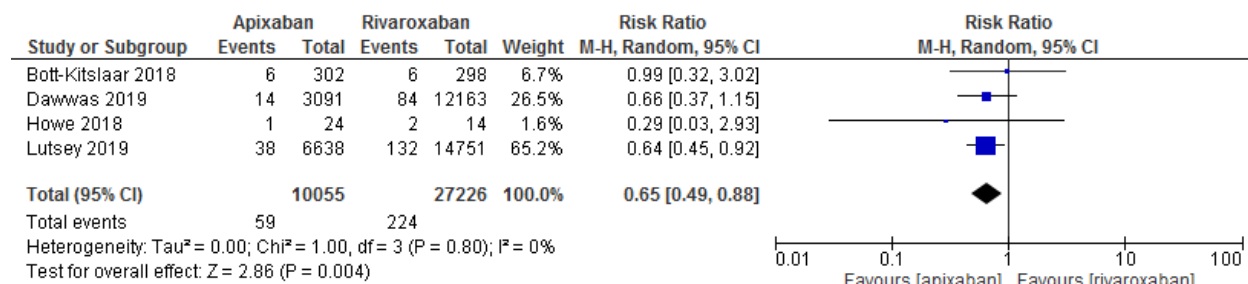
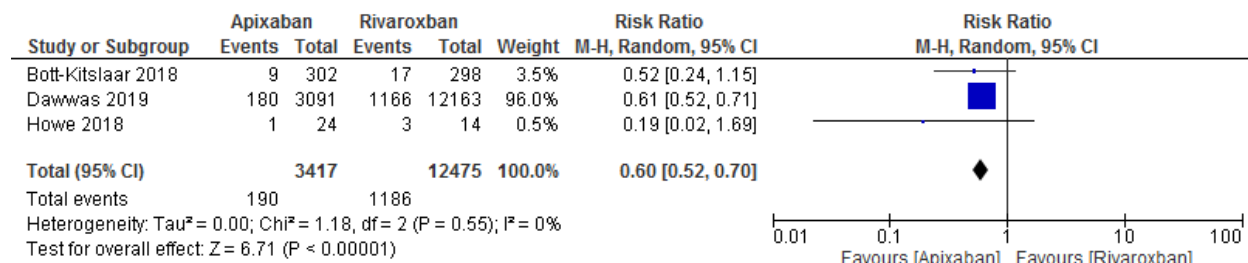


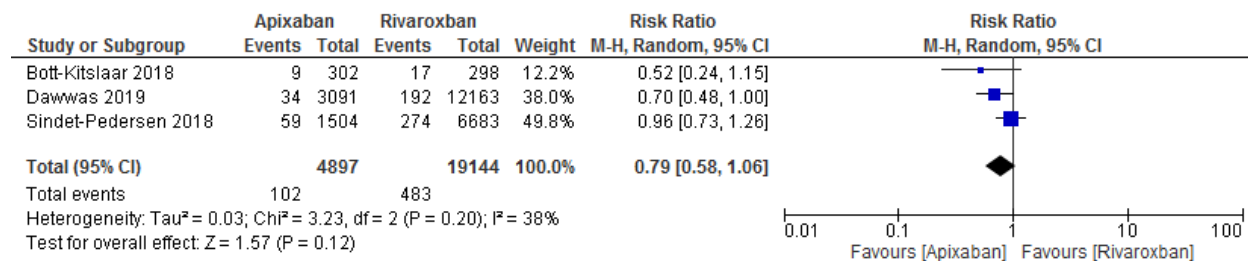
Supplementary file figure 1 – (removing Howe et al.) – sensitivity analysis



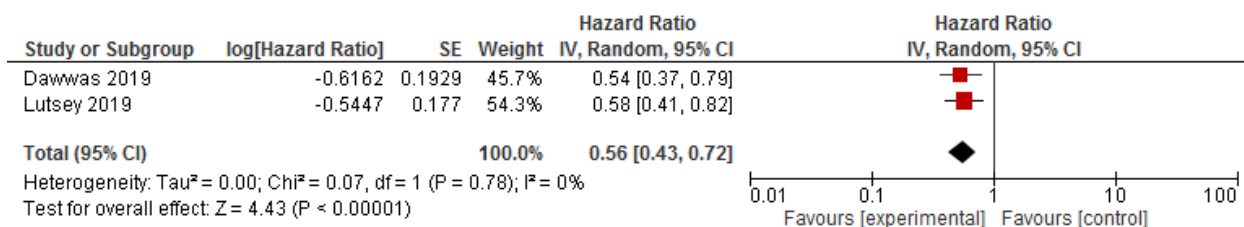
Supplementary file figure 2 – (removing Sindet-Pederson et al.) – sensitivity analysis



Supplementary file figure 3: composite of major and minor bleeding



Supplementary file figure 4: composite of major bleeding and VTE recurrence



Supplementary file figure 5: HR of major bleeding in 3 months

Outcome	Number of studies	Number of Patients	Risk ratio (95% CI)	P value	Heterogeneity (I ² %)
Apixaban vs. Rivaroxaban					
Recurrent VTE	3	24,041	0.89 (0.67 – 1.19)	0.45	0%
Major Bleeding	5	45,468	0.73 (0.58 – 0.93)	0.010	0%
Minor Bleeding	3	15,892	0.59 (0.50 – 0.70)	<0.01	0%
Composite of major and minor bleeding	2	15,854	0.60 (0.52 – 0.69)	<0.01	0%
Composite of VTE and major bleeding	3	24,041	0.77 (0.58– 1.06)	0.12	38%
Hazard ratio for major bleeding at 3 months: 0.56 (CI: 0.43-0.72, I ² : 0%, P<0.01)					

Supplementary Table 1: Total number of efficacy and safety end point events in apixaban and rivaroxaban patients

CI = confidence interval

VTE = venous thromboembolism

Included studies	Selection				Comparability		Outcome		Classification
	Representative-ness of exposure group	Representative-ness of the non-exposed group	Ascertainment of exposure	Determination that outcome not present initially	Comparison of cohorts	Assessment of outcome	Long enough follow-up?	Adequacy of follow-up?	
<u>Sindet-Pedersen (2018)</u>	Yes	Yes	Secure record	Yes	Yes	Reported	Yes (3 mos and 6 mos)	No (lost to follow-up not reported)	7
<u>Lutsey (2019)</u>	Yes	Yes	Secure record	Yes	Yes	Major bleeding reported (minor missing)	Yes (90 days)	No (lost to follow-up not reported)	6
<u>Bott-Kitslaar (2018)</u>	Yes	Yes	No - Not reported	Yes	Yes	Reported	Yes (3 mos)	No (lost to follow-up not reported)	6
<u>Dawwas (2019)</u>	Yes	Yes	Secure record	Yes	Yes	Reported	Yes (99 days)	No (lost to follow-up not reported)	7
<u>Howe (2018)</u>	Yes	Yes	Secure record	Yes	Yes	Reported	Yes (180 days)	No (lost to follow-up not reported)	7

Supplementary Table 2: Assessment of the quality of included studies (Newcastle-Ottawa Scale used for determination of quality)