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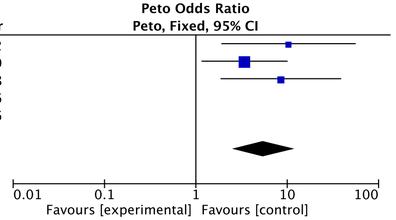
Appendix figure 1. Subgroup analyses

A. Occurrence of arterial thrombosis during treatment with DOACs and VKA

Study or Subgroup	DOAC Events	DOAC Total	Vitamin K antagonist Events	Vitamin K antagonist Total	Weight	Peto Odds Ratio Peto, Fixed, 95% CI	Year
Woller et al. (ASTRO-APS) 2022	6	23	0	25	21.4%	10.33 [1.90, 56.25]	2022
Ordi-Ros et al. 2019	11	95	3	95	52.1%	3.41 [1.15, 10.10]	2019
Pengo et al. (TRAPS) 2018	7	59	0	61	26.5%	8.52 [1.86, 38.96]	2018
Goldhaber et al. 2016	0	71	0	80		Not estimable	2016
Cohen et al. (RAPS) 2016	0	57	0	58		Not estimable	2016
Total (95% CI)		**305**		**319**	**100.0%**	**5.51 [2.52, 12.07]**	
Total events	24		3				

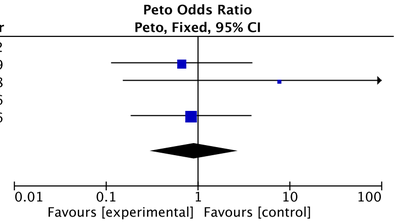
Heterogeneity: Chi^2 = 1.59, df = 2 (P = 0.45); I^2 = 0%
Test for overall effect: Z = 4.27 (P < 0.0001)



B. Occurrence of venous thrombosis during treatment with DOACs and VKA

Study or Subgroup	DOAC Events	DOAC Total	Vitamin K antagonist Events	Vitamin K antagonist Total	Weight	Peto Odds Ratio Peto, Fixed, 95% CI	Year
Woller et al. (ASTRO-APS) 2022	0	23	0	25		Not estimable	2022
Ordi-Ros et al. 2019	2	95	3	95	38.9%	0.66 [0.11, 3.91]	2019
Pengo et al. (TRAPS) 2018	1	59	0	61	7.9%	7.64 [0.15, 385.43]	2018
Cohen et al. (RAPS) 2016	0	57	0	58		Not estimable	2016
Goldhaber et al. 2016	3	71	4	80	53.2%	0.84 [0.18, 3.82]	2016
Total (95% CI)		**305**		**319**	**100.0%**	**0.91 [0.30, 2.76]**	
Total events	6		7				

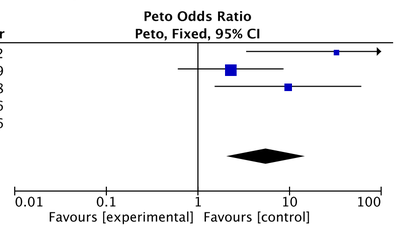
Heterogeneity: Chi^2 = 1.26, df = 2 (P = 0.53); I^2 = 0%
Test for overall effect: Z = 0.16 (P = 0.87)



C. Occurrence of thrombosis during treatment with DOACs and VKA in patients with previous arterial thrombosis

Study or Subgroup	DOAC Events	DOAC Total	Vitamin K antagonist Events	Vitamin K antagonist Total	Weight	Peto Odds Ratio Peto, Fixed, 95% CI	Year
Woller et al. (ASTRO-APS) 2022	4	6	0	11	18.3%	32.69 [3.36, 318.04]	2022
Ordi-Ros et al. 2019	7	37	3	34	53.7%	2.28 [0.60, 8.60]	2019
Pengo et al. (TRAPS) 2018	5	21	0	22	27.9%	9.61 [1.52, 60.74]	2018
Cohen et al. (RAPS) 2016	0	0	0	0		Not estimable	2016
Goldhaber et al. 2016	0	0	0	0		Not estimable	2016
Total (95% CI)		**64**		**67**	**100.0%**	**5.55 [2.09, 14.70]**	
Total events	16		3				

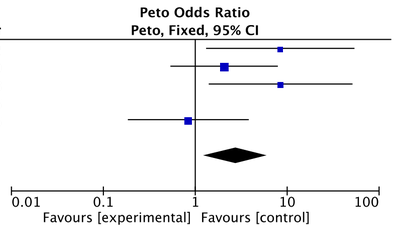
Heterogeneity: Chi^2 = 4.40, df = 2 (P = 0.11); I^2 = 55%
Test for overall effect: Z = 3.45 (P = 0.0006)



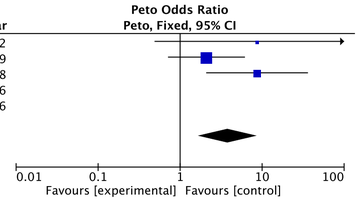
D. Occurrence of thrombosis during treatment with DOACs and VKA in patients with previous venous thrombosis

Study or Subgroup	DOAC Events	DOAC Total	Vitamin K antagonist Events	Vitamin K antagonist Total	Weight	Peto Odds Ratio Peto, Fixed, 95% CI	Year
Woller et al. (ASTRO-APS) 2022	5	20	0	18	18.3%	8.42 [1.31, 54.01]	2022
Ordi-Ros et al. 2019	6	69	3	70	34.8%	2.06 [0.54, 7.92]	2019
Pengo et al. (TRAPS) 2018	5	38	0	39	19.4%	8.49 [1.40, 51.42]	2018
Cohen et al. (RAPS) 2016	0	57	0	58		Not estimable	2016
Goldhaber et al. 2016	3	71	4	80	27.5%	0.84 [0.18, 3.82]	2016
Total (95% CI)		**255**		**265**	**100.0%**	**2.74 [1.24, 6.07]**	
Total events	19		7				

Heterogeneity: Chi^2 = 5.43, df = 3 (P = 0.14); I^2 = 45%
Test for overall effect: Z = 2.49 (P = 0.01)



E. Occurrence of thrombosis during treatment with DOACs and VKA in patients with triple positivity

Study or Subgroup	DOAC Events	DOAC Total	Vitamin K antagonist Events	Vitamin K antagonist Total	Weight	Peto Odds Ratio Peto, Fixed, 95% CI	Year
Woller et al. (ASTRO-APS) 2022	2	7	0	7	8.2%	8.73 [0.49, 156.28]	2022
Ordi-Ros et al. 2019	10	58	5	57	58.4%	2.10 [0.71, 6.18]	2019
Pengo et al. (TRAPS) 2018	8	59	0	61	33.4%	8.68 [2.08, 36.23]	2018
Cohen et al. (RAPS) 2016	0	7	0	12		Not estimable	2016
Goldhaber et al. 2016	0	0	0	0		Not estimable	2016
Total (95% CI)		**131**		**137**	**100.0%**	**3.79 [1.66, 8.65]**	
Total events	20		5				

Heterogeneity: Chi^2 = 2.77, df = 2 (P = 0.25); I^2 = 28%
Test for overall effect: Z = 3.16 (P = 0.002)