S5 Table: Results of sensitivity analysis fixed-effect NMA (significant results in bold)

| **Outcome** | **RR (95% Crl)** |
| --- | --- |
| **Apixaban vs. VKA** | **Dabigatran vs. VKA** | **Rivaroxaban vs. VKA** | **Edoxaban vs. VKA** | **Apixaban vs. dabigatran**  | **Apixaban vs. rivaroxaban**  | **Apixaban vs. edoxaban** | **Rivaroxaban vs. dabigatran**  | **Rivaroxaban vs. edoxaban** | **Dabigatran vs edoxaban** |
| VTE and VTE-related-death | 0.83(0.59, 1.17) | 1.09(0.76, 1.57) | 0.90(0.67, 1.20) | 0.83(0.60, 1.14) | 0.76(0.46, 1.26) | 0.92(0.59, 1.45) | 1.01(0.63, 1.63) | 0.82(0.52, 1.31) | 1.09 (0.71, 1.69) | 1.32 (0.81, 2.16) |
| Major or CRNM bleeding | **0.44****(0.35, 0.55)** | **0.63****(0.51, 0.77)** | 0.94(0.82, 1.07) | **0.82****(0.72, 0.94)** | **0.70****(0.52, 0.95)** | **0.47****(0.36, 0.61)** | **0.54****(0.41, 0.69)** | **1.49****(1.17, 1.91)** | 1.14 (0.94, 1.38) | **0.76** **(0.60, 0.98)** |
| Major bleeding | **0.30****(0.16, 0.53)** | 0.72(0.47, 1.10) | **0.55****(0.37, 0.81)** | 0.85(0.60, 1.21) | **0.42****(0.20, 0.84)** | 0.55(0.27, 1.09) | **0.35****(0.18, 0.69)** | 0.76(0.43, 1.35) | 0.65 (0.39, 1.09) | 0.85 (0.49, 1.47) |
| CRNM bleeding | **0.48****(0.38, 0.60)** | **0.60****(0.47, 0.76)** | 1.02(0.88, 1.18) | **0.81****(0.70, 0.94)** | 0.80(0.57, 1.12) | **0.47****(0.36, 0.62)** | **0.59****(0.45, 0.78)** | **1.70****(1.29, 2.26)** | **1.26** **(1.03, 1.55)** | **0.74** **(0.56, 0.98)** |
| All-cause mortality | 0.79(0.52, 1.18) | 1.00(0.67, 1.50) | 0.97(0.73, 1.28) | 1.05(0.82, 1.34) | 0.79(0.44, 1.40) | 0.82(0.50, 1.34) | 0.75(0.47, 1.21) | 0.96(0.59, 1.58) | 0.92 (0.64, 1.33) | 0.92 (0.64, 1.33) |
| Non-fatal PE | 1.19(0.68, 2.08) | 1.00(0.52, 1.93) | 1.10(0.71, 1.71) | 0.83(0.57, 1.22) | 1.18(0.50, 2.80) | 1.08(0.53, 2.20) | 1.43(0.73, 2.83) | 1.10(0.50, 2.42) | 1.33(0.74, 2.36) | 1.20(0.56, 2.56) |
| DVT | 0.61(0.34, 1.05) | 1.18(0.75, 1.86) | 0.71(0.44, 1.11) | 0.91(0.64, 1.29) | 0.51(0.25, 1.04) | 0.86(0.41, 1.76) | 0.67(0.34, 1.29) | 0.60(0.31, 1.14) | 0.78(0.44, 1.39) | 1.30(0.73, 2.31) |
| VTE-related death | 0.80(0.36, 1.72) | 0.63(0.07, 4.12) | 0.99(0.44, 2.24) | 1.00(0.56, 1.78) | 1.28(0.17, 12.29) | 0.80(0.26, 2.48) | 0.80(0.30, 2.08) | 1.59(0.20, 15.73) | 1.00(0.37, 2.67) | 0.63(0.07, 4.45) |
| Intracranial bleeding | 0.47(0.09, 1.87) | 0.36(0.05, 1.77) | **0.34****(0.11, 0.91)** | **0.26****(0.09, 0.68)** | 1.33(0.14, 15.45) | 1.40(0.21, 8.35) | 1.83(0.28, 10.70) | 0.95(0.13, 9.23) | 1.29(0.29, 5.69) | 1.38(0.14, 9.78) |
| Other major bleeding† | **0.27****(0.14, 0.51)** | 0.76(0.49, 1.17) | **0.60****(0.39, 0.91)** | 1.07(0.72, 1.58) | **0.36****(0.16, 0.77)** | **0.46****(0.21, 0.97)** | **0.26****(0.12, 0.53)** | 0.79(0.43, 1.46) | **0.56****(0.32, 0.997)** | 0.71(0.39, 1.27) |
| Other deaths‡ | 0.80(0.48, 1.31) | 1.05(0.69, 1.61) | 1.02(0.75, 1.39) | 1.16(0.88, 1.53) | 0.76(0.40, 1.47) | 0.78(0.44, 1.41) | 0.71(0.39, 1.25) | 0.97(0.57, 1.65) | 0.84(0.55, 1.28) | 0.91(0.54, 1.50) |

Abbreviations: BD, twice daily; Crl, credible interval; CRNM, clinically relevant non major; OD, once daily; PE, pulmonary embolism; VKA, vitamin K antagonist; VTE, venous thromboembolism
†Defined as ‘major bleed’ minus ‘intracranial bleeding’
‡Defined as ‘all-cause mortality minus ‘VTE-related death’ minus ‘bleeding-related death’