SUPPLEMENTARY MATERIAL

Early Discontinuation of Antithrombotic Therapy Following Left Atrial Appendage Closure: A Systematic Review and Meta-analysis

Database	Queries	Results
PUBMED	("Left Atrial Appendage"[Mesh] OR "left atrial appendage"[tiab] OR "left atrial appendage occlusion"[tiab] OR "left atrial appendage closure"[tiab] OR "LAA occlusion"[tiab] OR "LAA closure"[tiab] OR LAAO[tiab] OR LAAC[tiab] OR Watchman[tiab] OR Amplatzer[tiab]) AND (antithrombotic*[tiab] OR anticoagulant*[tiab] OR antiplatelet*[tiab] OR "oral anticoagulant*"[tiab] OR "direct oral anticoagulant*"[tiab] OR DOAC*[tiab] OR warfarin[tiab] OR aspirin[tiab] OR clopidogrel[tiab] OR "postprocedural therapy"[tiab] OR "post-procedural therapy"[tiab] OR "postprocedural treatment"[tiab] OR "post-procedural treatment"[tiab])	1722
SCOPUS	TITLE-ABS-KEY ("left atrial appendage" OR "left atrial appendage occlusion" OR "left atrial appendage closure" OR "LAA occlusion" OR "LAA closure" OR LAAO OR LAAC OR Watchman OR Amplatzer OR "occlusion device" OR "closure device") AND TITLE-ABS-KEY (antithrombotic*OR anticoagulant*OR antiplatelet*OR "oral anticoagulant*"OR "direct oral anticoagulant*"OR DOAC*OR warfarin OR aspirin OR clopidogrel OR "postprocedural therapy" OR "post-procedural therapy" OR "postprocedural treatment" OR "post-procedural treatment")	2390

Supplementary Table 1. Search strategy

Study	Design	Tool	Selection (0–4)	Comparability (0–2)	Outcome (0–3)	Total NOS (0–9)	Overall risk of bias
Darmon et al	Prospective cohort	Newcastle–Ottawa	4	0	3	7	Low
Mesnier et al	Retrospective cohort	Newcastle–Ottawa	4	2	3	9	Low
Paitazoglou et al	Prospective cohort	Newcastle–Ottawa	4	0	3	7	Low
Ryuzaki et al	Prospective cohort	Newcastle–Ottawa	4	0	2	6	Moderate
Kramer et al	Retrospective cohort	Newcastle–Ottawa	4	0	3	7	Low
Gallo et al	Retrospective cohort	Newcastle–Ottawa	4	0	3	7	Low
Wong et al	Prospective cohort	Newcastle–Ottawa	4	0	3	7	Low

Supplementary Table 2. Quality assessment of included studies using the Newcastle–Ottawa Scale (NOS)

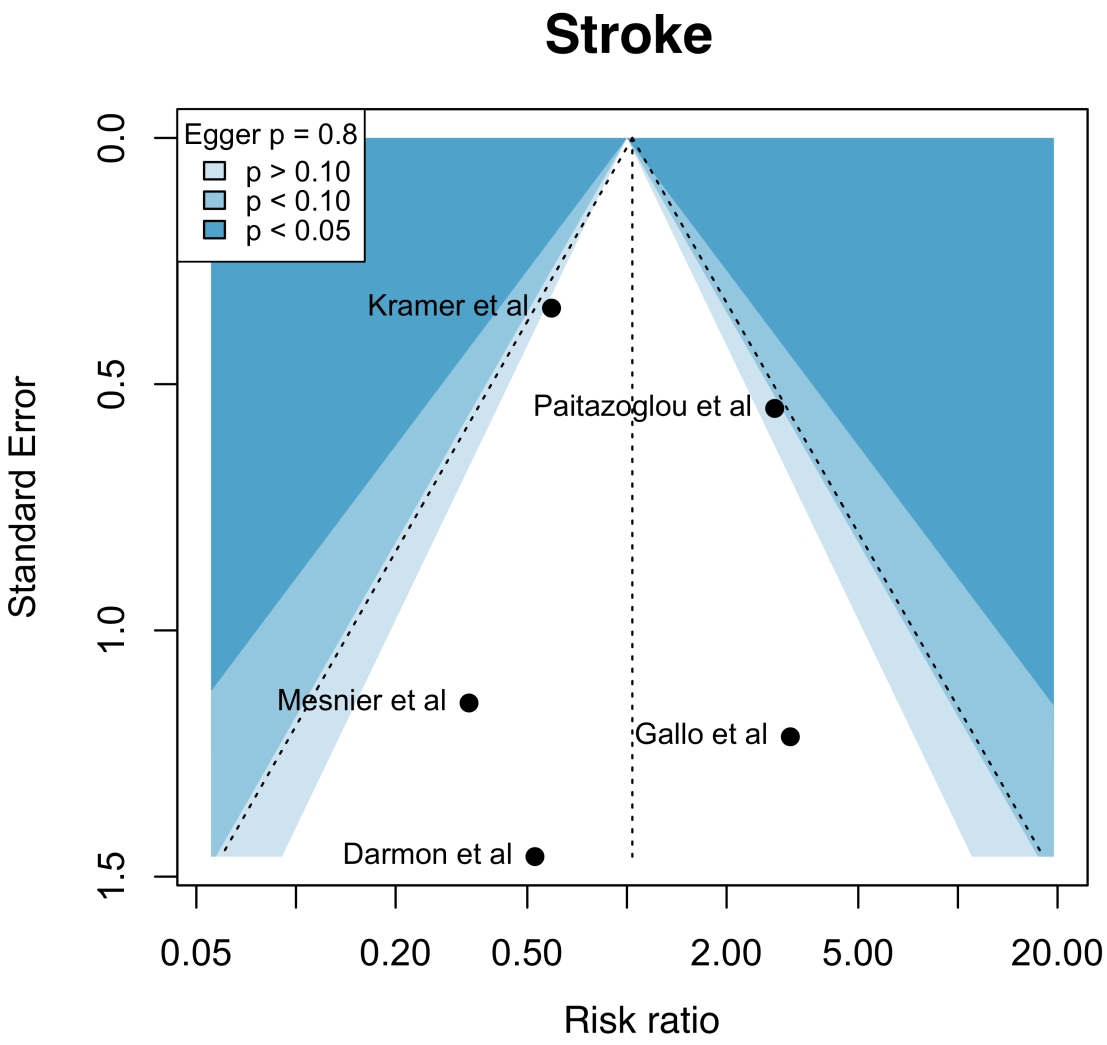


Figure S1. Funnel plot evaluating small-study and publication bias for stroke outcomes after complete antithrombotic discontinuation following LAAC. The distribution of study effect sizes is plotted against standard error. Contour-enhanced shading indicates statistical significance regions. Egger's test value reported within the plot.

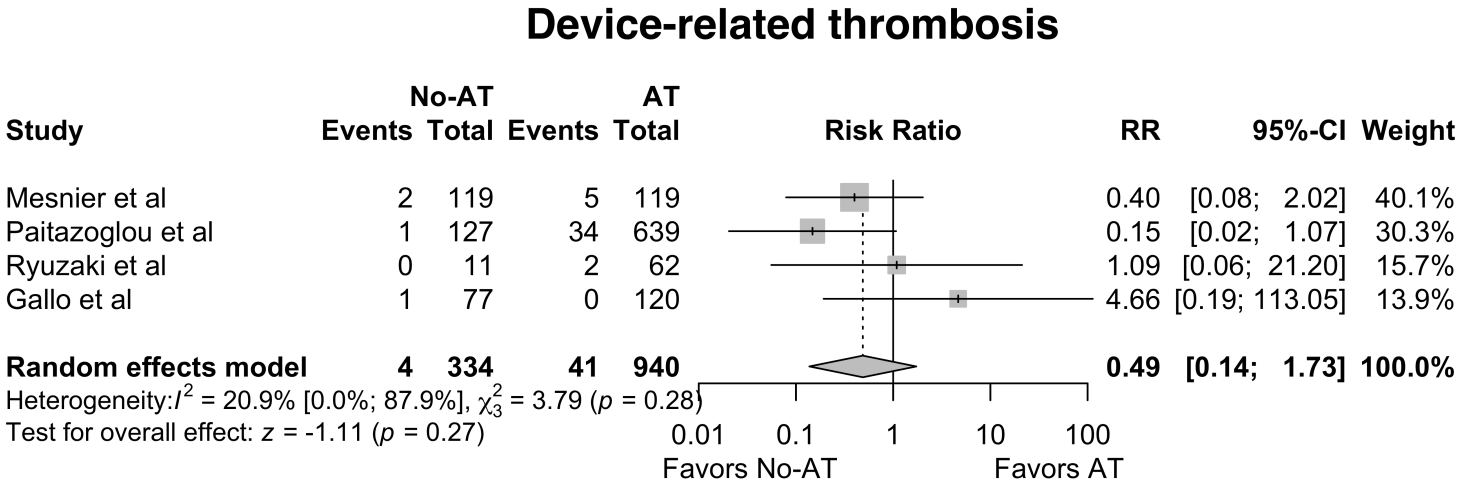


Figure S2. Supplementary meta-analysis of device-related thrombus (DRT) events in patients undergoing complete discontinuation of antithrombotic therapy versus continued treatment after LAAC. Risk ratio (RR) with 95% confidence intervals calculated using a random-effects model.

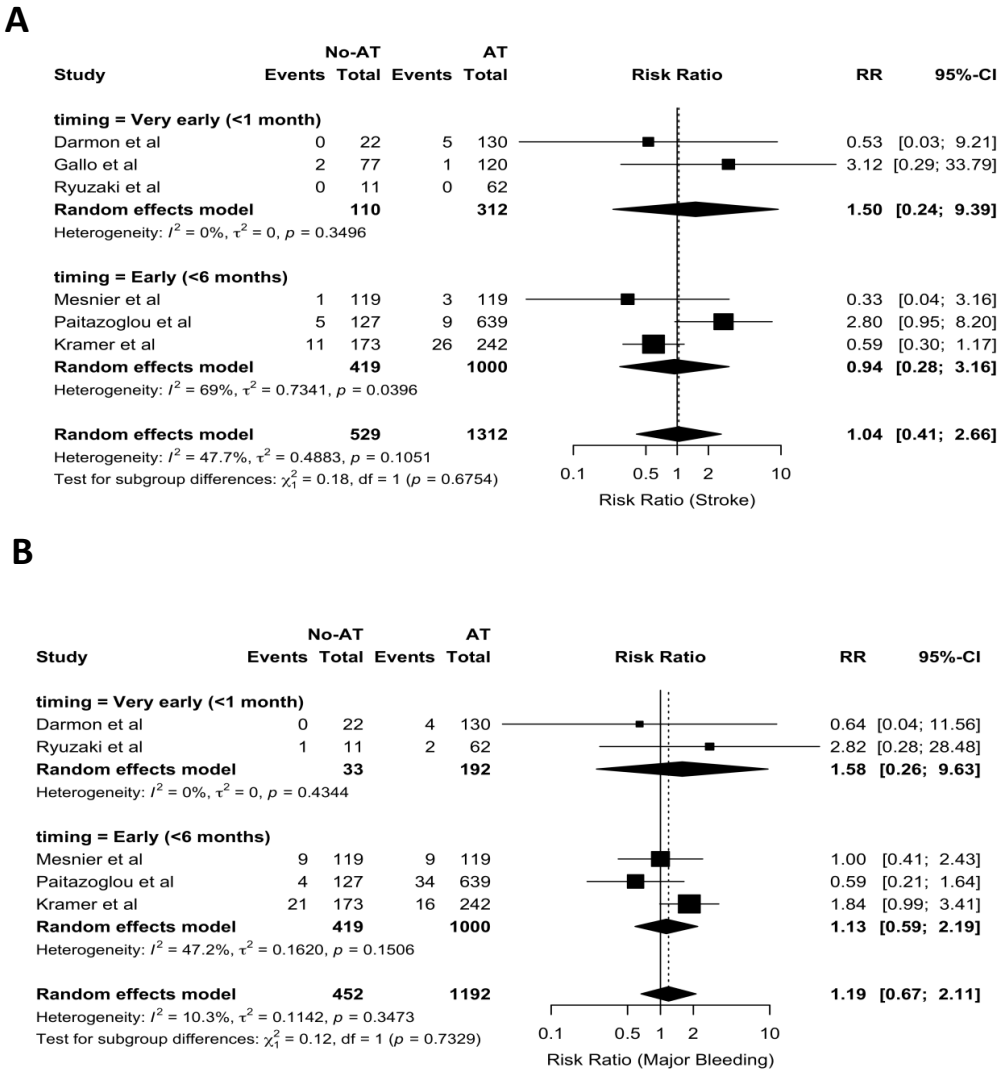
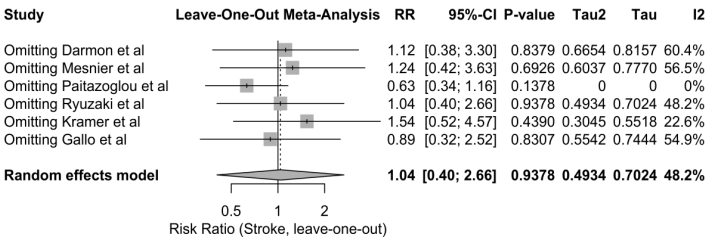
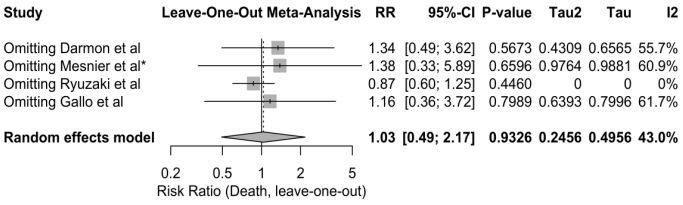


Figure S3. Forest plots of stroke (panel A) and major bleeding (panel B) stratified by timing of complete antithrombotic discontinuation after left atrial appendage closure. Very early = withdrawal <1 month. Early = withdrawal <6 months. Effect size expressed as risk ratio (RR) with 95% confidence intervals (random-effects model).

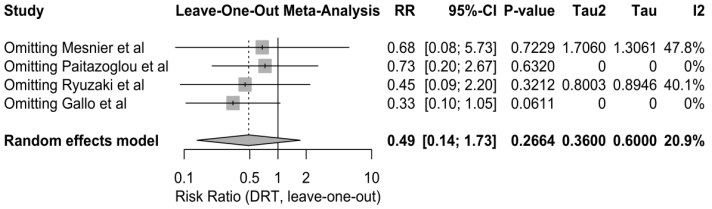
A



B



C



D

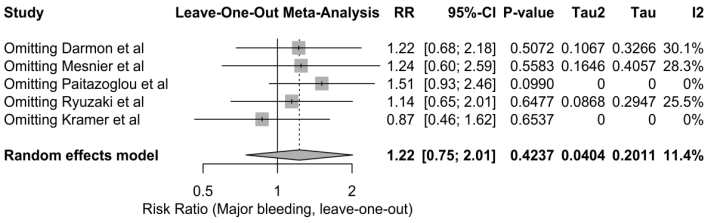


Figure S4. Leave-one-out influence analysis showing pooled risk ratio variation when sequentially omitting each study from the meta-analysis. Panel A = Stroke, Panel B = Death, Panel C = Major Bleeding, Panel D = Device-related thrombus (DRT). Stability of estimates indicates robustness of the pooled effect, while visible shifts suggest study-level influence.