           | 0.80                        |
| CHADS2    |        |                                |                           |                           |                                |                             |
| <=3       | 6052    | 1.5                            | 1.4                       | 2.0                       | REF                            | REF                         |
| >3        | 1988    | 3.5                            | 2.8                       | 3.4                       | 0.53                           | 0.23                        |
| Region    |         |                                |                           |                           |                                |                             |
| N. America | 1598    | 1.8                            | 1.9                       | 2.1                       | REF                            | REF                         |
| S. America | 1061    | 2.2                            | 1.8                       | 2.3                       | 0.61                           | 0.72                        |
| W. Europe | 1233    | 1.6                            | 2.3                       | 2.1                       | 0.47                           | 0.93                        |
| E. Europe | 3008    | 1.7                            | 1.5                       | 2.6                       | 0.70                           | 0.47                        |
| Asia      | 1120    | 3.1                            | 1.6                       | 2.3                       | 0.15                           | 0.24                        |
| Diabetes  |         |                                |                           |                           |                                |                             |
| No        | 5268    | 2.2                            | 1.8                       | 2.4                       | REF                            | REF                         |
| Yes       | 2762    | 1.5                            | 1.7                       | 2.2                       | 0.23                           | 0.24                        |
| Heart Failure |     |                                |                           |                           |                                |                             |
| No        | 3464    | 2.0                            | 1.9                       | 2.4                       | REF                            | REF                         |
| Yes       | 4576    | 2.0                            | 1.7                       | 2.3                       | 0.51                           | 0.71                        |
| Stroke/TIA |        |                                |                           |                           |                                |                             |
| No        | 5761    | 1.5                            | 1.4                       | 1.9                       | REF                            | REF                         |
| Yes       | 2279    | 3.4                            | 2.8                       | 3.5                       | 0.62                           | 0.37                        |
| AF type   |         |                                |                           |                           |                                |                             |
| Paroxysmal| 2432    | 0.9                            | 2.0                       | 1.9                       | REF                            | REF                         |
| Persistent| 1825    | 2.4                            | 1.4                       | 1.7                       | 0.001                          | 0.007                       |
| Permanent | 3760    | 2.5                            | 1.8                       | 2.9                       | 0.001                          | 0.109                       |
| Hypertension |      |                                |                           |                           |                                |                             |
| No        | 409     | 2.2                            | 2.3                       | 4.4                       | REF                            | REF                         |
| Yes       | 7631    | 2.0                            | 1.7                       | 2.2                       | 0.60                           | 0.11                        |
| Prior MI  |         |                                |                           |                           |                                |                             |
| No        | 7457    | 1.9                            | 1.7                       | 2.2                       | REF                            | REF                         |
| Yes       | 582     | 3.1                            | 2.0                       | 3.1                       | 0.42                           | 0.81                        |
| Dose reduced |      |                                |                           |                           |                                |                             |
| No        | 5112    | 1.6                            | 1.5                       | 1.8                       | REF                            | REF                         |
| Yes       | 2628    | 2.8                            | 2.2                       | 3.2                       | 0.52                           | 1.00                        |
| Aspirin use |        |                                |                           |                           |                                |                             |
| No        | 5903    | 1.9                            | 1.8                       | 2.3                       | REF                            | REF                         |
| Yes       | 2135    | 2.4                            | 1.6                       | 2.3                       | 0.12                           | 0.31                        |
| Amiodarone use |   |                                |                           |                           |                                |                             |
| No        | 7073    | 2.0                            | 1.8                       | 2.4                       | REF                            | REF                         |
| Yes       | 967     | 1.7                            | 1.2                       | 1.6                       | 0.55                           | 0.47                        |
Supplemental Figure X: Edoxaban versus warfarin on major bleeding in women by major subgroups. (The x-axis of the forest plot represents hazard ratio.)

| Age (yrs) | Total N | Warfarin Annualized Event rate | HDER Annualized Event rate | LDER Annualized Event rate | HDER x Subgrp P for interaction | LDER x Sex P for interaction |
|-----------|---------|-------------------------------|---------------------------|---------------------------|---------------------------------|-------------------------------|
| <65       | 1506    | 1.7                           | 1.6                       | 0.5                       |                                  |                               |
| 65-<75    | 2745    | 2.8                           | 2.2                       | 1.4                       | 0.64                            | 0.25                          |
| >=75      | 3755    | 4.7                           | 3.2                       | 2.1                       | 0.40                            | 0.36                          |
| Weight (kg) |        |                               |                           |                           |                                 |                               |
| <74       | 3890    | 3.9                           | 2.6                       | 1.5                       |                                  |                               |
| >=74      | 4116    | 2.9                           | 2.3                       | 1.6                       | 0.43                            | 0.20                          |
| CHADS2    |         |                               |                           |                           |                                 |                               |
| <=3       | 6022    | 3.1                           | 2.3                       | 1.5                       |                                  |                               |
| >3        | 1984    | 4.2                           | 3.2                       | 1.7                       | 0.89                            | 0.60                          |
| Region    |         |                               |                           |                           |                                 |                               |
| N. America | 1591   | 4.4                           | 4.4                       | 2.8                       |                                  |                               |
| S. America | 1078   | 3.7                           | 2.8                       | 1.3                       | 0.37                            | 0.22                          |
| W. Europe | 1227   | 4.0                           | 2.7                       | 1.4                       | 0.32                            | 0.16                          |
| E. Europe | 2997   | 2.3                           | 1.3                       | 1.0                       | 0.090                           | 0.31                          |
| Asia      | 1113    | 4.3                           | 3.0                       | 1.6                       | 0.34                            | 0.21                          |
| Diabetes  |         |                               |                           |                           |                                 |                               |
| No        | 5232    | 3.2                           | 2.4                       | 1.4                       |                                  |                               |
| Yes       | 2774    | 3.6                           | 2.5                       | 1.8                       | 0.69                            | 0.58                          |
| CHF       |         |                               |                           |                           |                                 |                               |
| No        | 3442    | 3.7                           | 2.9                       | 1.6                       |                                  |                               |
| Yes       | 4564    | 3.1                           | 2.2                       | 1.5                       | 0.75                            | 0.56                          |
| Stroke/TIA|         |                               |                           |                           |                                 |                               |
| No        | 5733    | 3.3                           | 2.3                       | 1.6                       |                                  |                               |
| Yes       | 2273    | 3.4                           | 3.0                       | 1.3                       | 0.36                            | 0.38                          |
| AF type   |         |                               |                           |                           |                                 |                               |
| Paroxysmal| 2421    | 3.0                           | 3.4                       | 1.1                       |                                  |                               |
| Persistent| 1815    | 3.9                           | 1.5                       | 1.5                       | 0.002                           | 0.74                          |
| Permanent | 3770    | 3.3                           | 2.3                       | 1.9                       | 0.072                           | 0.12                          |
| Hypertension |       |                               |                           |                           |                                 |                               |
| No        | 407     | 4.1                           | 2.9                       | 1.5                       |                                  |                               |
| Yes       | 7599    | 3.3                           | 2.5                       | 1.5                       | 0.96                            | 0.76                          |
| Prior MI  |         |                               |                           |                           |                                 |                               |
| No        | 7424    | 3.5                           | 2.5                       | 1.5                       |                                  |                               |
| Yes       | 581     | 1.8                           | 2.9                       | 1.8                       | 0.11                            | 0.11                          |
| Dose reduced |       |                               |                           |                           |                                 |                               |
| No        | 5065    | 2.7                           | 2.5                       | 1.7                       |                                  |                               |
| Yes       | 2611    | 4.7                           | 2.5                       | 1.3                       | 0.028                           | 0.033                         |
| Aspirin use |       |                               |                           |                           |                                 |                               |
| No        | 5885    | 3.0                           | 2.4                       | 1.3                       |                                  |                               |
| Yes       | 2120    | 4.5                           | 2.8                       | 2.3                       | 0.32                            | 0.55                          |
| Amiodarone use |    |                               |                           |                           |                                 |                               |
| No        | 7042    | 3.4                           | 2.5                       | 1.6                       |                                  |                               |
| Yes       | 964     | 2.6                           | 2.5                       | 0.8                       | 0.41                            | 0.42                          |