

Supplementary Figure S1: Risk of bias assessment of included studies

Study	Risk of bias domains					
	D1	D2	D3	D4	D5	Overall
Agno 2019						
Agnelli 2015						
Guntupalli 2020						
Kim 2022						
McBane 2019						
Mokadem 2021						
Planquette 2022						
Raskob 2018						
Wang 2019						
Young 2018						
Agnelli 2020						

Domains:

D1: Bias arising from the randomization process.

D2: Bias due to deviations from intended intervention.

D3: Bias due to missing outcome data.

D4: Bias in measurement of the outcome.

D5: Bias in selection of the reported result.

Judgement

Some concerns

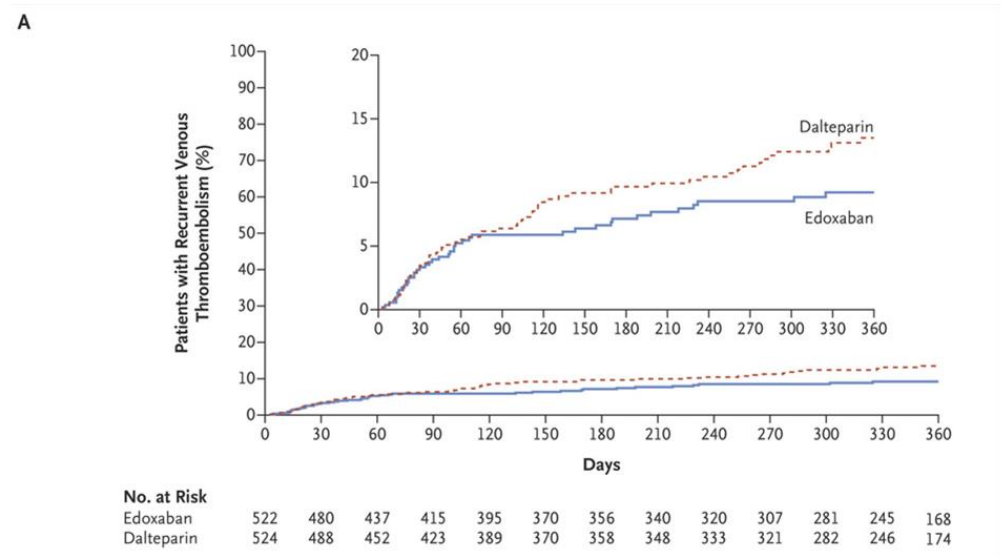
Low

Supplementary Data S1: EMBASE Search Strategy

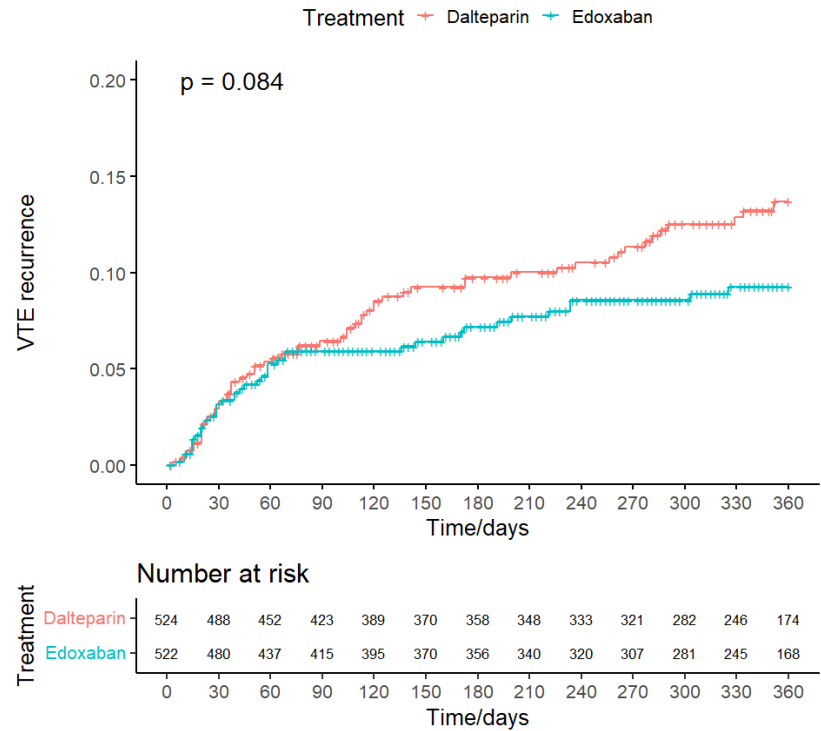
<b>1</b>	'neoplasm':ti,ab OR 'cancer*':ti,ab OR 'tumo*':ti,ab OR 'malign*':ti,ab or "neoplasm"/exp
<b>2</b>	((vein* or venous* or deep-vein* or deep-veno*) NEAR/3 (occlu* or thrombo* or block* or stasis*)):ti,ab
<b>3</b>	"venous thromboembolism"/exp or "vein thrombosis"/exp or "lung embolism"/exp or "occlusive cerebrovascular disease "/exp or "budd chiari syndrome"/exp or "postthrombosis syndrome"/exp or "vein occlusion"/exp or "phlegmasia alba dolens"/exp or "Lemierre syndrome"/exp
<b>4</b>	("pulmonary embolism" or "Phlebothrombosis" or "budd-chiari syndrome" or "hepatic venous outflow obstruction" or "chiaris syndrome " or "chiari syndrome" or "postthrombotic syndrome" or "Thrombophlebit*" or "phlegmasia alba dolens" or "lemierre disease" or "lemierre syndrome" or "lemierres disease" or "lemierres syndrome" or "postanginal sepsis " or "paget-schroetter syndrome" or "paget schroetter" or "thromboembolism"):ti,ab
<b>5</b>	"blood clotting inhibitor"/exp OR 'new oral anticoagulant'/exp OR 'novel oral anticoagulant'/exp OR 'blood clotting factor 10a inhibitor'/exp OR ('apixaban*' OR 'betrixaban*' OR 'edoxaban*' OR 'rivaroxaban*' OR 'dabigatran*' or "Xarelto" or "BAY 59-7939" or "BMS 562247" or "BMS-562247" or "Xa inhibitor" or "Melagatran" or "Ximelagatran" or "Exanta" or "H 376 95" or "H 376-95" or "DU-176b" or "xi-melagatran" or "BMS562247" or "asundexian"):ti,ab
<b>6</b>	'low molecular weight heparin'/exp OR ('lmwh' OR 'enoxaparin' OR 'nadroparin' OR 'tinzaparin' OR 'dalteparin'):ti,ab

1 AND (2 OR 3 OR 4) AND 5 AND 6, limit to RCTs

VTE recurrence – Raskob 2018 original

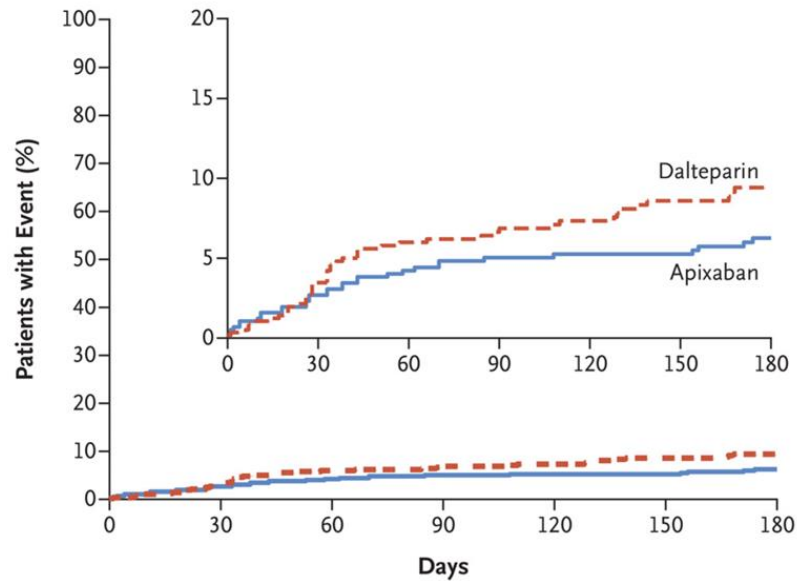


VTE recurrence – Raskob 2018 reconstructed



## VTE recurrence – Agnelli 2020 original

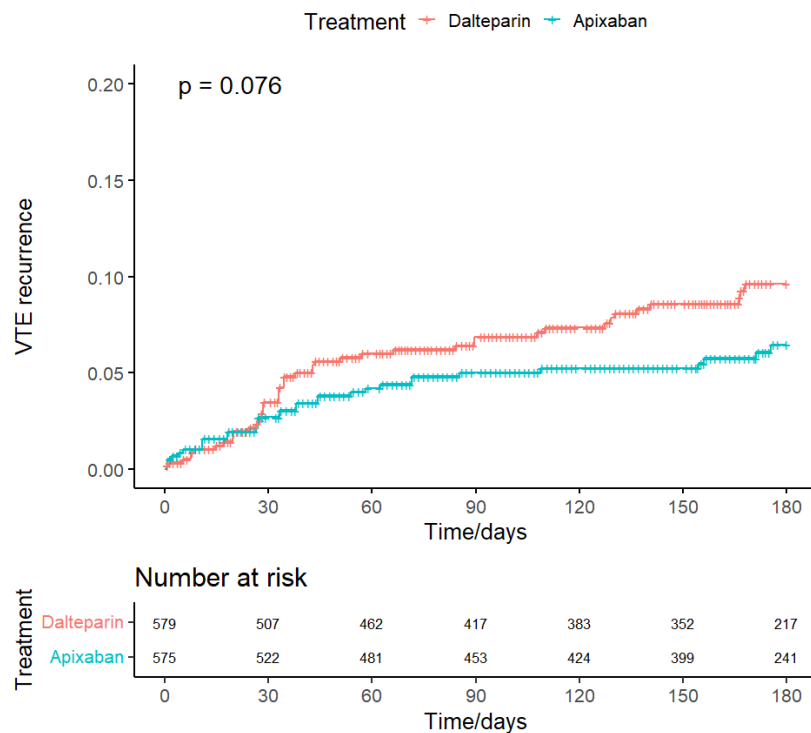
### A Recurrent Venous Thromboembolism



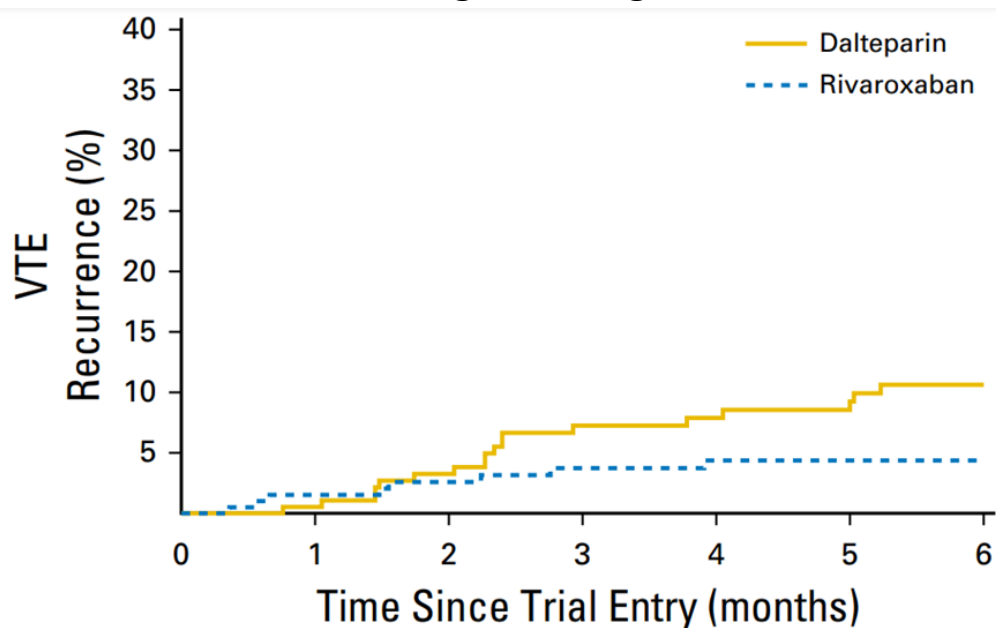
#### No. at Risk

Dalteparin	579	507	462	417	383	352	217
Apixaban	575	522	481	453	424	399	241

## VTE recurrence – Agnelli 2020 reconstructed



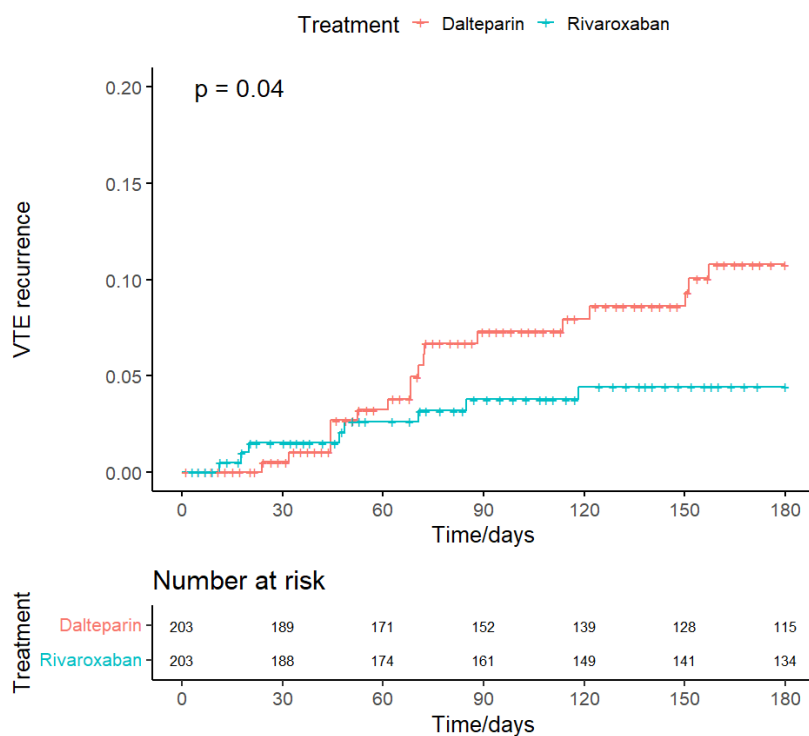
## VTE recurrence – Young 2018 original



No. at risk:

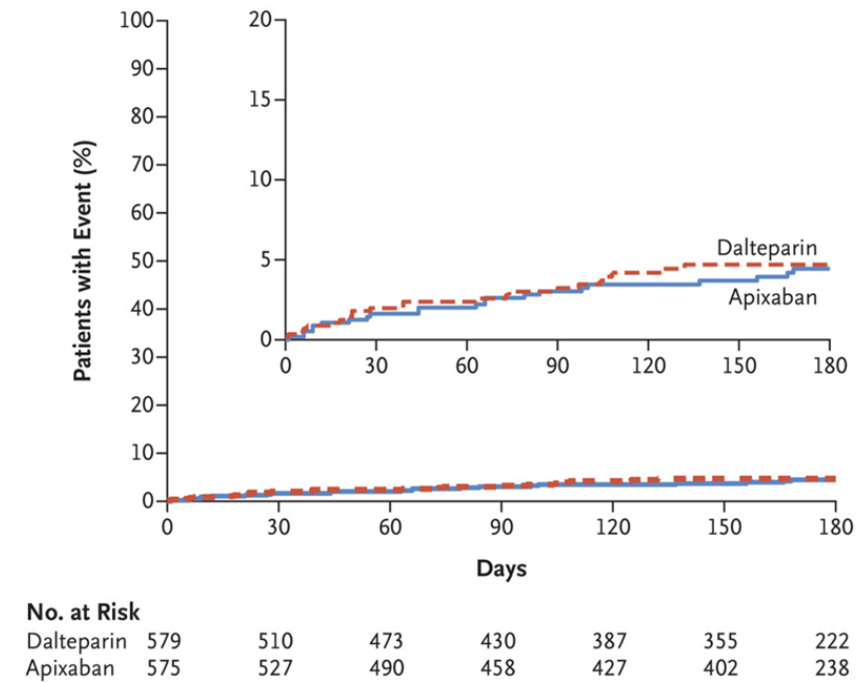
Dalteparin	203	171	139	115
Rivaroxaban	203	174	149	134

## VTE recurrence – Young 2018 reconstructed

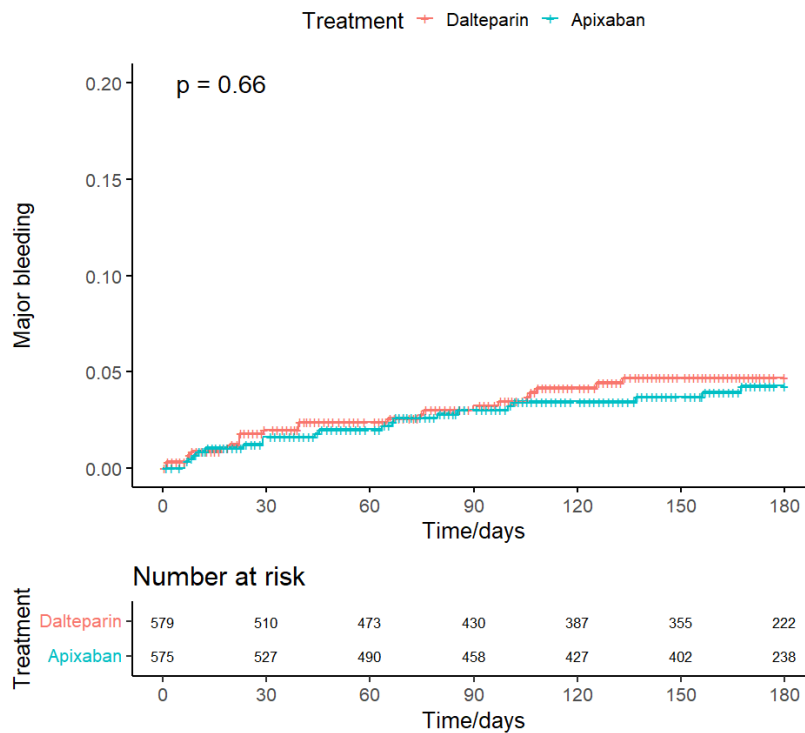


## Major bleeding – Agnelli 2020 original

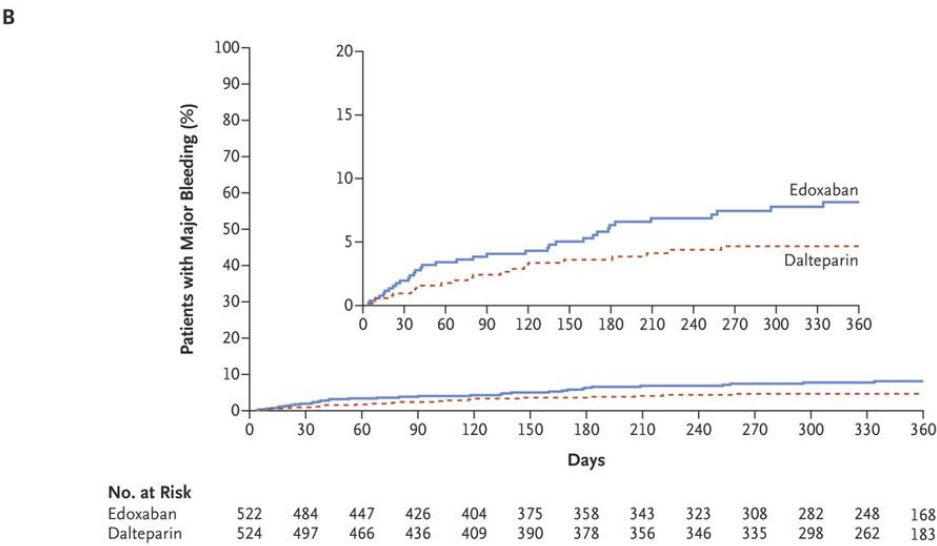
**B Major Bleeding**



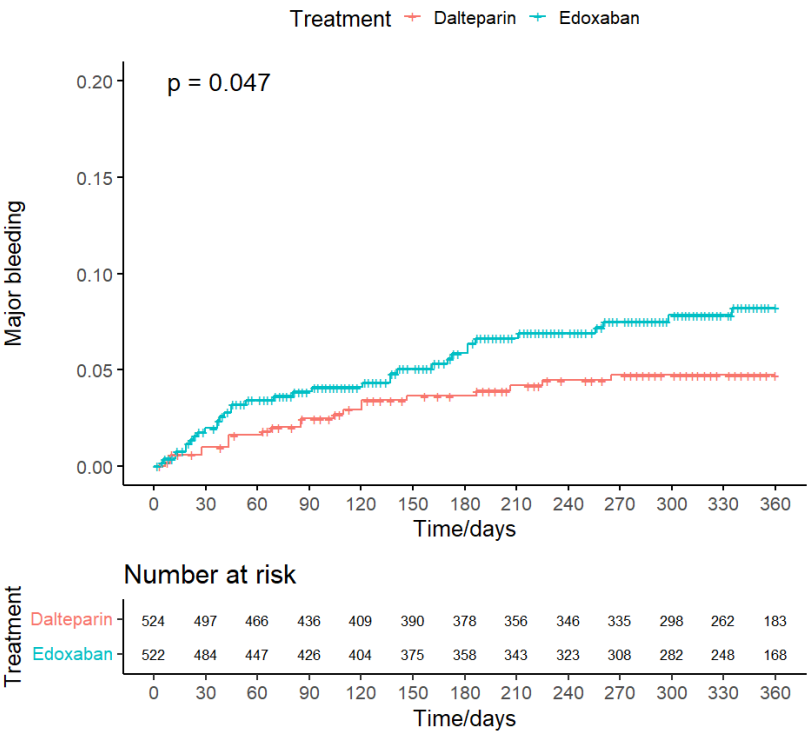
## Major bleeding – Agnelli 2020 reconstructed



# Major bleeding – Raskob 2018 original

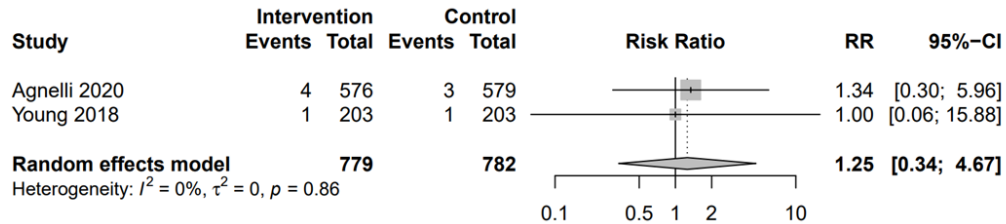


# Major bleeding – Raskob 2018 reconstructed

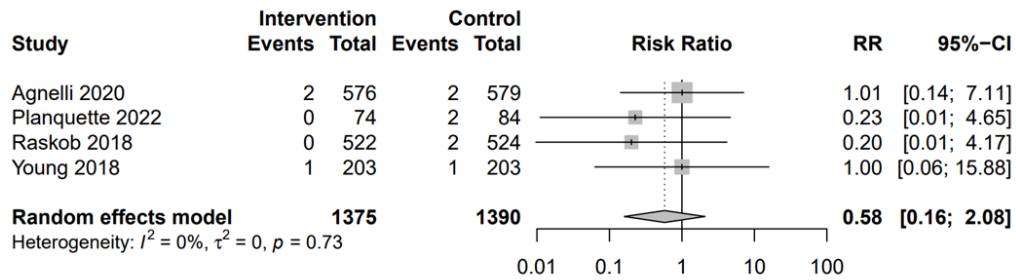


Supplementary Data 3: Forest plots of other meta-analysed outcomes

## Forest plot of death due to pulmonary embolism

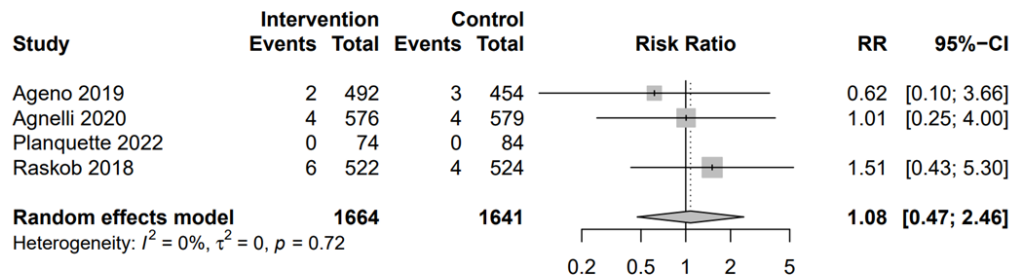


## Forest plot of death due to bleeding

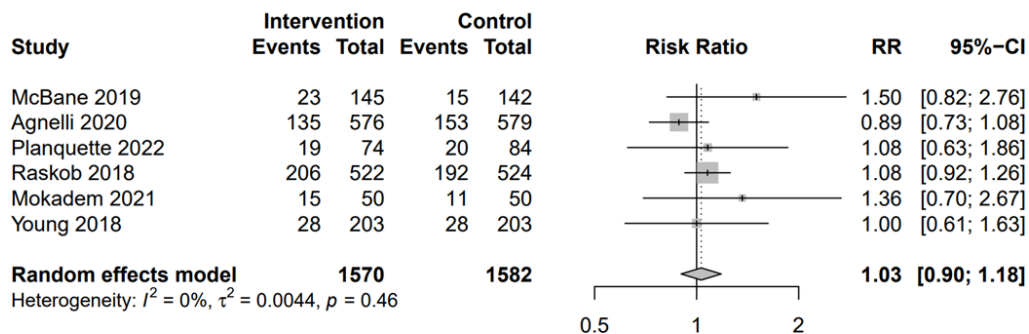




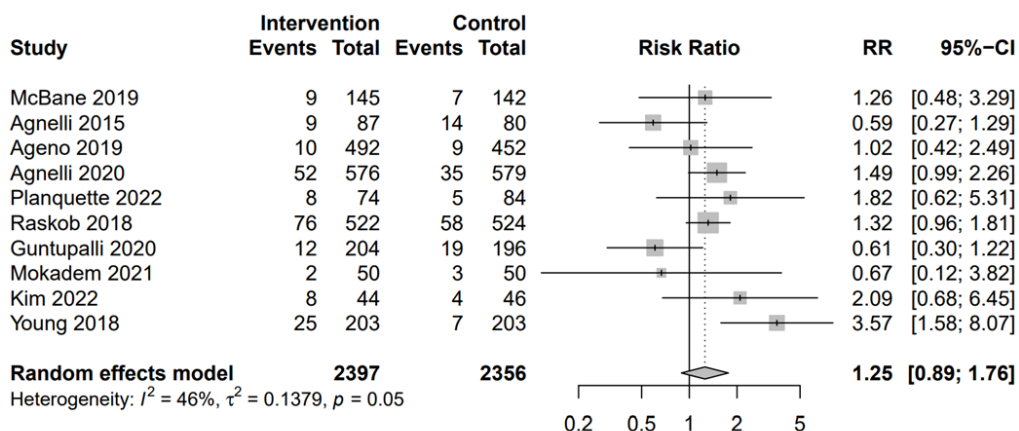
## Forest plot of death due to venous thromboembolism



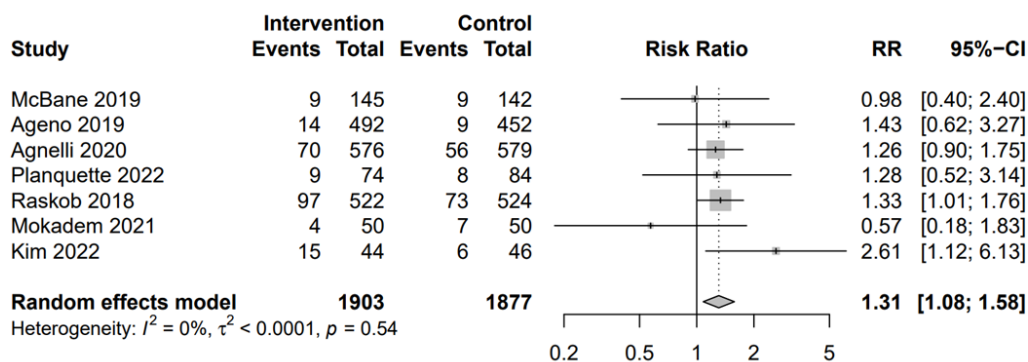
## Forest plot of death outcomes



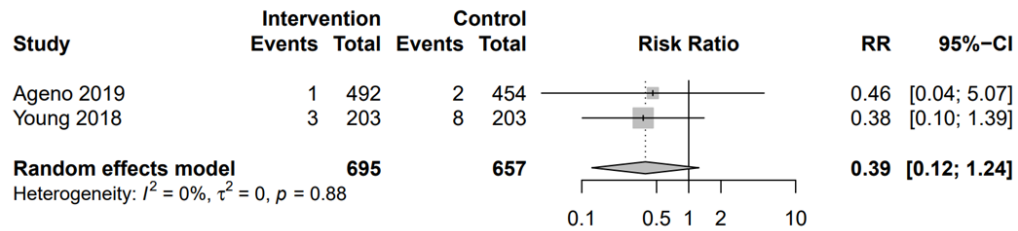
## Forest plot of clinically relevant non-major bleeding outcomes



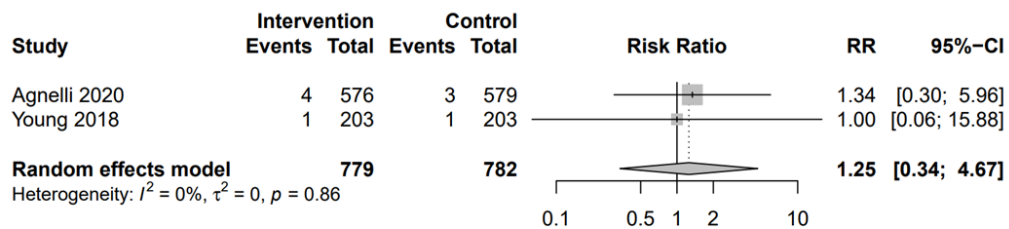
## Forest plot of major or clinically relevant non-major bleeding outcomes



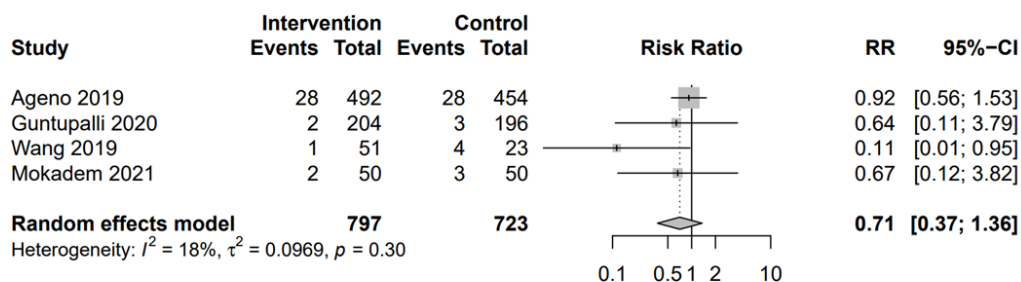
## Forest plot of non-fatal pulmonary embolism outcomes



## Forest plot of fatal pulmonary embolism outcomes



## Forest plot of venous thromboembolism outcomes



## Forest plot of recurrent pulmonary embolism outcomes

