DOI: 10.24875/RECIC.M260005883

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PRISMA CHECKLIST

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	NA
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Abstract
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Introduction
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Eligibility criteria, search strategy, data selection, and extraction
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Eligibility criteria, search strategy, data selection, and extraction
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Eligibility criteria, search strategy, data selection, and extraction; Supplementary Materials
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Eligibility criteria, search strategy, data selection, and extraction; Supplementary Materials
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Eligibility criteria, search strategy, data selection, and extraction; Supplementary Materials
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Study endpoints
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Eligibility criteria, search strategy, data selection, and extraction
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Quality assessment
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Statistical analysis
Synthesis	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study	Eligibility criteria, search strategy,

Section and Topic	Item #	Checklist item	Location where item is reported
methods		intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	data selection, and extraction
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Statistical analysis
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Statistical analysis
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Statistical analysis
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Statistical analysis
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Statistical analysis
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Statistical analysis
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	NA
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Study selection, baseline, and angiographic characteristics
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	NA
Study characteristics	17	Cite each included study and present its characteristics.	Study selection, baseline, and angiographic characteristics; Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Supplementary Materials
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Figures 1-3; Supplementary Materials
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Supplementary Materials
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Results section; Supplementary Materials
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Results section; Supplementary Materials
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Results section; Supplementary Materials
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Results section; Supplementary Materials

Section and Topic	Item #	Checklist item	Location where item is reported
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Results section; Supplementary Materials
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion
	23b	Discuss any limitations of the evidence included in the review.	Discussion
	23c	Discuss any limitations of the review processes used.	Discussion
	23d	Discuss implications of the results for practice, policy, and future research.	Discussion
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Methods
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	NA
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	NA
Competing interests	26	Declare any competing interests of review authors.	Title page
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Title page

SUPPLEMENTARY TABLES

Supplementary Table 1. Search strategy

Database	Queries	Number of records
PubMed	((("elutable"[All Fields] OR "elutant"[All Fields] OR "elute"[All Fields] OR "eluted"[All Fields] OR "elutent"[All Fields] OR "eluter"[All Fields] OR "eluters"[All Fields] OR "elutes"[All Fields] OR "eluting"[All Fields] OR "elution"[All Fields] OR "elutions"[All Fields]) AND ("balloon"[All Fields] OR "balloon s"[All Fields] OR "balloons"[All Fields]) AND ("coronaries"[All Fields] OR "heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields])) OR (("coated"[All Fields] OR "coating"[All Fields] OR "coating s"[All Fields] OR "coatings"[All Fields]) AND ("balloon"[All Fields] OR "balloon s"[All Fields] OR "balloons"[All Fields]) AND ("coronaries"[All Fields] OR "heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]))) AND "random*"[All Fields] AND ("stent s"[All Fields] OR "stentings"[All Fields] OR "stents"[MeSH Terms] OR "stents"[All Fields] OR "stent"[All Fields] OR "stented"[All Fields] OR "stenting"[All Fields])	1,856
Scopus	TITLE-ABS-KEY ((((eluting AND balloon) AND (coronary)) OR ((coated AND balloon) AND (coronary))) AND (random*) AND (stent))	1,735
Web of Science	(eluting AND balloon) OR (coated AND balloon) (All Fields) AND coronary (All Fields) AND random* (All Fields) AND stent (All Fields)	1,400

Supplementary Table 2. Endpoint definitions of included trials

Study	Target Lesion Revascularization	Target Vessel Revascularization	Myocardial Infarction	Vessel Thrombosis	Cardiac Death	Major adverse cardiovascular events	Major bleeding
SELUTION DeNovo	NA	ND	ND	ND	ND	Composite of cardiac death, target-vessel related myocardial infarction or clinically driven target vessel revascularization	BARC type 3-5
REC-CAGEFREE I	Repeat percutaneous intervention of the target lesion or bypass surgery of the target vessel performed for restenosis or other complication of the target lesion	Repeat percutaneous intervention or surgical bypass of any segment of the target vessel including the target lesion	Spontaneous Myocardial infarction (according to Fourth universal definition of myocardial infarction 2018)	ARC-2 criteria	ARC-2 criteria	Device-oriented composite endpoint (DoCE) including cardiovascular death, target vessel myocardial infarction, and clinically indicated target lesion revascularization	BARC type 3 or 5
Dissolve SVD	ND	ND	ND	ARC criteria	ND	Composite of cardiovascular death, target vessel myocardial infarction, or target lesion revascularization	NA
REVELATION	ND	NA	ND	NA	ND	Composite of cardiac death, recurrent myocardial infarction, ischaemia-driven target lesion revascularization	NA
PICCOLETTO-II	ND	NA	ND	ND	ND	Composite of cardiac death, all myocardial infarctions, target lesion revascularization	NA
Ke et al.	NA	Typical angina pectoris or confirmed ischemia referable to the target lesion/vessel requiring urgent or selective repeat PCI or coronary artery bypass graft	Peri-procedural MI (within 48 h) was defined as: I. a creatine kinase-MB (CKMB) >10 or troponin >70 × the upper reference limit (URL), or II. a CK-MB >5 or troponin >35 × URL plus either:	ARC criteria	All deaths were deemed cardiogenic unless there was clear evidence of non-cardiac causes	Composite of cardiac death, target vessel myocardial infarction, target vessel thrombosis and ischemia-driven target vessel/lesion revascularization	NA

			(1) new pathological Q waves in ≥2 contiguous leads or new left bundle branch block; (2) angiographically documented graft or coronary artery occlusion or new severe stenosis with thrombosis; (3) imaging evidence of new loss of viable myocardium; or (4) new regional wall motion abnormality. In non-ST elevation MI patients with elevated pre-procedural biomarkers in whom the levels were stable (≤20% variation) or falling, peri-procedural MI could be diagnosed when the post-procedural biomarkers rise by >20% along with the criteria similar to the aforementioned definition II. Spontaneous MI (after 48h) was defined as a clinical syndrome consistent with MI along with a CK-MB or troponin >1 × URL and new ST-segment elevation or depression or other findings as described above.				
Kawai et al.	ND	ND	ND	NA	ND	Composite of death, target lesion revascularisation, and myocardial infarction	NA
Wang et al.	ND	ND	ARC criteria	ARC criteria	Any death that was not clearly of extracardiac origin	Composite of cardiac death, non-fatal myocardial infarction, and target vessel	BARC type 3-5

						revascularization, and stent thrombosis	
Yu et al.	Any repeat revascularization within the stented or DCB-treated segment	Any repeat revascularization of the target vessel	Third International Definition of Myocardial Infarction	NA	Any death that was not clearly of extracardiac origin	Composite of cardiac death, non-fatal myocardial infarction, target vessel revascularization, and target vessel revascularization	NA
BASKET-SMALL 2	NA	ND	Third universal definition of myocardial infarction	ARC criteria	Any death that was not clearly of extracardiac origin	Composite of cardiac death, non-fatal myocardial infarction, and target-vessel revascularisation	BARC type 3-5
RESTORE SVD China	Any repeat percutaneous intervention of the target lesion or bypass surgery of the target vessel performed for restenosis or other complication of the target lesion. All TLR should be classified prospectively as ischemia-driven or not ischemia-driven by the investigator prior to repeat angiography.	Any repeat percutaneous intervention or surgical bypass of any segment of the target vessel	SCAI definition	ARC criteria	Any death due to proximate cardiac cause (e.g. MI, low-output failure, fatal arrhythmia), unwitnessed death and death of unknown cause, and all procedure related deaths including those related to concomitant treatment.	Composite of cardiac death, target vessel-myocardial infarction, and ischemia-driven target-lesion revascularization	NA
Gobić et al.	NA	NA	ND	ND	ND	Composite of cardiovascular death, reinfarction, target lesion revascularization and stent thrombosis	ND
Nishiyama et al.	TLR was performed in patients who had ≥75% diameter stenosis by quantitative coronary angiography and/or had symptoms of ischemia	NA	NA	NA	NA	NA	NA

Abbreviations: ACS = acute coronary syndrome; ARC = Academic Research Consortium; BARC= Bleeding Academic Research Consortium; CABG = coronary artery bypass-grafting; NA = not applicable; ND = no data; PCI = percutaneous coronary intervention; QCA= quantitative coronary angiography

Supplementary Table 3. Available endpoints across included trials.

Study	Target Lesion Revascularization	Target Vessel Revascularization	Myocardial Infarction	Target Vessel Myocardial Infarction	Vessel Thrombosis	Cardiac Death	All-Cause Death	Major Adverse Cardiovascular Events	Major Bleeding	Binary Restenosis	Late Lumen Loss	Minimal Luminal Diameter	Diameter Stenosis	Net Luminal Gain
SELUTION DeNovo		✓	✓	✓	✓	✓	✓	✓	✓					
REC-CAGEFREE I	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Dissolve SVD	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
REVELATION	✓		✓			✓		✓			✓	✓		
PICCOLETTO-II	✓		✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Ke et al.		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	
Kawai et al.	✓		✓	✓		✓	✓	✓		✓	✓	✓	✓	
Wang et al.	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓		
Yu et al.	✓	✓	✓			✓	✓	✓		✓	✓	✓	✓	
BASKET-SMALL 2		✓	✓		✓	✓	✓	✓	✓				✓	
RESTORE SVD China	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Gobić et al.			✓	✓	✓	✓		✓	✓	✓	✓	✓		
Nishiyama et al.	✓										✓	✓	✓	
Total number of studies:	**9**	**8**	**11**	**7**	**9**	**12**	**10**	**11**	**5**	**7**	**10**	**10**	**8**	**3**

Supplementary Table 4. Baseline clinical characteristics of patients enrolled in the included trials

Study	Sex (male) DCB / DES	Age (years) DCB / DES	Hypertension DCB/DES	Smoking DCB / DES	Diabetes DCB / DES	ACS DCB / DES	Previous MI DCB / DES	Previous PCI DCB / DES	LVEF (%) DCB / DES
SELUTION DeNovo	75.3% / 74.0%	67.1 (9.7) / 66.7 (10.4)	69.3% / 70.3%	17.9% / 19.6%	25.6% / 25.1%	33.3% / 31.8%	18.2 % / 17.7%	27.5% / 27.1%	ND / ND
REC-CAGEFREE I	769 (67.9%) / 805 (70.7%)	62 (55-69) / 62 (54-59)	662 (58.4%) / 704 (61.8%)	360 (31.8%) / 404 (35.5%)	282 (24.9%) / 338 (29.7%)	630 (55.6%) / 627 (55.0%)	81 (7.1%) / 105 (9.2%)	137 (12.1%) / 142 (12.5%)	60 (56-65) / 60 (56-65)
Dissolve SVD	94 (72.9%) / 82 (69.5%)	60.2 (9.5) / 60.1 (9.3)	95 (73.6%) / 89 (75.4%)	27 (20.9%) / 25 (21.2%)	46 (35.7%) / 45 (38.1%)	82 (63.6%) / 77 (65.3%)	33 (25.6%) / 27 (22.9%)	ND / ND	62.4 (7.8) / 61.7 (7.8)
Ke et al.	26 (86.7%) / 25 (83.3%)	58.6 (10.3) / 61.4 (8.5)	18 (60.0%) / 21 (70.0%)	16 (53.3%) / 19 (63.3%)	9 (30.0%) / 11 (36.7%)	14 (46.6%) / 16 (53.3%)	3 (10.0%) / 2 (6.7%)	5 (16.7%) / 4 (13.3%)	62.5 (7.8) / 64.0 (11.4)
Yu et al.	ND / ND	62.6 (8.8) / 64.0 (10.5)	50 (59.5%) / 54 (68.4%)	46 (54.8%) / 42 (53.2%)	16 (19.0%) / 23 (29.1%)	76 (90.5%) / 69 (87.3%)	ND / ND	11 (13.1%) / 14 (17.7%)	ND / ND
Wang et al.	88 (95.7%) / 84 (91.3%)	49.2 (10.6) / 49.6 (8.8)	67 (72.8%) / 65 (70.7%)	71 (77.2%) / 78 (84.8%)	71 (77.2%) / 79 (85.9%)	92 (100%) / 92 (100%)	ND / ND	ND / ND	ND / ND
Kawai et al.	15 (79%) / 17 (74%)	69 (8) / 73 (8)	17 (89%) / 21 (91%)	10 (53%) / 12 (52%)	5 (26%) / 8 (35%)	0 (0%) / 0 (0%)	2 (11%) / 5 (22%)	10 (53%) / 10 (43%)	67 (7) / 66 (10)
PICCOLETO-II	83 (70.3%) / 87 (76.9%)	64 (48-80) / 66 (50-82)	77 (65.2%) / 76 (67.2%)	23 (19.5%) / 19 (16.7%)	45 (38%) / 40 (35.4%)	54 (45.8%) / 50 (44.3%)	45 (38%) / 34 (30%)	59 (50%) / 60 (53%)	58 (48-68) / 58 (51-65)

REVELATION	52 (87%) / 52 (87%)	57.4 (9.2) / 57.3 (8.3)	18 (30%) / 19 (32%)	28 (47%) / 24 (40%)	8 (13%) / 4 (7%)	60 (100%) / 60 (100%)	ND / ND	2 (3%) / 0 (0%)	ND / ND
RESTORE SVD China	66.4 (77%) / 77.2 (88%)	60.1 (10.5) / 60.5 (10.8)	67.2 (78%) / 75.4 (86%)	29.3 (34%) / 31.6 (36%)	39.7 (46%) / 42.1 (48%)	69.0 (80%) / 71.1 (81%)	22.4 (26%) / 24.6 (28%)	38.8 (45%) / 33.3 (38%)	60.6 (7.3) / 59.9 (6.9)
BASKET-SMALL 2	295 (77%) / 262 (70%)	67.2 (10.3) / 68.4 (10.3)	324 (85%) / 332 (89%)	82 (22%) / 72 (20%)	122 (32%) / 130 (35%)	112 (30%) / 102 (27%)	160 (42%) / 133 (35%)	235 (62%) / 241 (64%)	60 (50–60) / 60 (55–65)
Gobić et al.	71.1% / 73%	56.6 (13.2) / 54.3 (10.6)	31.6% / 35.1%	42.1% / 56.8%	5.3% / 10.8%	100% / 100%	ND / ND	ND / ND	ND / ND
Nishiyama et al.	20 (66.7%) / 24 (80.0%)	67.3 (11.1) / 70.6 (9.0)	23 (76.7%) / 27 (90.0%)	17 (56.7%) / 19 (63.3%)	12 (40.0%) / 13 (43.3%)	0 (0%) / 0 (0%)	ND / ND	ND / ND	ND / ND

Categorical variables are presented as frequencies and percentages. Continuous variables are presented as mean (standard deviation) or median (interquartile range).

Abbreviations: ACS = acute coronary syndrome; DCB = drug-coated balloon; DES = drug-eluting stent; LVEF = left ventricular ejection fraction; MI = myocardial infarction; ND = no data; PCI = percutaneous coronary intervention.

Supplementary Table 5. Baseline angiographic and procedural characteristics of patients enrolled in the included trials

Study	MVD DCB / DES	LAD DCB / DES	Bifurcation lesion DCB / DES	RVD (mm) DCB / DES	Lesion lenght (mm) DCB / DES	ACC/AHA type B2/C lesions DCB / DES	Device size (mm) DCB / DES	Device lenght (mm) DCB / DES	Number of devices DCB / DES	Bailout stenting (DCB)
SELUTION DeNovo	ND / ND	47.7% / 47.3%	32.1 % / 30.8%	ND / ND	ND / ND	66.8% / 62.3%	3.1 (0.5) / 3.1 (0.5)	31.6 (17.1) / 28.7 (15.1)	1.7 (1.0) / 1.6 (0.9)	20.7%
REC-CAGEFREE I	ND / ND	656 (51.8% / 626 (49.6%)	410 (32.5%) / 388 (31.1%)	ND / ND	ND / ND	ND / ND	3.0 (2.75-3.5) / 3.0 (2.75-3.5)	ND / ND	ND / ND	106 (9.3%)
Dissolve SVD	ND / ND	29 (22.5%) / 28 (23.5%)	ND / ND	2.20 (0.26) / 2.21 (0.24)	12.3 (5.5) / 11.5 (5.1)	ND / ND	2.44 (0.19) / 2.42 (0.18)	20.5 (5.7) / 19.4 (5.2)	ND / ND	5 (3.9%)
Ke et al.	ND / ND	18 (60.0%) / 17 (56.7%)	30 (100%) / 30 (100%)	2.97 (0.34) / 2.93 (0.41)	21.97 (6.98) / 22.77 (9.02)	ND / ND	ND / ND	ND / ND	ND / ND	0 (0%)
Yu et al.	70 (83.3%) / 67 (84.8%)	48 (57.1%) / 35 (44.3%)	ND / ND	2.50 (2.50-3.00) / 2.50 (2.50-3.00)	18.2 (16.0-20.1) / 20.0 (15.0-25.0)	39 (46.4%) / 33 (41.8%)	2.75 (2.50-3.00) / 3.00 (2.75-3.50)	17.5 (15.0-20.0) / 23.0 (18.0-28.0)	ND / ND	2 (2.4 %)
Wang et al.	ND / ND	64 (55.2%) / 64 (56.6%)	ND / ND	3.31 (0.56) / 3.43 (0.48)	30.6 (10.0) / 33.5 (13.1)	ND / ND	3.19 (0.57) / 3.34 (0.49)	ND / ND	1.27 (0.45) / 1.23 (0.42)	0 (0%)
Kawai et al.	ND / ND	8 (42%) / 4 (17%)	ND / ND	2.29 (0.49) / 2.08 (0.43)	11.8 (4.6) / 11.3 (5.5)	5 (26%) / 8 (35%)	2.6 (0.4) / 2.4 (0.3)	19 (4.6) / 17 (4.8)	ND / ND	0 (0%)
PICCOLETO-II	86 (72.8%) / 86 (76%)	47 (40%) / 44 (39%)	15 (12.7%) / 14 (12.3%)	2.23 (0.4) / 2.18 (0.4)	13.5 (7.3) / 14.0 (6.9)	ND / ND	ND / ND	21.8 (8.2) / 18.3 (6.9)	1.03 / 1.12	8 (6.8%)
REVELATION	16 (26.7) / 18 (29.7)	19 (32%) / 24 (40%)	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	11 (18.3%)
RESTORE SVD China	41.4 (48%) / 39.5 (45%)	8.6 (10%) / 8.8 (10%)	ND / ND	2.42 (0.15) / 2.42 (0.18)	ND / ND	37.9 (44%) / 40.4 (46%)	2.41 (0.16) / 2.41 (0.18)	21.0 (4.9) / 20.4 (5.8)	ND / ND	6 (5.2%)

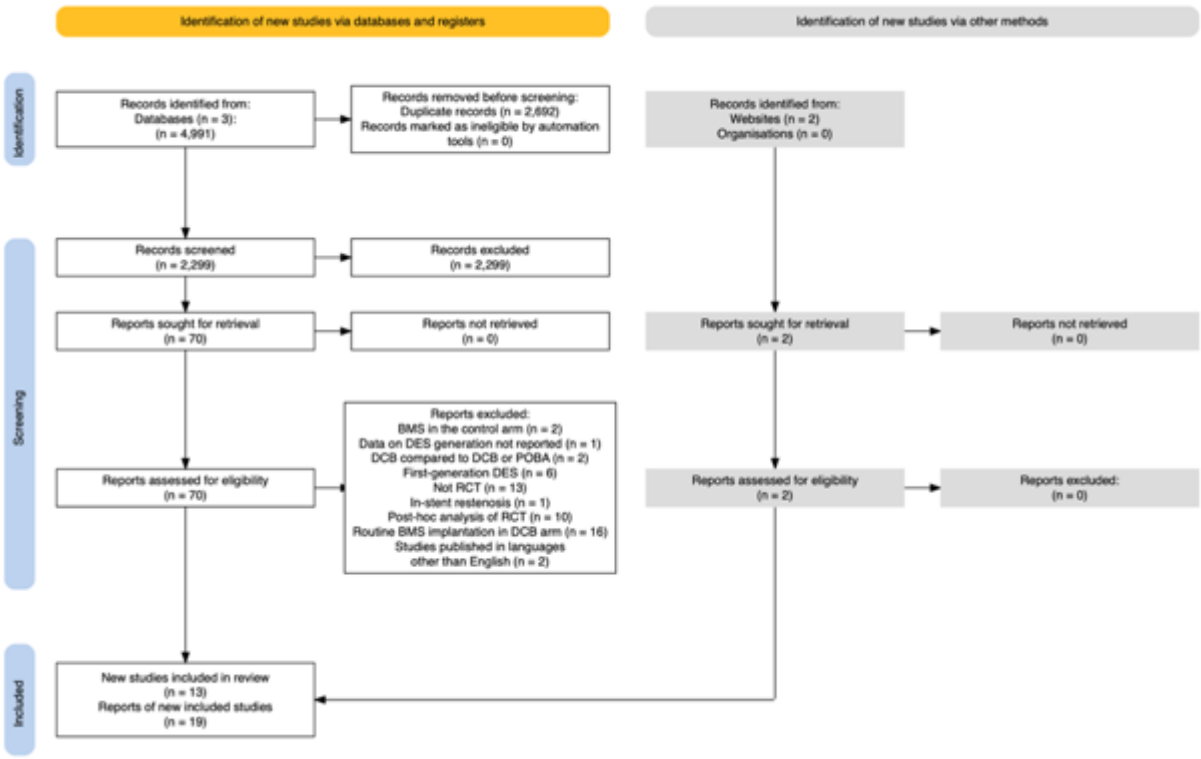
BASKET-SMALL 2	313 (82%) / 285 (76%)	128 (34%) / 116 (31%)	22 (6%) / 29 (8%)	ND / ND	ND / ND	ND / ND	2.75 (2.14) / 2.57 (0.25)	23.9 (11.7) / 23.2 (12.9)	1.68 (0.82) / 1.26 (0.55)	19 (5.0%)
Gobić et al.	ND / ND	ND / ND	ND / ND	2.61 (0.49) / 3.04 (0.46)	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	3 (7.3%)
Nishiyama et al.	ND / ND	12 (44.4%) / 17 (51.5%)	ND / ND	2.88 (0.57) / 2.72 (0.64)	16.13 (5.25) / 18.1 (7.4)	12 (44.4%) / 20 (60.6%)	3.08 (0.48) / 2.99 (0.37)	20.9 (5.1) / 23.0 (8.0)	ND / ND	3 (10.0%)

Categorical variables are presented as frequencies and percentages. Continuous variables are presented as mean (standard deviation) or median (interquartile range).

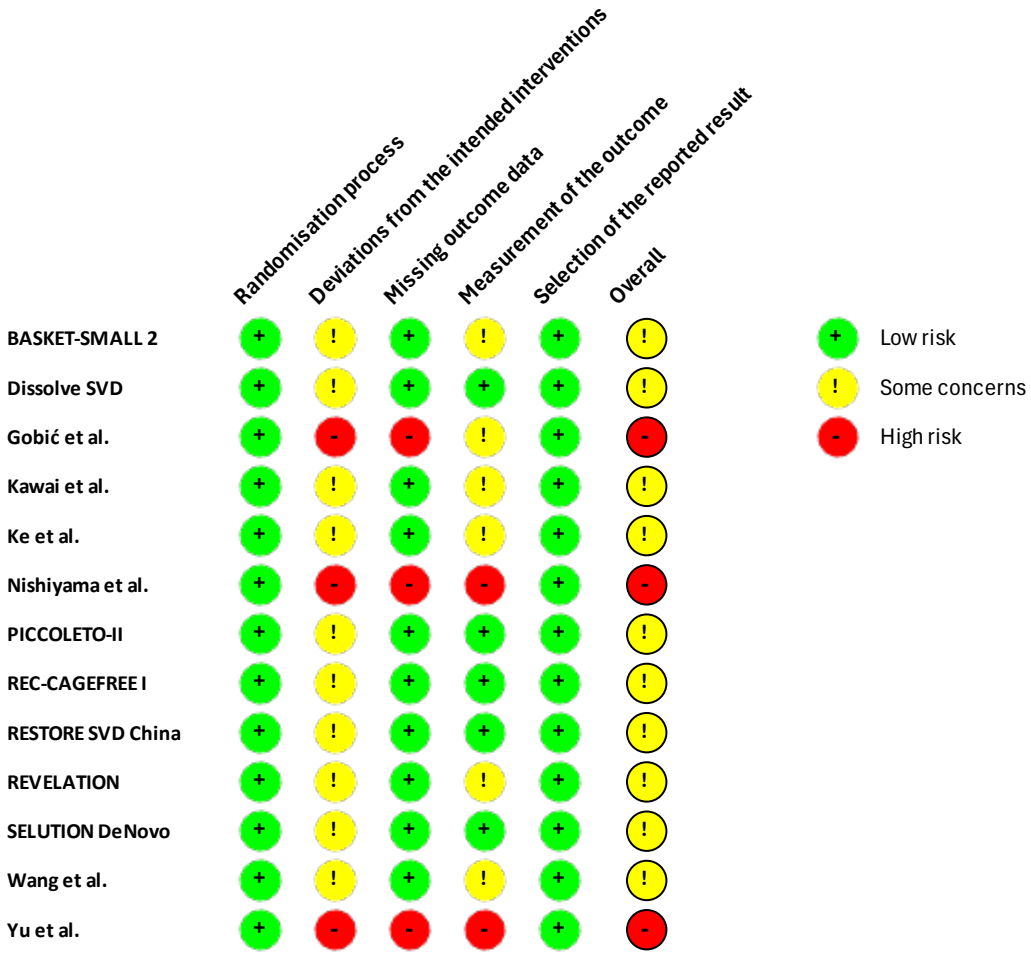
Abbreviations: DCB = drug-coated balloon; DES = drug-eluting stent; LAD = left anterior descending artery; MVD = multivessel disease; ND = no data; RVD = reference vessel diameter.

SUPPLEMENTARY FIGURES

Supplementary Figure 1. PRISMA flow-chart

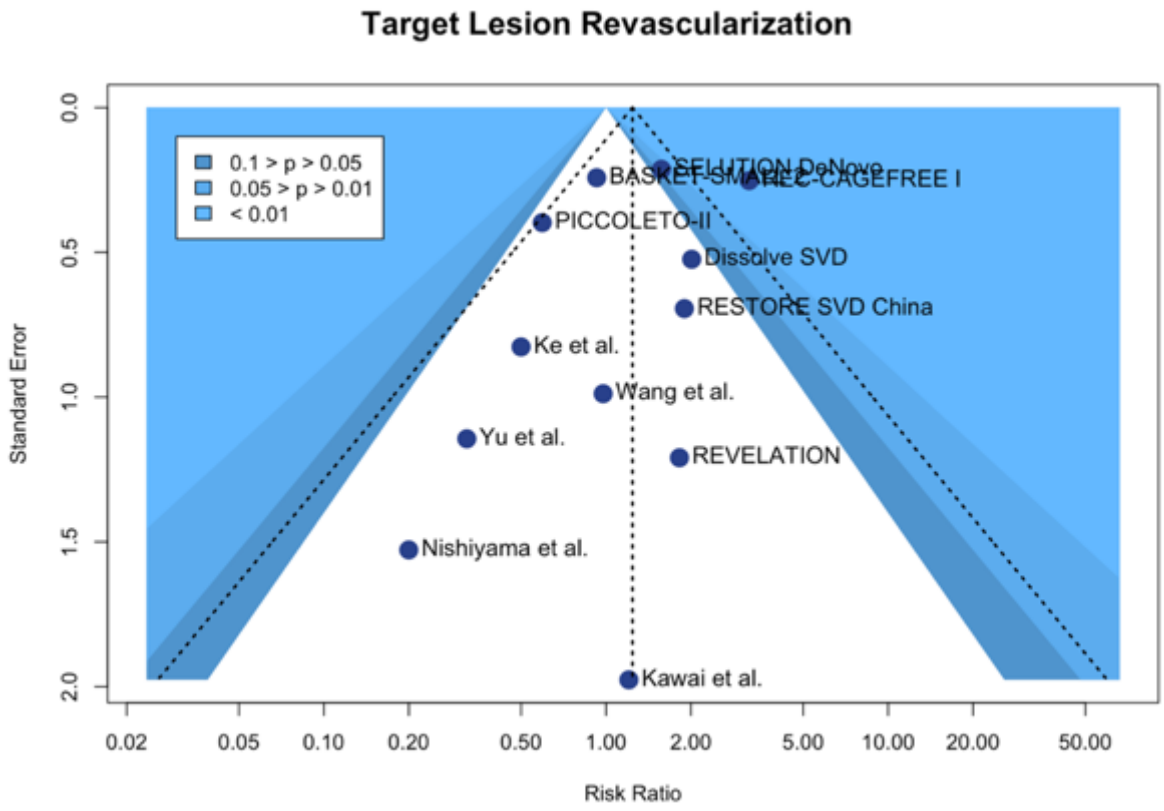


Supplementary Figure 2. Results of risk of bias assessment

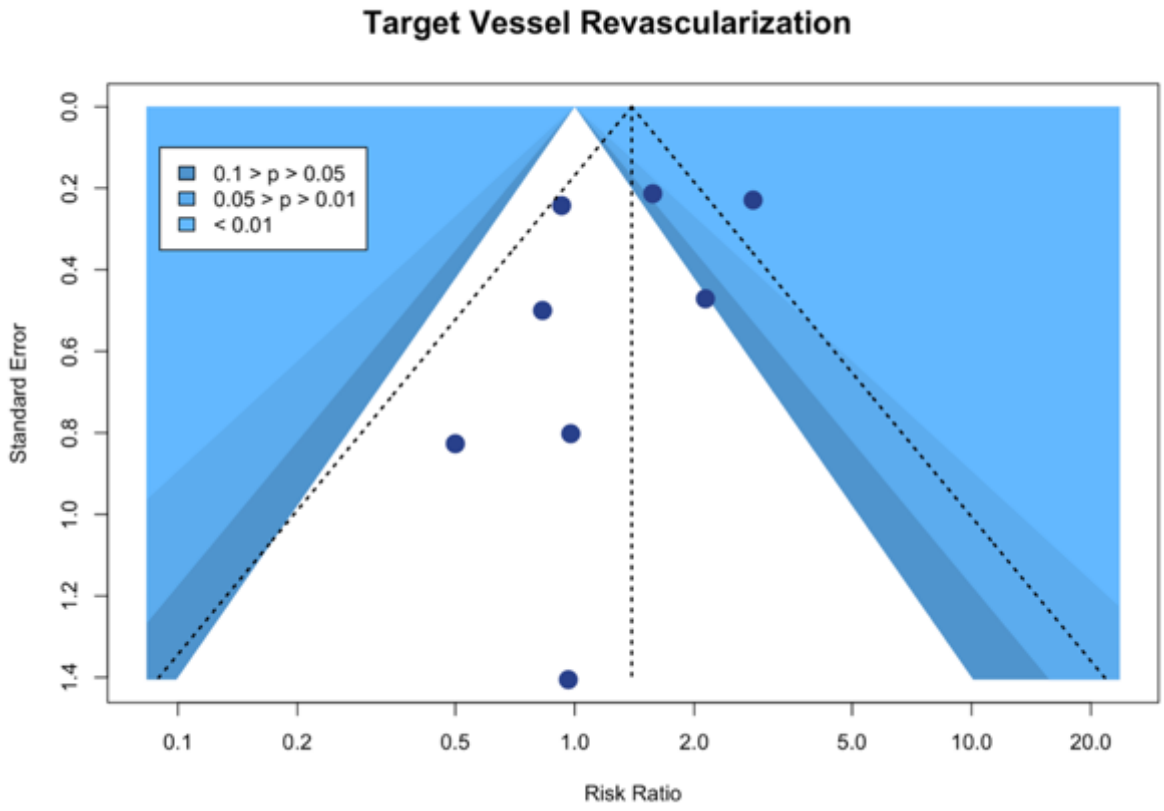


Supplementary Figure 3. Contour-enhanced funnel plot for primary (A), secondary (B-I), and angiographic outcomes (J-N)

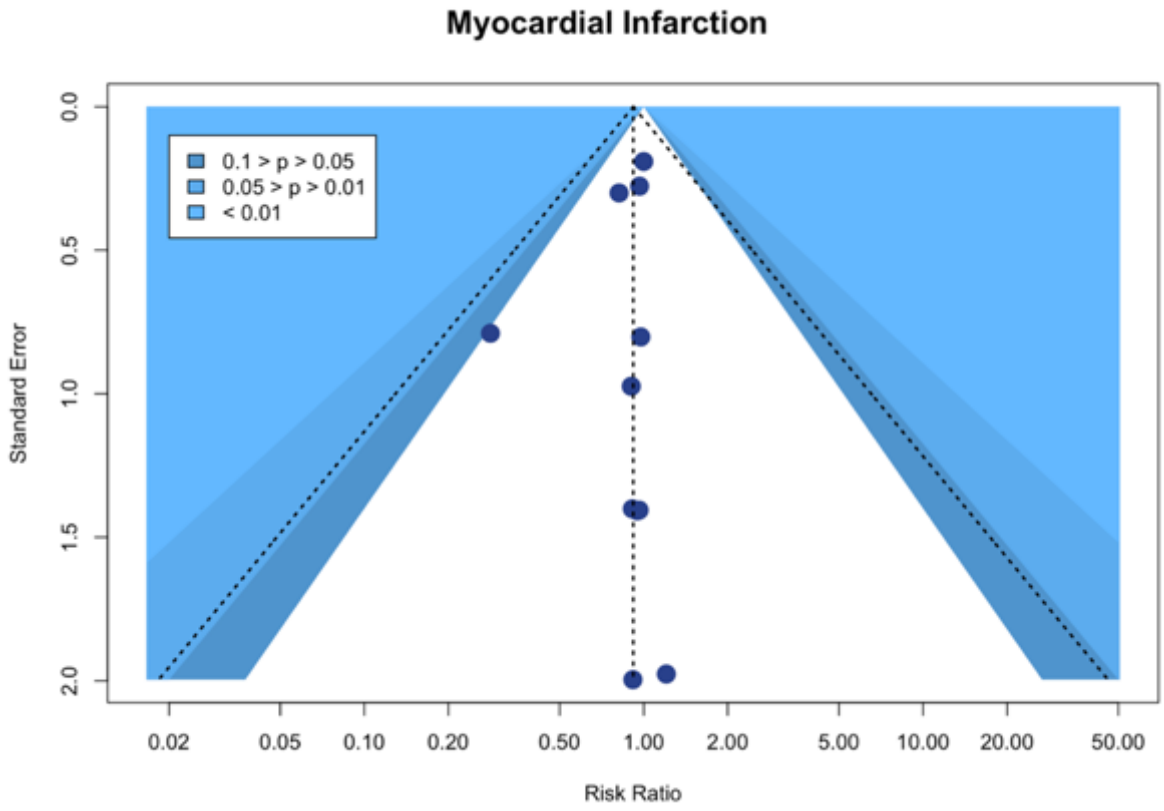
A)



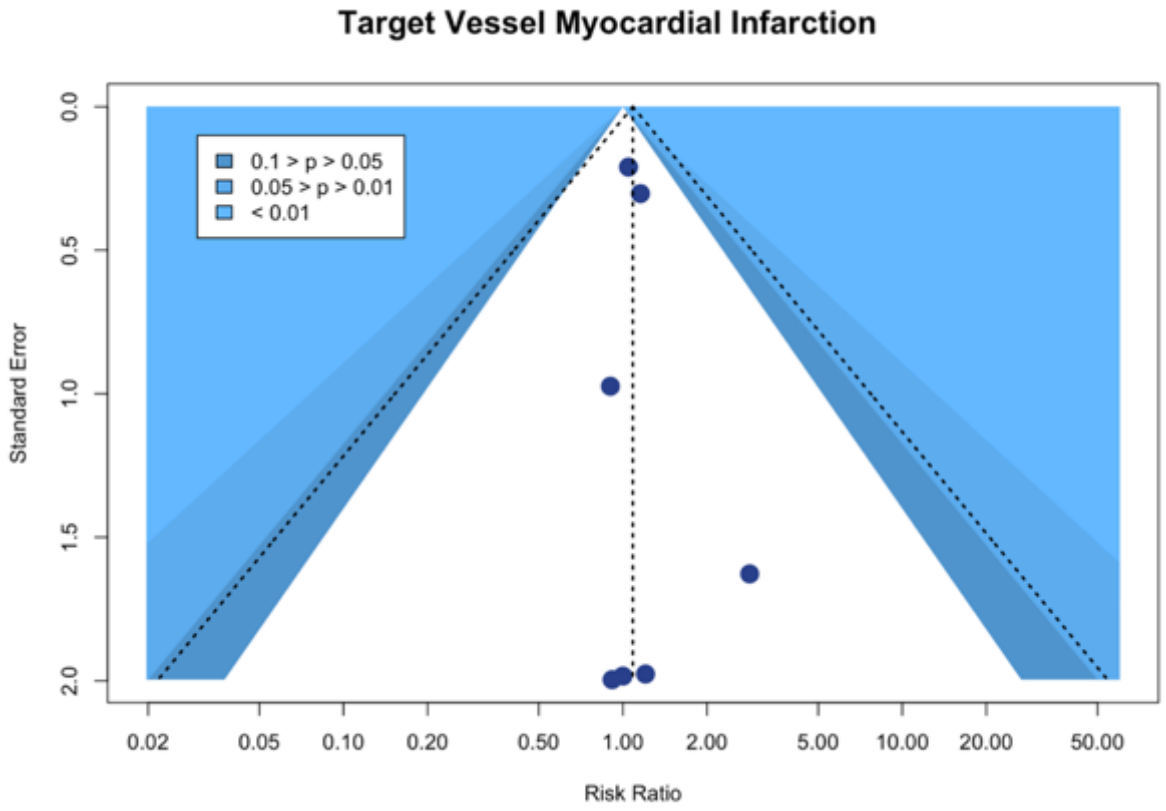
B)


Target Vessel Revascularization
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0.1
0.2
0.5
1.0
2.0
5.0
10.0
20.0
Risk Ratio

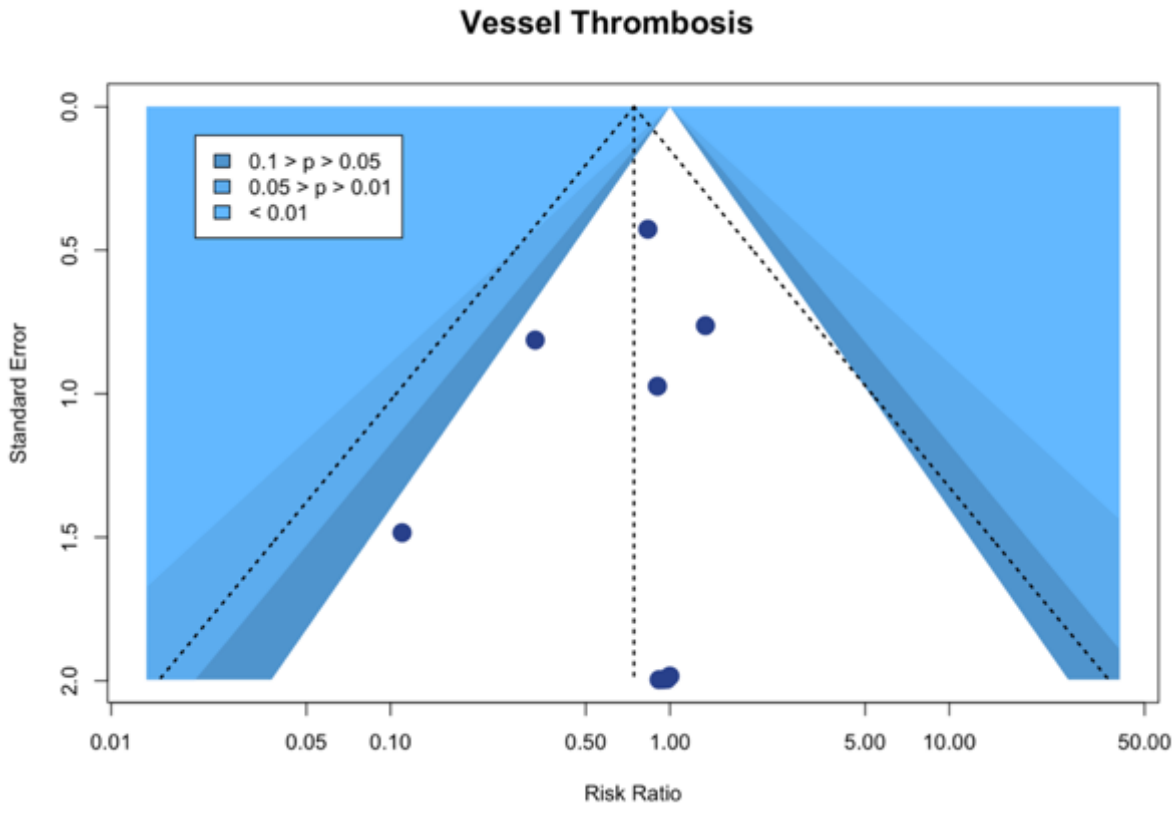
C)


Myocardial Infarction
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.02
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
50.00
Risk Ratio

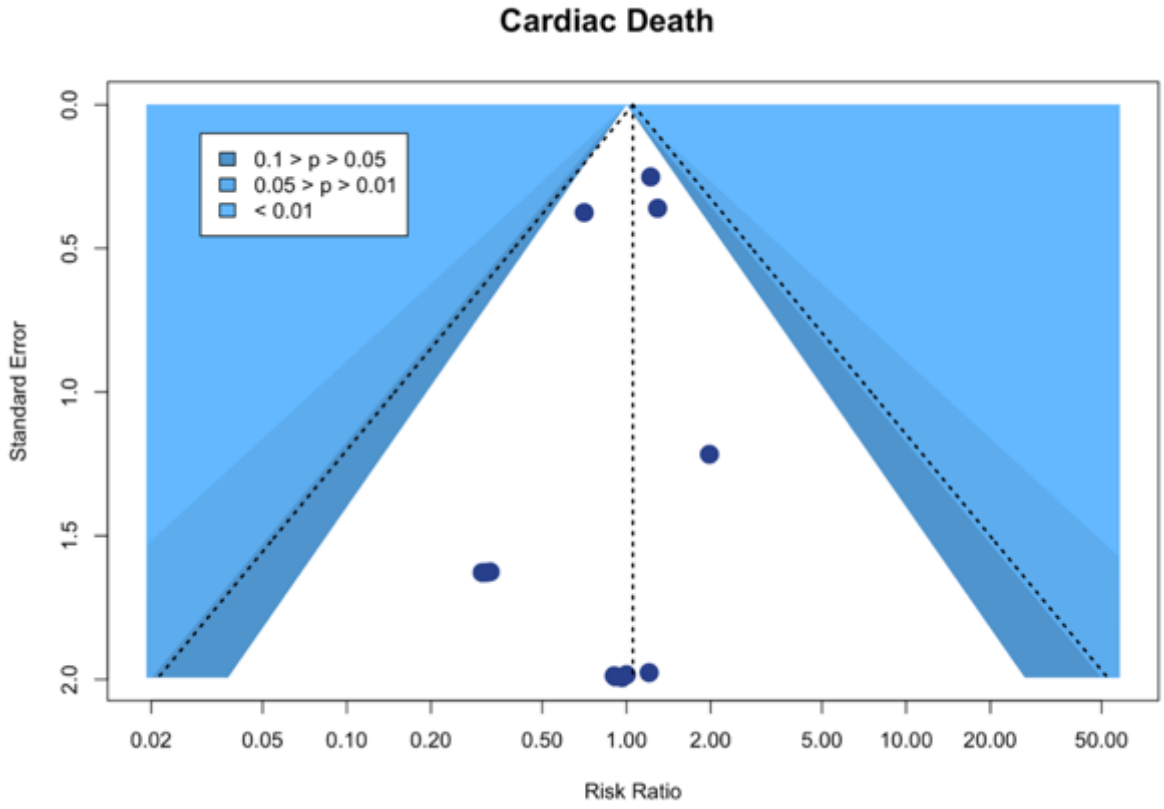
D)


Target Vessel Myocardial Infarction
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.02
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
50.00
Risk Ratio

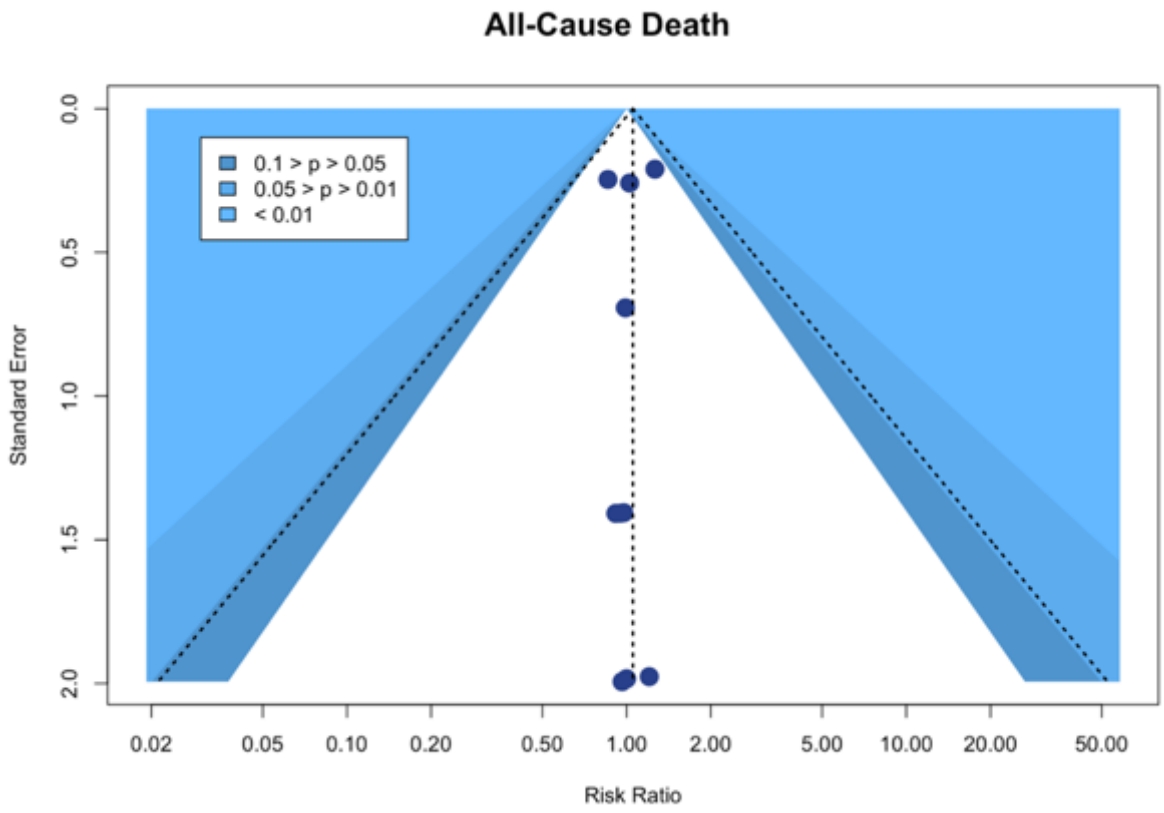
E)


Vessel Thrombosis
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.01
0.05
0.10
0.50
1.00
5.00
10.00
50.00
Risk Ratio

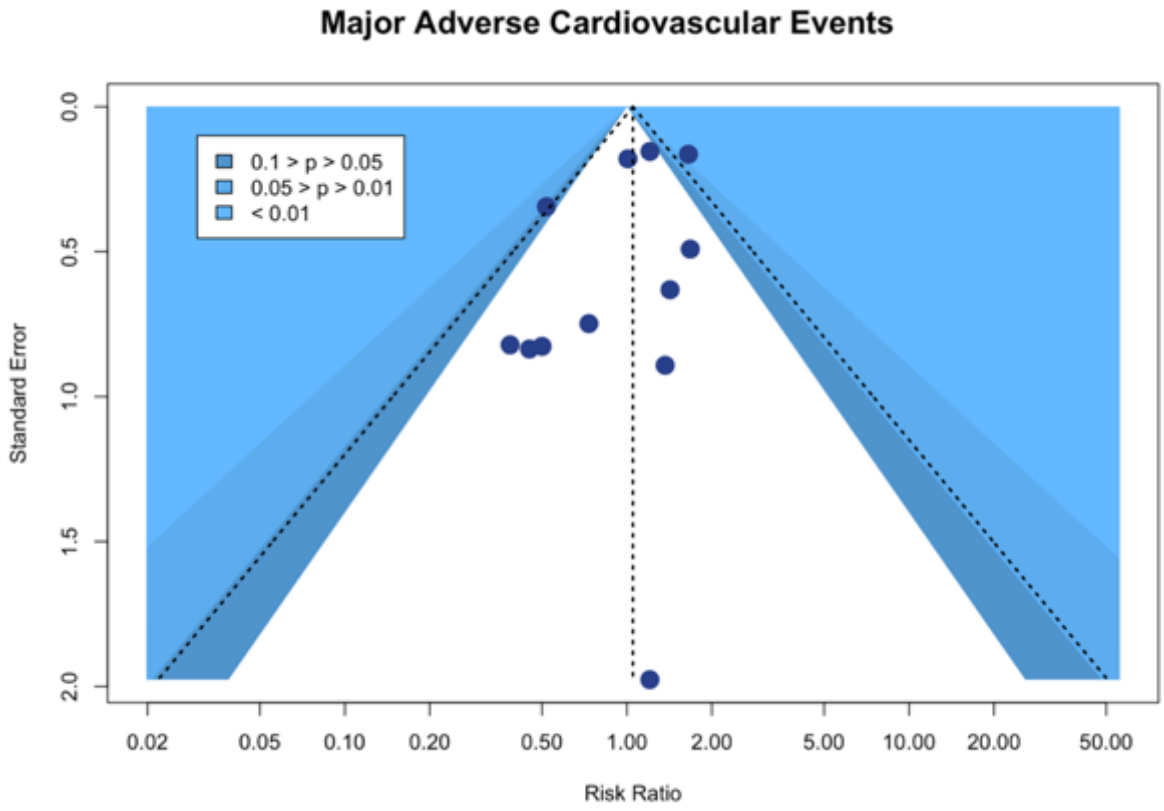
F)


Cardiac Death
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.02
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
50.00
Risk Ratio

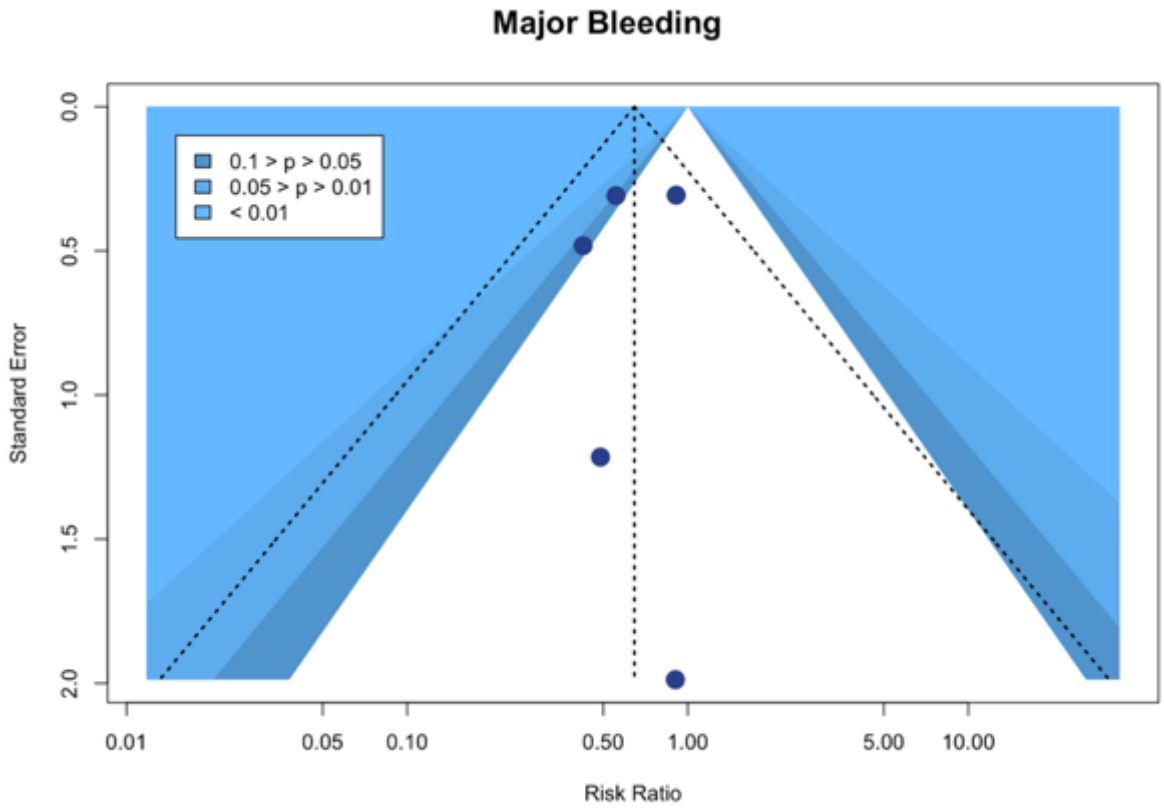
G)


All-Cause Death
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.02
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
50.00
Risk Ratio

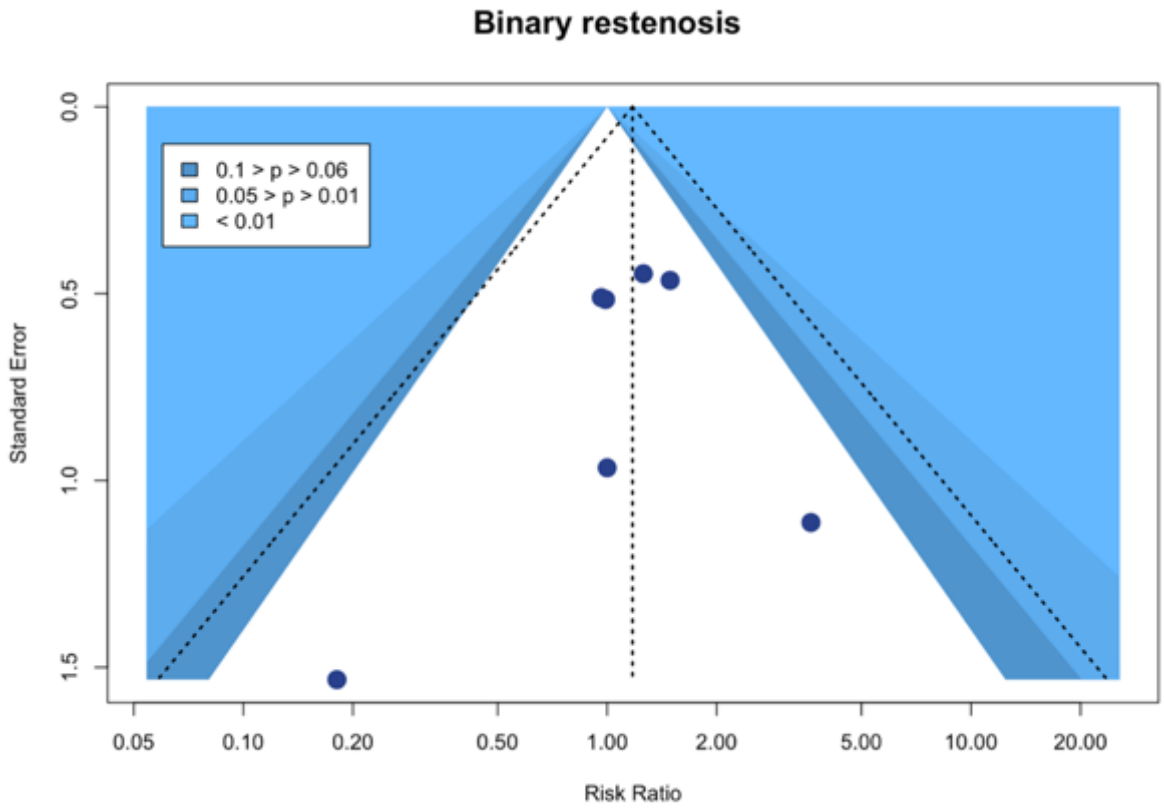
H)


Major Adverse Cardiovascular Events
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.02
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
50.00
Risk Ratio

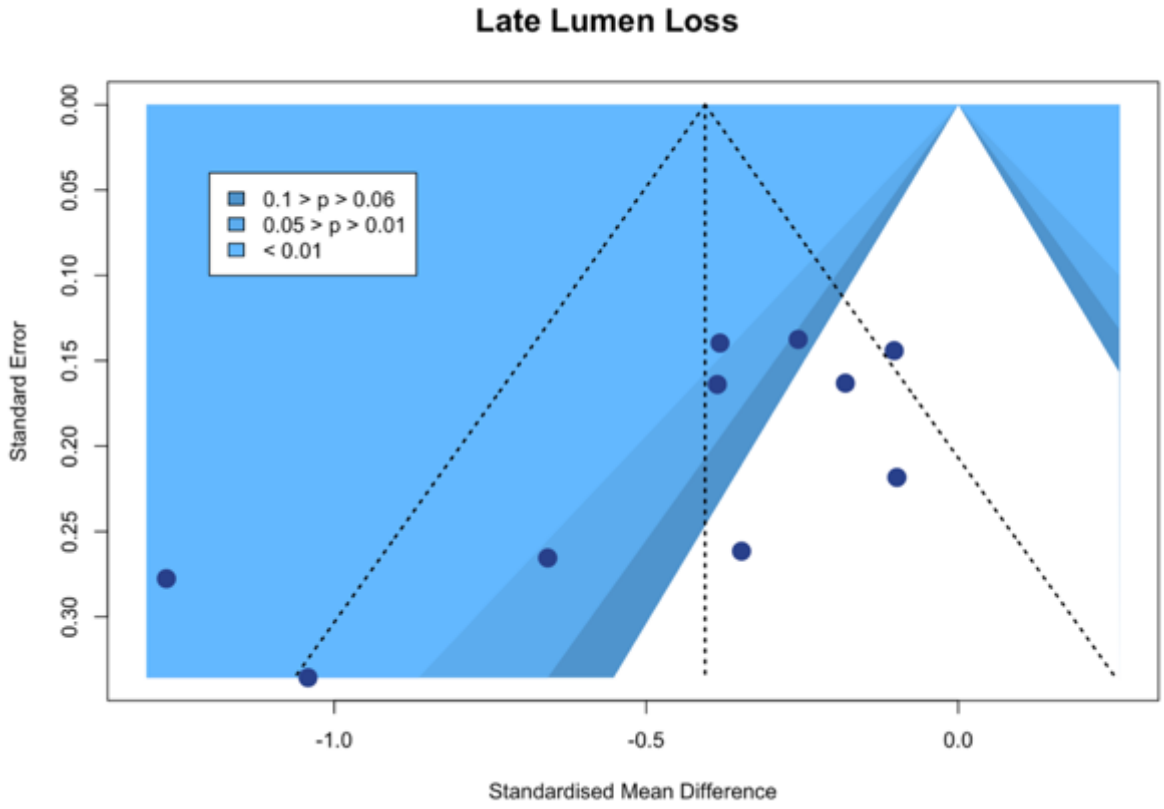
I)


Major Bleeding
0.1 > p > 0.05
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
2.0
0.01
0.05
0.10
0.50
1.00
5.00
10.00
Risk Ratio

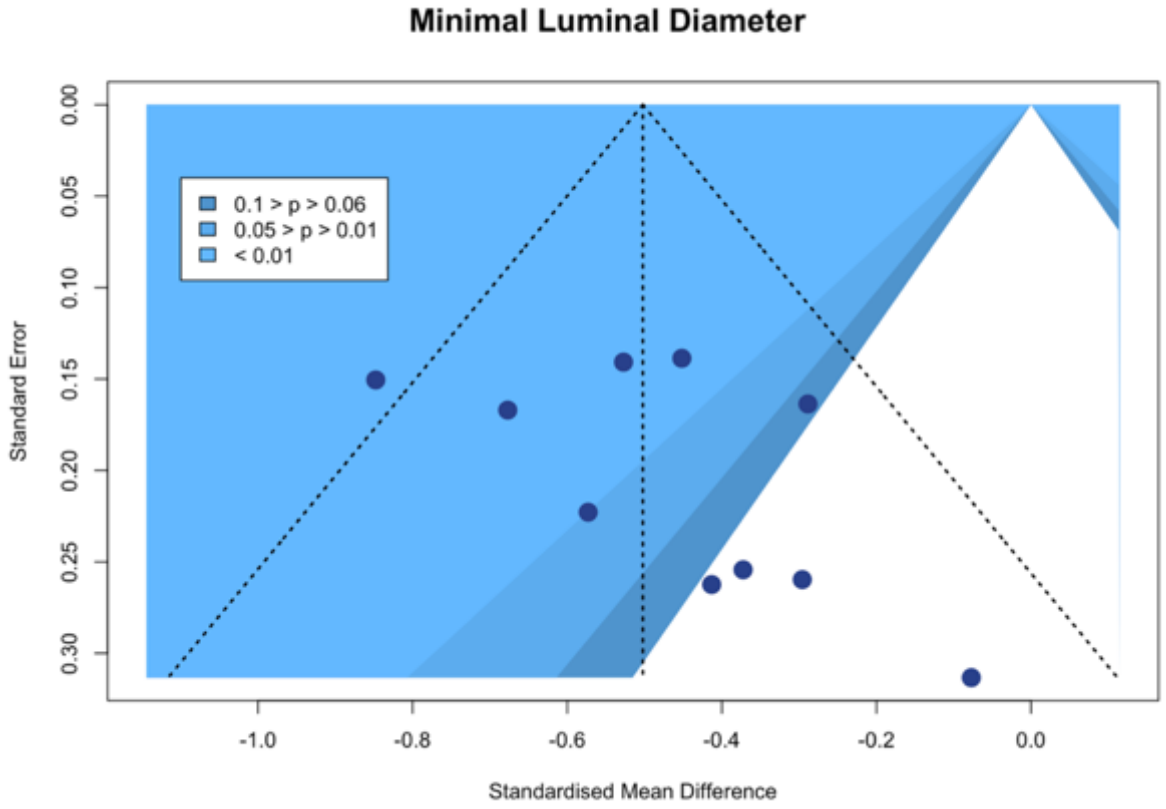
J)


Binary restenosis
0.1 > p > 0.06
0.05 > p > 0.01
< 0.01
Standard Error
0.0
0.5
1.0
1.5
0.05
0.10
0.20
0.50
1.00
2.00
5.00
10.00
20.00
Risk Ratio

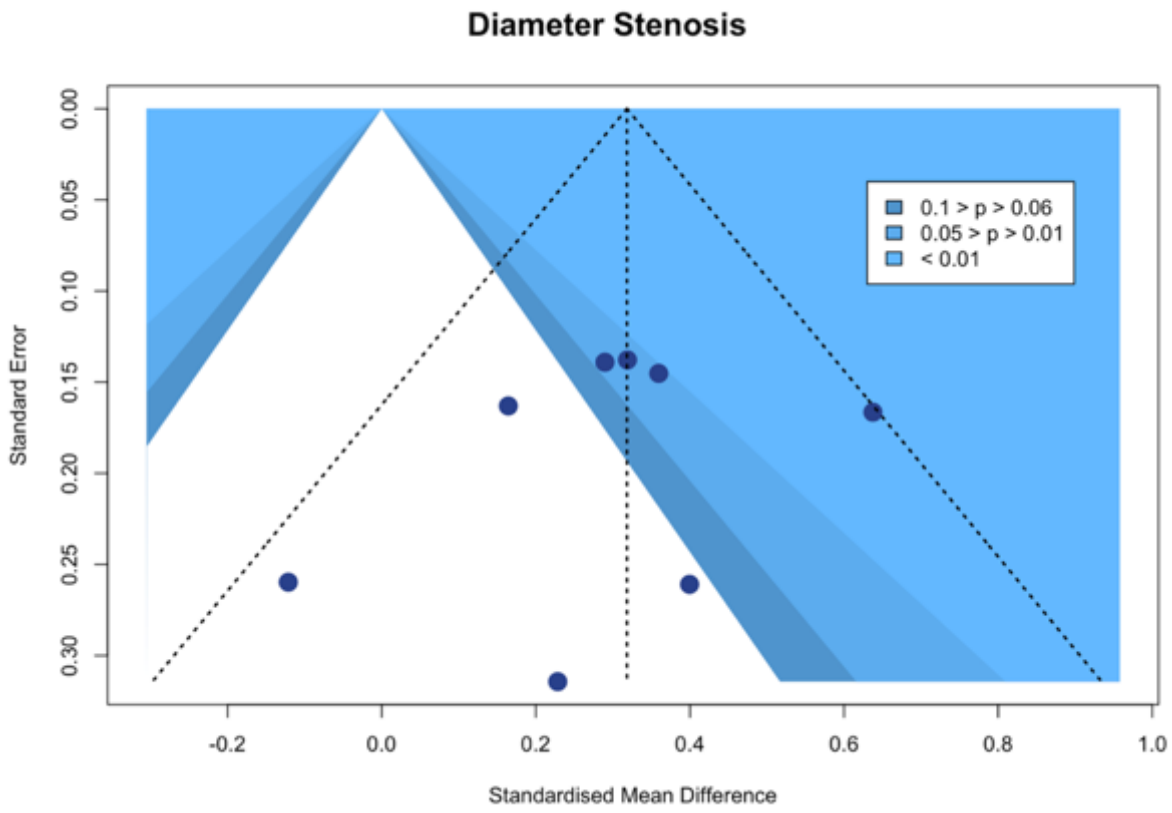
K)


Late Lumen Loss
0.1 > p > 0.06
0.05 > p > 0.01
< 0.01
Standard Error
0.00
0.05
0.10
0.15
0.20
0.25
0.30
-1.0
-0.5
0.0
Standardised Mean Difference

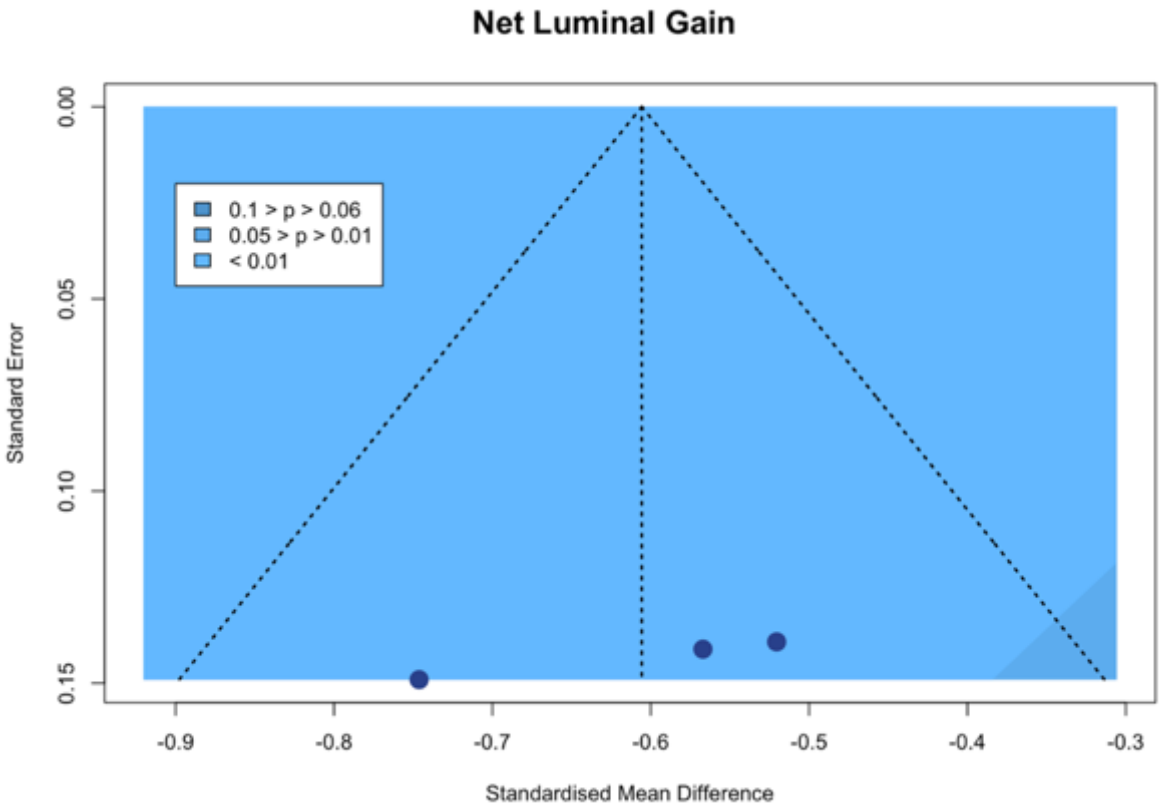
L)


Minimal Luminal Diameter
0.1 > p > 0.06
0.05 > p > 0.01
< 0.01
Standard Error
0.00
0.05
0.10
0.15
0.20
0.25
0.30
-1.0
-0.8
-0.6
-0.4
-0.2
0.0
Standardised Mean Difference

M)

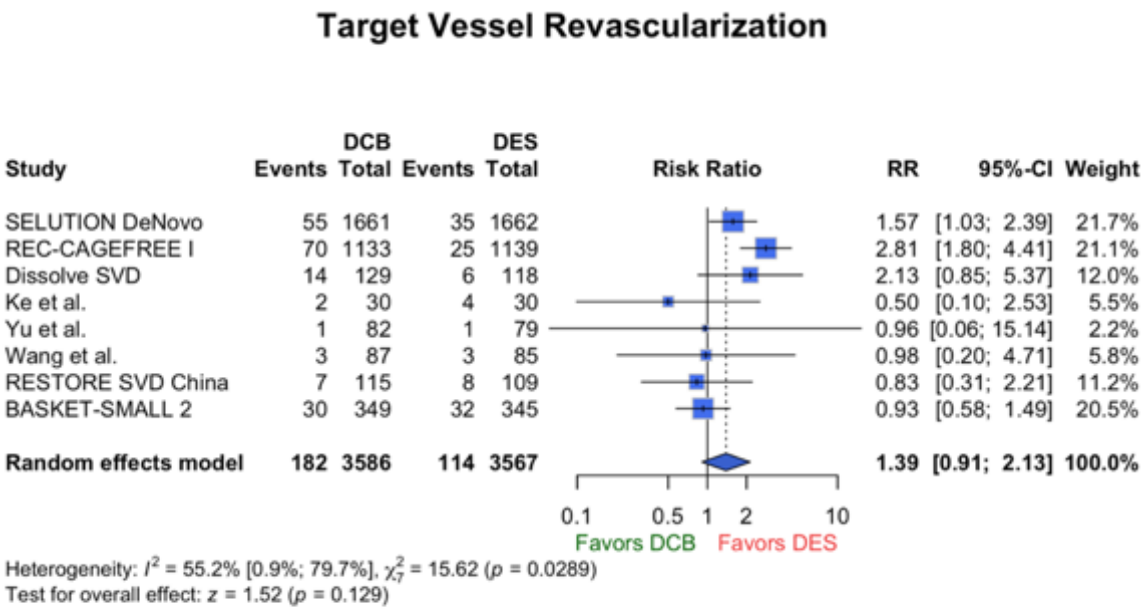

Diameter Stenosis
0.1 > p > 0.06
0.05 > p > 0.01
< 0.01
Standard Error
0.00
0.05
0.10
0.15
0.20
0.25
0.30
-0.2
0.0
0.2
0.4
0.6
0.8
1.0
Standardised Mean Difference

N)

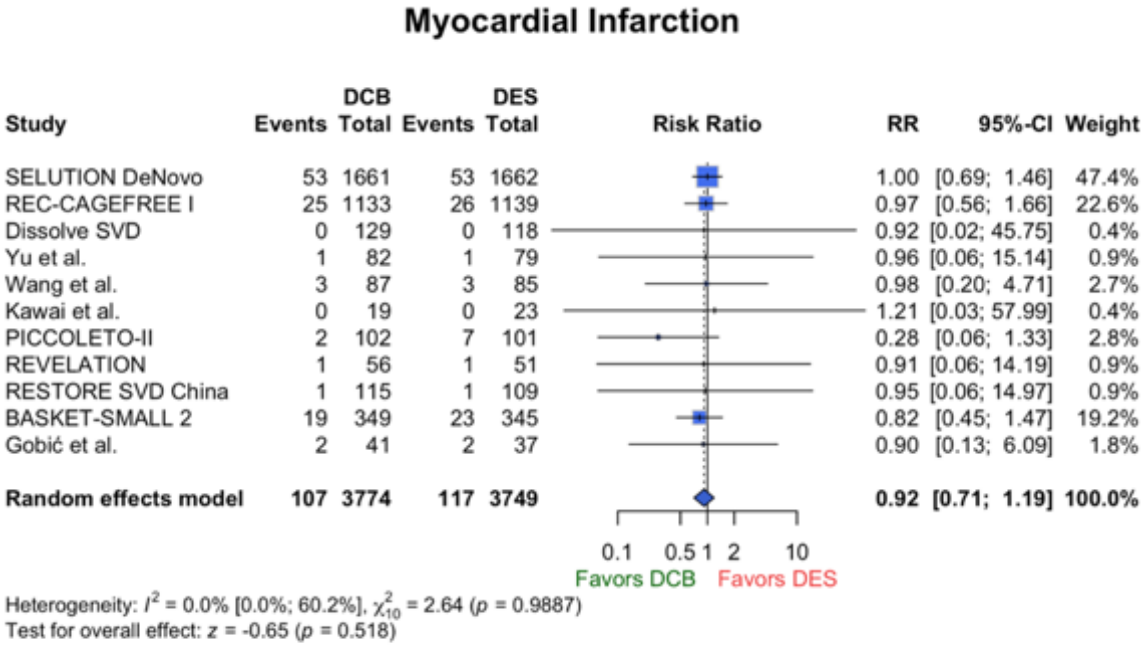

Net Luminal Gain
0.1 > p > 0.06
0.05 > p > 0.01
< 0.01
Standard Error
0.00
0.05
0.10
0.15
-0.9
-0.8
-0.7
-0.6
-0.5
-0.4
-0.3
Standardised Mean Difference

Supplementary Figure 4. Results of meta-analysis for the secondary clinical outcomes (A-H) and binary restenosis (I)

A)

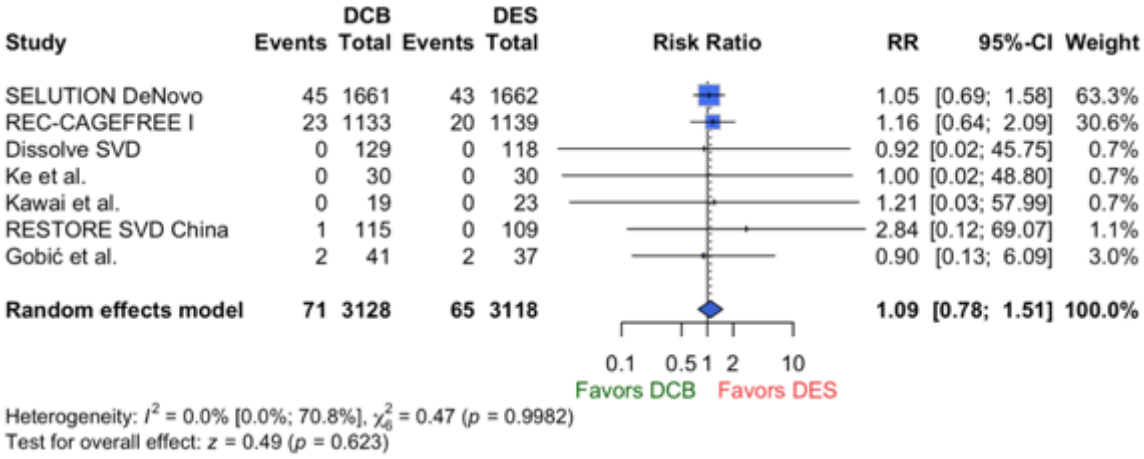


B)



C)

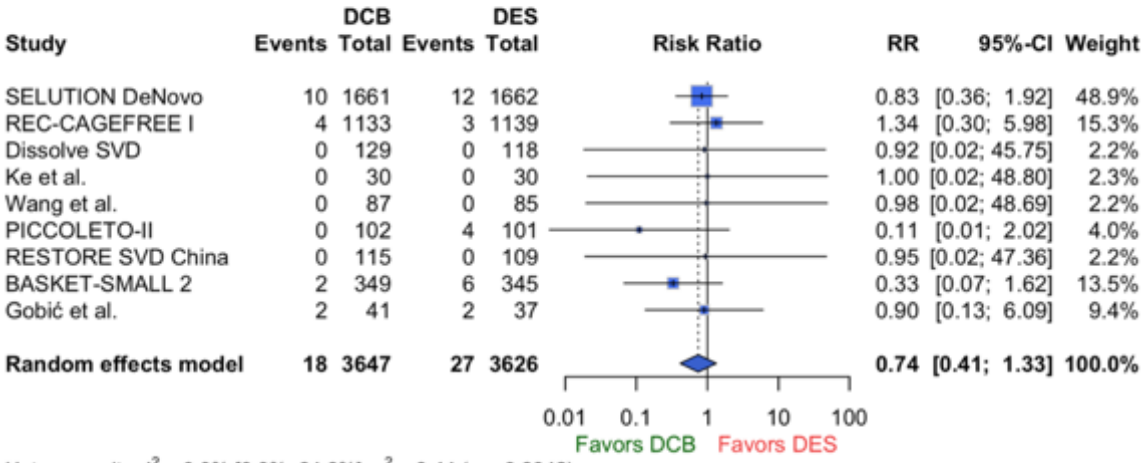
Target Vessel Myocardial Infarction



Heterogeneity: I^2 = 0.0% [0.0%; 70.8%], χ^2_6 = 0.47 (p = 0.9982)
Test for overall effect: z = 0.49 (p = 0.623)

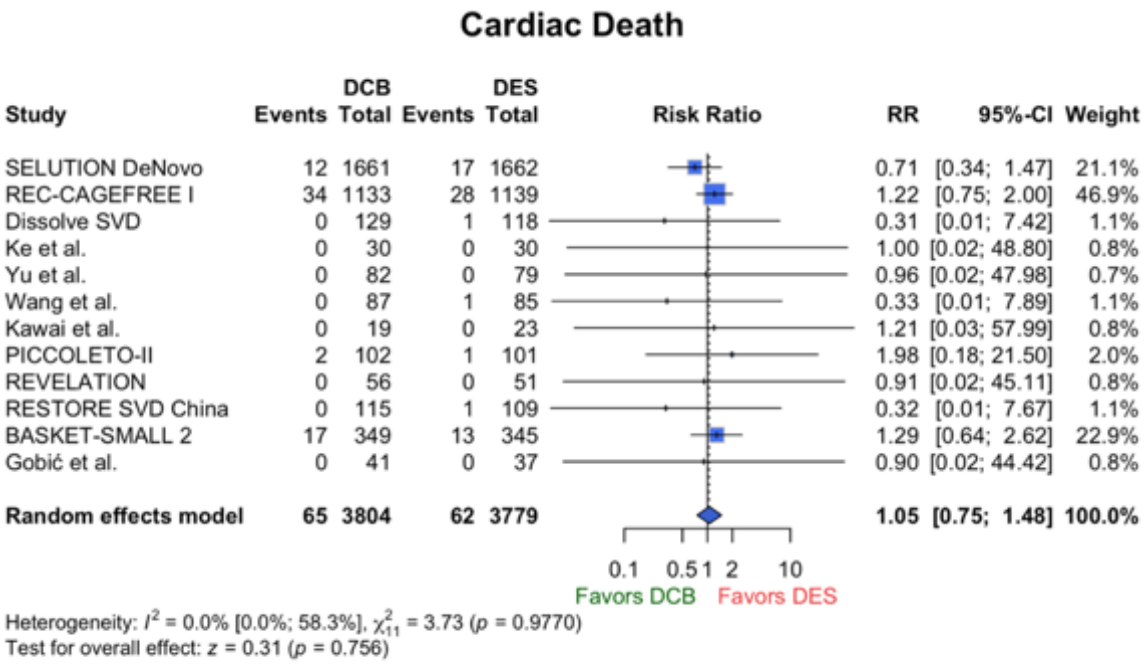
D)

Vessel Thrombosis

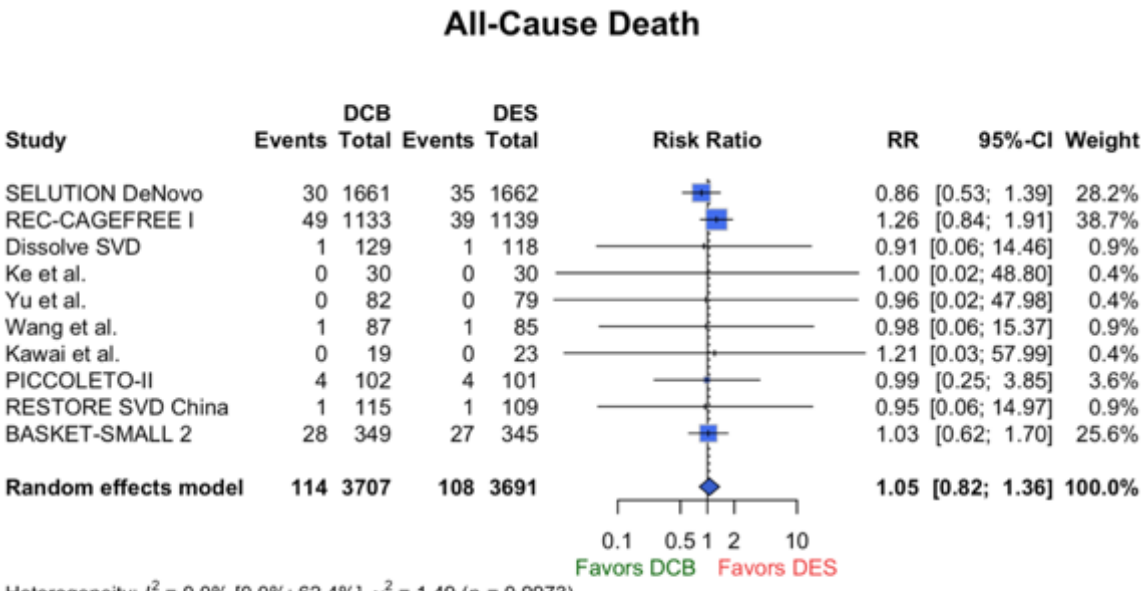


Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 3.44 (p = 0.9042)
Test for overall effect: z = -0.99 (p = 0.321)

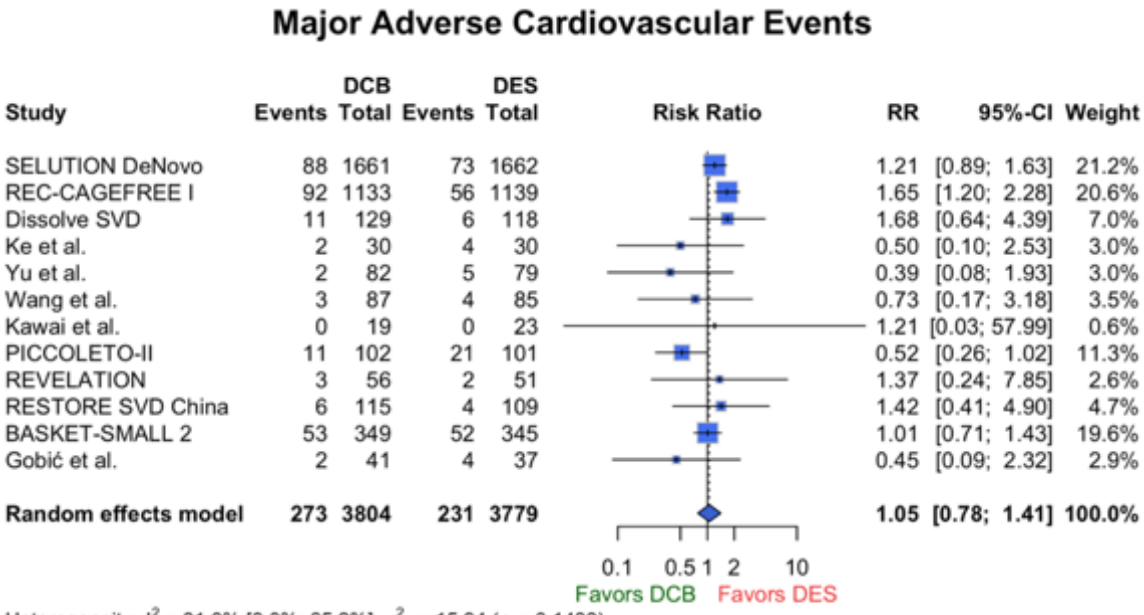
E)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 12 1661 17 1662 0.71 [0.34; 1.47] 21.1%
REC-CAGEFREE I 34 1133 28 1139 1.22 [0.75; 2.00] 46.9%
Dissolve SVD 0 129 1 118 0.31 [0.01; 7.42] 1.1%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.8%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.7%
Wang et al. 0 87 1 85 0.33 [0.01; 7.89] 1.1%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.8%
PICCOLETO-II 2 102 1 101 1.98 [0.18; 21.50] 2.0%
REVELATION 0 56 0 51 0.91 [0.02; 45.11] 0.8%
RESTORE SVD China 0 115 1 109 0.32 [0.01; 7.67] 1.1%
BASKET-SMALL 2 17 349 13 345 1.29 [0.64; 2.62] 22.9%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 0.8%
Random effects model 65 3804 62 3779 1.05 [0.75; 1.48] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 58.3%], χ^2_{11} = 3.73 (p = 0.9770)
Test for overall effect: z = 0.31 (p = 0.756)

F)

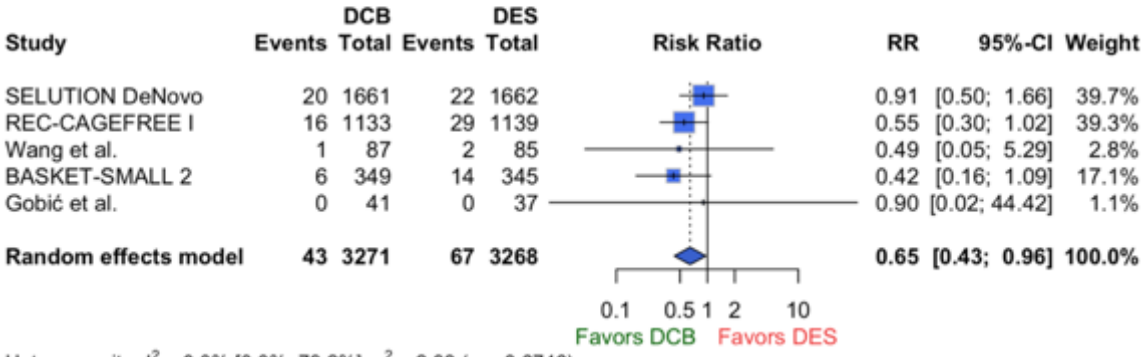

All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 30 1661 35 1662 0.86 [0.53; 1.39] 28.2%
REC-CAGEFREE I 49 1133 39 1139 1.26 [0.84; 1.91] 38.7%
Dissolve SVD 1 129 1 118 0.91 [0.06; 14.46] 0.9%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.4%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.4%
Wang et al. 1 87 1 85 0.98 [0.06; 15.37] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 4 102 4 101 0.99 [0.25; 3.85] 3.6%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 25.6%
Random effects model 114 3707 108 3691 1.05 [0.82; 1.36] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 1.49 (p = 0.9973)
Test for overall effect: z = 0.40 (p = 0.690)

G)



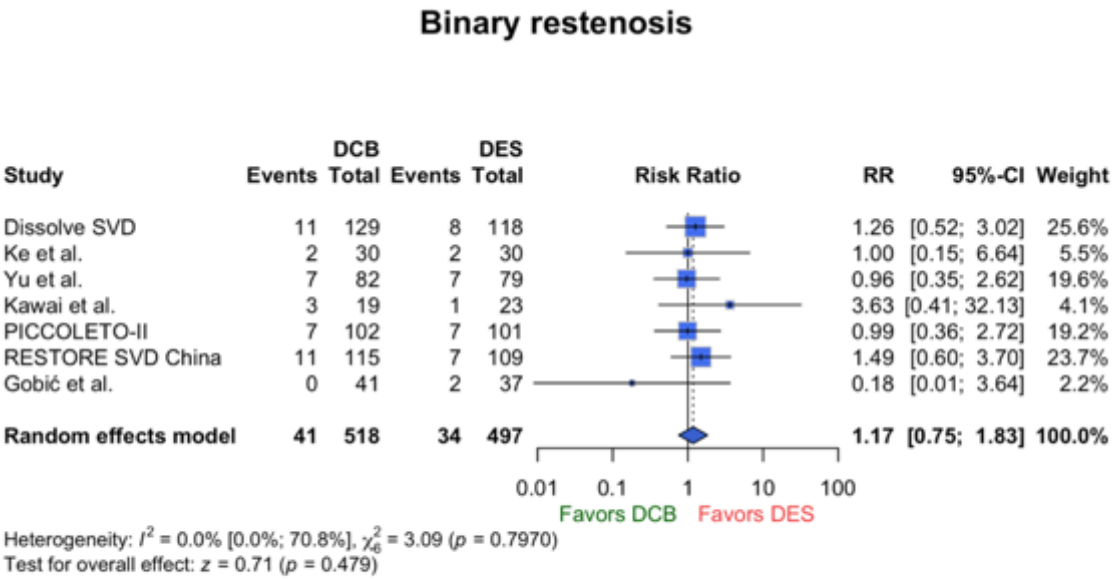
Heterogeneity: I^2 = 31.0% [0.0%; 65.2%], χ^2_{11} = 15.94 (p = 0.1433)
Test for overall effect: z = 0.32 (p = 0.746)

H)



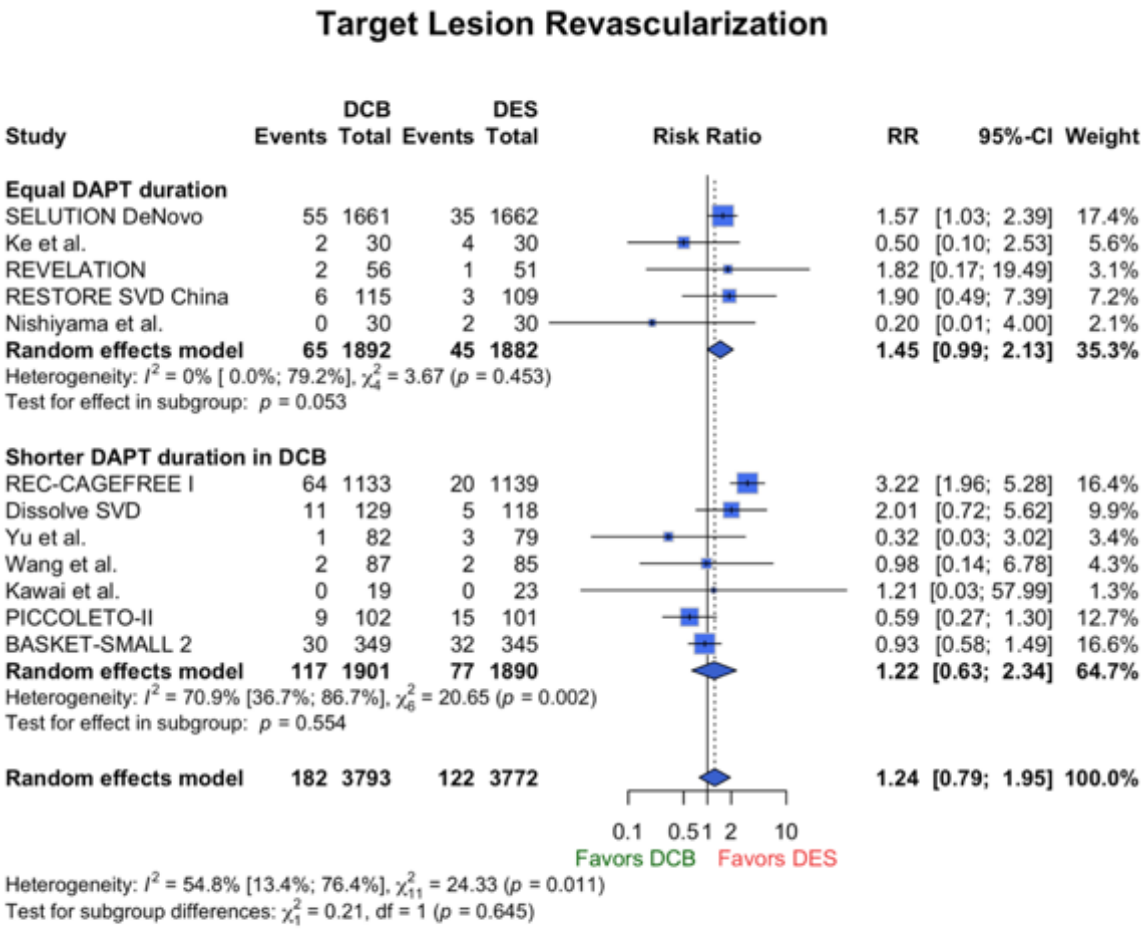
Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 2.33 (p = 0.6746)
Test for overall effect: z = -2.15 (p = 0.032)

I)


Binary restenosis
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Dissolve SVD 11 129 8 118 1.26 [0.52; 3.02] 25.6%
Ke et al. 2 30 2 30 1.00 [0.15; 6.64] 5.5%
Yu et al. 7 82 7 79 0.96 [0.35; 2.62] 19.6%
Kawai et al. 3 19 1 23 3.63 [0.41; 32.13] 4.1%
PICCOLETO-II 7 102 7 101 0.99 [0.36; 2.72] 19.2%
RESTORE SVD China 11 115 7 109 1.49 [0.60; 3.70] 23.7%
Gobić et al. 0 41 2 37 0.18 [0.01; 3.64] 2.2%
Random effects model 41 518 34 497 1.17 [0.75; 1.83] 100.0%
0.01 0.1 1 10 100
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 70.8%], χ^2_6 = 3.09 (p = 0.7970)
Test for overall effect: z = 0.71 (p = 0.479)

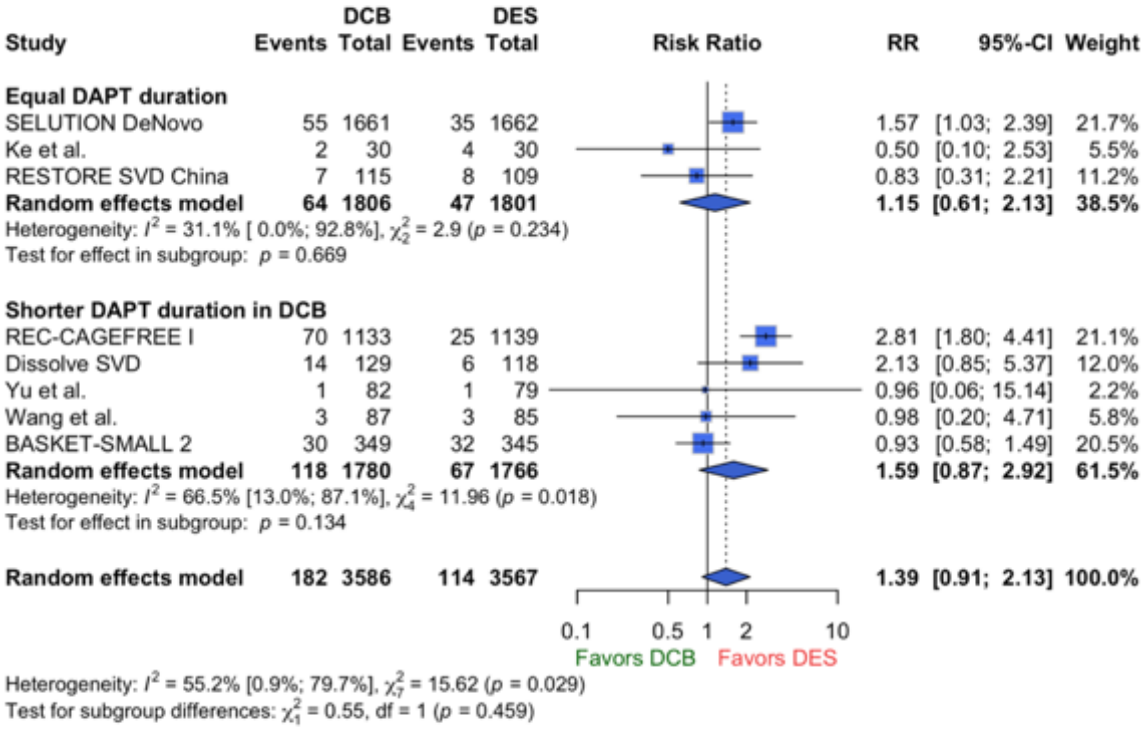
Supplementary Figure 5. Subgroup analysis by dual antiplatelet therapy duration for the primary (A) and secondary clinical outcomes (B-I)

A)

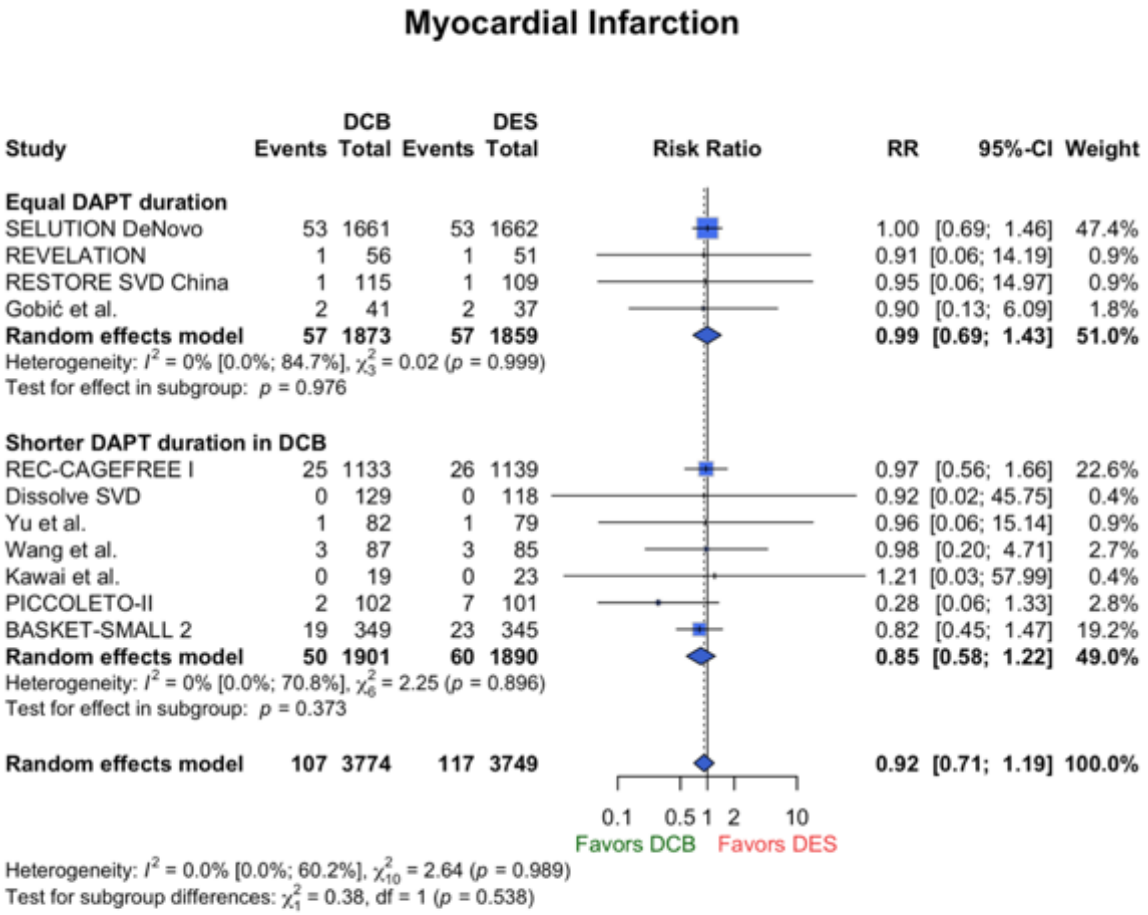


B)

Target Vessel Revascularization

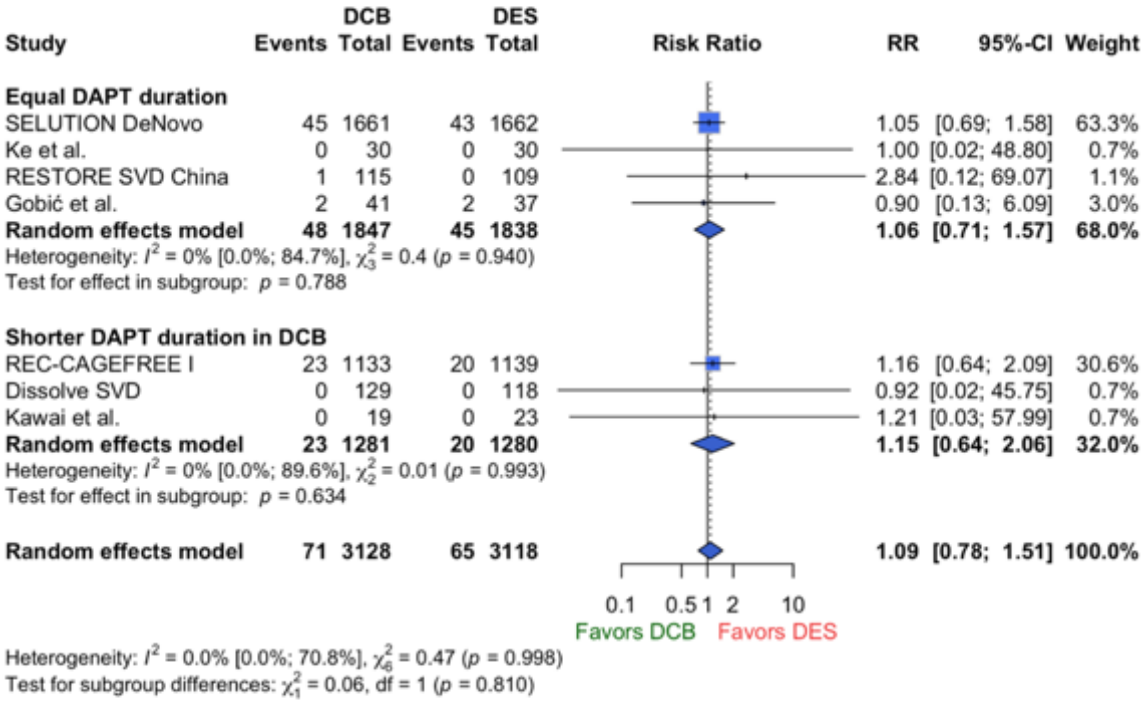


C)

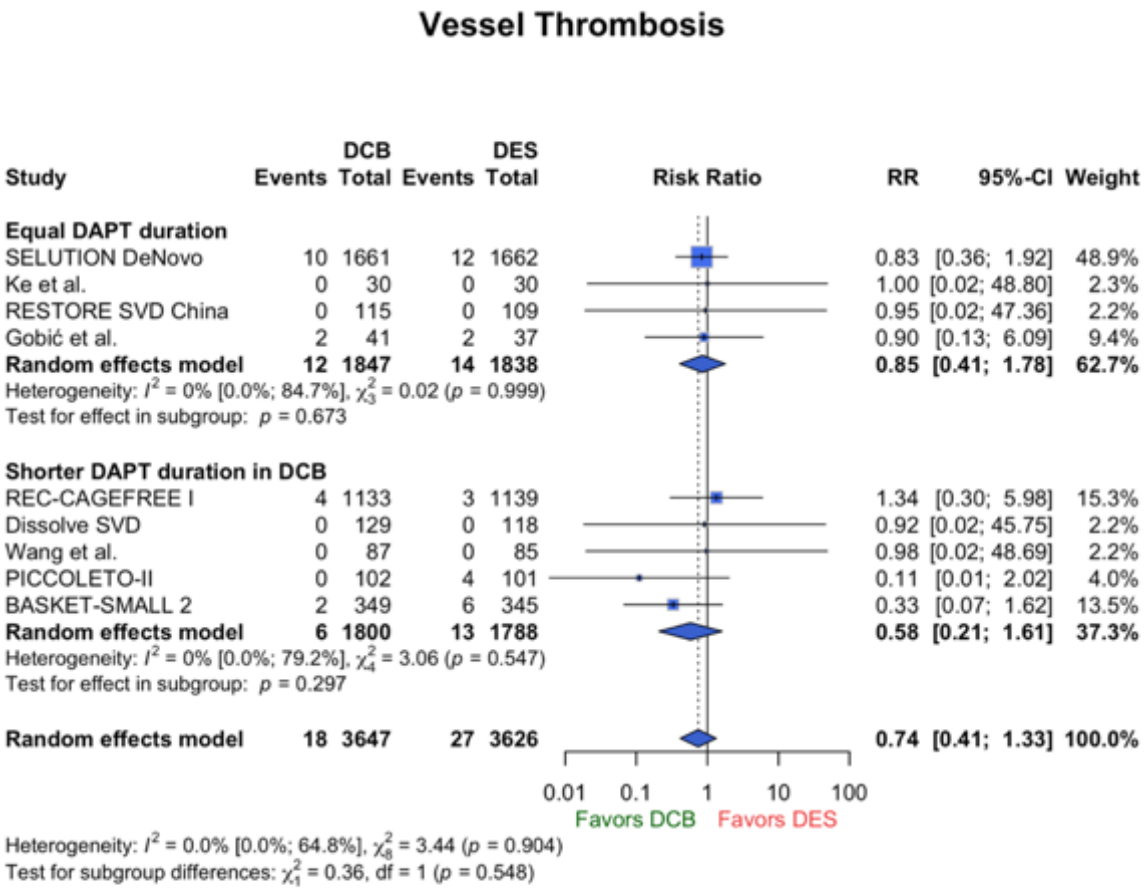

Myocardial Infarction
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 53 1661 53 1662 1.00 [0.69; 1.46] 47.4%
REVELATION 1 56 1 51 0.91 [0.06; 14.19] 0.9%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 1.8%
Random effects model 57 1873 57 1859 0.99 [0.69; 1.43] 51.0%
Heterogeneity: I^2 = 0% [0.0%; 84.7%], χ^2_3 = 0.02 (p = 0.999)
Test for effect in subgroup: p = 0.976
Shorter DAPT duration in DCB
REC-CAGEFREE I 25 1133 26 1139 0.97 [0.56; 1.66] 22.6%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 0.4%
Yu et al. 1 82 1 79 0.96 [0.06; 15.14] 0.9%
Wang et al. 3 87 3 85 0.98 [0.20; 4.71] 2.7%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 2 102 7 101 0.28 [0.06; 1.33] 2.8%
BASKET-SMALL 2 19 349 23 345 0.82 [0.45; 1.47] 19.2%
Random effects model 50 1901 60 1890 0.85 [0.58; 1.22] 49.0%
Heterogeneity: I^2 = 0% [0.0%; 70.8%], χ^2_6 = 2.25 (p = 0.896)
Test for effect in subgroup: p = 0.373
Random effects model 107 3774 117 3749 0.92 [0.71; 1.19] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 60.2%], χ^2_{10} = 2.64 (p = 0.989)
Test for subgroup differences: χ^2_1 = 0.38, df = 1 (p = 0.538)

D)

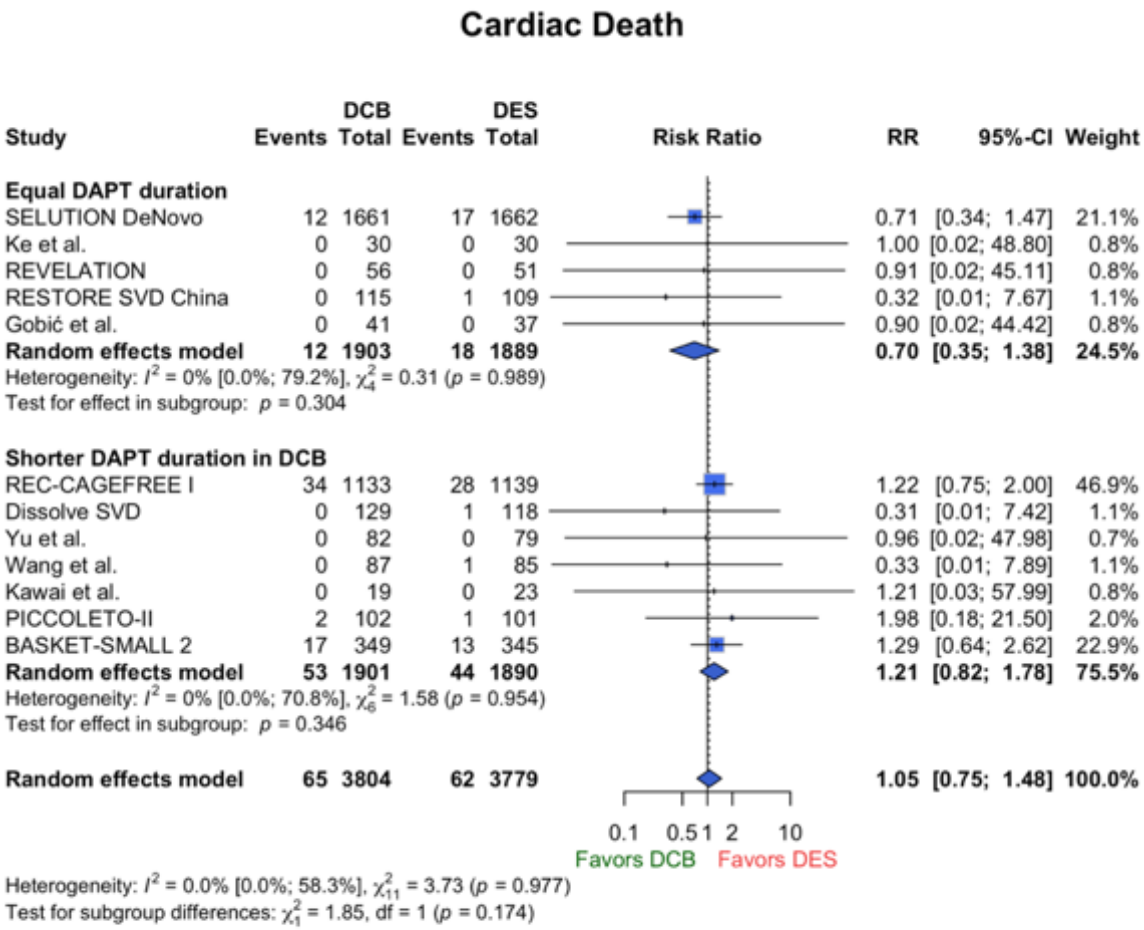
Target Vessel Myocardial Infarction



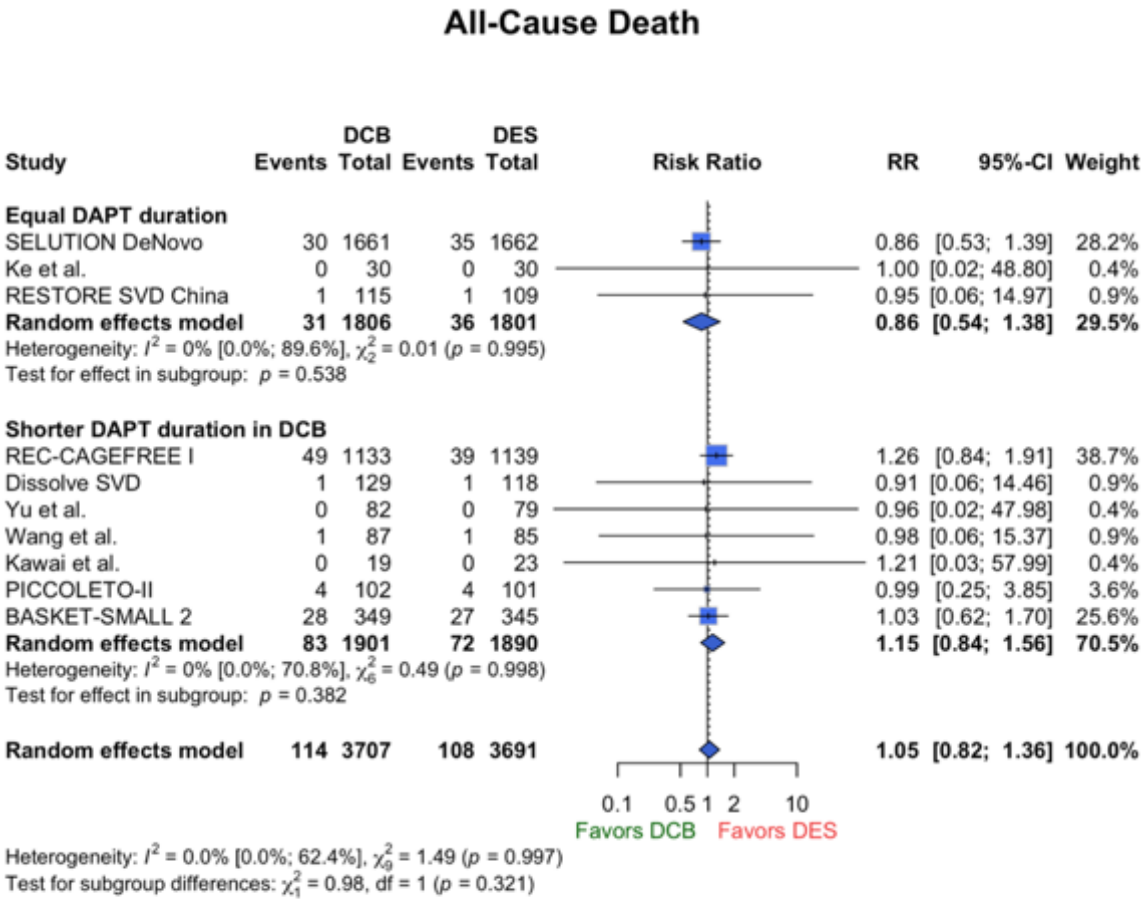
E)


Vessel Thrombosis
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 10 1661 12 1662 0.83 [0.36; 1.92] 48.9%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 2.3%
RESTORE SVD China 0 115 0 109 0.95 [0.02; 47.36] 2.2%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 9.4%
Random effects model 12 1847 14 1838 0.85 [0.41; 1.78] 62.7%
Heterogeneity: I^2 = 0% [0.0%; 84.7%], χ^2_3 = 0.02 (p = 0.999)
Test for effect in subgroup: p = 0.673
Shorter DAPT duration in DCB
REC-CAGEFREE I 4 1133 3 1139 1.34 [0.30; 5.98] 15.3%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 2.2%
Wang et al. 0 87 0 85 0.98 [0.02; 48.69] 2.2%
PICCOLETO-II 0 102 4 101 0.11 [0.01; 2.02] 4.0%
BASKET-SMALL 2 2 349 6 345 0.33 [0.07; 1.62] 13.5%
Random effects model 6 1800 13 1788 0.58 [0.21; 1.61] 37.3%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 3.06 (p = 0.547)
Test for effect in subgroup: p = 0.297
Random effects model 18 3647 27 3626 0.74 [0.41; 1.33] 100.0%
0.01 0.1 1 10 100
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 3.44 (p = 0.904)
Test for subgroup differences: χ^2_1 = 0.36, df = 1 (p = 0.548)

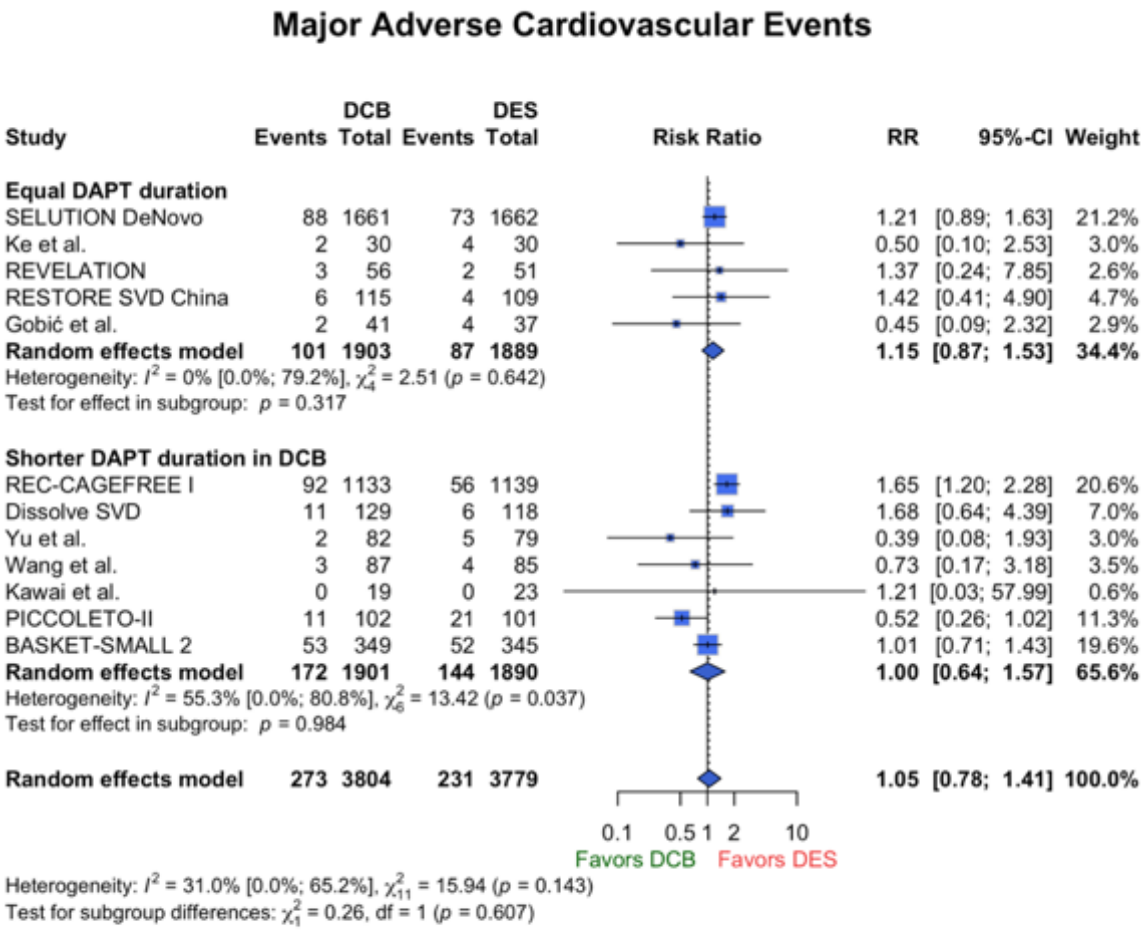
F)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 12 1661 17 1662 0.71 [0.34; 1.47] 21.1%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.8%
REVELATION 0 56 0 51 0.91 [0.02; 45.11] 0.8%
RESTORE SVD China 0 115 1 109 0.32 [0.01; 7.67] 1.1%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 0.8%
Random effects model 12 1903 18 1889 0.70 [0.35; 1.38] 24.5%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 0.31 (p = 0.989)
Test for effect in subgroup: p = 0.304
Shorter DAPT duration in DCB
REC-CAGEFREE I 34 1133 28 1139 1.22 [0.75; 2.00] 46.9%
Dissolve SVD 0 129 1 118 0.31 [0.01; 7.42] 1.1%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.7%
Wang et al. 0 87 1 85 0.33 [0.01; 7.89] 1.1%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.8%
PICCOLETO-II 2 102 1 101 1.98 [0.18; 21.50] 2.0%
BASKET-SMALL 2 17 349 13 345 1.29 [0.64; 2.62] 22.9%
Random effects model 53 1901 44 1890 1.21 [0.82; 1.78] 75.5%
Heterogeneity: I^2 = 0% [0.0%; 70.8%], χ^2_6 = 1.58 (p = 0.954)
Test for effect in subgroup: p = 0.346
Random effects model 65 3804 62 3779 1.05 [0.75; 1.48] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 58.3%], χ^2_{11} = 3.73 (p = 0.977)
Test for subgroup differences: χ^2_1 = 1.85, df = 1 (p = 0.174)

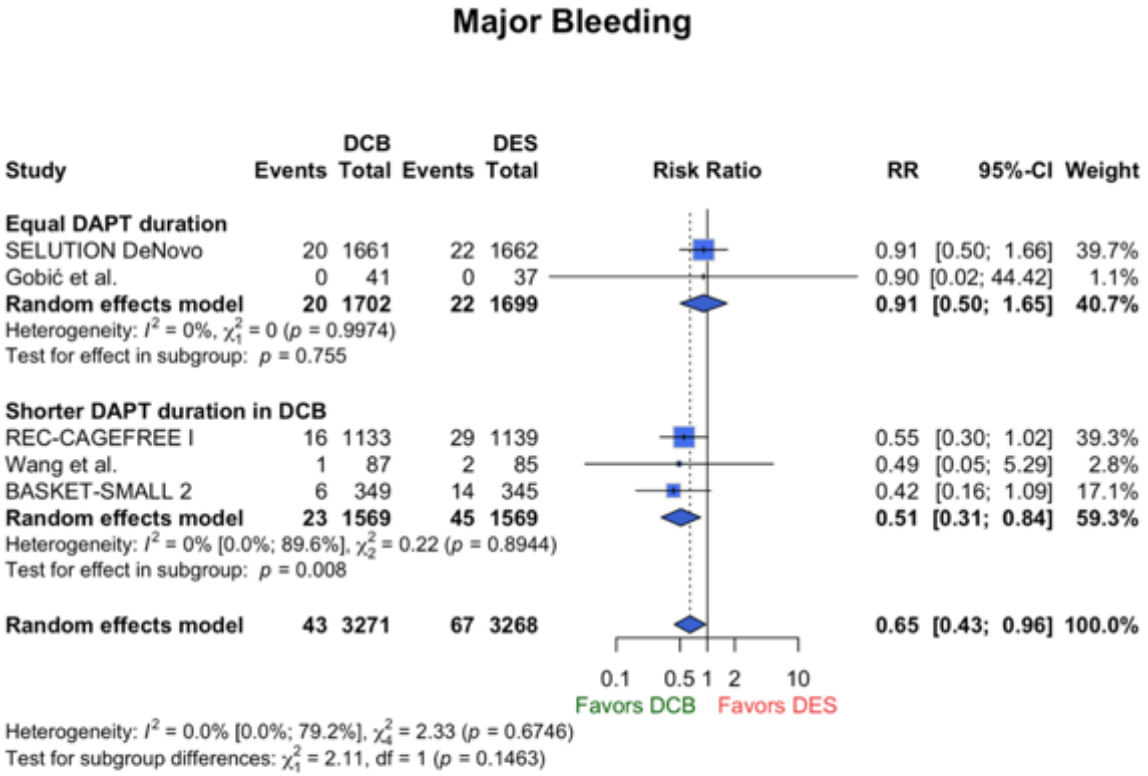
G)


All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 30 1661 35 1662 0.86 [0.53; 1.39] 28.2%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.4%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
Random effects model 31 1806 36 1801 0.86 [0.54; 1.38] 29.5%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.01 (p = 0.995)
Test for effect in subgroup: p = 0.538
Shorter DAPT duration in DCB
REC-CAGEFREE I 49 1133 39 1139 1.26 [0.84; 1.91] 38.7%
Dissolve SVD 1 129 1 118 0.91 [0.06; 14.46] 0.9%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.4%
Wang et al. 1 87 1 85 0.98 [0.06; 15.37] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 4 102 4 101 0.99 [0.25; 3.85] 3.6%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 25.6%
Random effects model 83 1901 72 1890 1.15 [0.84; 1.56] 70.5%
Heterogeneity: I^2 = 0% [0.0%; 70.8%], χ^2_6 = 0.49 (p = 0.998)
Test for effect in subgroup: p = 0.382
Random effects model 114 3707 108 3691 1.05 [0.82; 1.36] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 1.49 (p = 0.997)
Test for subgroup differences: χ^2_1 = 0.98, df = 1 (p = 0.321)

H)

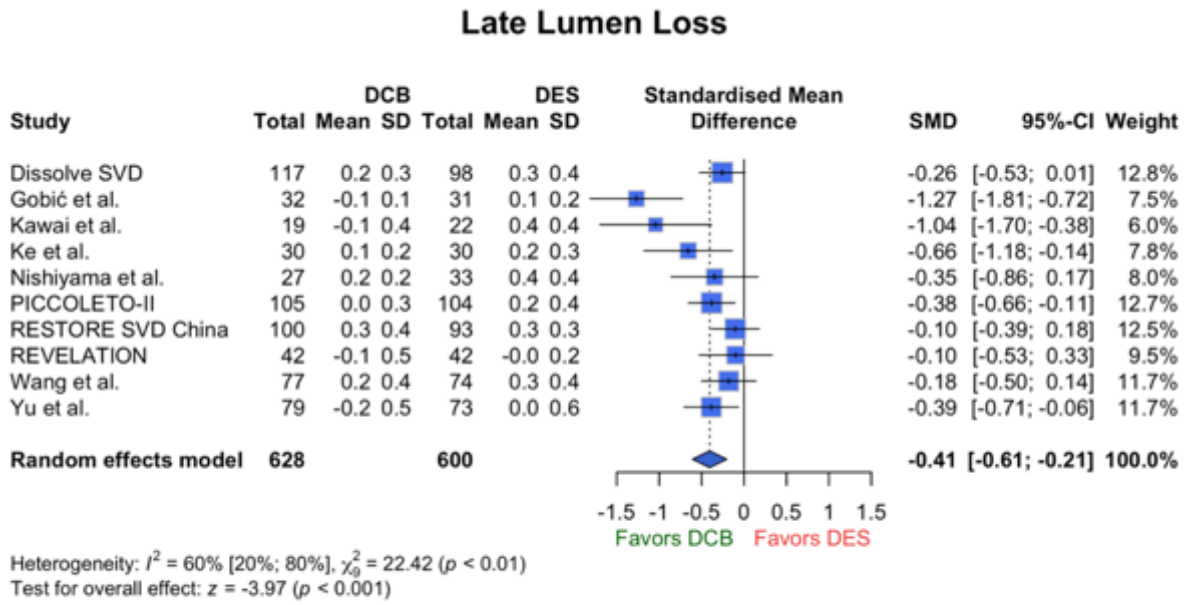

Major Adverse Cardiovascular Events
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 88 1661 73 1662 1.21 [0.89; 1.63] 21.2%
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 3.0%
REVELATION 3 56 2 51 1.37 [0.24; 7.85] 2.6%
RESTORE SVD China 6 115 4 109 1.42 [0.41; 4.90] 4.7%
Gobić et al. 2 41 4 37 0.45 [0.09; 2.32] 2.9%
Random effects model 101 1903 87 1889 1.15 [0.87; 1.53] 34.4%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 2.51 (p = 0.642)
Test for effect in subgroup: p = 0.317
Shorter DAPT duration in DCB
REC-CAGEFREE I 92 1133 56 1139 1.65 [1.20; 2.28] 20.6%
Dissolve SVD 11 129 6 118 1.68 [0.64; 4.39] 7.0%
Yu et al. 2 82 5 79 0.39 [0.08; 1.93] 3.0%
Wang et al. 3 87 4 85 0.73 [0.17; 3.18] 3.5%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.6%
PICCOLETO-II 11 102 21 101 0.52 [0.26; 1.02] 11.3%
BASKET-SMALL 2 53 349 52 345 1.01 [0.71; 1.43] 19.6%
Random effects model 172 1901 144 1890 1.00 [0.64; 1.57] 65.6%
Heterogeneity: I^2 = 55.3% [0.0%; 80.8%], χ^2_6 = 13.42 (p = 0.037)
Test for effect in subgroup: p = 0.984
Random effects model 273 3804 231 3779 1.05 [0.78; 1.41] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 31.0% [0.0%; 65.2%], χ^2_{11} = 15.94 (p = 0.143)
Test for subgroup differences: χ^2_1 = 0.26, df = 1 (p = 0.607)

I)

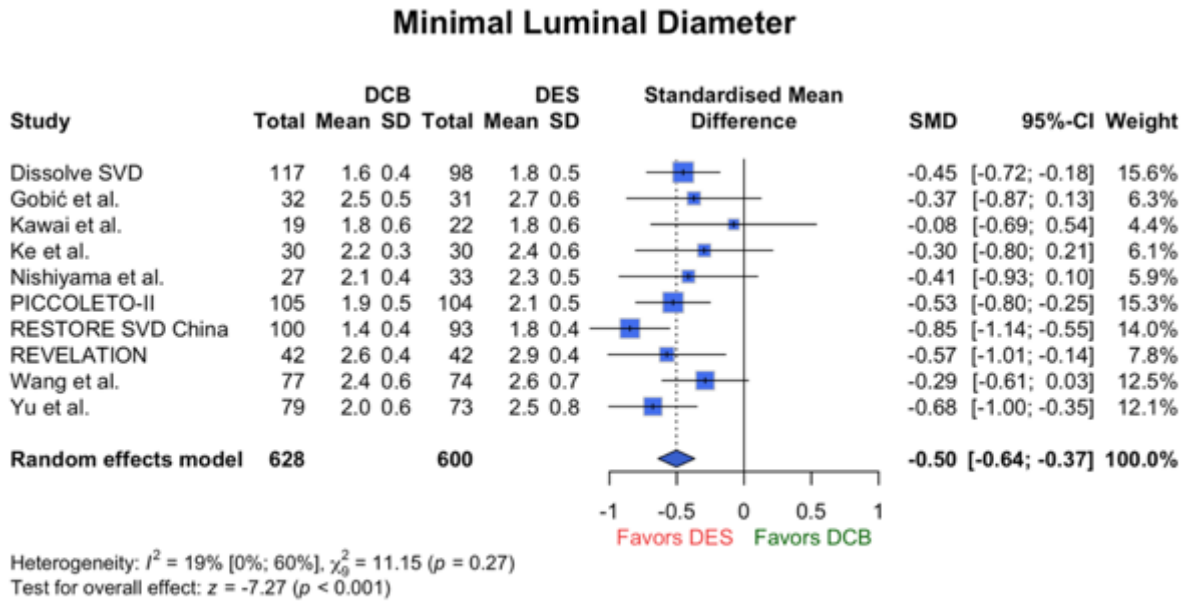

Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Equal DAPT duration
SELUTION DeNovo 20 1661 22 1662 0.91 [0.50; 1.66] 39.7%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 1.1%
Random effects model 20 1702 22 1699 0.91 [0.50; 1.65] 40.7%
Heterogeneity: I^2 = 0%, χ^2_1 = 0 (p = 0.9974)
Test for effect in subgroup: p = 0.755
Shorter DAPT duration in DCB
REC-CAGEFREE I 16 1133 29 1139 0.55 [0.30; 1.02] 39.3%
Wang et al. 1 87 2 85 0.49 [0.05; 5.29] 2.8%
BASKET-SMALL 2 6 349 14 345 0.42 [0.16; 1.09] 17.1%
Random effects model 23 1569 45 1569 0.51 [0.31; 0.84] 59.3%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.22 (p = 0.8944)
Test for effect in subgroup: p = 0.008
Random effects model 43 3271 67 3268 0.65 [0.43; 0.96] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 2.33 (p = 0.6746)
Test for subgroup differences: χ^2_1 = 2.11, df = 1 (p = 0.1463)

Supplementary Figure 6. Results of meta-analysis for angiographic outcomes

A)

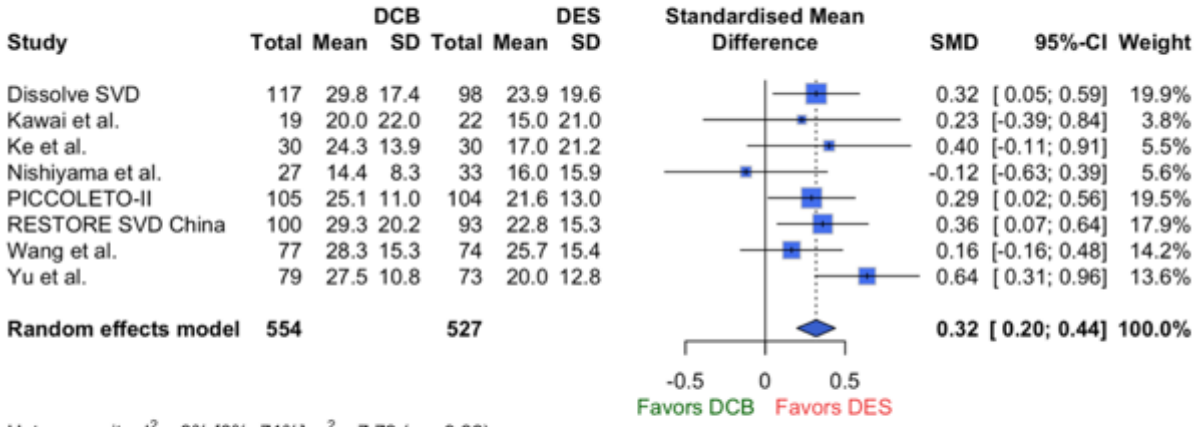


B)



C)

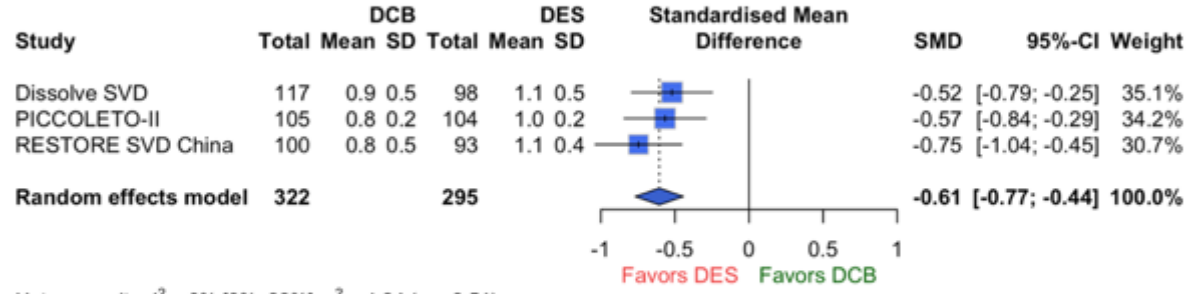
Diameter Stenosis



Heterogeneity: I^2 = 9% [0%; 71%], χ^2_7 = 7.73 (p = 0.36)
Test for overall effect: z = 5.18 (p < 0.001)

D)

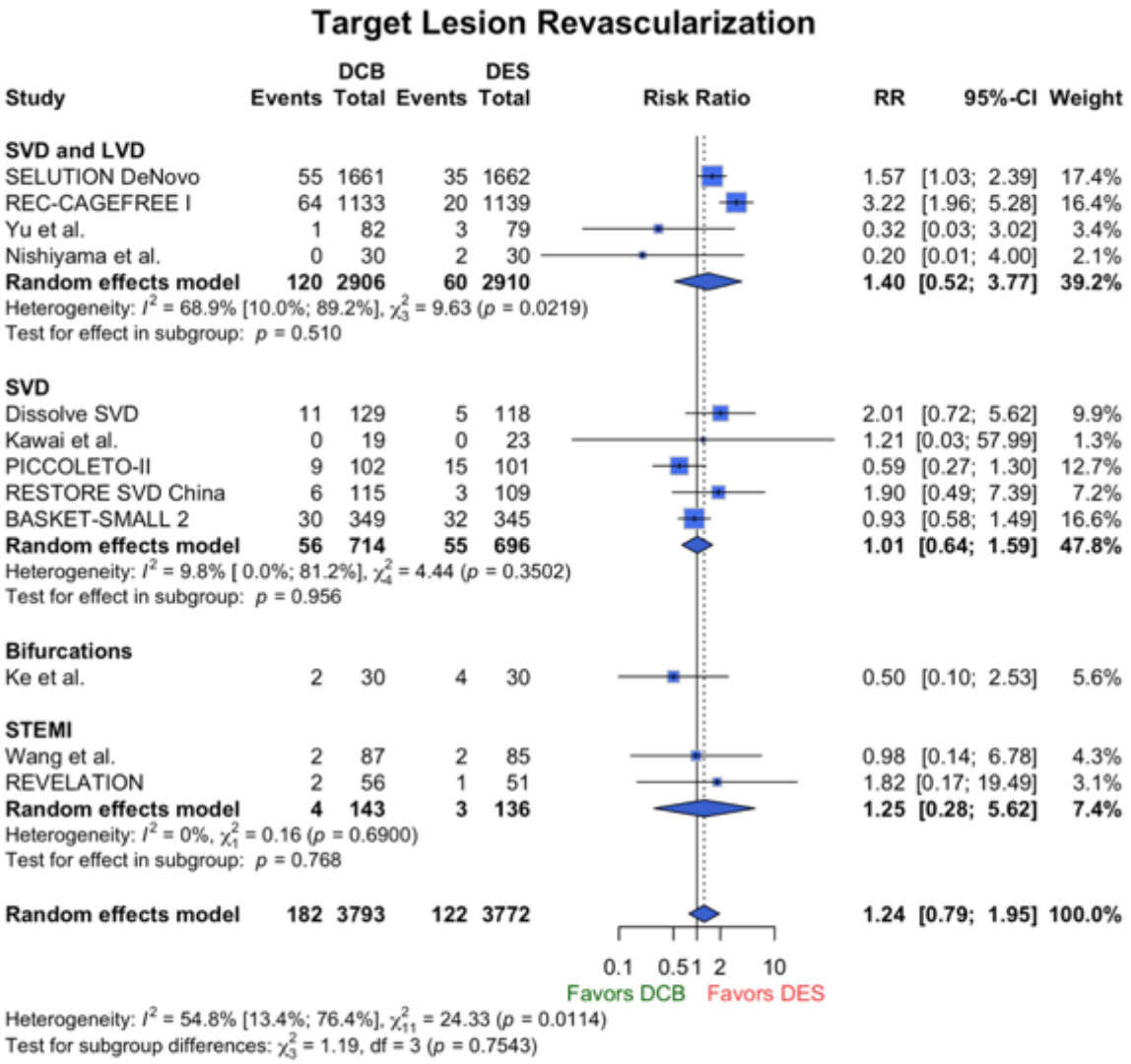
Net Luminal Gain



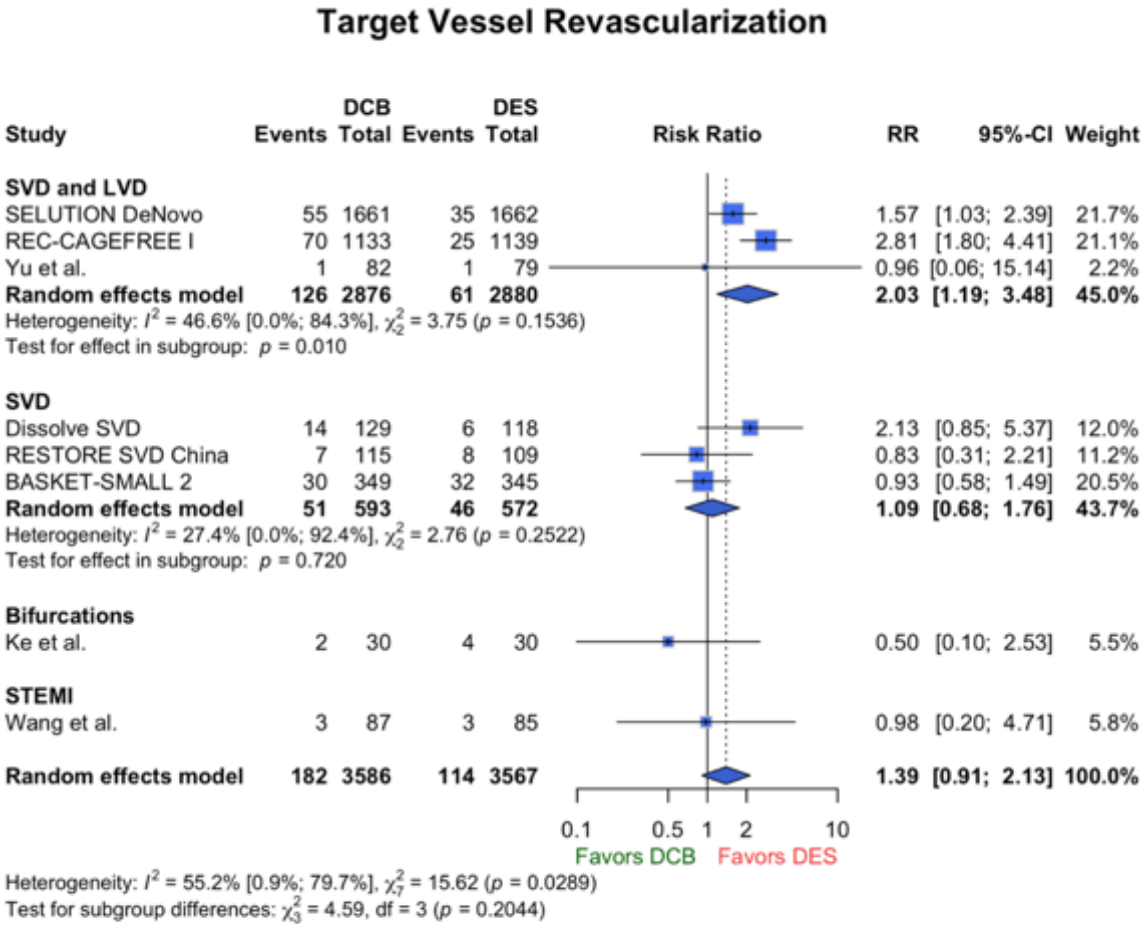
Heterogeneity: I^2 = 0% [0%; 90%], χ^2_2 = 1.34 (p = 0.51)
Test for overall effect: z = -7.34 (p < 0.001)

Supplementary Figure 7. Subgroup analysis by indication for primary (A) and secondary clinical outcomes (B-I)

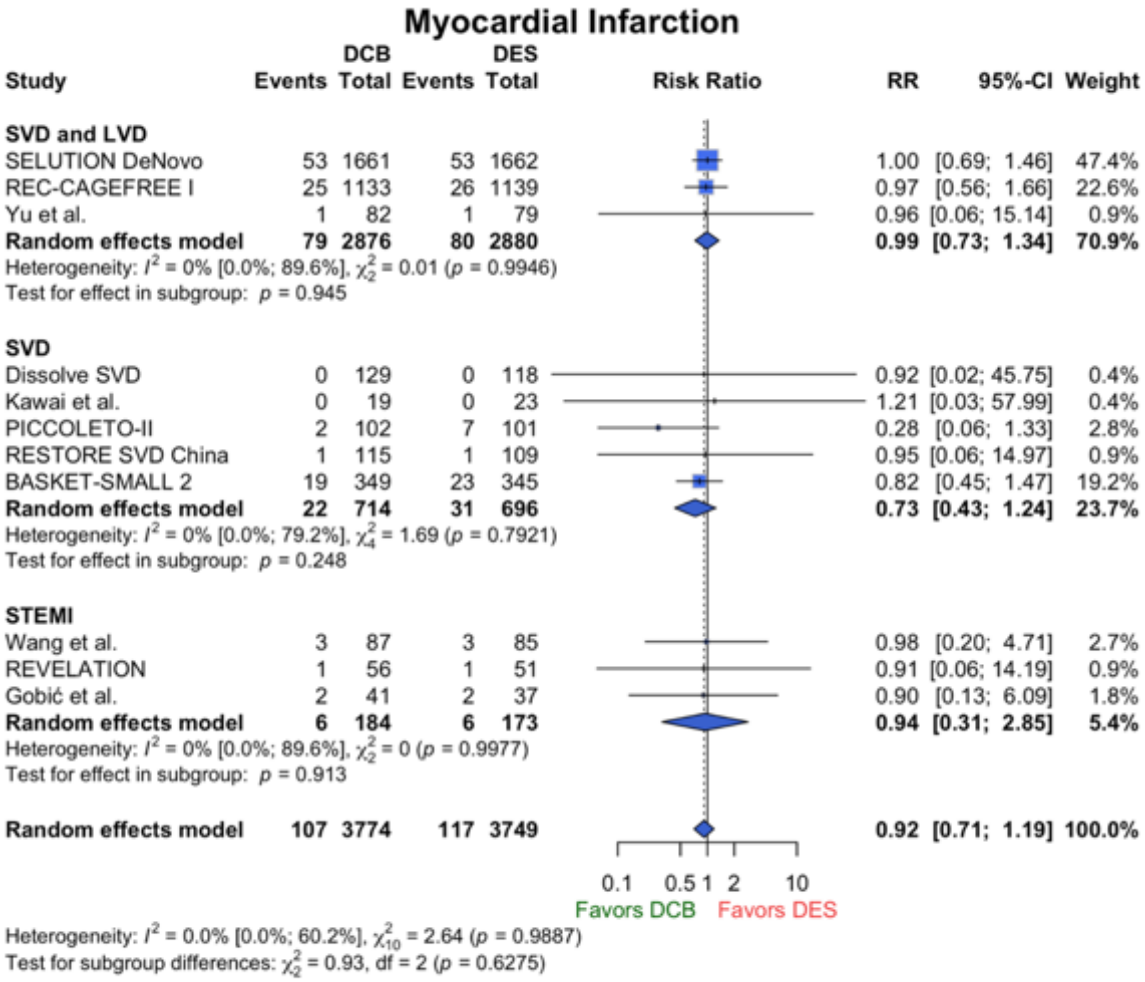
A)



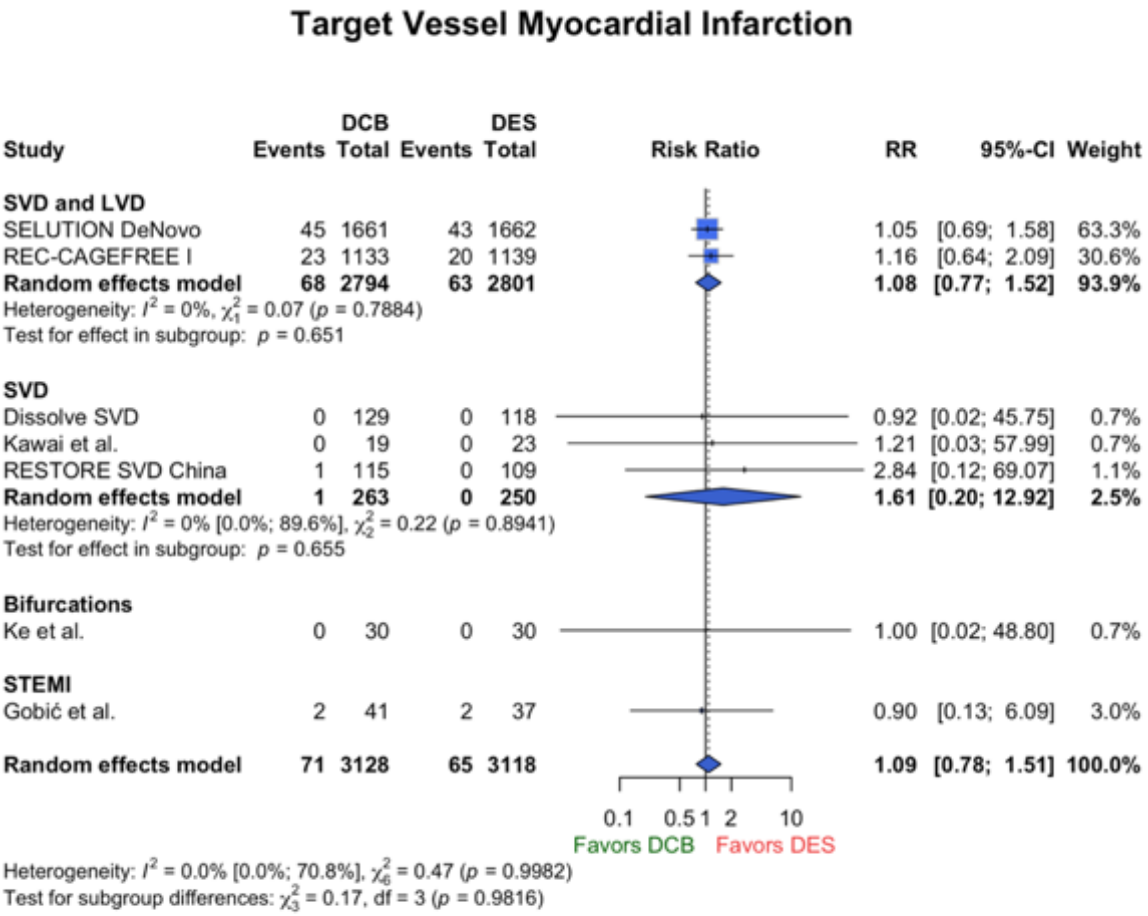
B)


Target Vessel Revascularization
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 55 1661 35 1662 1.57 [1.03; 2.39] 21.7%
REC-CAGEFREE I 70 1133 25 1139 2.81 [1.80; 4.41] 21.1%
Yu et al. 1 82 1 79 0.96 [0.06; 15.14] 2.2%
Random effects model 126 2876 61 2880 2.03 [1.19; 3.48] 45.0%
Heterogeneity: I^2 = 46.6% [0.0%; 84.3%], χ^2_2 = 3.75 (p = 0.1536)
Test for effect in subgroup: p = 0.010
SVD
Dissolve SVD 14 129 6 118 2.13 [0.85; 5.37] 12.0%
RESTORE SVD China 7 115 8 109 0.83 [0.31; 2.21] 11.2%
BASKET-SMALL 2 30 349 32 345 0.93 [0.58; 1.49] 20.5%
Random effects model 51 593 46 572 1.09 [0.68; 1.76] 43.7%
Heterogeneity: I^2 = 27.4% [0.0%; 92.4%], χ^2_2 = 2.76 (p = 0.2522)
Test for effect in subgroup: p = 0.720
Bifurcations
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 5.5%
STEMI
Wang et al. 3 87 3 85 0.98 [0.20; 4.71] 5.8%
Random effects model 182 3586 114 3567 1.39 [0.91; 2.13] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 55.2% [0.9%; 79.7%], χ^2_7 = 15.62 (p = 0.0289)
Test for subgroup differences: χ^2_3 = 4.59, df = 3 (p = 0.2044)

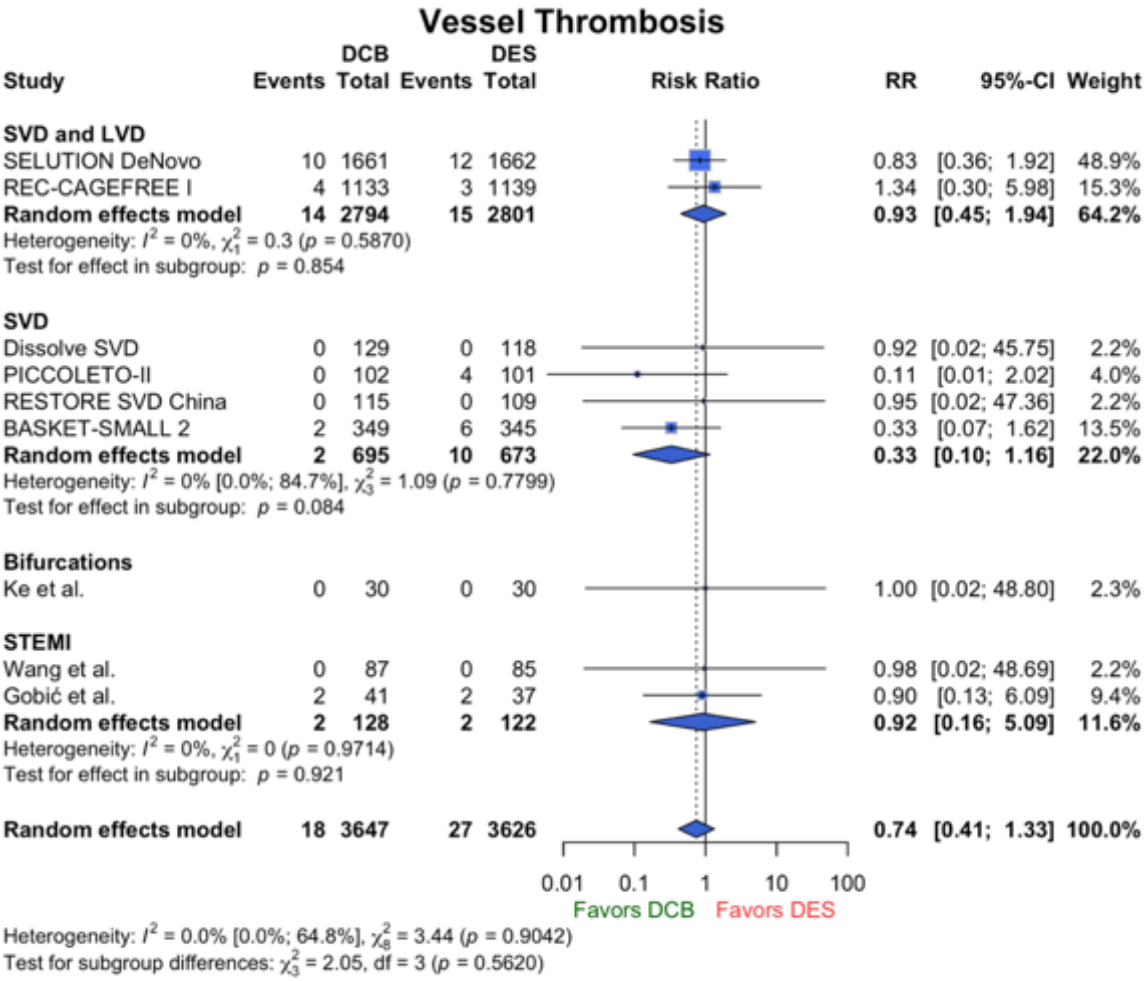
C)


Myocardial Infarction
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 53 1661 53 1662 1.00 [0.69; 1.46] 47.4%
REC-CAGEFREE I 25 1133 26 1139 0.97 [0.56; 1.66] 22.6%
Yu et al. 1 82 1 79 0.96 [0.06; 15.14] 0.9%
Random effects model 79 2876 80 2880 0.99 [0.73; 1.34] 70.9%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.01 (p = 0.9946)
Test for effect in subgroup: p = 0.945
SVD
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 0.4%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 2 102 7 101 0.28 [0.06; 1.33] 2.8%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 19 349 23 345 0.82 [0.45; 1.47] 19.2%
Random effects model 22 714 31 696 0.73 [0.43; 1.24] 23.7%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 1.69 (p = 0.7921)
Test for effect in subgroup: p = 0.248
STEMI
Wang et al. 3 87 3 85 0.98 [0.20; 4.71] 2.7%
REVELATION 1 56 1 51 0.91 [0.06; 14.19] 0.9%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 1.8%
Random effects model 6 184 6 173 0.94 [0.31; 2.85] 5.4%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0 (p = 0.9977)
Test for effect in subgroup: p = 0.913
Random effects model 107 3774 117 3749 0.92 [0.71; 1.19] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 60.2%], χ^2_{10} = 2.64 (p = 0.9887)
Test for subgroup differences: χ^2_2 = 0.93, df = 2 (p = 0.6275)

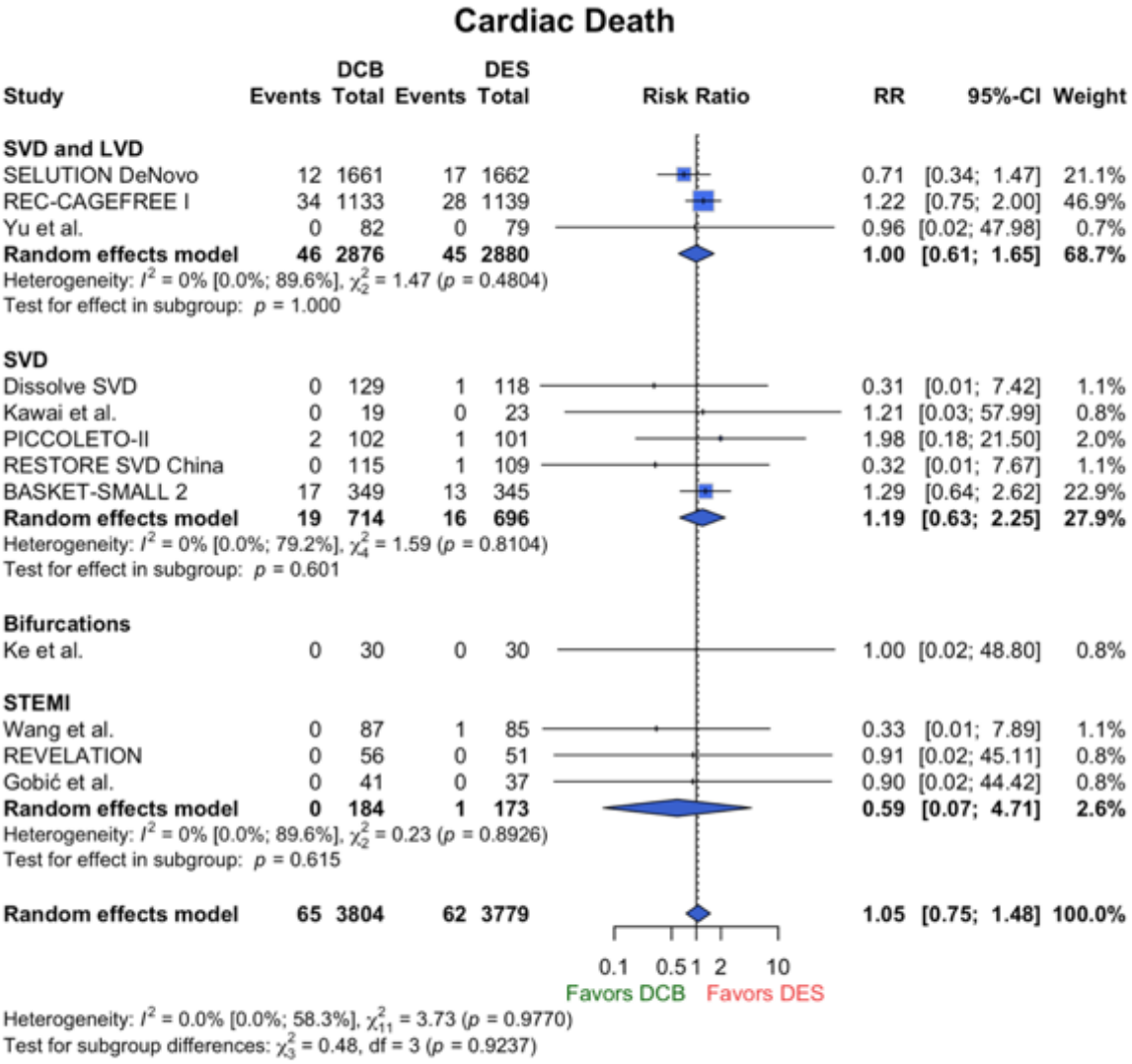
D)


Target Vessel Myocardial Infarction
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 45 1661 43 1662 1.05 [0.69; 1.58] 63.3%
REC-CAGEFREE I 23 1133 20 1139 1.16 [0.64; 2.09] 30.6%
Random effects model 68 2794 63 2801 1.08 [0.77; 1.52] 93.9%
Heterogeneity: I^2 = 0%, χ^2_1 = 0.07 (p = 0.7884)
Test for effect in subgroup: p = 0.651
SVD
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 0.7%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.7%
RESTORE SVD China 1 115 0 109 2.84 [0.12; 69.07] 1.1%
Random effects model 1 263 0 250 1.61 [0.20; 12.92] 2.5%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.22 (p = 0.8941)
Test for effect in subgroup: p = 0.655
Bifurcations
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.7%
STEMI
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 3.0%
Random effects model 71 3128 65 3118 1.09 [0.78; 1.51] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 70.8%], χ^2_6 = 0.47 (p = 0.9982)
Test for subgroup differences: χ^2_3 = 0.17, df = 3 (p = 0.9816)

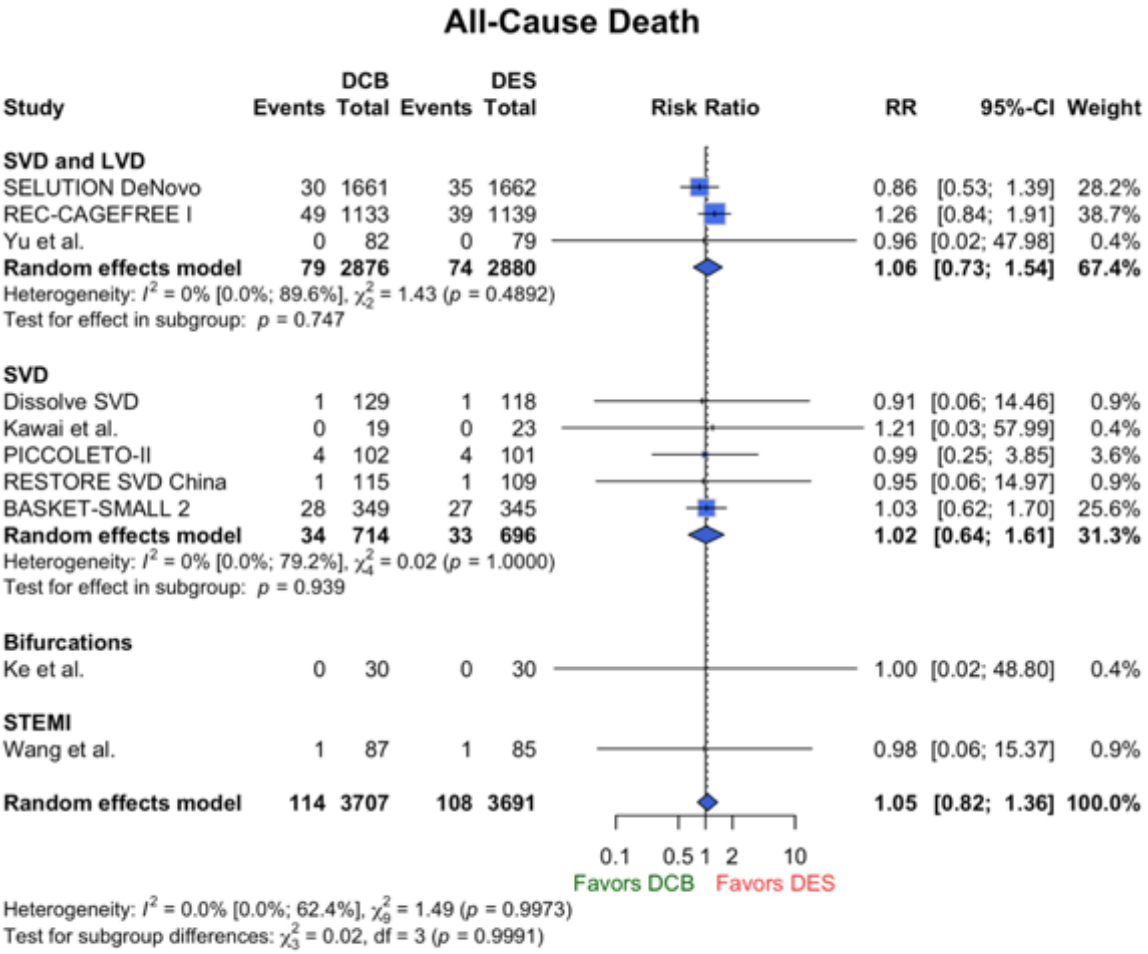
E)


Vessel Thrombosis
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 10 1661 12 1662 0.83 [0.36; 1.92] 48.9%
REC-CAGEFREE I 4 1133 3 1139 1.34 [0.30; 5.98] 15.3%
Random effects model 14 2794 15 2801 0.93 [0.45; 1.94] 64.2%
Heterogeneity: I^2 = 0%, χ^2_1 = 0.3 (p = 0.5870)
Test for effect in subgroup: p = 0.854
SVD
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 2.2%
PICCOLETO-II 0 102 4 101 0.11 [0.01; 2.02] 4.0%
RESTORE SVD China 0 115 0 109 0.95 [0.02; 47.36] 2.2%
BASKET-SMALL 2 2 349 6 345 0.33 [0.07; 1.62] 13.5%
Random effects model 2 695 10 673 0.33 [0.10; 1.16] 22.0%
Heterogeneity: I^2 = 0% [0.0%; 84.7%], χ^2_3 = 1.09 (p = 0.7799)
Test for effect in subgroup: p = 0.084
Bifurcations
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 2.3%
STEMI
Wang et al. 0 87 0 85 0.98 [0.02; 48.69] 2.2%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 9.4%
Random effects model 2 128 2 122 0.92 [0.16; 5.09] 11.6%
Heterogeneity: I^2 = 0%, χ^2_1 = 0 (p = 0.9714)
Test for effect in subgroup: p = 0.921
Random effects model 18 3647 27 3626 0.74 [0.41; 1.33] 100.0%
0.01 0.1 1 10 100
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 3.44 (p = 0.9042)
Test for subgroup differences: χ^2_3 = 2.05, df = 3 (p = 0.5620)

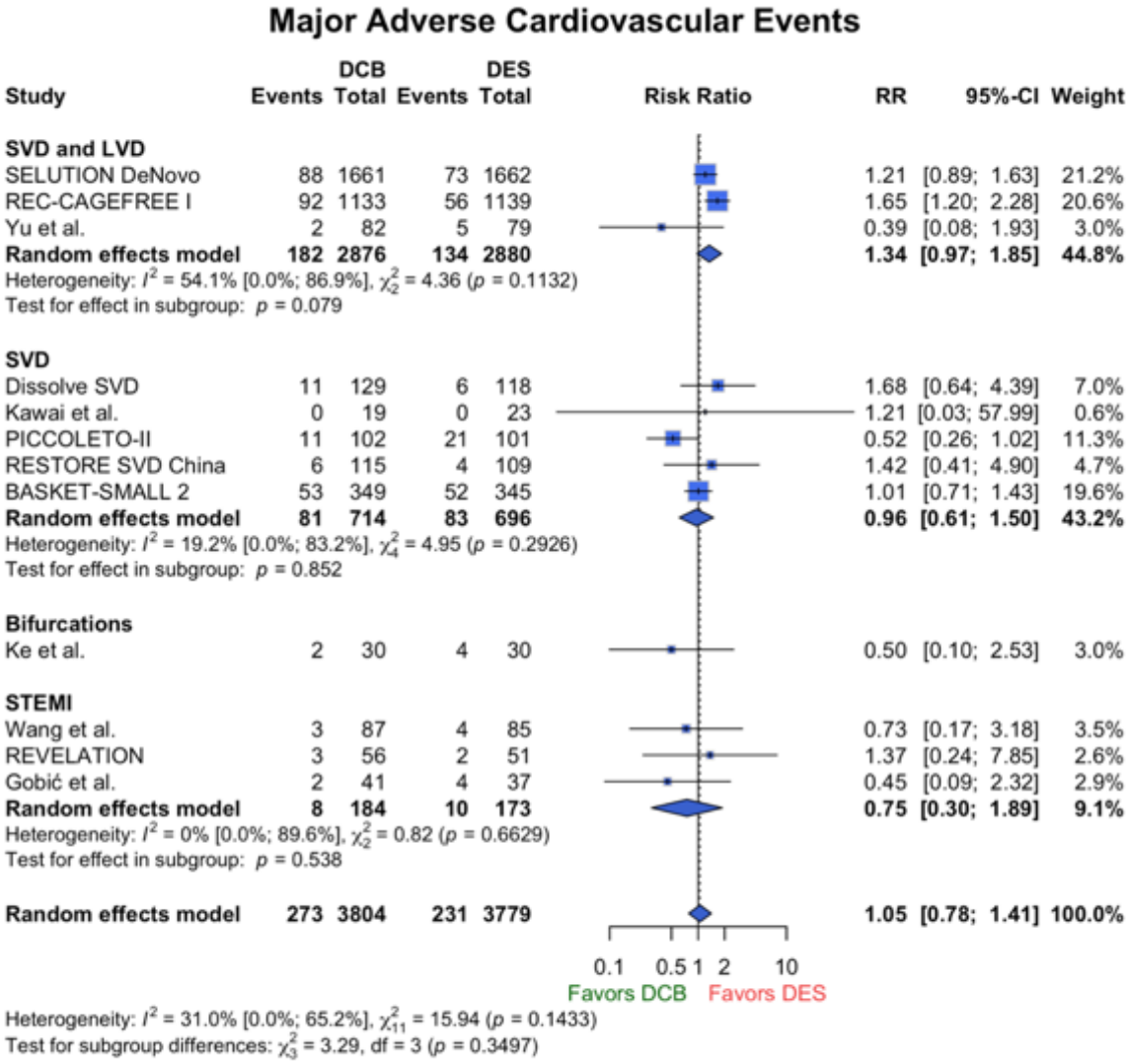
F)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 12 1661 17 1662 0.71 [0.34; 1.47] 21.1%
REC-CAGEFREE I 34 1133 28 1139 1.22 [0.75; 2.00] 46.9%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.7%
Random effects model 46 2876 45 2880 1.00 [0.61; 1.65] 68.7%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 1.47 (p = 0.4804)
Test for effect in subgroup: p = 1.000
SVD
Dissolve SVD 0 129 1 118 0.31 [0.01; 7.42] 1.1%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.8%
PICCOLETO-II 2 102 1 101 1.98 [0.18; 21.50] 2.0%
RESTORE SVD China 0 115 1 109 0.32 [0.01; 7.67] 1.1%
BASKET-SMALL 2 17 349 13 345 1.29 [0.64; 2.62] 22.9%
Random effects model 19 714 16 696 1.19 [0.63; 2.25] 27.9%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 1.59 (p = 0.8104)
Test for effect in subgroup: p = 0.601
Bifurcations
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.8%
STEMI
Wang et al. 0 87 1 85 0.33 [0.01; 7.89] 1.1%
REVELATION 0 56 0 51 0.91 [0.02; 45.11] 0.8%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 0.8%
Random effects model 0 184 1 173 0.59 [0.07; 4.71] 2.6%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.23 (p = 0.8926)
Test for effect in subgroup: p = 0.615
Random effects model 65 3804 62 3779 1.05 [0.75; 1.48] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 58.3%], χ^2_{11} = 3.73 (p = 0.9770)
Test for subgroup differences: χ^2_3 = 0.48, df = 3 (p = 0.9237)

G)

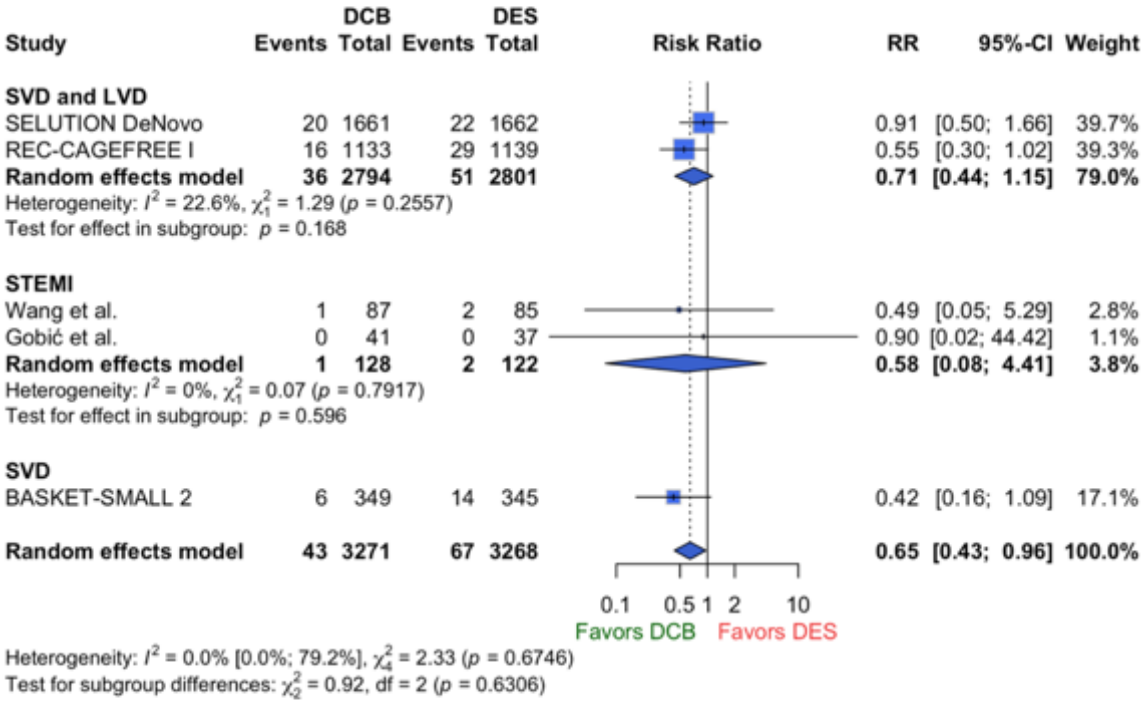

All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 30 1661 35 1662 0.86 [0.53; 1.39] 28.2%
REC-CAGEFREE I 49 1133 39 1139 1.26 [0.84; 1.91] 38.7%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.4%
Random effects model 79 2876 74 2880 1.06 [0.73; 1.54] 67.4%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 1.43 (p = 0.4892)
Test for effect in subgroup: p = 0.747
SVD
Dissolve SVD 1 129 1 118 0.91 [0.06; 14.46] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 4 102 4 101 0.99 [0.25; 3.85] 3.6%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 25.6%
Random effects model 34 714 33 696 1.02 [0.64; 1.61] 31.3%
Heterogeneity: I^2 = 0% [0.0%; 79.2%], χ^2_4 = 0.02 (p = 1.0000)
Test for effect in subgroup: p = 0.939
Bifurcations
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.4%
STEMI
Wang et al. 1 87 1 85 0.98 [0.06; 15.37] 0.9%
Random effects model 114 3707 108 3691 1.05 [0.82; 1.36] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 1.49 (p = 0.9973)
Test for subgroup differences: χ^2_3 = 0.02, df = 3 (p = 0.9991)

H)


Major Adverse Cardiovascular Events
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SVD and LVD
SELUTION DeNovo 88 1661 73 1662 1.21 [0.89; 1.63] 21.2%
REC-CAGEFREE I 92 1133 56 1139 1.65 [1.20; 2.28] 20.6%
Yu et al. 2 82 5 79 0.39 [0.08; 1.93] 3.0%
Random effects model 182 2876 134 2880 1.34 [0.97; 1.85] 44.8%
Heterogeneity: I^2 = 54.1% [0.0%; 86.9%], χ^2_2 = 4.36 (p = 0.1132)
Test for effect in subgroup: p = 0.079
SVD
Dissolve SVD 11 129 6 118 1.68 [0.64; 4.39] 7.0%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.6%
PICCOLETO-II 11 102 21 101 0.52 [0.26; 1.02] 11.3%
RESTORE SVD China 6 115 4 109 1.42 [0.41; 4.90] 4.7%
BASKET-SMALL 2 53 349 52 345 1.01 [0.71; 1.43] 19.6%
Random effects model 81 714 83 696 0.96 [0.61; 1.50] 43.2%
Heterogeneity: I^2 = 19.2% [0.0%; 83.2%], χ^2_4 = 4.95 (p = 0.2926)
Test for effect in subgroup: p = 0.852
Bifurcations
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 3.0%
STEMI
Wang et al. 3 87 4 85 0.73 [0.17; 3.18] 3.5%
REVELATION 3 56 2 51 1.37 [0.24; 7.85] 2.6%
Gobić et al. 2 41 4 37 0.45 [0.09; 2.32] 2.9%
Random effects model 8 184 10 173 0.75 [0.30; 1.89] 9.1%
Heterogeneity: I^2 = 0% [0.0%; 89.6%], χ^2_2 = 0.82 (p = 0.6629)
Test for effect in subgroup: p = 0.538
Random effects model 273 3804 231 3779 1.05 [0.78; 1.41] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 31.0% [0.0%; 65.2%], χ^2_{11} = 15.94 (p = 0.1433)
Test for subgroup differences: χ^2_3 = 3.29, df = 3 (p = 0.3497)

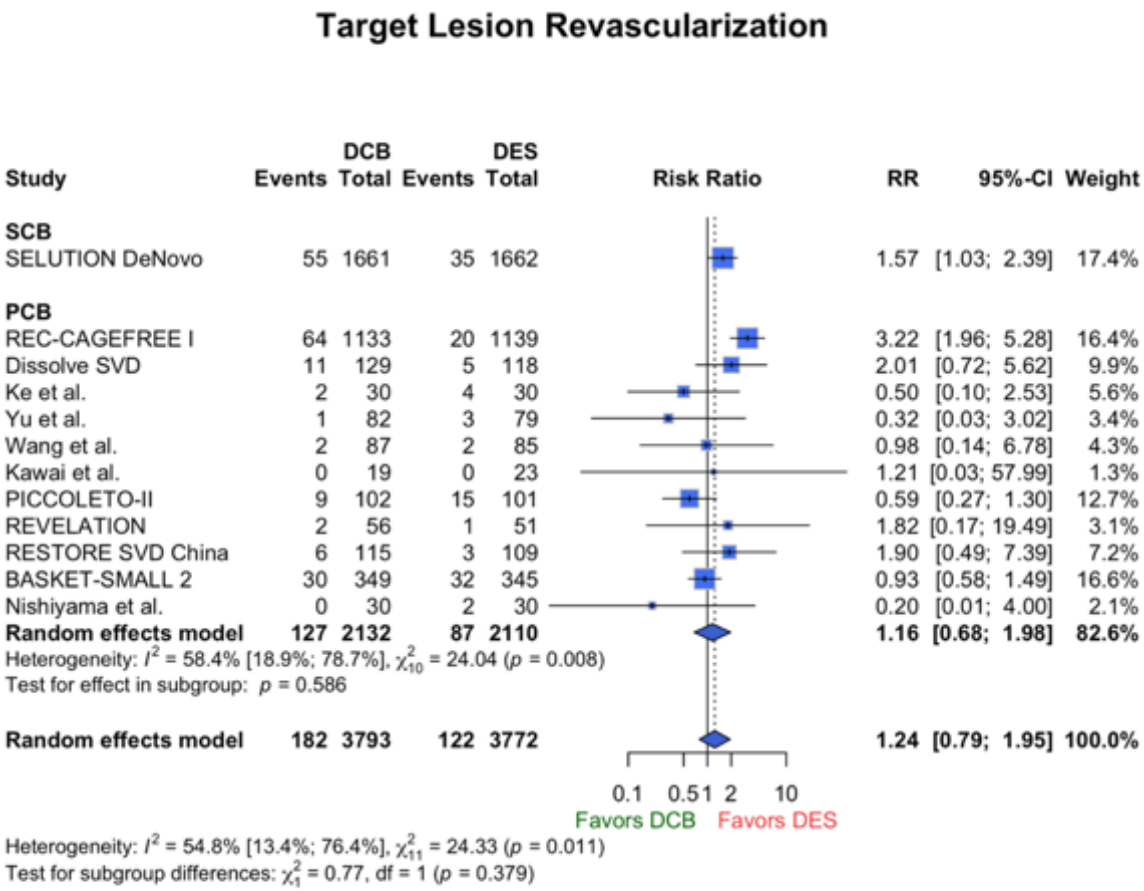
I)

Major Bleeding

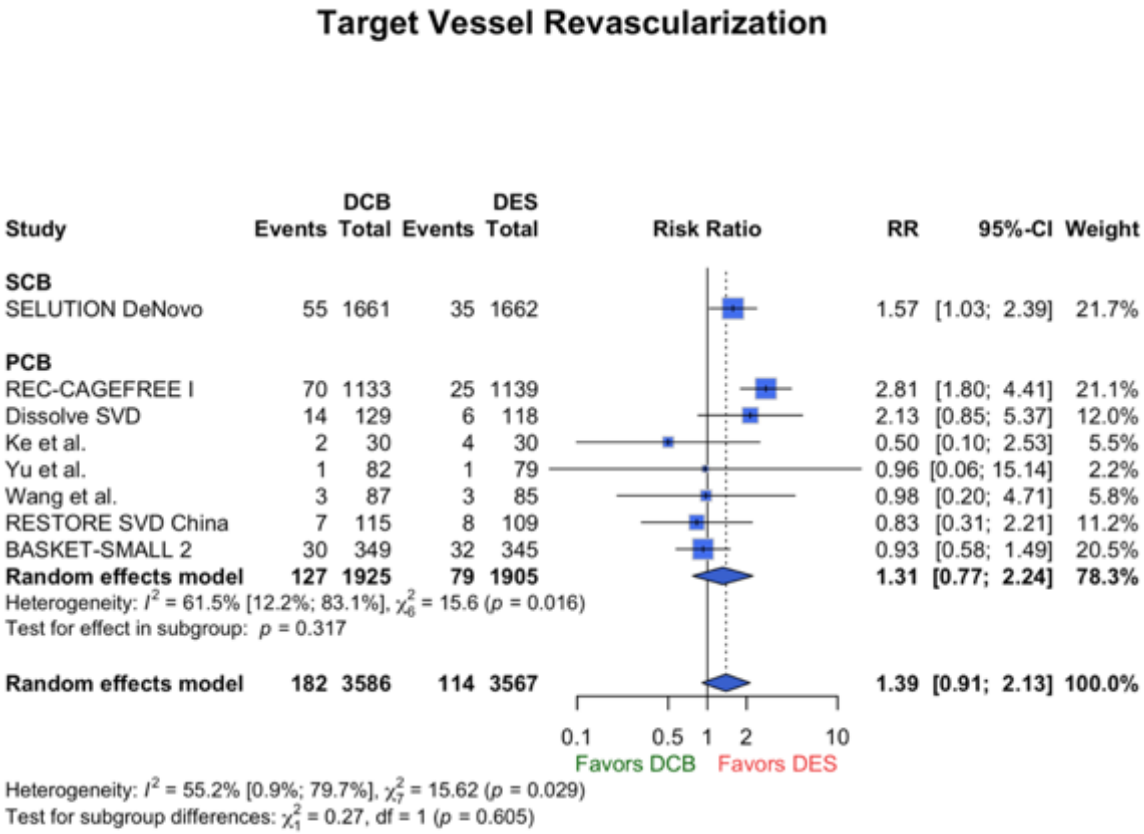


Supplementary Figure 8. Subgroup analysis by drug (sirolimus vs. paclitaxel-coated balloons) for primary (A) and secondary clinical outcomes (B-I)

A)

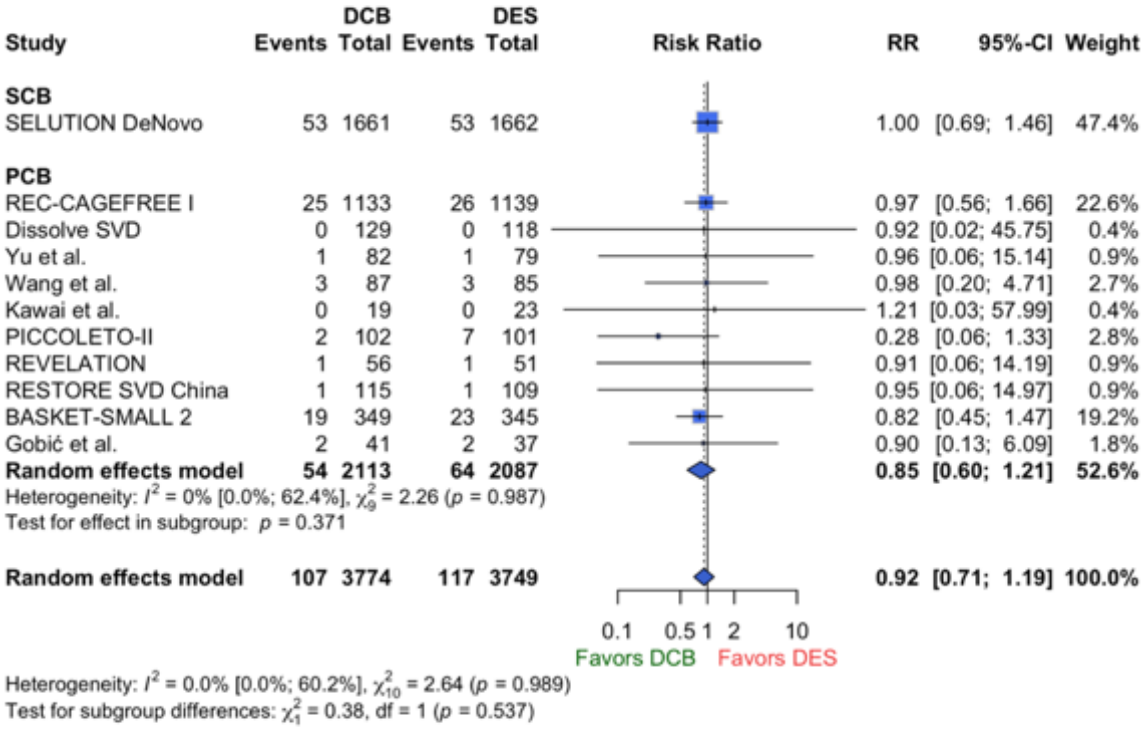


B)

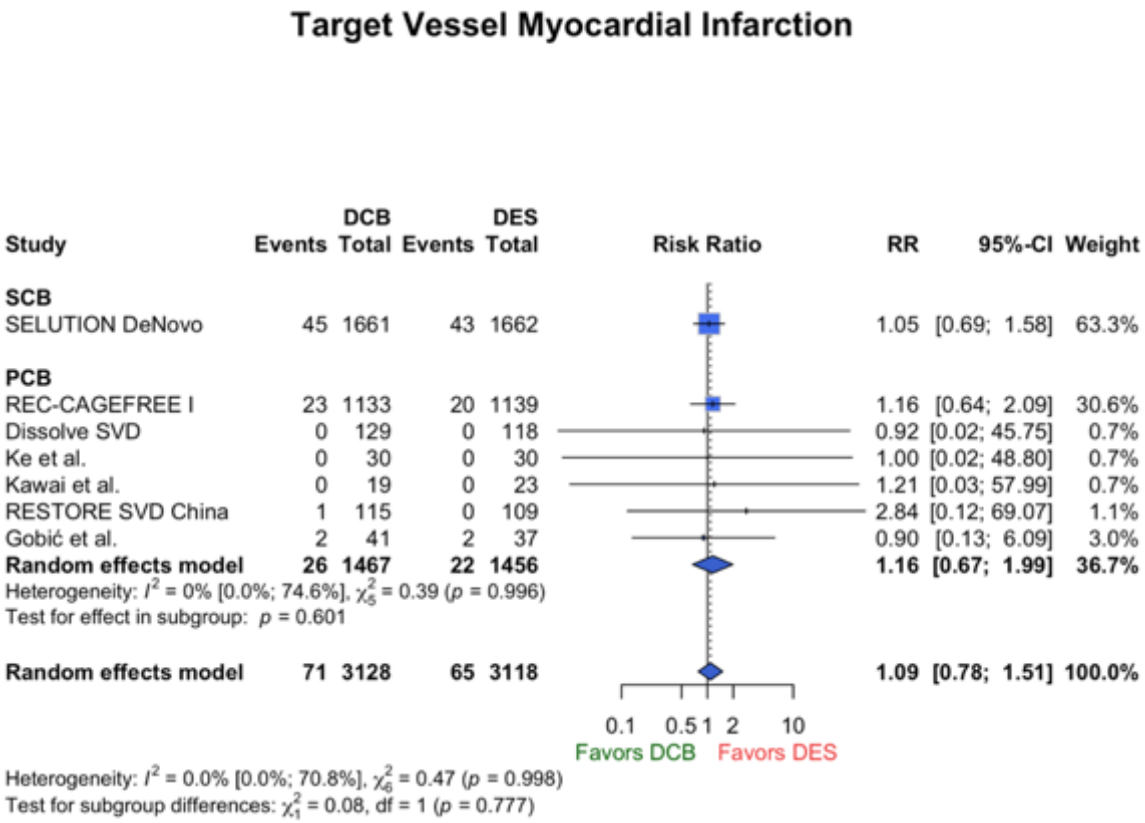

Target Vessel Revascularization
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SCB
SELUTION DeNovo 55 1661 35 1662 1.57 [1.03; 2.39] 21.7%
PCB
REC-CAGEFREE I 70 1133 25 1139 2.81 [1.80; 4.41] 21.1%
Dissolve SVD 14 129 6 118 2.13 [0.85; 5.37] 12.0%
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 5.5%
Yu et al. 1 82 1 79 0.96 [0.06; 15.14] 2.2%
Wang et al. 3 87 3 85 0.98 [0.20; 4.71] 5.8%
RESTORE SVD China 7 115 8 109 0.83 [0.31; 2.21] 11.2%
BASKET-SMALL 2 30 349 32 345 0.93 [0.58; 1.49] 20.5%
Random effects model 127 1925 79 1905 1.31 [0.77; 2.24] 78.3%
Heterogeneity: I^2 = 61.5% [12.2%; 83.1%], χ^2_6 = 15.6 (p = 0.016)
Test for effect in subgroup: p = 0.317
Random effects model 182 3586 114 3567 1.39 [0.91; 2.13] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 55.2% [0.9%; 79.7%], χ^2_7 = 15.62 (p = 0.029)
Test for subgroup differences: χ^2_1 = 0.27, df = 1 (p = 0.605)

C)

Myocardial Infarction

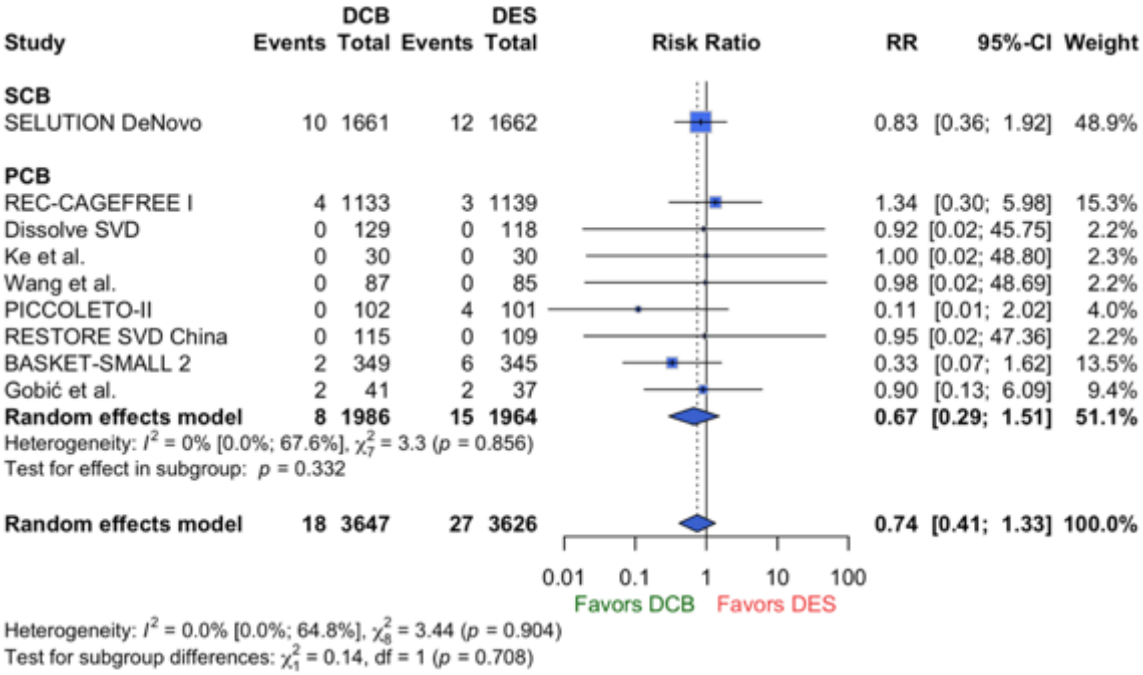


D)

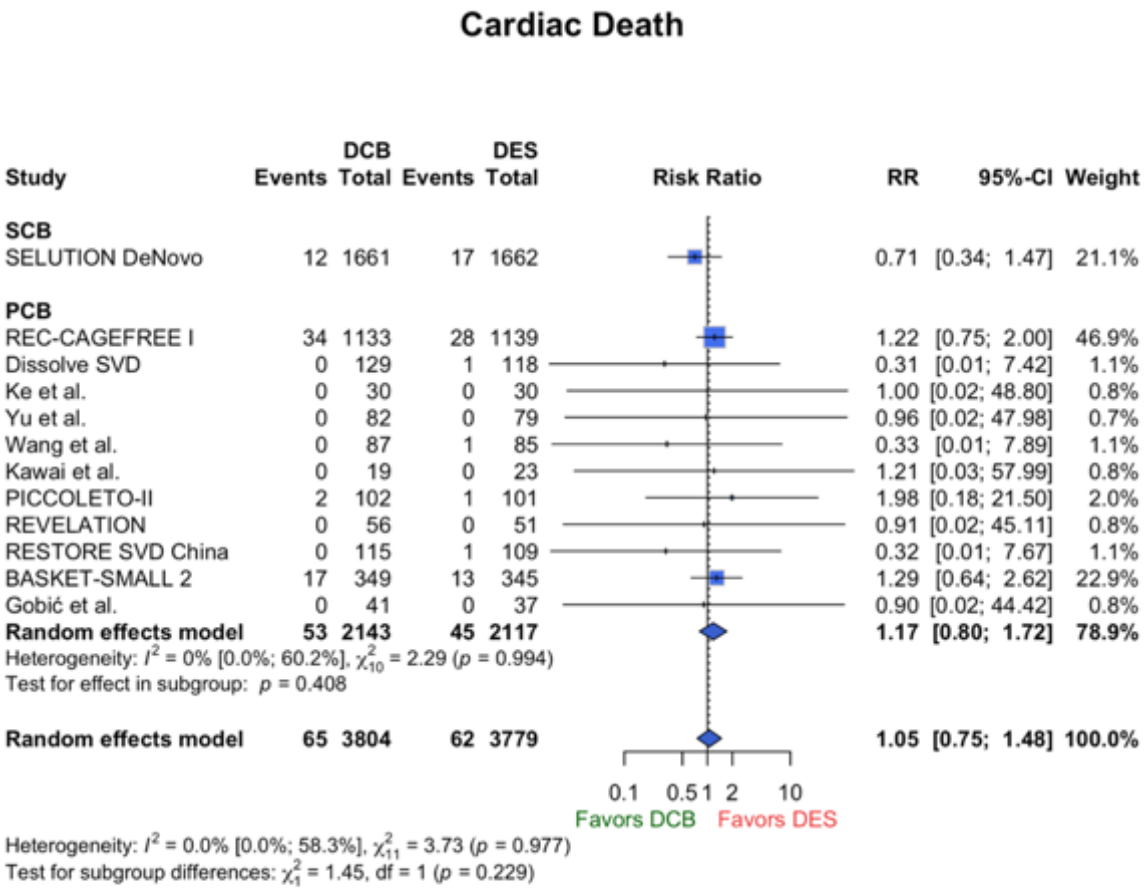

Target Vessel Myocardial Infarction
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SCB
SELUTION DeNovo 45 1661 43 1662 1.05 [0.69; 1.58] 63.3%
PCB
REC-CAGEFREE I 23 1133 20 1139 1.16 [0.64; 2.09] 30.6%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 0.7%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.7%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.7%
RESTORE SVD China 1 115 0 109 2.84 [0.12; 69.07] 1.1%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 3.0%
Random effects model 26 1467 22 1456 1.16 [0.67; 1.99] 36.7%
Heterogeneity: I^2 = 0% [0.0%; 74.6%], χ^2_5 = 0.39 (p = 0.996)
Test for effect in subgroup: p = 0.601
Random effects model 71 3128 65 3118 1.09 [0.78; 1.51] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 70.8%], χ^2_6 = 0.47 (p = 0.998)
Test for subgroup differences: χ^2_1 = 0.08, df = 1 (p = 0.777)

E)

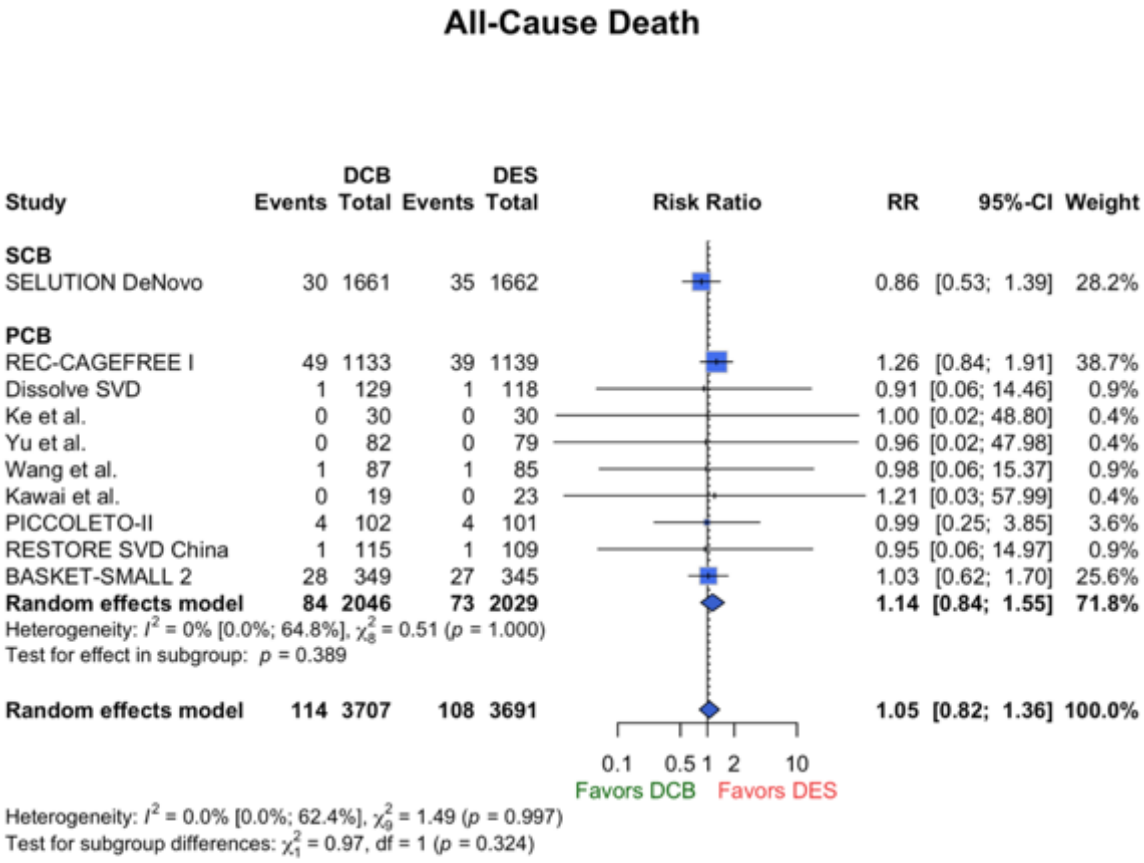
Vessel Thrombosis



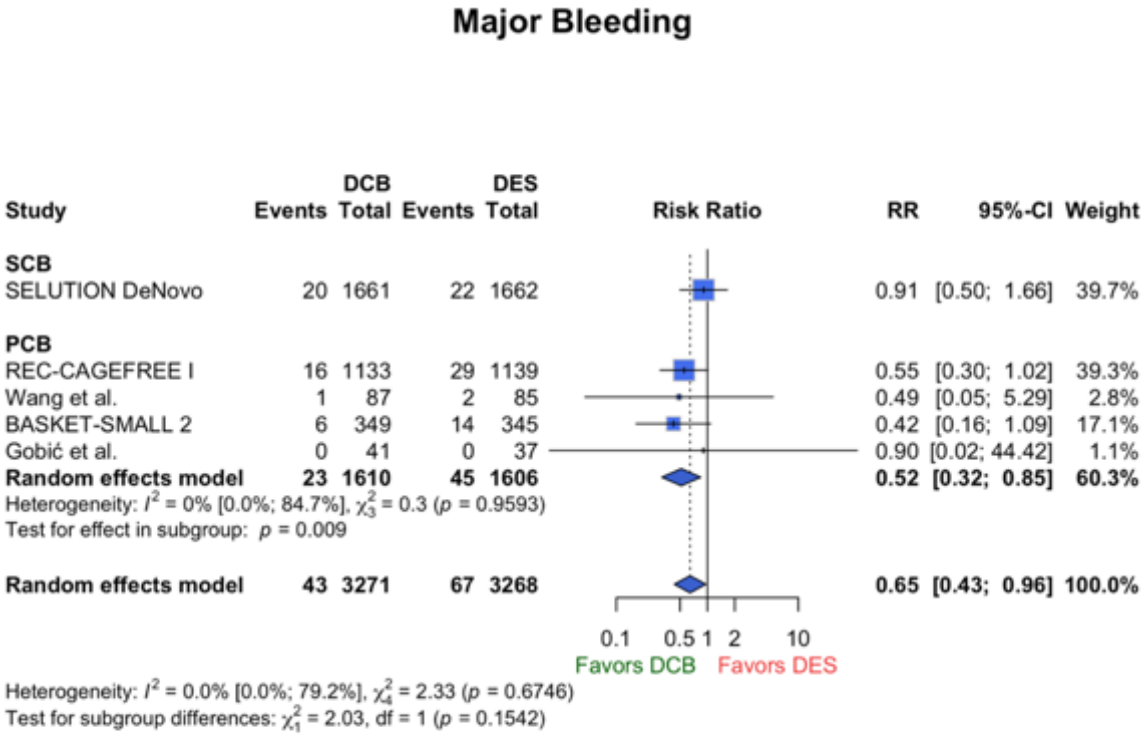
F)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SCB
SELUTION DeNovo 12 1661 17 1662 0.71 [0.34; 1.47] 21.1%
PCB
REC-CAGEFREE I 34 1133 28 1139 1.22 [0.75; 2.00] 46.9%
Dissolve SVD 0 129 1 118 0.31 [0.01; 7.42] 1.1%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.8%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.7%
Wang et al. 0 87 1 85 0.33 [0.01; 7.89] 1.1%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.8%
PICCOLETO-II 2 102 1 101 1.98 [0.18; 21.50] 2.0%
REVELATION 0 56 0 51 0.91 [0.02; 45.11] 0.8%
RESTORE SVD China 0 115 1 109 0.32 [0.01; 7.67] 1.1%
BASKET-SMALL 2 17 349 13 345 1.29 [0.64; 2.62] 22.9%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 0.8%
Random effects model 53 2143 45 2117 1.17 [0.80; 1.72] 78.9%
Heterogeneity: I^2 = 0% [0.0%; 60.2%], χ^2_{10} = 2.29 (p = 0.994)
Test for effect in subgroup: p = 0.408
Random effects model 65 3804 62 3779 1.05 [0.75; 1.48] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 58.3%], χ^2_{11} = 3.73 (p = 0.977)
Test for subgroup differences: χ^2_1 = 1.45, df = 1 (p = 0.229)

G)

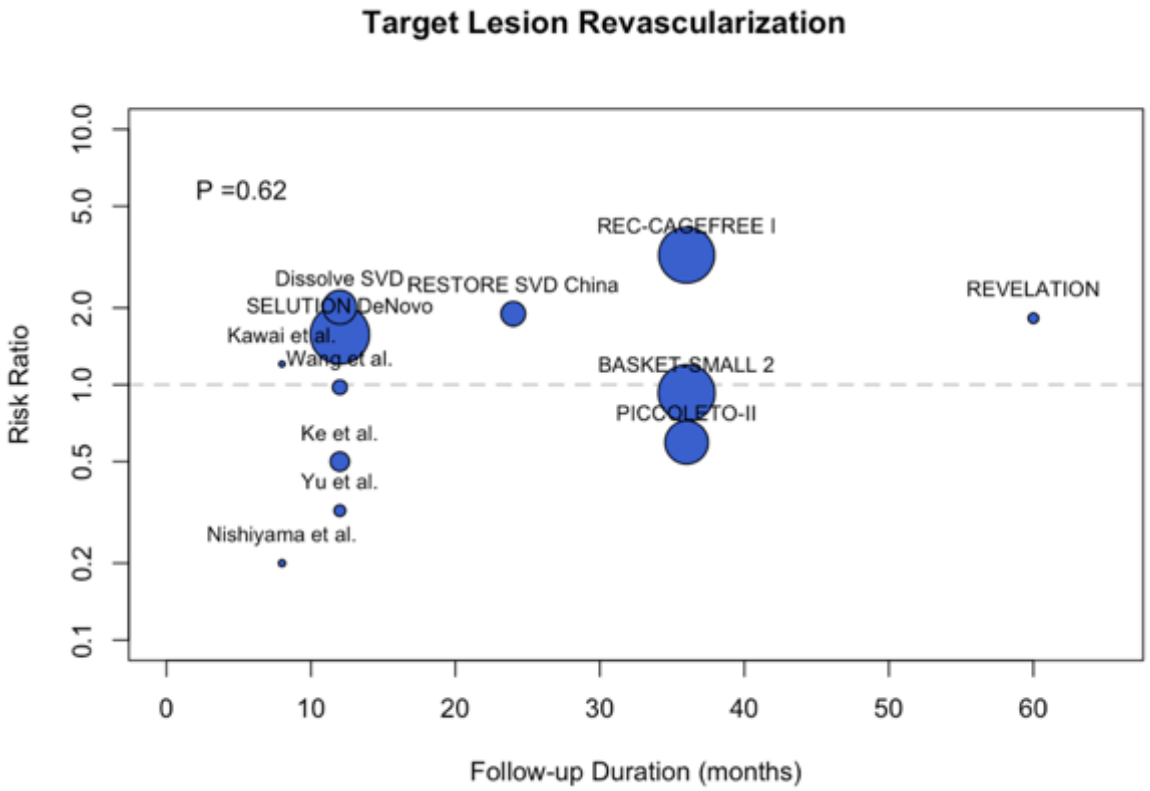

All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SCB
SELUTION DeNovo 30 1661 35 1662 0.86 [0.53; 1.39] 28.2%
PCB
REC-CAGEFREE I 49 1133 39 1139 1.26 [0.84; 1.91] 38.7%
Dissolve SVD 1 129 1 118 0.91 [0.06; 14.46] 0.9%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.4%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 0.4%
Wang et al. 1 87 1 85 0.98 [0.06; 15.37] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 4 102 4 101 0.99 [0.25; 3.85] 3.6%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 25.6%
Random effects model 84 2046 73 2029 1.14 [0.84; 1.55] 71.8%
Heterogeneity: I^2 = 0% [0.0%; 64.8%], χ^2_8 = 0.51 (p = 1.000)
Test for effect in subgroup: p = 0.389
Random effects model 114 3707 108 3691 1.05 [0.82; 1.36] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 1.49 (p = 0.997)
Test for subgroup differences: χ^2_1 = 0.97, df = 1 (p = 0.324)

H)

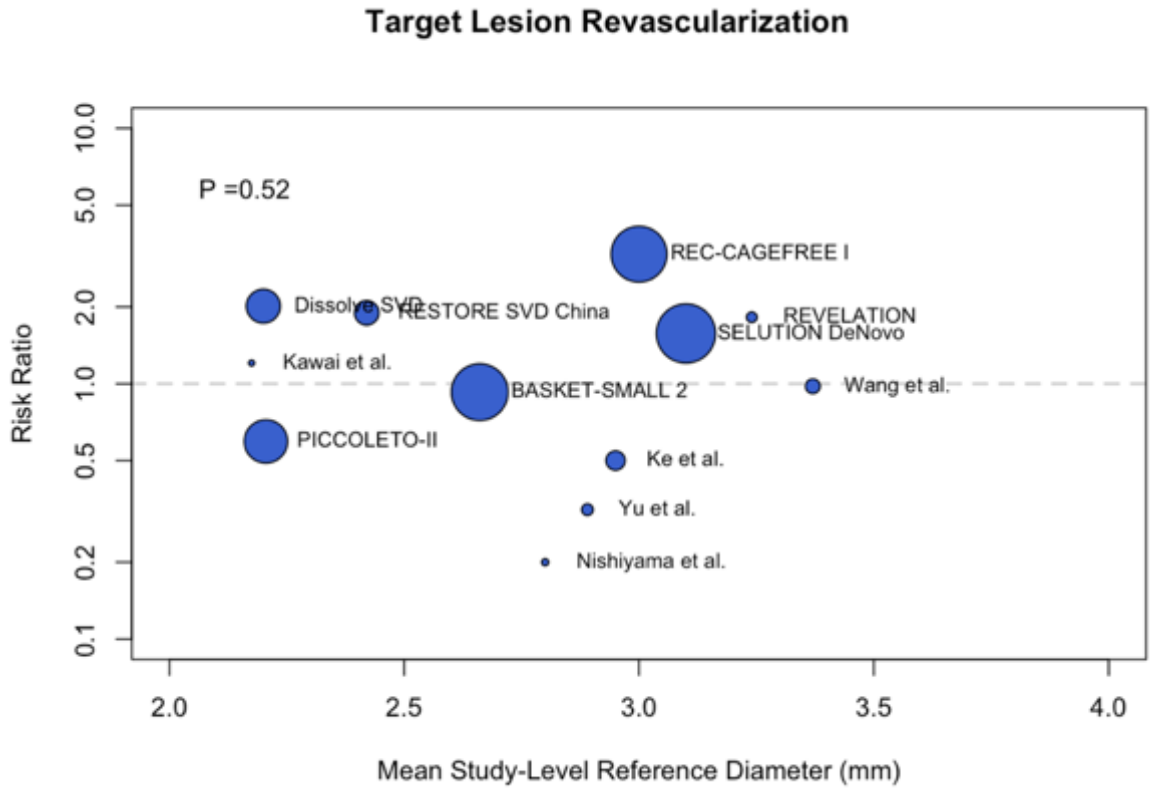

Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SCB
SELUTION DeNovo 20 1661 22 1662 0.91 [0.50; 1.66] 39.7%
PCB
REC-CAGEFREE I 16 1133 29 1139 0.55 [0.30; 1.02] 39.3%
Wang et al. 1 87 2 85 0.49 [0.05; 5.29] 2.8%
BASKET-SMALL 2 6 349 14 345 0.42 [0.16; 1.09] 17.1%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 1.1%
Random effects model 23 1610 45 1606 0.52 [0.32; 0.85] 60.3%
Heterogeneity: I^2 = 0% [0.0%; 84.7%], χ^2_3 = 0.3 (p = 0.9593)
Test for effect in subgroup: p = 0.009
Random effects model 43 3271 67 3268 0.65 [0.43; 0.96] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 2.33 (p = 0.6746)
Test for subgroup differences: χ^2_1 = 2.03, df = 1 (p = 0.1542)

Supplementary Figure 9. Meta-regression by follow-up duration (A), study-level mean reference diameter (B), and publication year (C)

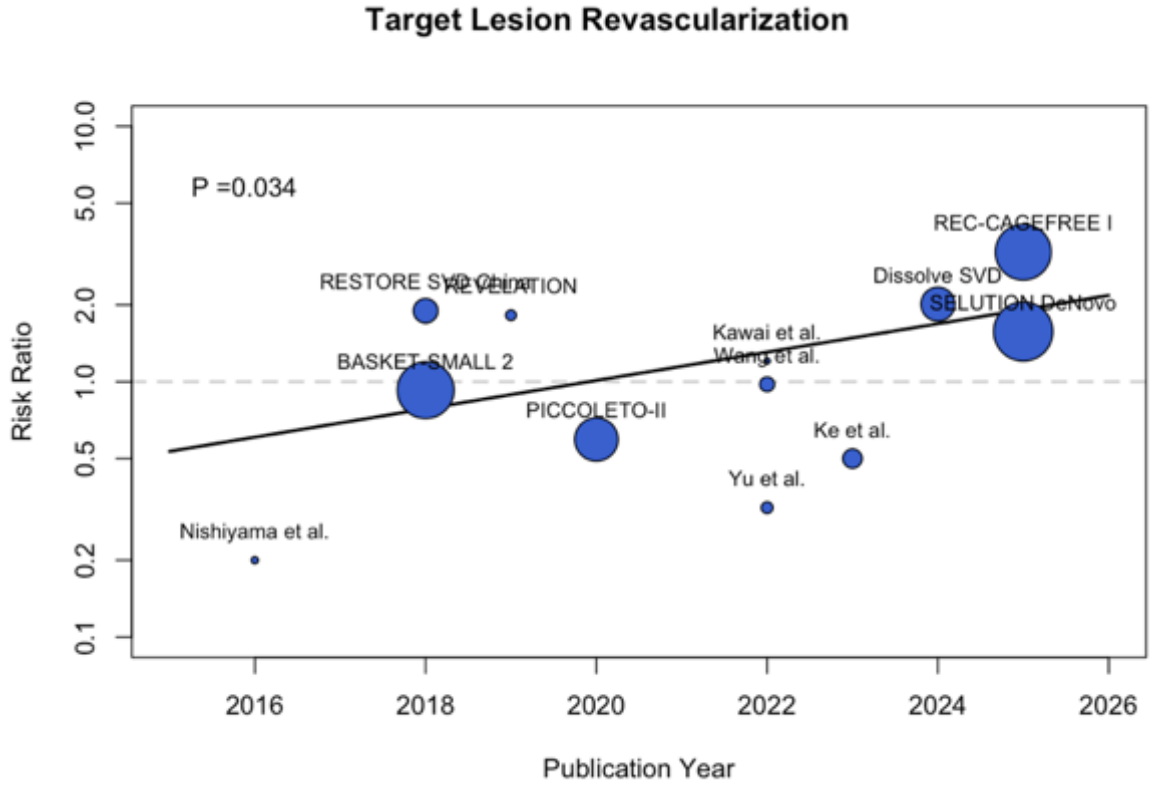
A)



B)

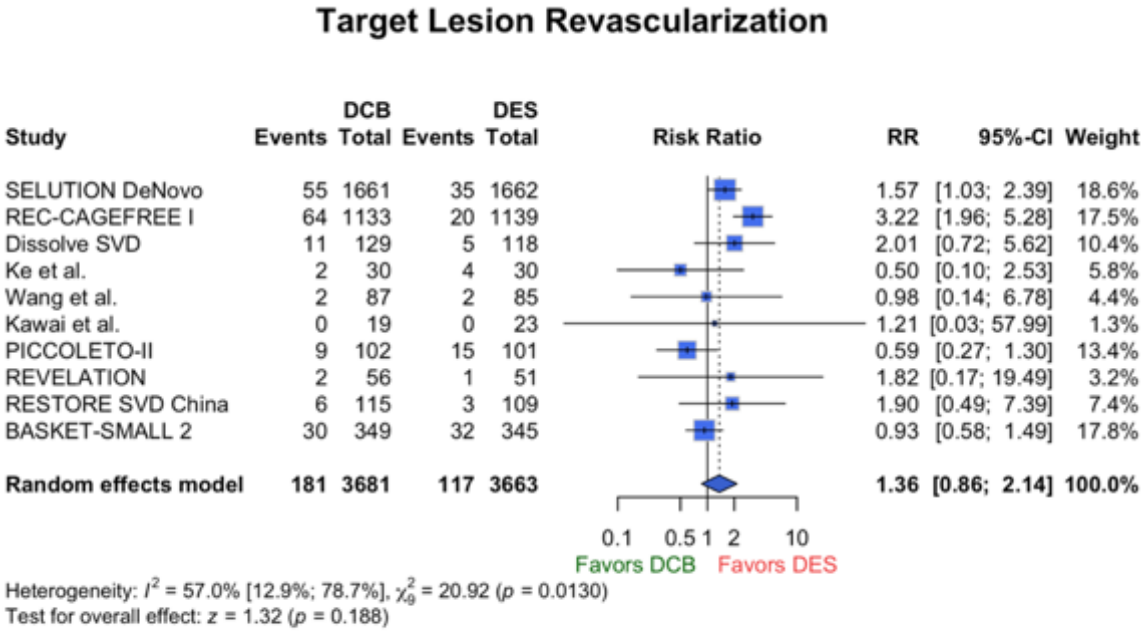

Target Lesion Revascularization
P =0.52
REC-CAGEFREE I
Dissolve SVD
RESTORE SVD China
REVELATION
SELUTION DeNovo
Kawai et al.
BASKET-SMALL 2
Wang et al.
PICCOLETO-II
Ke et al.
Yu et al.
Nishiyama et al.
Risk Ratio
0.1
0.2
0.5
1.0
2.0
5.0
10.0
2.0
2.5
3.0
3.5
4.0
Mean Study-Level Reference Diameter (mm)

C)

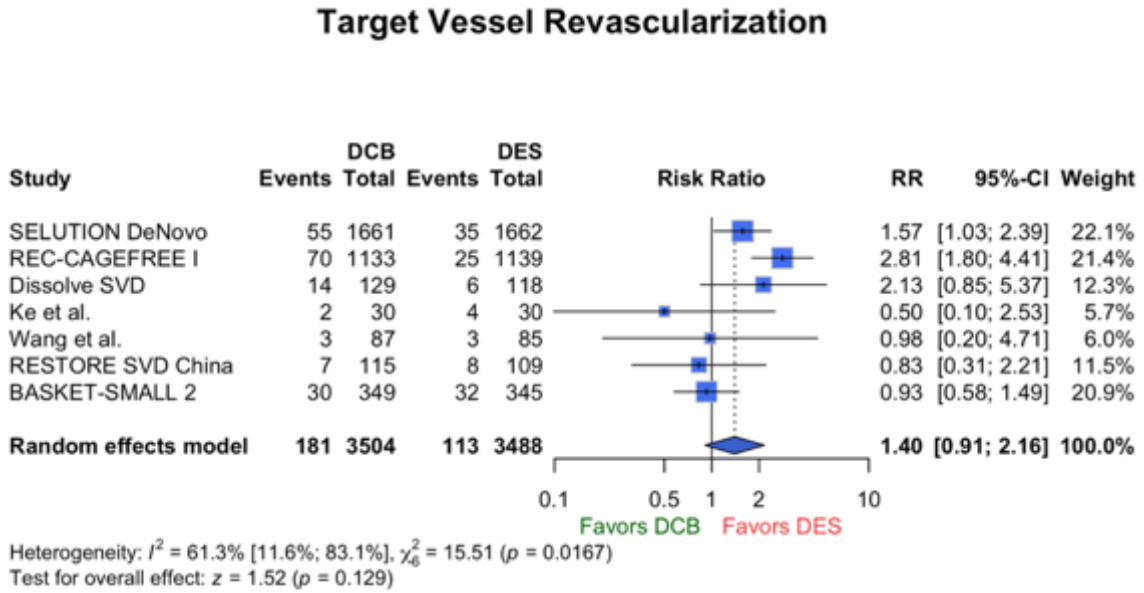

Target Lesion Revascularization
P =0.034
REC-CAGEFREE I
RESTORE SVD China
REVELATION
Dissolve SVD
SELUTION DeNovo
Kawai et al.
Wang et al.
BASKET-SMALL 2
PICCOLETO-II
Ke et al.
Yu et al.
Nishiyama et al.
Risk Ratio
0.1
0.2
0.5
1.0
2.0
5.0
10.0
2016
2018
2020
2022
2024
2026
Publication Year

Supplementary Figure 10. Sensitivity analysis by excluding trials with high risk of bias for primary (A), and secondary outcomes (B-I)

A)



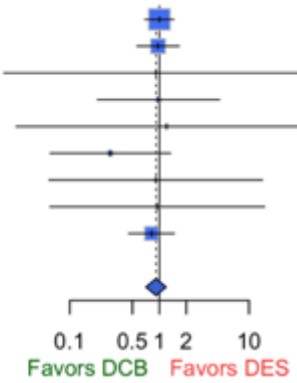
B)



C)

Myocardial Infarction

Study	DCB Events	DCB Total	DES Events	DES Total	RR	95%-CI	Weight
SELUTION DeNovo	53	1661	53	1662	1.00	[0.69; 1.46]	48.7%
REC-CAGEFREE I	25	1133	26	1139	0.97	[0.56; 1.66]	23.2%
Dissolve SVD	0	129	0	118	0.92	[0.02; 45.75]	0.4%
Wang et al.	3	87	3	85	0.98	[0.20; 4.71]	2.8%
Kawai et al.	0	19	0	23	1.21	[0.03; 57.99]	0.5%
PICCOLETO-II	2	102	7	101	0.28	[0.06; 1.33]	2.9%
REVELATION	1	56	1	51	0.91	[0.06; 14.19]	0.9%
RESTORE SVD China	1	115	1	109	0.95	[0.06; 14.97]	0.9%
BASKET-SMALL 2	19	349	23	345	0.82	[0.45; 1.47]	19.7%
Random effects model	**104**	**3651**	**114**	**3633**	**0.92**	**[0.71; 1.19]**	**100.0%**

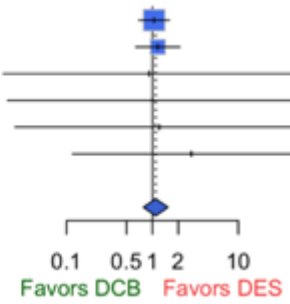


Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 2.64 (p = 0.9550)
Test for overall effect: z = -0.64 (p = 0.524)

D)

Target Vessel Myocardial Infarction

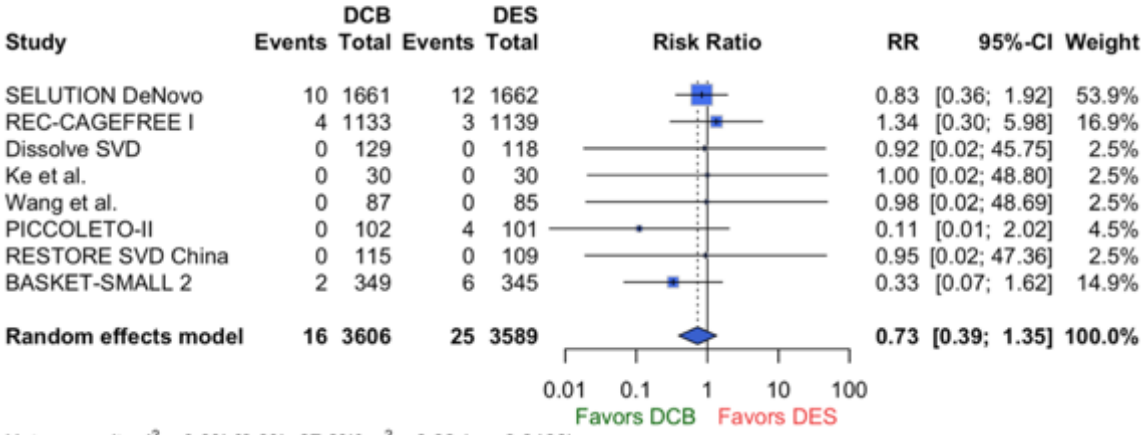
Study	DCB Events	DCB Total	DES Events	DES Total	RR	95%-CI	Weight
SELUTION DeNovo	45	1661	43	1662	1.05	[0.69; 1.58]	65.2%
REC-CAGEFREE I	23	1133	20	1139	1.16	[0.64; 2.09]	31.5%
Dissolve SVD	0	129	0	118	0.92	[0.02; 45.75]	0.7%
Ke et al.	0	30	0	30	1.00	[0.02; 48.80]	0.7%
Kawai et al.	0	19	0	23	1.21	[0.03; 57.99]	0.7%
RESTORE SVD China	1	115	0	109	2.84	[0.12; 69.07]	1.1%
Random effects model	**69**	**3087**	**63**	**3081**	**1.09**	**[0.78; 1.52]**	**100.0%**



Heterogeneity: I^2 = 0.0% [0.0%; 74.6%], χ^2_5 = 0.43 (p = 0.9944)
Test for overall effect: z = 0.52 (p = 0.605)

E)

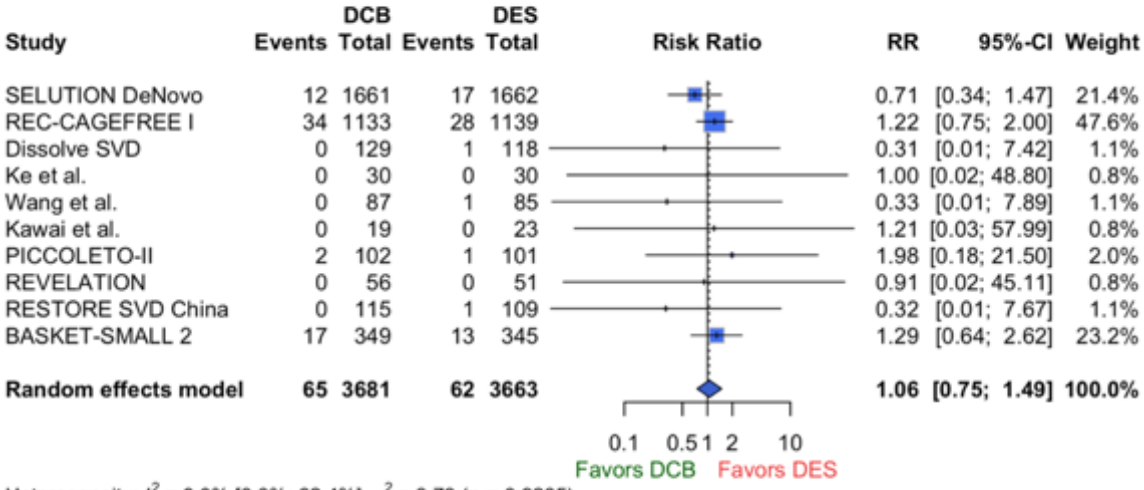
Vessel Thrombosis



Heterogeneity: I^2 = 0.0% [0.0%; 67.6%], χ^2_7 = 3.39 (p = 0.8466)
Test for overall effect: z = -1.01 (p = 0.313)

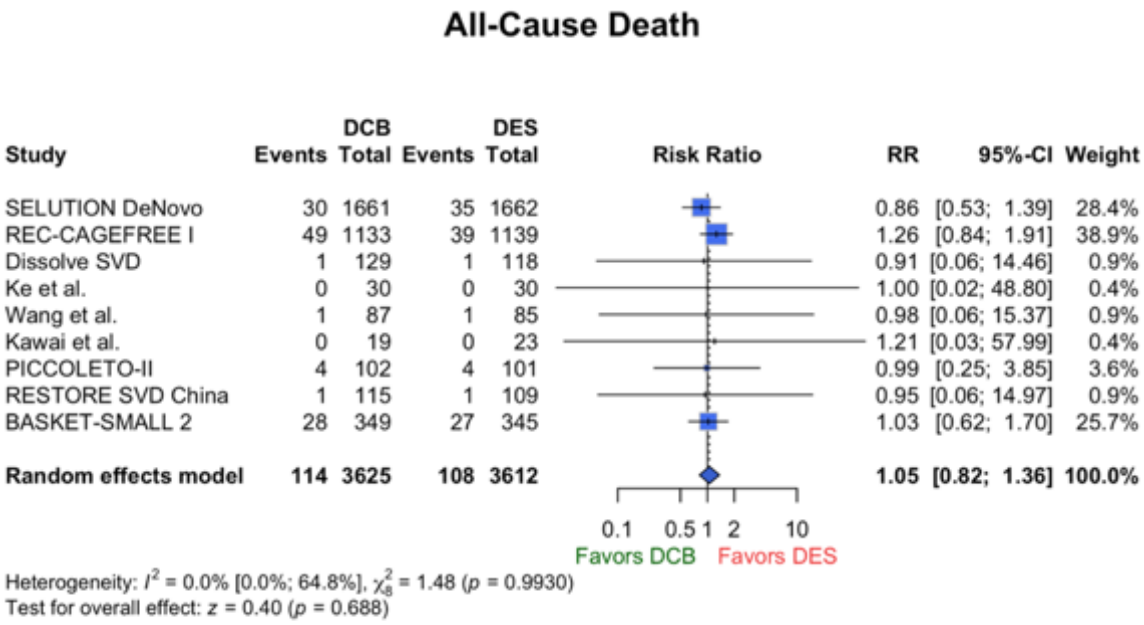
F)

Cardiac Death

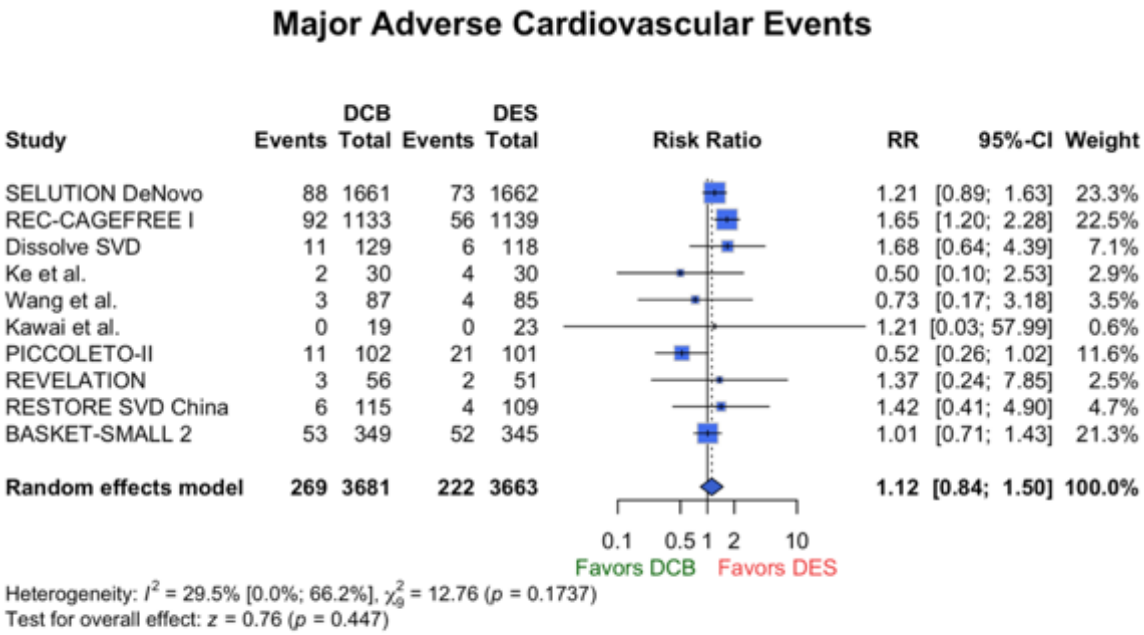


Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 3.73 (p = 0.9285)
Test for overall effect: z = 0.32 (p = 0.750)

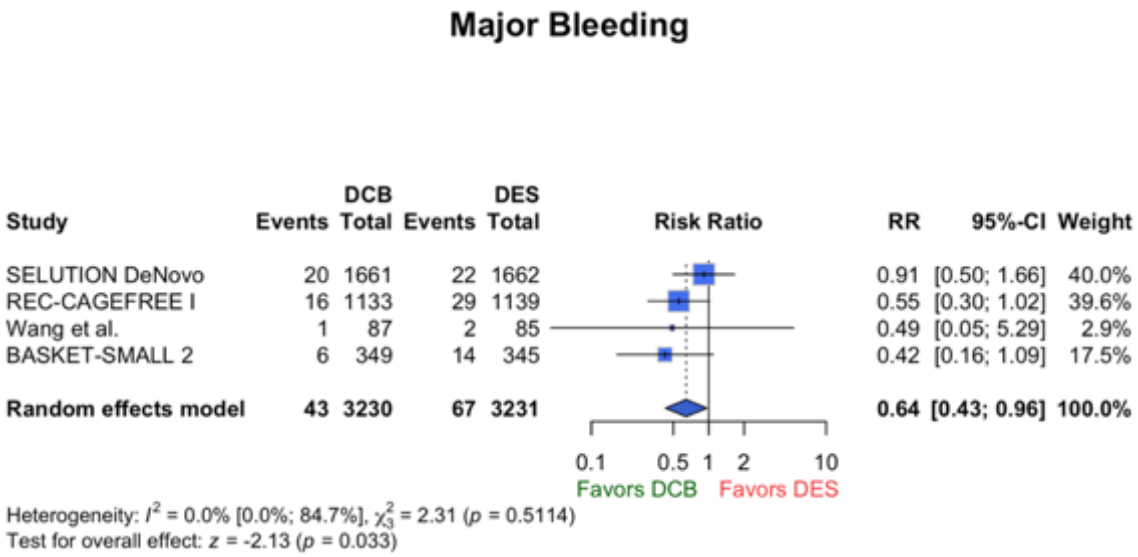
G)


All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 30 1661 35 1662 0.86 [0.53; 1.39] 28.4%
REC-CAGEFREE I 49 1133 39 1139 1.26 [0.84; 1.91] 38.9%
Dissolve SVD 1 129 1 118 0.91 [0.06; 14.46] 0.9%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 0.4%
Wang et al. 1 87 1 85 0.98 [0.06; 15.37] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.4%
PICCOLETO-II 4 102 4 101 0.99 [0.25; 3.85] 3.6%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 25.7%
Random effects model 114 3625 108 3612 1.05 [0.82; 1.36] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 1.48 (p = 0.9930)
Test for overall effect: z = 0.40 (p = 0.688)

H)

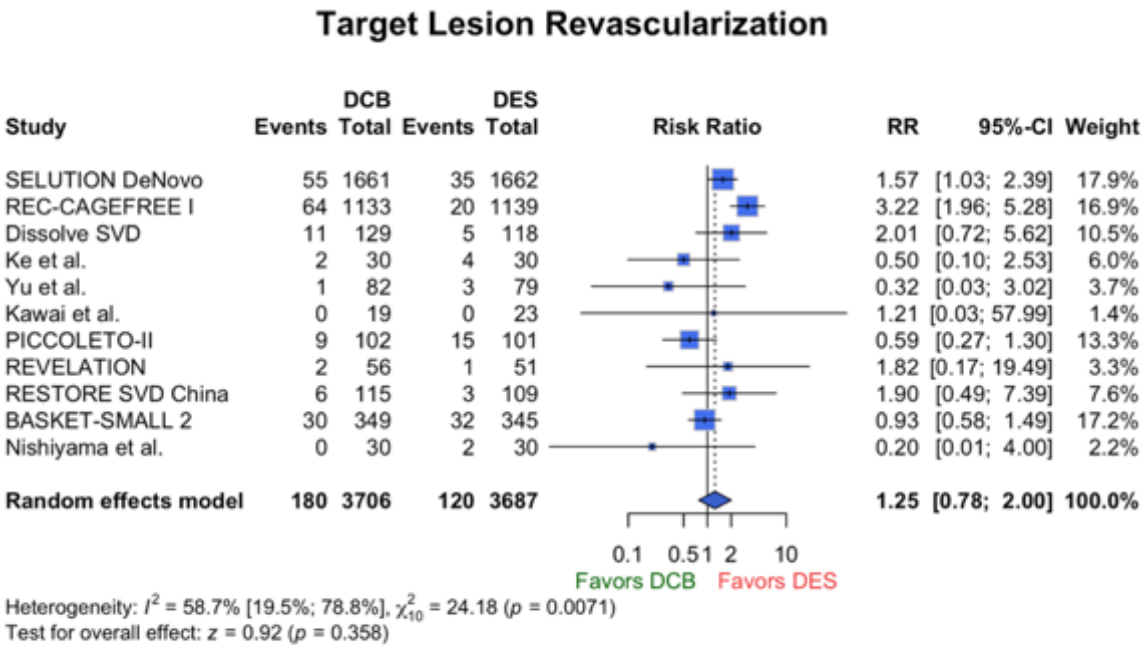

Major Adverse Cardiovascular Events
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 88 1661 73 1662 1.21 [0.89; 1.63] 23.3%
REC-CAGEFREE I 92 1133 56 1139 1.65 [1.20; 2.28] 22.5%
Dissolve SVD 11 129 6 118 1.68 [0.64; 4.39] 7.1%
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 2.9%
Wang et al. 3 87 4 85 0.73 [0.17; 3.18] 3.5%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.6%
PICCOLETO-II 11 102 21 101 0.52 [0.26; 1.02] 11.6%
REVELATION 3 56 2 51 1.37 [0.24; 7.85] 2.5%
RESTORE SVD China 6 115 4 109 1.42 [0.41; 4.90] 4.7%
BASKET-SMALL 2 53 349 52 345 1.01 [0.71; 1.43] 21.3%
Random effects model 269 3681 222 3663 1.12 [0.84; 1.50] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 29.5% [0.0%; 66.2%], χ^2_9 = 12.76 (p = 0.1737)
Test for overall effect: z = 0.76 (p = 0.447)

I)

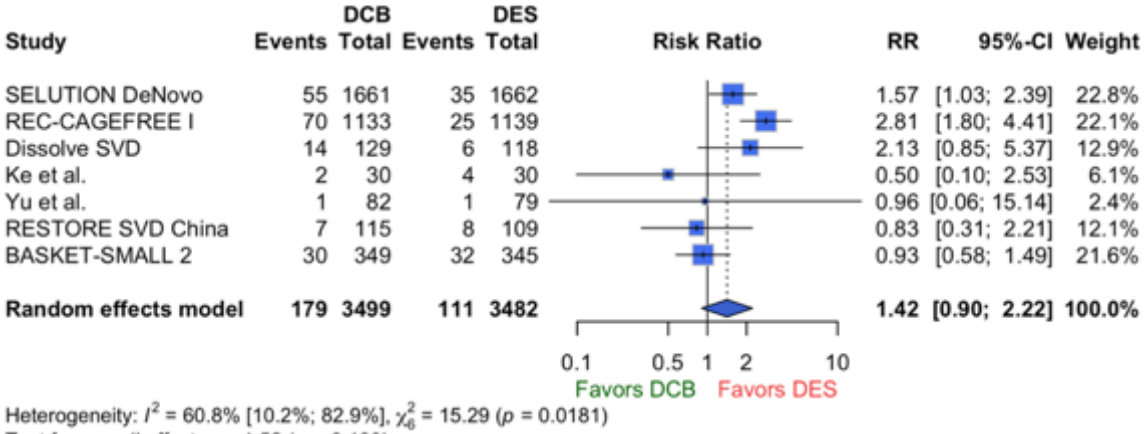

Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 20 1661 22 1662 0.91 [0.50; 1.66] 40.0%
REC-CAGEFREE I 16 1133 29 1139 0.55 [0.30; 1.02] 39.6%
Wang et al. 1 87 2 85 0.49 [0.05; 5.29] 2.9%
BASKET-SMALL 2 6 349 14 345 0.42 [0.16; 1.09] 17.5%
Random effects model 43 3230 67 3231 0.64 [0.43; 0.96] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 84.7%], χ^2_3 = 2.31 (p = 0.5114)
Test for overall effect: z = -2.13 (p = 0.033)

Supplementary Figure 11. Sensitivity analysis by excluding the trial, which compared ultrasound-controlled drug-releasing balloons with drug-eluting stents for primary (A) and secondary outcomes (B-H)

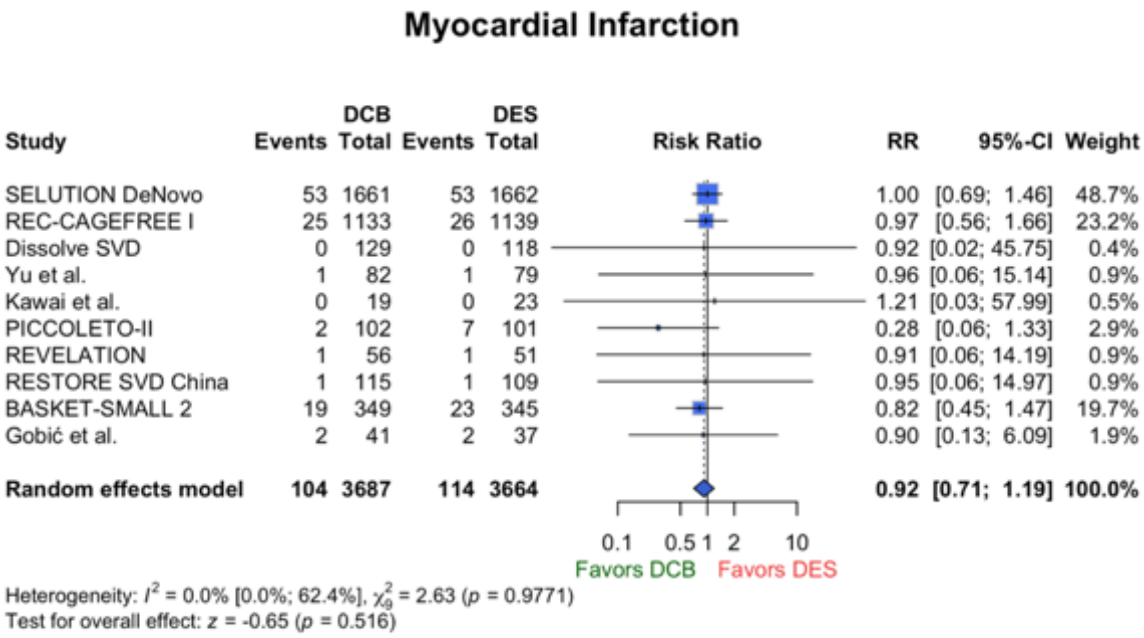
A)



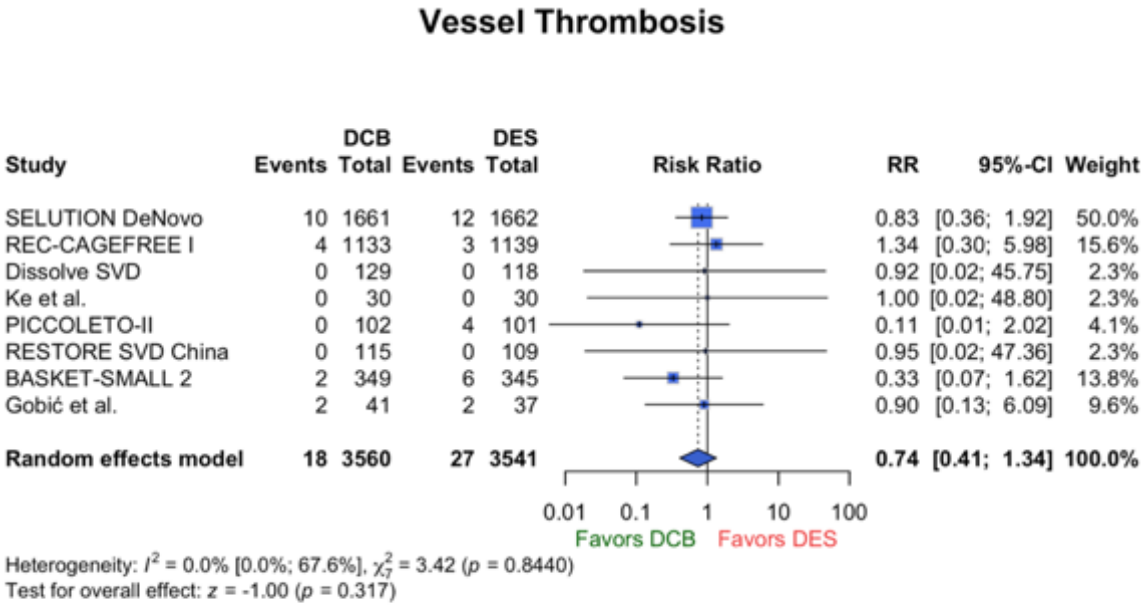
B)



C)


Myocardial Infarction
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 53 1661 53 1662 1.00 [0.69; 1.46] 48.7%
REC-CAGEFREE I 25 1133 26 1139 0.97 [0.56; 1.66] 23.2%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 0.4%
Yu et al. 1 82 1 79 0.96 [0.06; 15.14] 0.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.5%
PICCOLETO-II 2 102 7 101 0.28 [0.06; 1.33] 2.9%
REVELATION 1 56 1 51 0.91 [0.06; 14.19] 0.9%
RESTORE SVD China 1 115 1 109 0.95 [0.06; 14.97] 0.9%
BASKET-SMALL 2 19 349 23 345 0.82 [0.45; 1.47] 19.7%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 1.9%
Random effects model 104 3687 114 3664 0.92 [0.71; 1.19] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 2.63 (p = 0.9771)
Test for overall effect: z = -0.65 (p = 0.516)

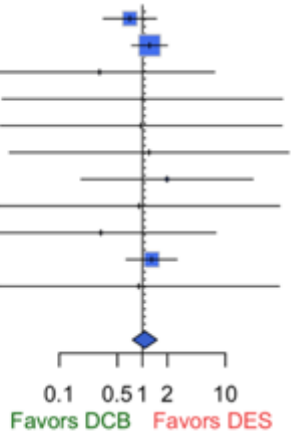
D)


Vessel Thrombosis
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 10 1661 12 1662 0.83 [0.36; 1.92] 50.0%
REC-CAGEFREE I 4 1133 3 1139 1.34 [0.30; 5.98] 15.6%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 2.3%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 2.3%
PICCOLETO-II 0 102 4 101 0.11 [0.01; 2.02] 4.1%
RESTORE SVD China 0 115 0 109 0.95 [0.02; 47.36] 2.3%
BASKET-SMALL 2 2 349 6 345 0.33 [0.07; 1.62] 13.8%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 9.6%
Random effects model 18 3560 27 3541 0.74 [0.41; 1.34] 100.0%
0.01 0.1 1 10 100
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 67.6%], χ^2_7 = 3.42 (p = 0.8440)
Test for overall effect: z = -1.00 (p = 0.317)

E)

Cardiac Death

Study	DCB Events	DCB Total	DES Events	DES Total	RR	95%-CI	Weight
SELUTION DeNovo	12	1661	17	1662	0.71	[0.34; 1.47]	21.3%
REC-CAGEFREE I	34	1133	28	1139	1.22	[0.75; 2.00]	47.4%
Dissolve SVD	0	129	1	118	0.31	[0.01; 7.42]	1.1%
Ke et al.	0	30	0	30	1.00	[0.02; 48.80]	0.8%
Yu et al.	0	82	0	79	0.96	[0.02; 47.98]	0.8%
Kawai et al.	0	19	0	23	1.21	[0.03; 57.99]	0.8%
PICCOLETO-II	2	102	1	101	1.98	[0.18; 21.50]	2.0%
REVELATION	0	56	0	51	0.91	[0.02; 45.11]	0.8%
RESTORE SVD China	0	115	1	109	0.32	[0.01; 7.67]	1.1%
BASKET-SMALL 2	17	349	13	345	1.29	[0.64; 2.62]	23.1%
Gobić et al.	0	41	0	37	0.90	[0.02; 44.42]	0.8%
Random effects model	**65**	**3717**	**61**	**3694**	**1.07**	**[0.76; 1.50]**	**100.0%**

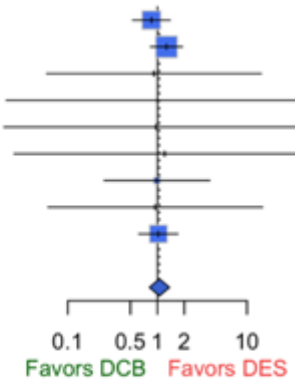


Heterogeneity: I^2 = 0.0% [0.0%; 60.2%], χ^2_{10} = 3.21 (p = 0.9761)
Test for overall effect: z = 0.39 (p = 0.700)

F)

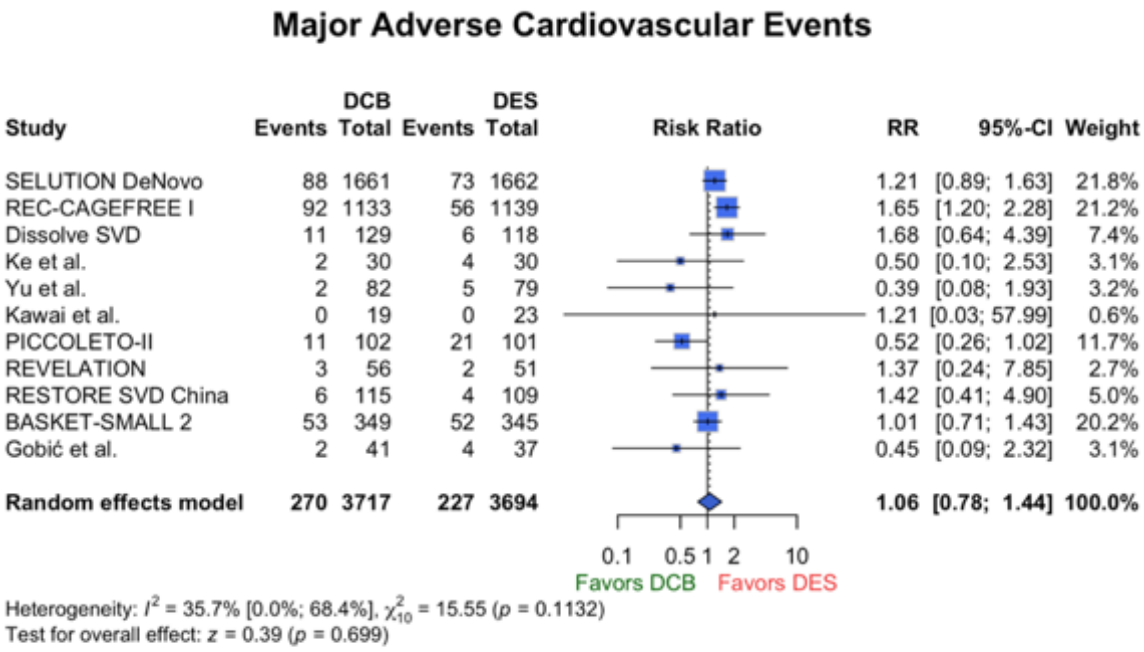
All-Cause Death

Study	DCB Events	DCB Total	DES Events	DES Total	RR	95%-CI	Weight
SELUTION DeNovo	30	1661	35	1662	0.86	[0.53; 1.39]	28.5%
REC-CAGEFREE I	49	1133	39	1139	1.26	[0.84; 1.91]	39.0%
Dissolve SVD	1	129	1	118	0.91	[0.06; 14.46]	0.9%
Ke et al.	0	30	0	30	1.00	[0.02; 48.80]	0.4%
Yu et al.	0	82	0	79	0.96	[0.02; 47.98]	0.4%
Kawai et al.	0	19	0	23	1.21	[0.03; 57.99]	0.4%
PICCOLETO-II	4	102	4	101	0.99	[0.25; 3.85]	3.6%
RESTORE SVD China	1	115	1	109	0.95	[0.06; 14.97]	0.9%
BASKET-SMALL 2	28	349	27	345	1.03	[0.62; 1.70]	25.8%
Random effects model	**113**	**3620**	**107**	**3606**	**1.05**	**[0.81; 1.36]**	**100.0%**

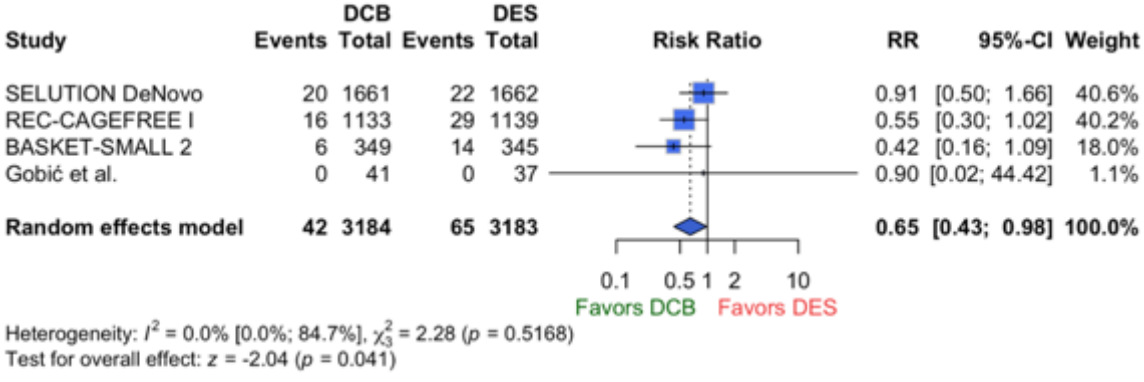


Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 1.48 (p = 0.9930)
Test for overall effect: z = 0.40 (p = 0.687)

G)

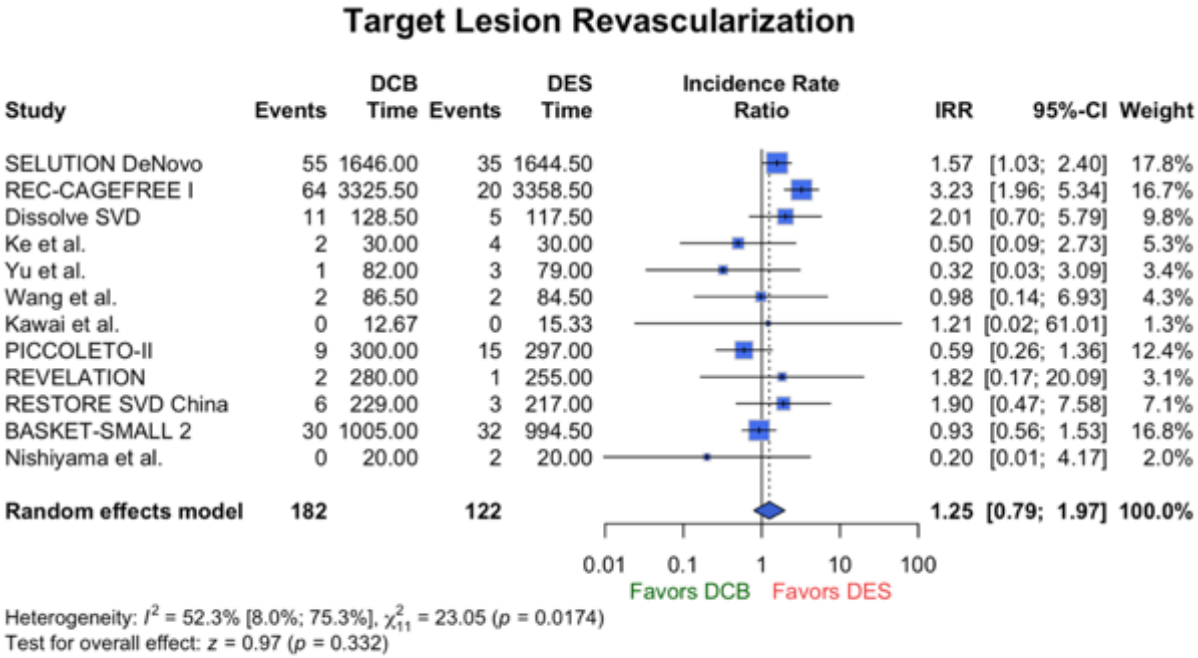

Major Adverse Cardiovascular Events
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 88 1661 73 1662 1.21 [0.89; 1.63] 21.8%
REC-CAGEFREE I 92 1133 56 1139 1.65 [1.20; 2.28] 21.2%
Dissolve SVD 11 129 6 118 1.68 [0.64; 4.39] 7.4%
Ke et al. 2 30 4 30 0.50 [0.10; 2.53] 3.1%
Yu et al. 2 82 5 79 0.39 [0.08; 1.93] 3.2%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 0.6%
PICCOLETO-II 11 102 21 101 0.52 [0.26; 1.02] 11.7%
REVELATION 3 56 2 51 1.37 [0.24; 7.85] 2.7%
RESTORE SVD China 6 115 4 109 1.42 [0.41; 4.90] 5.0%
BASKET-SMALL 2 53 349 52 345 1.01 [0.71; 1.43] 20.2%
Gobić et al. 2 41 4 37 0.45 [0.09; 2.32] 3.1%
Random effects model 270 3717 227 3694 1.06 [0.78; 1.44] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 35.7% [0.0%; 68.4%], χ^2_{10} = 15.55 (p = 0.1132)
Test for overall effect: z = 0.39 (p = 0.699)

H)


Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 20 1661 22 1662 0.91 [0.50; 1.66] 40.6%
REC-CAGEFREE I 16 1133 29 1139 0.55 [0.30; 1.02] 40.2%
BASKET-SMALL 2 6 349 14 345 0.42 [0.16; 1.09] 18.0%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 1.1%
Random effects model 42 3184 65 3183 0.65 [0.43; 0.98] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 84.7%], χ^2_3 = 2.28 (p = 0.5168)
Test for overall effect: z = -2.04 (p = 0.041)

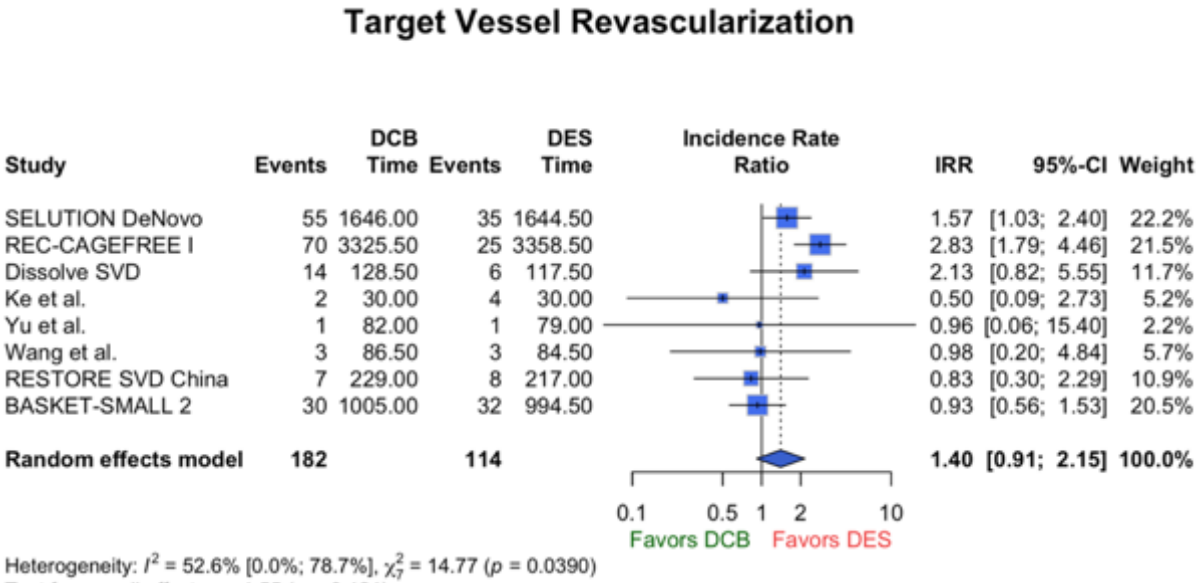
Supplementary Figure 12. Sensitivity analysis by applying the incidence rate ratio as an effect measure for primary (A), and secondary outcomes (B-I)

A)



Heterogeneity: I^2 = 52.3% [8.0%; 75.3%], χ^2_{11} = 23.05 (p = 0.0174)
Test for overall effect: z = 0.97 (p = 0.332)

B)

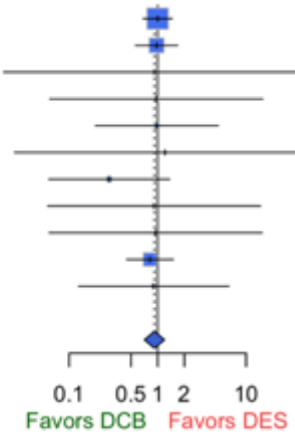


Heterogeneity: I^2 = 52.6% [0.0%; 78.7%], χ^2_7 = 14.77 (p = 0.0390)
Test for overall effect: z = 1.55 (p = 0.121)

C)

Myocardial Infarction

Study	DCB Events	DCB Time	DES Events	DES Time	IRR	95%-CI	Weight
SELUTION DeNovo	53	1646.00	53	1644.50	1.00	[0.68; 1.46]	47.6%
REC-CAGEFREE I	25	3325.50	26	3358.50	0.97	[0.56; 1.68]	22.9%
Dissolve SVD	0	128.50	0	117.50	0.91	[0.02; 46.08]	0.4%
Yu et al.	1	82.00	1	79.00	0.96	[0.06; 15.40]	0.9%
Wang et al.	3	86.50	3	84.50	0.98	[0.20; 4.84]	2.7%
Kawai et al.	0	12.67	0	15.33	1.21	[0.02; 61.01]	0.4%
PICCOLETO-II	2	300.00	7	297.00	0.28	[0.06; 1.36]	2.8%
REVELATION	1	280.00	1	255.00	0.91	[0.06; 14.56]	0.9%
RESTORE SVD China	1	229.00	1	217.00	0.95	[0.06; 15.15]	0.9%
BASKET-SMALL 2	19	1005.00	23	994.50	0.82	[0.45; 1.50]	18.7%
Gobić et al.	2	20.50	2	18.50	0.90	[0.13; 6.41]	1.8%
Random effects model	**107**		**117**		**0.92**	**[0.71; 1.20]**	**100.0%**

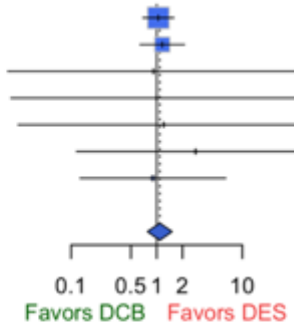


Heterogeneity: I^2 = 0.0% [0.0%; 60.2%], χ^2_{10} = 2.55 (p = 0.9901)
Test for overall effect: z = -0.62 (p = 0.532)

D)

Target Vessel Myocardial Infarction

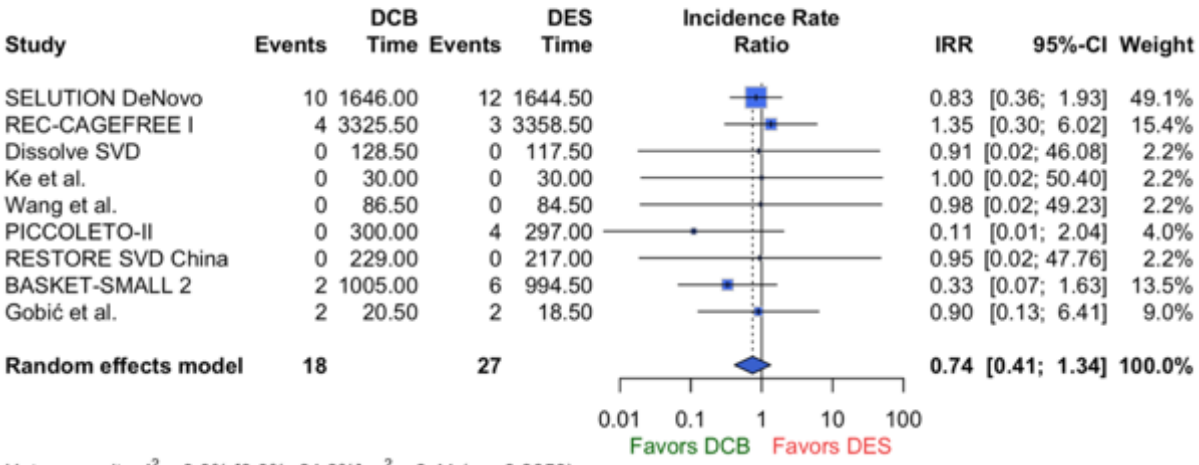
Study	DCB Events	DCB Time	DES Events	DES Time	IRR	95%-CI	Weight
SELUTION DeNovo	45	1646.00	43	1644.50	1.05	[0.69; 1.59]	63.2%
REC-CAGEFREE I	23	3325.50	20	3358.50	1.16	[0.64; 2.11]	30.7%
Dissolve SVD	0	128.50	0	117.50	0.91	[0.02; 46.08]	0.7%
Ke et al.	0	30.00	0	30.00	1.00	[0.02; 50.40]	0.7%
Kawai et al.	0	12.67	0	15.33	1.21	[0.02; 61.01]	0.7%
RESTORE SVD China	1	229.00	0	217.00	2.84	[0.12; 69.78]	1.1%
Gobić et al.	2	20.50	2	18.50	0.90	[0.13; 6.41]	2.9%
Random effects model	**71**		**65**		**1.09**	**[0.78; 1.51]**	**100.0%**



Heterogeneity: I^2 = 0.0% [0.0%; 70.8%], χ^2_{6} = 0.47 (p = 0.9981)
Test for overall effect: z = 0.49 (p = 0.624)

E)

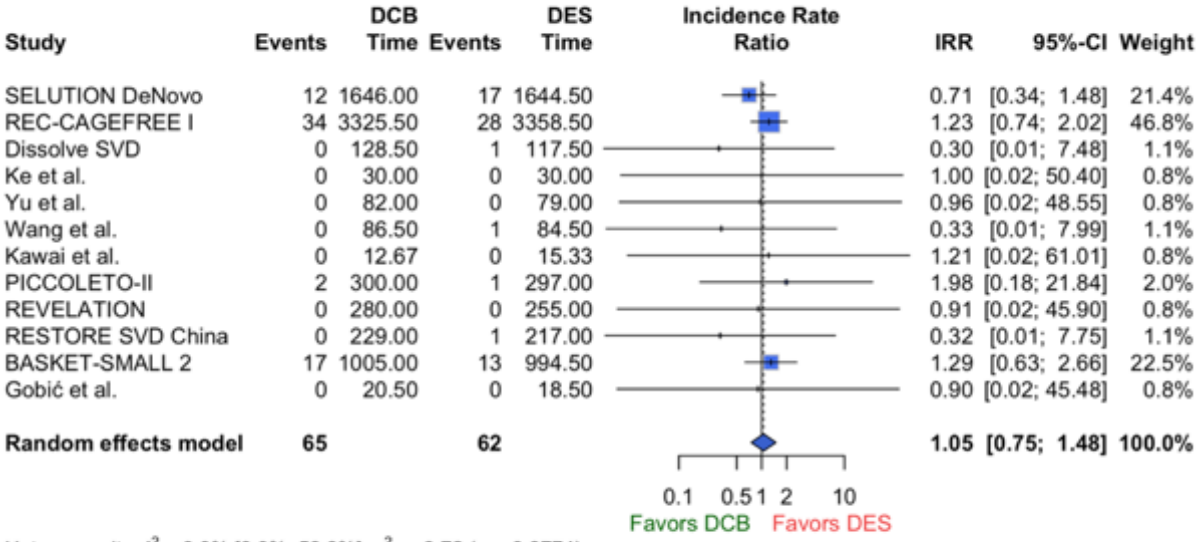
Vessel Thrombosis



Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 3.41 (p = 0.9059)
Test for overall effect: z = -0.99 (p = 0.324)

F)

Cardiac Death

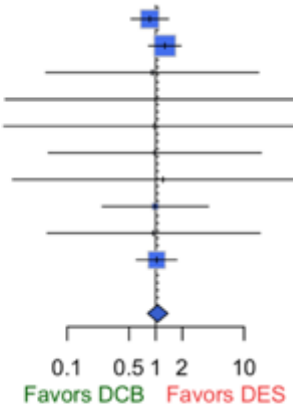


Heterogeneity: I^2 = 0.0% [0.0%; 58.3%], χ^2_{11} = 3.72 (p = 0.9774)
Test for overall effect: z = 0.30 (p = 0.764)

G)

All-Cause Death

Study	DCB Events	DCB Time	DES Events	DES Time	IRR	95%-CI	Weight
SELUTION DeNovo	30	1646.00	35	1644.50	0.86	[0.53; 1.39]	28.9%
REC-CAGEFREE I	49	3325.50	39	3358.50	1.27	[0.83; 1.93]	38.9%
Dissolve SVD	1	128.50	1	117.50	0.91	[0.06; 14.62]	0.9%
Ke et al.	0	30.00	0	30.00	1.00	[0.02; 50.40]	0.4%
Yu et al.	0	82.00	0	79.00	0.96	[0.02; 48.55]	0.4%
Wang et al.	1	86.50	1	84.50	0.98	[0.06; 15.62]	0.9%
Kawai et al.	0	12.67	0	15.33	1.21	[0.02; 61.01]	0.4%
PICCOLETO-II	4	300.00	4	297.00	0.99	[0.25; 3.96]	3.6%
RESTORE SVD China	1	229.00	1	217.00	0.95	[0.06; 15.15]	0.9%
BASKET-SMALL 2	28	1005.00	27	994.50	1.03	[0.60; 1.74]	24.6%
Random effects model	**114**		**108**		**1.05**	**[0.81; 1.37]**	**100.0%**

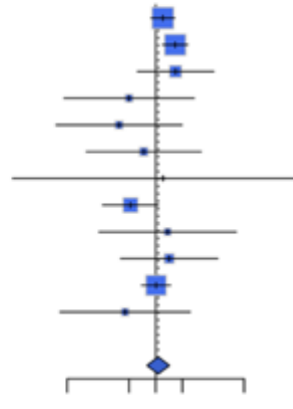


Heterogeneity: I^2 = 0.0% [0.0%; 62.4%], χ^2_9 = 1.49 (p = 0.9972)
Test for overall effect: z = 0.40 (p = 0.692)

H)

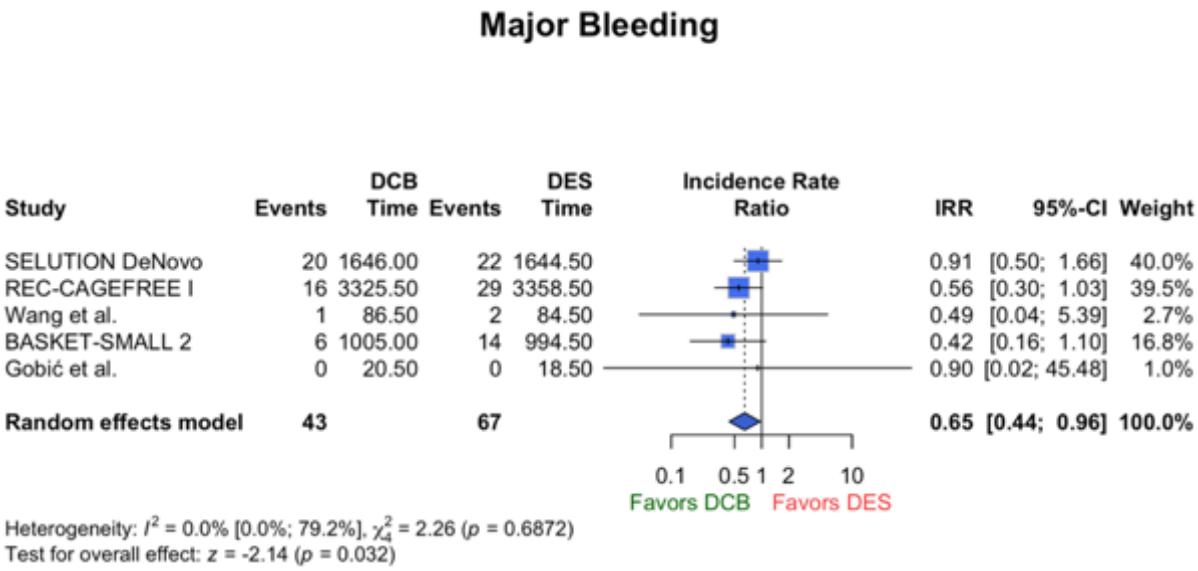
Major Adverse Cardiovascular Events

Study	DCB Events	DCB Time	DES Events	DES Time	IRR	95%-CI	Weight
SELUTION DeNovo	88	1646.00	73	1644.50	1.20	[0.88; 1.64]	22.4%
REC-CAGEFREE I	92	3325.50	56	3358.50	1.66	[1.19; 2.31]	21.6%
Dissolve SVD	11	128.50	6	117.50	1.68	[0.62; 4.53]	6.7%
Ke et al.	2	30.00	4	30.00	0.50	[0.09; 2.73]	2.7%
Yu et al.	2	82.00	5	79.00	0.39	[0.07; 1.99]	2.9%
Wang et al.	3	86.50	4	84.50	0.73	[0.16; 3.27]	3.4%
Kawai et al.	0	12.67	0	15.33	1.21	[0.02; 61.01]	0.5%
PICCOLETO-II	11	300.00	21	297.00	0.52	[0.25; 1.08]	10.4%
REVELATION	3	280.00	2	255.00	1.37	[0.23; 8.18]	2.4%
RESTORE SVD China	6	229.00	4	217.00	1.42	[0.40; 5.04]	4.5%
BASKET-SMALL 2	53	1005.00	52	994.50	1.01	[0.69; 1.48]	19.8%
Gobić et al.	2	20.50	4	18.50	0.45	[0.08; 2.46]	2.7%
Random effects model	**273**		**231**		**1.07**	**[0.80; 1.43]**	**100.0%**



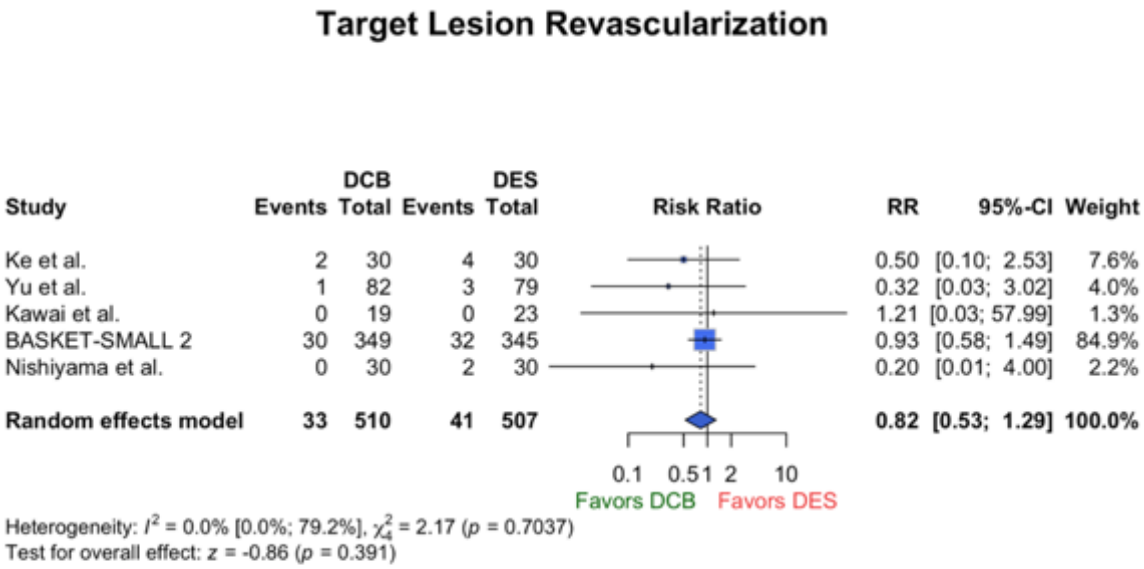
Heterogeneity: I^2 = 24.5% [0.0%; 61.6%], χ^2_{11} = 14.57 (p = 0.2032)
Test for overall effect: z = 0.44 (p = 0.660)

I)

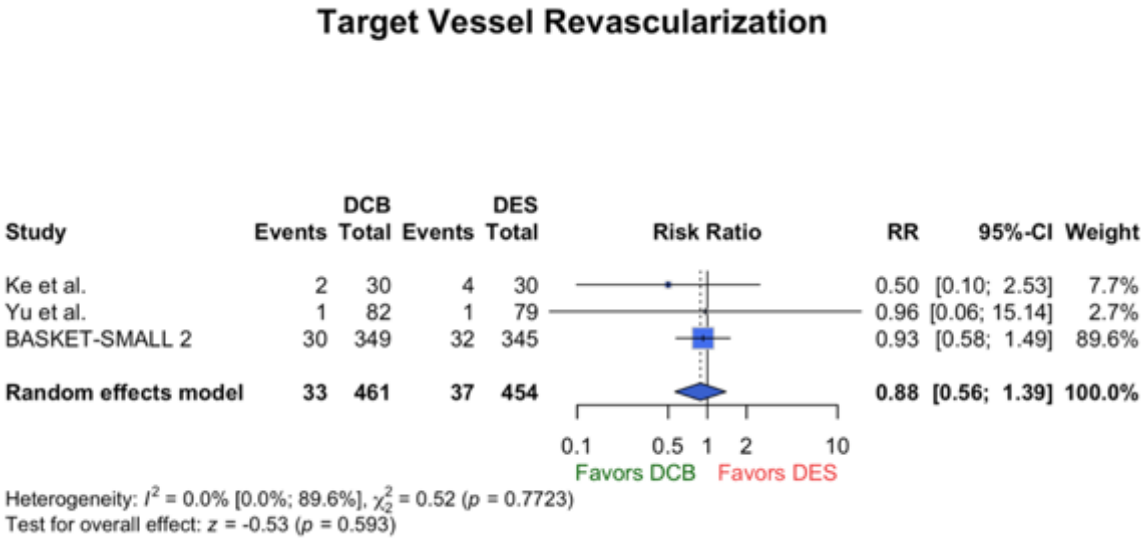

Major Bleeding
Study
Events
DCB Time
Events
DES Time
Incidence Rate Ratio
IRR
95%-CI
Weight
SELUTION DeNovo 20 1646.00 22 1644.50 0.91 [0.50; 1.66] 40.0%
REC-CAGEFREE I 16 3325.50 29 3358.50 0.56 [0.30; 1.03] 39.5%
Wang et al. 1 86.50 2 84.50 0.49 [0.04; 5.39] 2.7%
BASKET-SMALL 2 6 1005.00 14 994.50 0.42 [0.16; 1.10] 16.8%
Gobić et al. 0 20.50 0 18.50 0.90 [0.02; 45.48] 1.0%
Random effects model 43 67 0.65 [0.44; 0.96] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 2.26 (p = 0.6872)
Test for overall effect: z = -2.14 (p = 0.032)

Supplementary Figure 13. Sensitivity analysis limited to studies testing the drug-coated balloon, most commonly used in the included trials

A)

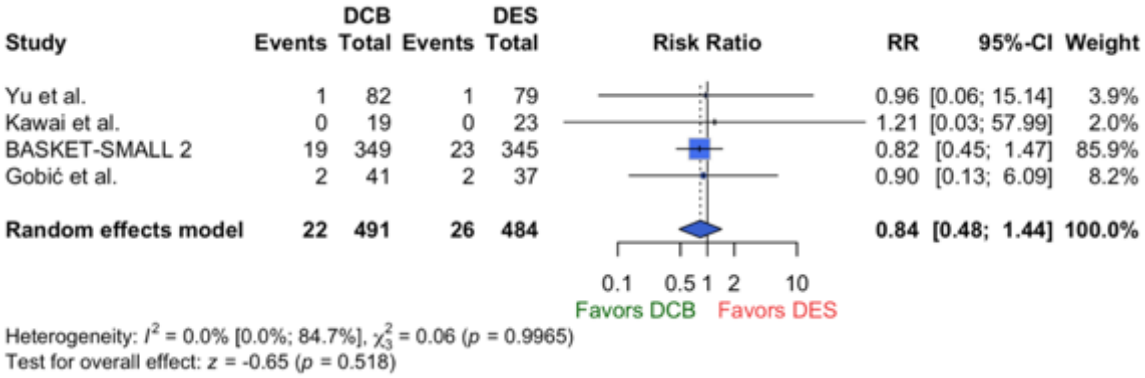


B)



C)

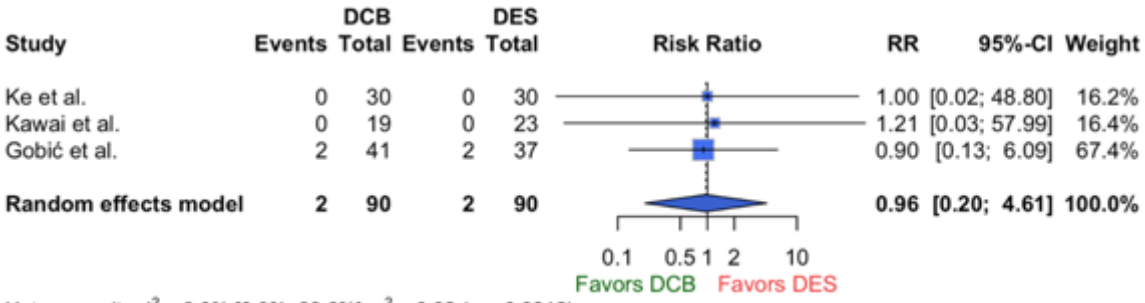
Myocardial Infarction



Heterogeneity: I^2 = 0.0% [0.0%; 84.7%], χ^2_3 = 0.06 (p = 0.9965)
Test for overall effect: z = -0.65 (p = 0.518)

D)

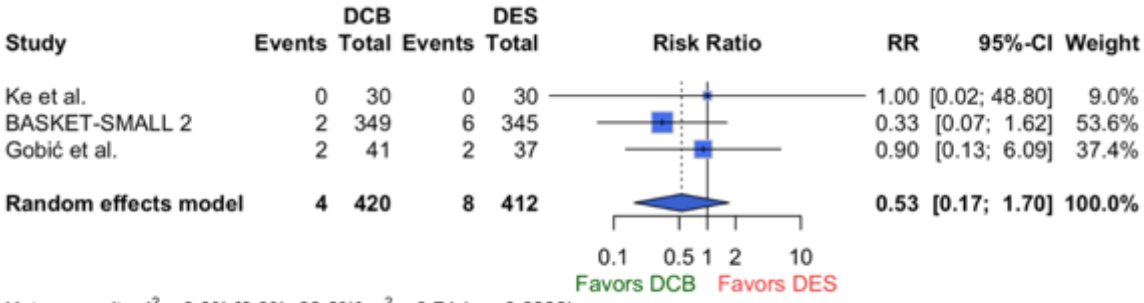
Target Vessel Myocardial Infarction



Heterogeneity: I^2 = 0.0% [0.0%; 89.6%], χ^2_2 = 0.02 (p = 0.9912)
Test for overall effect: z = -0.05 (p = 0.961)

E)

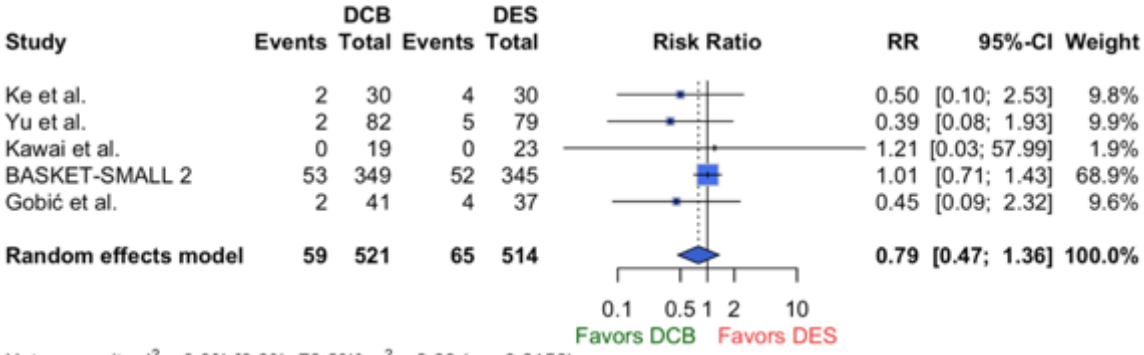
Vessel Thrombosis



Heterogeneity: I^2 = 0.0% [0.0%; 89.6%], χ^2_2 = 0.74 (p = 0.6898)
Test for overall effect: z = -1.06 (p = 0.287)

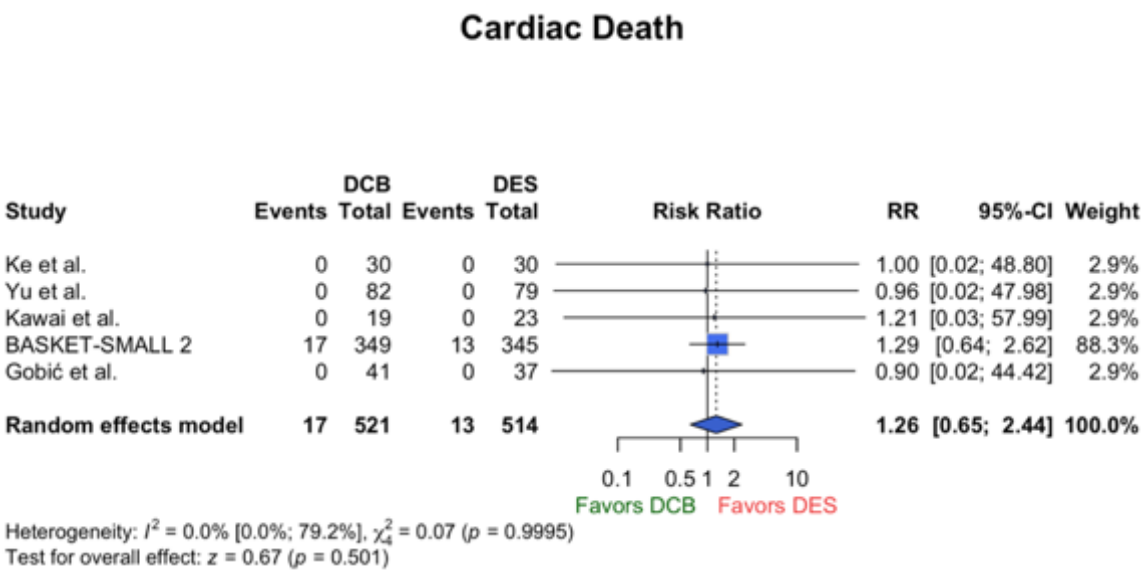
F)

Major Adverse Cardiovascular Events

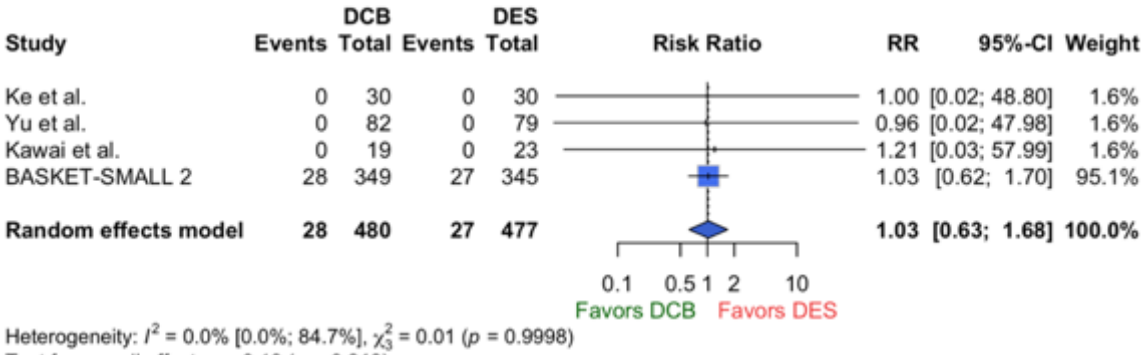


Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 2.66 (p = 0.6156)
Test for overall effect: z = -0.84 (p = 0.399)

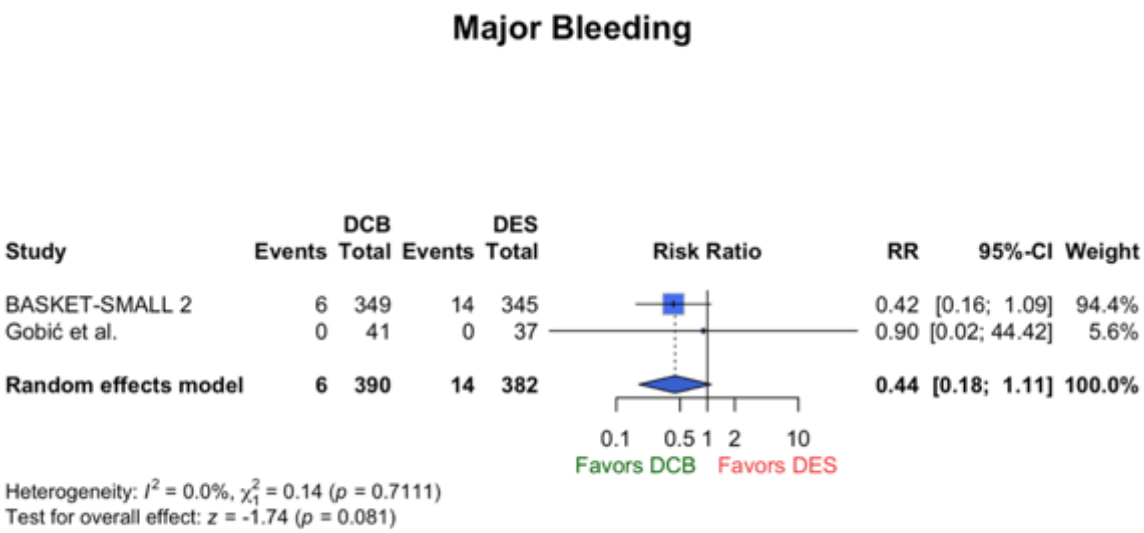
G)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 2.9%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 2.9%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 2.9%
BASKET-SMALL 2 17 349 13 345 1.29 [0.64; 2.62] 88.3%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 2.9%
Random effects model 17 521 13 514 1.26 [0.65; 2.44] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 79.2%], χ^2_4 = 0.07 (p = 0.9995)
Test for overall effect: z = 0.67 (p = 0.501)

H)

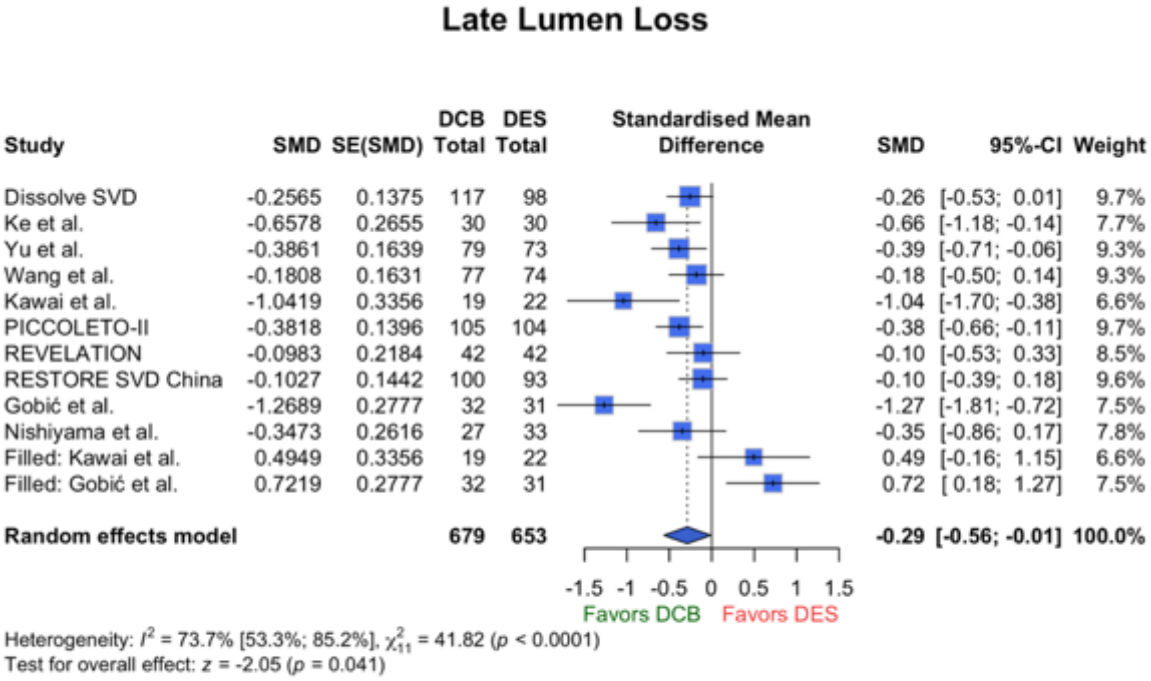

All-Cause Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 1.6%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 1.6%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 1.6%
BASKET-SMALL 2 28 349 27 345 1.03 [0.62; 1.70] 95.1%
Random effects model 28 480 27 477 1.03 [0.63; 1.68] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 84.7%], χ^2_3 = 0.01 (p = 0.9998)
Test for overall effect: z = 0.10 (p = 0.918)

I)

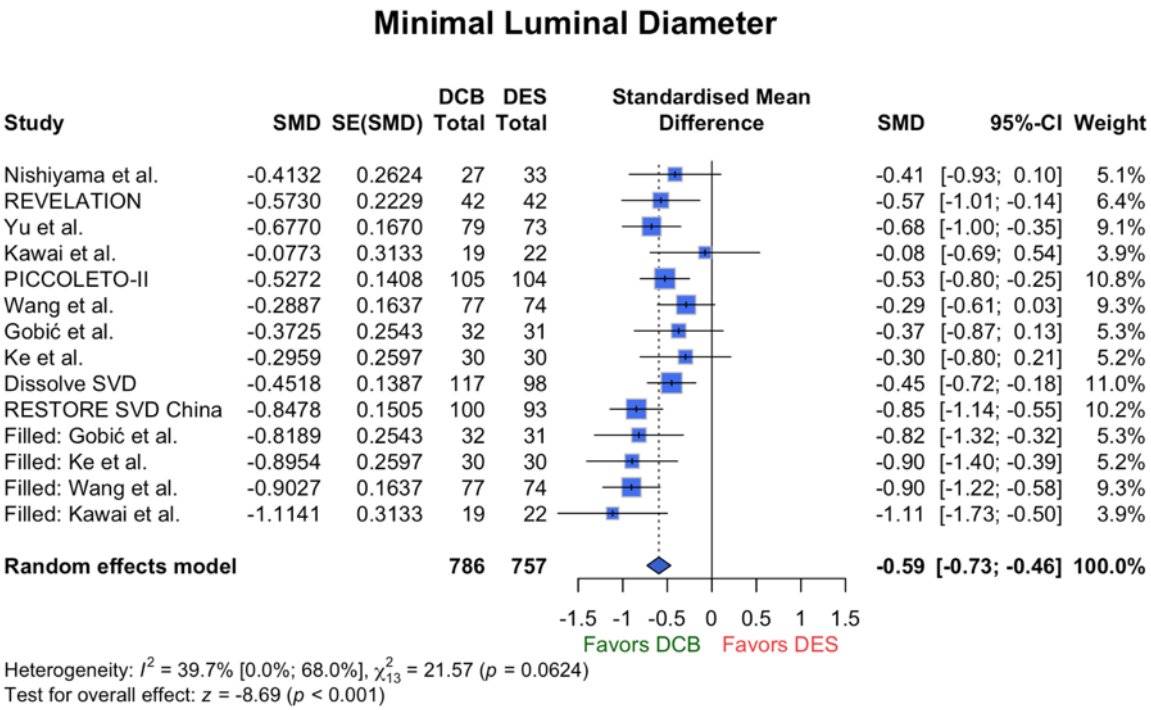

Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
BASKET-SMALL 2 6 349 14 345 0.42 [0.16; 1.09] 94.4%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 5.6%
Random effects model 6 390 14 382 0.44 [0.18; 1.11] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0%, χ^2_1 = 0.14 (p = 0.7111)
Test for overall effect: z = -1.74 (p = 0.081)

Supplementary Figure 14. Results of trim and fill analysis for endpoints suspected of publication bias

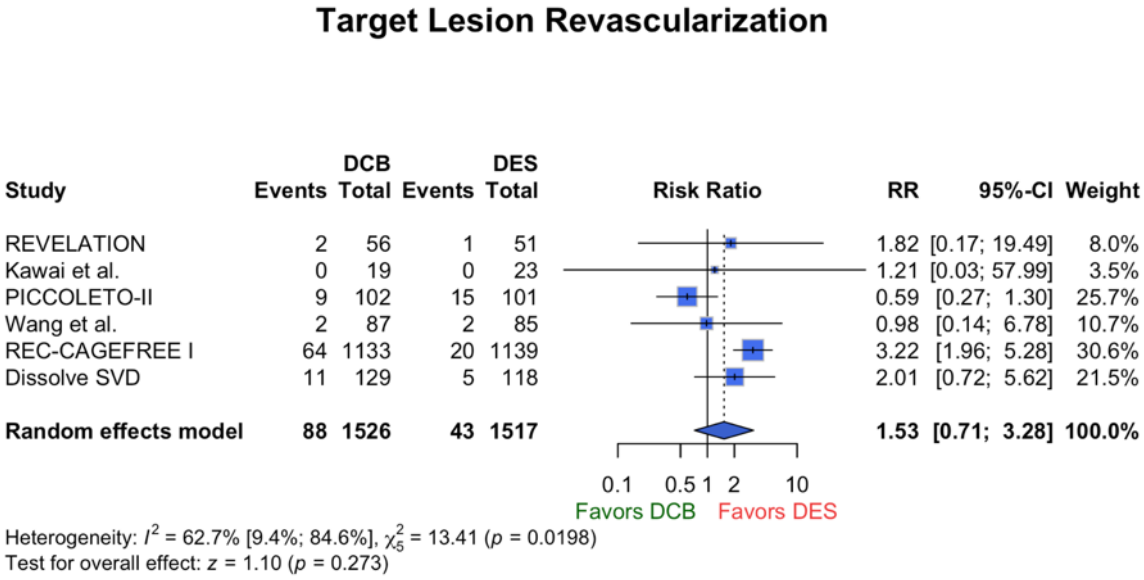
A)



B)

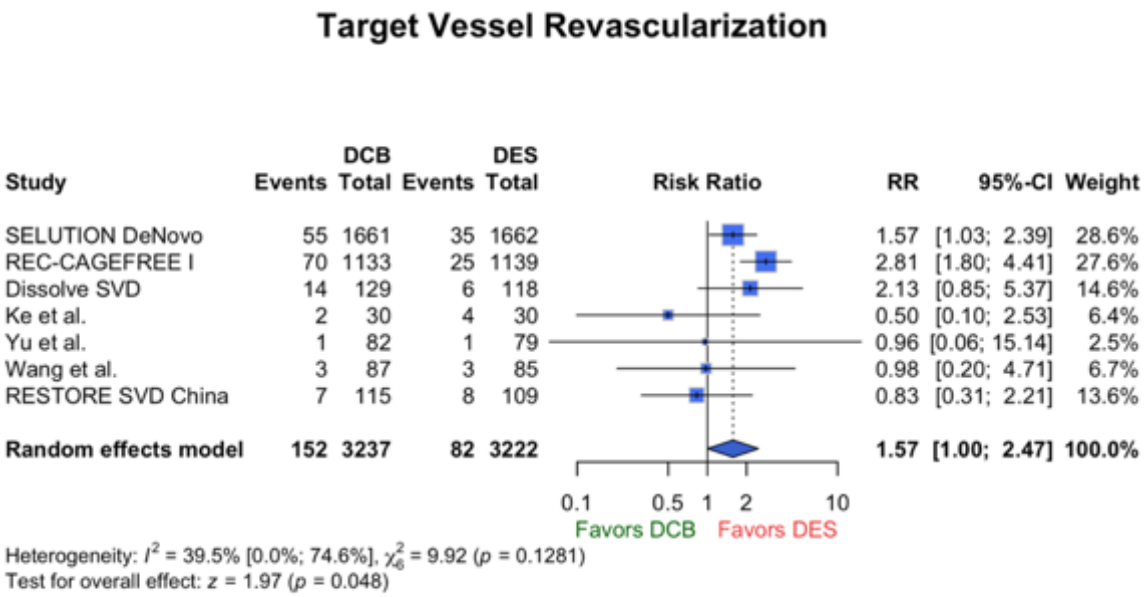

Minimal Luminal Diameter
Study
SMD
SE(SMD)
DCB Total
DES Total
Standardised Mean Difference
SMD
95%-CI
Weight
Nishiyama et al. -0.4132 0.2624 27 33 -0.41 [-0.93; 0.10] 5.1%
REVELATION -0.5730 0.2229 42 42 -0.57 [-1.01; -0.14] 6.4%
Yu et al. -0.6770 0.1670 79 73 -0.68 [-1.00; -0.35] 9.1%
Kawai et al. -0.0773 0.3133 19 22 -0.08 [-0.69; 0.54] 3.9%
PICCOLETO-II -0.5272 0.1408 105 104 -0.53 [-0.80; -0.25] 10.8%
Wang et al. -0.2887 0.1637 77 74 -0.29 [-0.61; 0.03] 9.3%
Gobić et al. -0.3725 0.2543 32 31 -0.37 [-0.87; 0.13] 5.3%
Ke et al. -0.2959 0.2597 30 30 -0.30 [-0.80; 0.21] 5.2%
Dissolve SVD -0.4518 0.1387 117 98 -0.45 [-0.72; -0.18] 11.0%
RESTORE SVD China -0.8478 0.1505 100 93 -0.85 [-1.14; -0.55] 10.2%
Filled: Gobić et al. -0.8189 0.2543 32 31 -0.82 [-1.32; -0.32] 5.3%
Filled: Ke et al. -0.8954 0.2597 30 30 -0.90 [-1.40; -0.39] 5.2%
Filled: Wang et al. -0.9027 0.1637 77 74 -0.90 [-1.22; -0.58] 9.3%
Filled: Kawai et al. -1.1141 0.3133 19 22 -1.11 [-1.73; -0.50] 3.9%
Random effects model 786 757 -0.59 [-0.73; -0.46] 100.0%
-1.5 -1 -0.5 0 0.5 1 1.5
Favors DCB
Favors DES
Heterogeneity: I^2 = 39.7% [0.0%; 68.0%], χ^2_{13} = 21.57 (p = 0.0624)
Test for overall effect: z = -8.69 (p < 0.001)

Supplementary Figure 15. Sensitivity analysis excluding trials that report target vessel revascularization instead of target lesion revascularization and/or non-Academic Research Consortium target lesion revascularization definitions

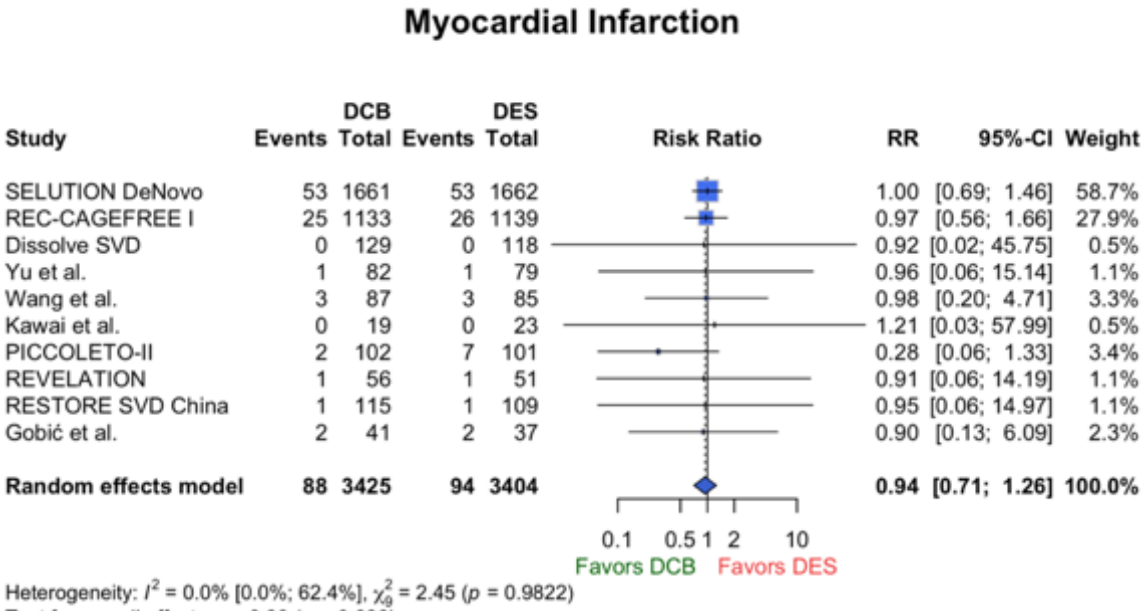


Supplementary Figure 16. Sensitivity analysis by excluding the trial utilizing a paclitaxel-eluting stent in the control arm

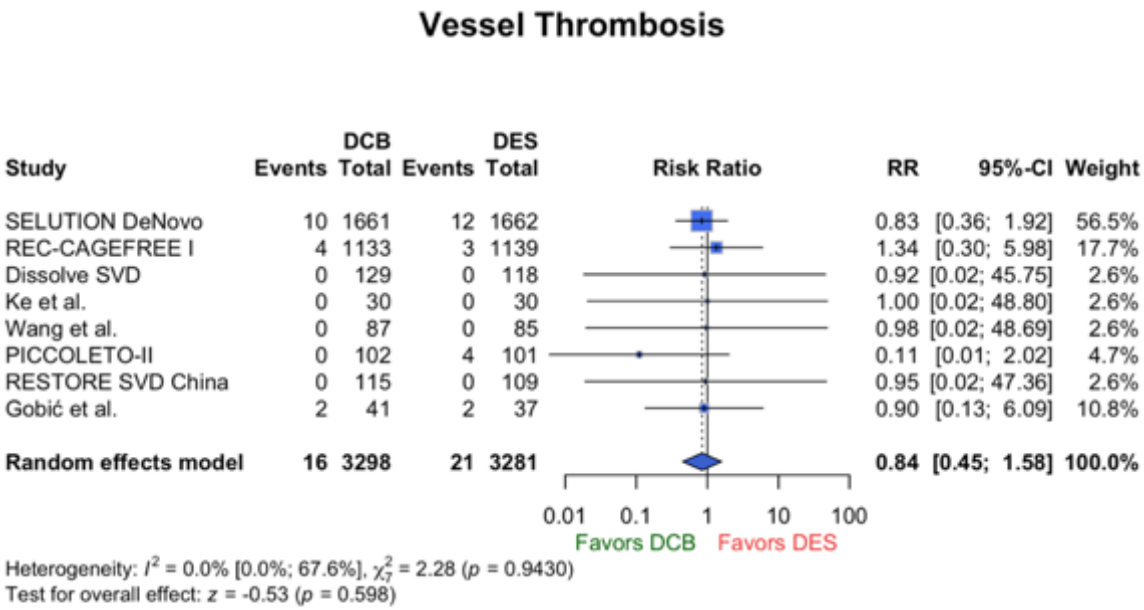
A)



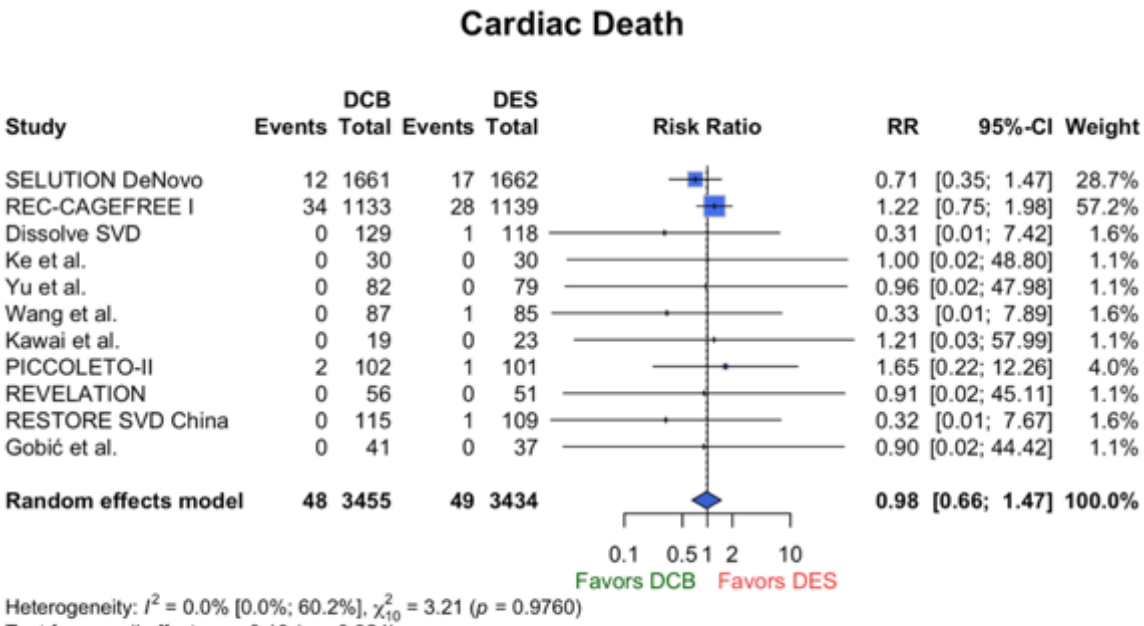
B)



C)

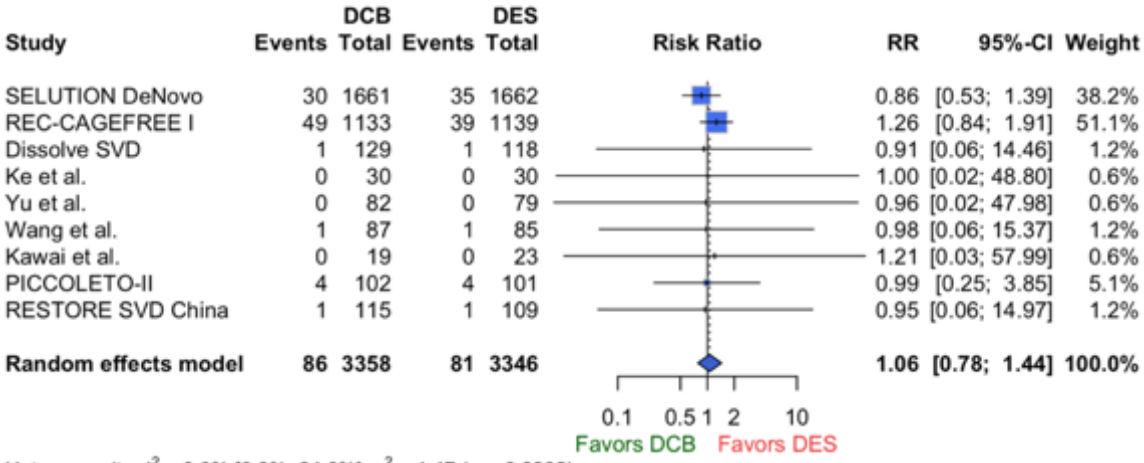

Vessel Thrombosis
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 10 1661 12 1662 0.83 [0.36; 1.92] 56.5%
REC-CAGEFREE I 4 1133 3 1139 1.34 [0.30; 5.98] 17.7%
Dissolve SVD 0 129 0 118 0.92 [0.02; 45.75] 2.6%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 2.6%
Wang et al. 0 87 0 85 0.98 [0.02; 48.69] 2.6%
PICCOLETO-II 0 102 4 101 0.11 [0.01; 2.02] 4.7%
RESTORE SVD China 0 115 0 109 0.95 [0.02; 47.36] 2.6%
Gobić et al. 2 41 2 37 0.90 [0.13; 6.09] 10.8%
Random effects model 16 3298 21 3281 0.84 [0.45; 1.58] 100.0%
0.01 0.1 1 10 100
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 67.6%], χ^2_7 = 2.28 (p = 0.9430)
Test for overall effect: z = -0.53 (p = 0.598)

D)


Cardiac Death
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 12 1661 17 1662 0.71 [0.35; 1.47] 28.7%
REC-CAGEFREE I 34 1133 28 1139 1.22 [0.75; 1.98] 57.2%
Dissolve SVD 0 129 1 118 0.31 [0.01; 7.42] 1.6%
Ke et al. 0 30 0 30 1.00 [0.02; 48.80] 1.1%
Yu et al. 0 82 0 79 0.96 [0.02; 47.98] 1.1%
Wang et al. 0 87 1 85 0.33 [0.01; 7.89] 1.6%
Kawai et al. 0 19 0 23 1.21 [0.03; 57.99] 1.1%
PICCOLETO-II 2 102 1 101 1.65 [0.22; 12.26] 4.0%
REVELATION 0 56 0 51 0.91 [0.02; 45.11] 1.1%
RESTORE SVD China 0 115 1 109 0.32 [0.01; 7.67] 1.6%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 1.1%
Random effects model 48 3455 49 3434 0.98 [0.66; 1.47] 100.0%
0.1 0.5 1 2 10
Favors DCB Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 60.2%], χ^2_{10} = 3.21 (p = 0.9760)
Test for overall effect: z = -0.10 (p = 0.924)

E)

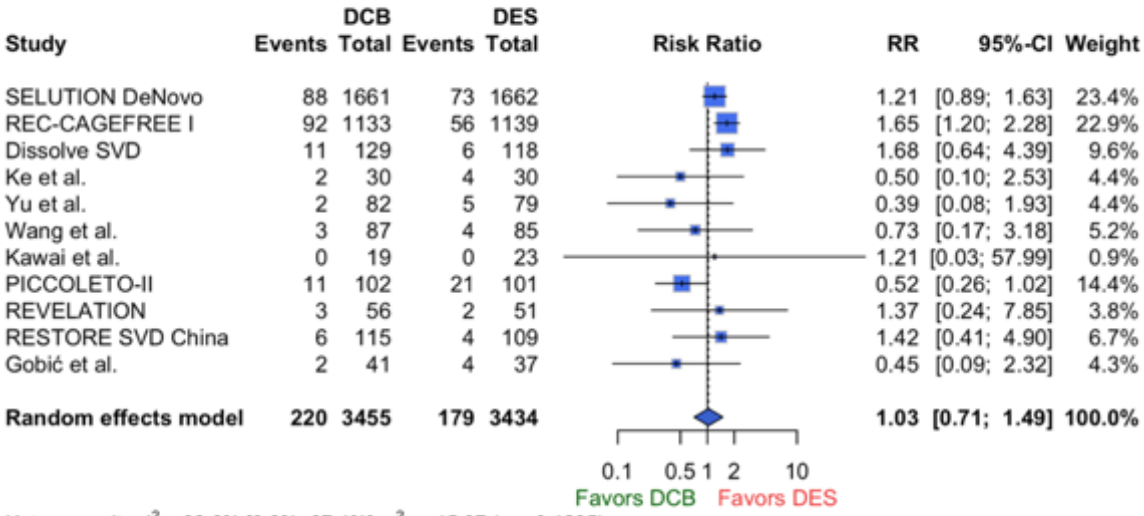
All-Cause Death



Heterogeneity: I^2 = 0.0% [0.0%; 64.8%], χ^2_8 = 1.47 (p = 0.9932)
Test for overall effect: z = 0.38 (p = 0.706)

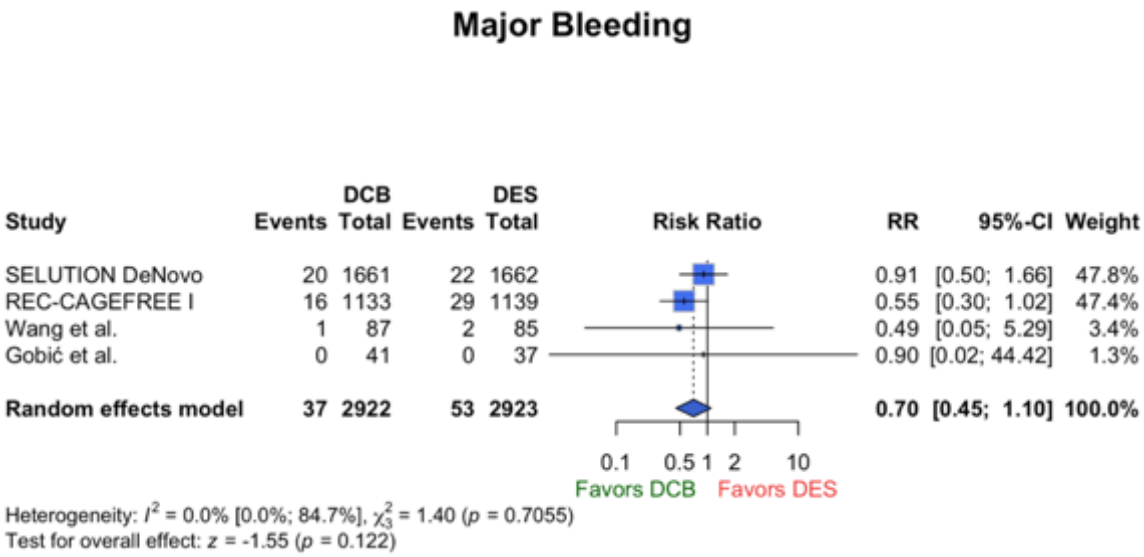
F)

Major Adverse Cardiovascular Events



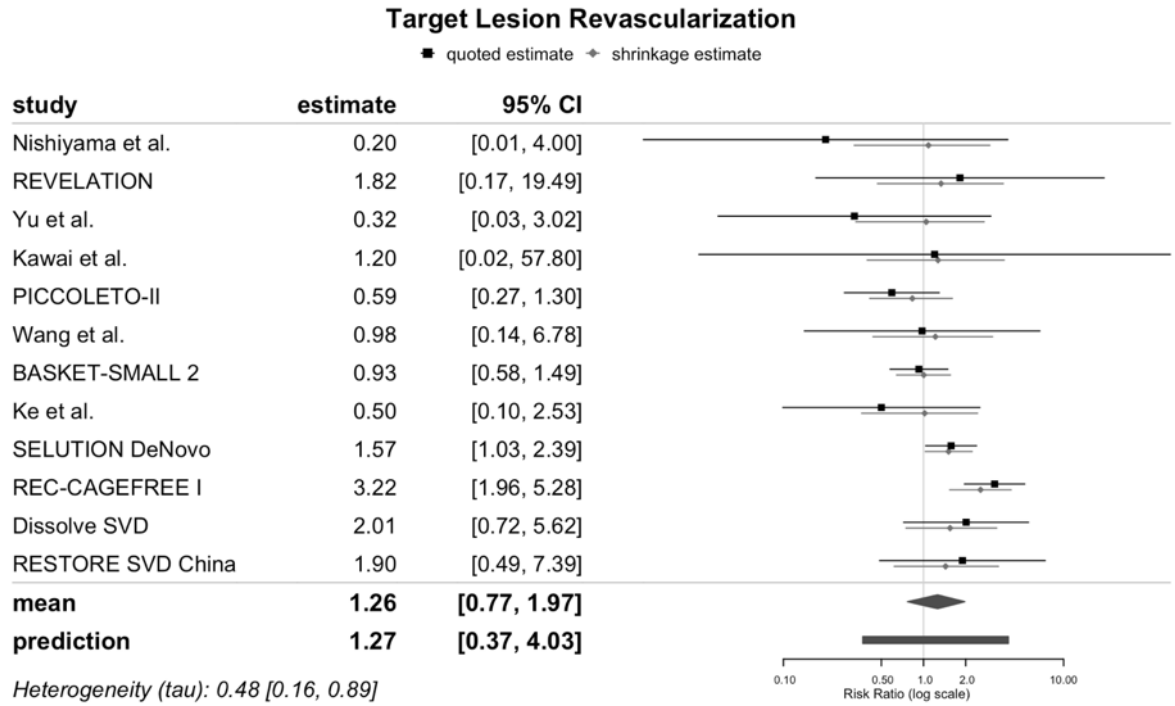
Heterogeneity: I^2 = 33.6% [0.0%; 67.4%], χ^2_{10} = 15.07 (p = 0.1295)
Test for overall effect: z = 0.15 (p = 0.878)

G)

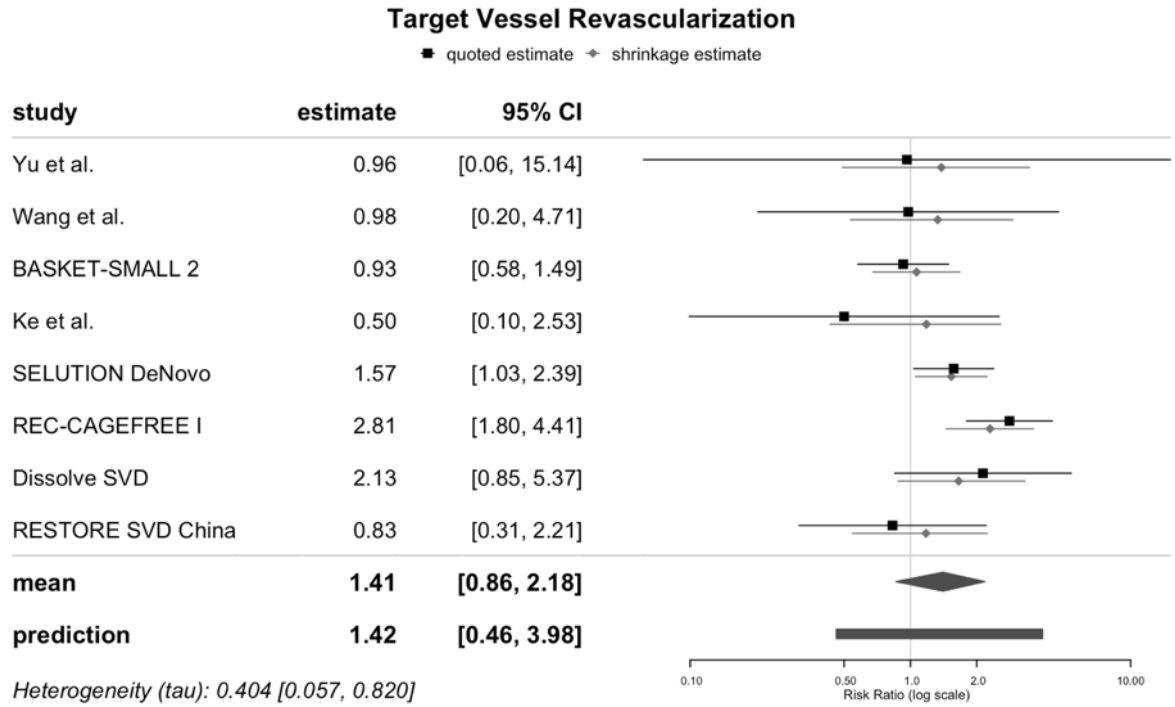

Major Bleeding
Study
DCB Events Total
DES Events Total
Risk Ratio
RR 95%-CI Weight
SELUTION DeNovo 20 1661 22 1662 0.91 [0.50; 1.66] 47.8%
REC-CAGEFREE I 16 1133 29 1139 0.55 [0.30; 1.02] 47.4%
Wang et al. 1 87 2 85 0.49 [0.05; 5.29] 3.4%
Gobić et al. 0 41 0 37 0.90 [0.02; 44.42] 1.3%
Random effects model 37 2922 53 2923 0.70 [0.45; 1.10] 100.0%
0.1 0.5 1 2 10
Favors DCB
Favors DES
Heterogeneity: I^2 = 0.0% [0.0%; 84.7%], χ^2_3 = 1.40 (p = 0.7055)
Test for overall effect: z = -1.55 (p = 0.122)

Supplementary Figure 17. Bayesian sensitivity analysis for primary (A), and secondary outcomes (B-I).

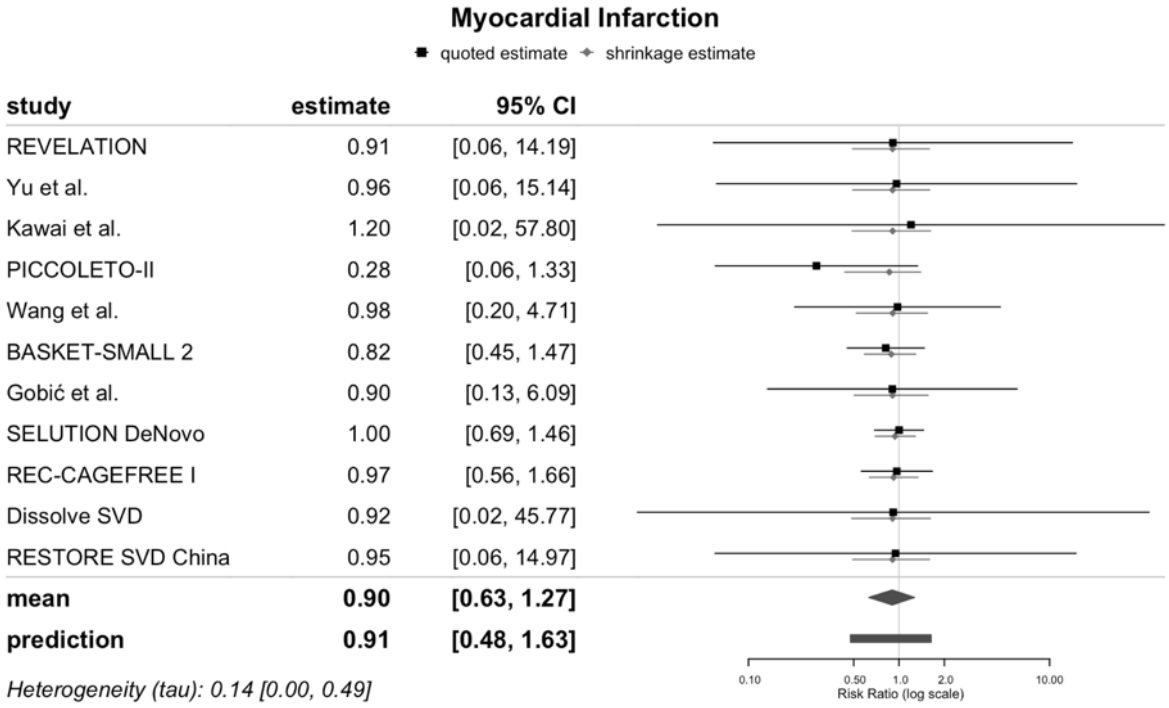
A)



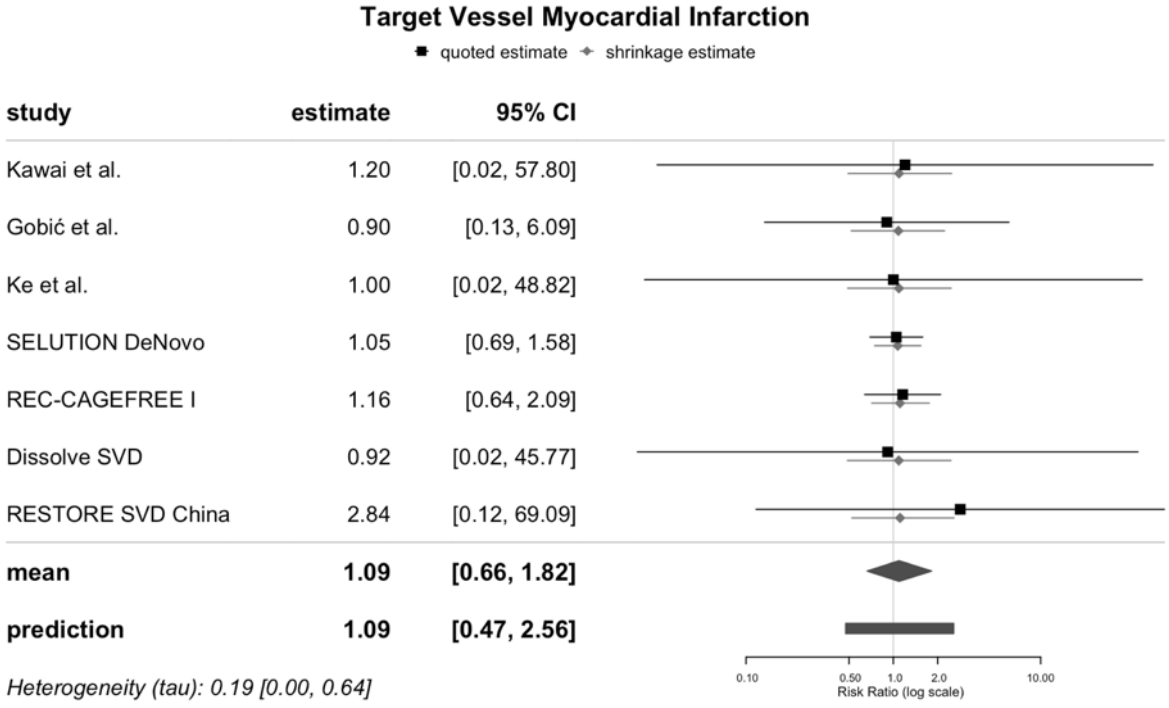
B)



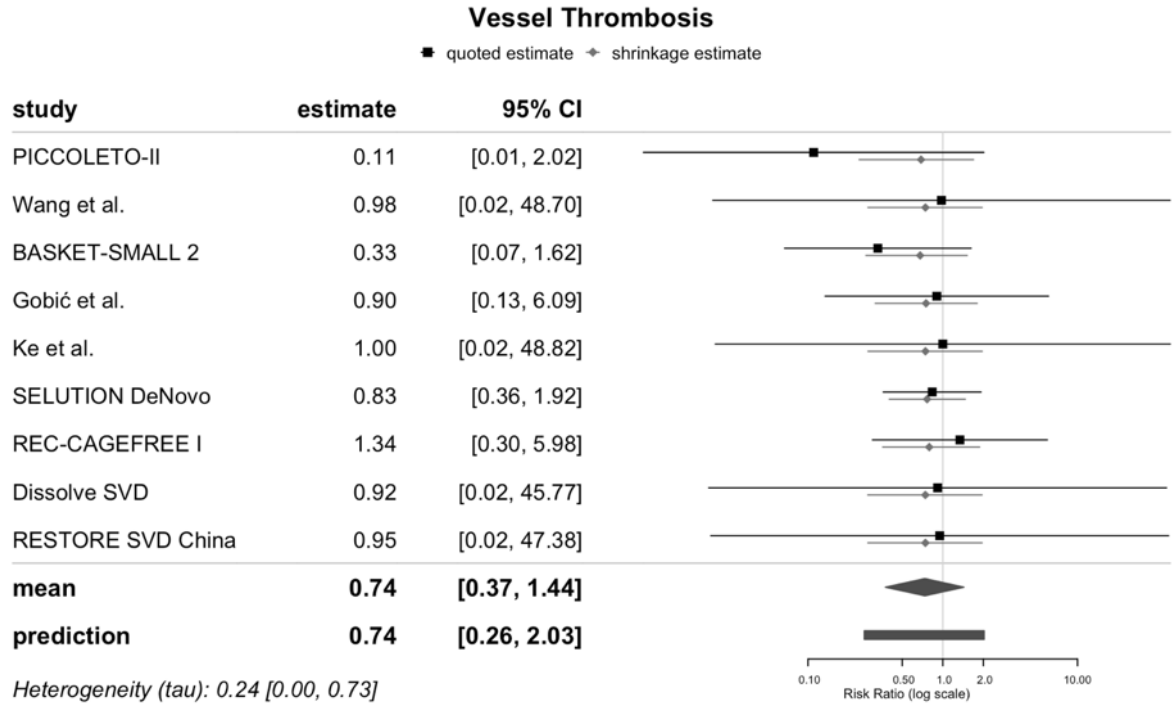
C)


Myocardial Infarction
quoted estimate
shrinkage estimate
study
estimate
95% CI
REVELATION 0.91 [0.06, 14.19]
Yu et al. 0.96 [0.06, 15.14]
Kawai et al. 1.20 [0.02, 57.80]
PICCOLETO-II 0.28 [0.06, 1.33]
Wang et al. 0.98 [0.20, 4.71]
BASKET-SMALL 2 0.82 [0.45, 1.47]
Gobić et al. 0.90 [0.13, 6.09]
SELUTION DeNovo 1.00 [0.69, 1.46]
REC-CAGEFREE I 0.97 [0.56, 1.66]
Dissolve SVD 0.92 [0.02, 45.77]
RESTORE SVD China 0.95 [0.06, 14.97]
mean 0.90 [0.63, 1.27]
prediction 0.91 [0.48, 1.63]
Heterogeneity (tau): 0.14 [0.00, 0.49]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

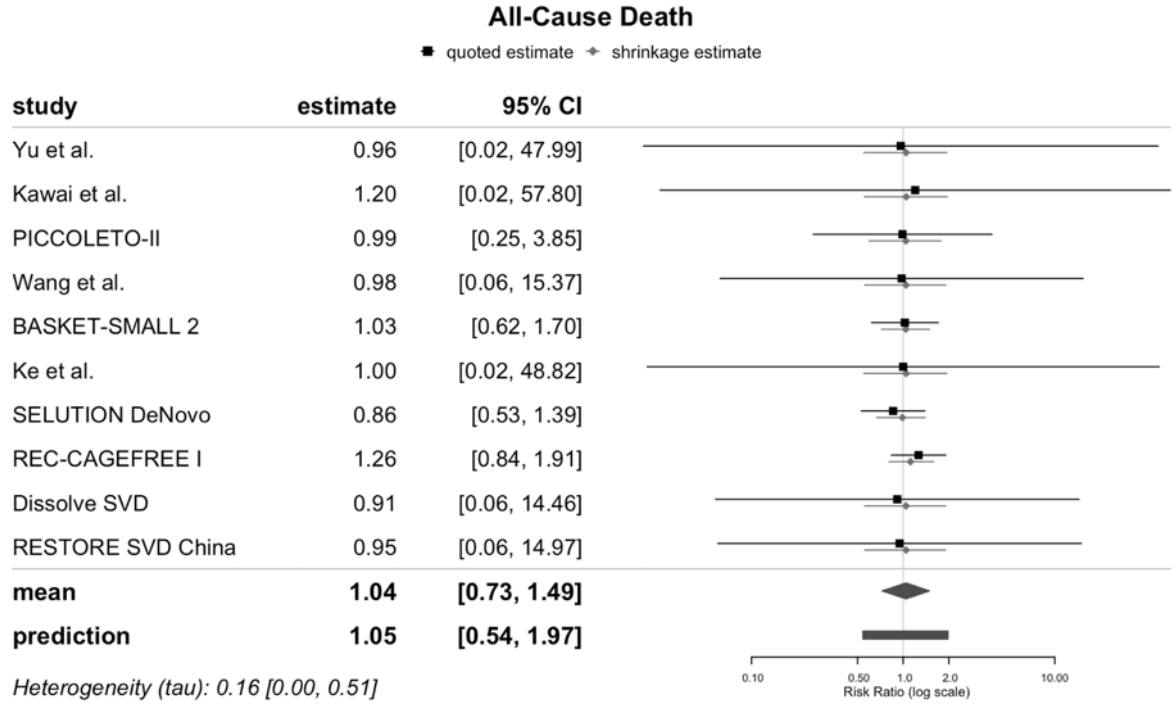
D)


Target Vessel Myocardial Infarction
quoted estimate
shrinkage estimate
study
estimate
95% CI
Kawai et al. 1.20 [0.02, 57.80]
Gobić et al. 0.90 [0.13, 6.09]
Ke et al. 1.00 [0.02, 48.82]
SELUTION DeNovo 1.05 [0.69, 1.58]
REC-CAGEFREE I 1.16 [0.64, 2.09]
Dissolve SVD 0.92 [0.02, 45.77]
RESTORE SVD China 2.84 [0.12, 69.09]
mean 1.09 [0.66, 1.82]
prediction 1.09 [0.47, 2.56]
Heterogeneity (tau): 0.19 [0.00, 0.64]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

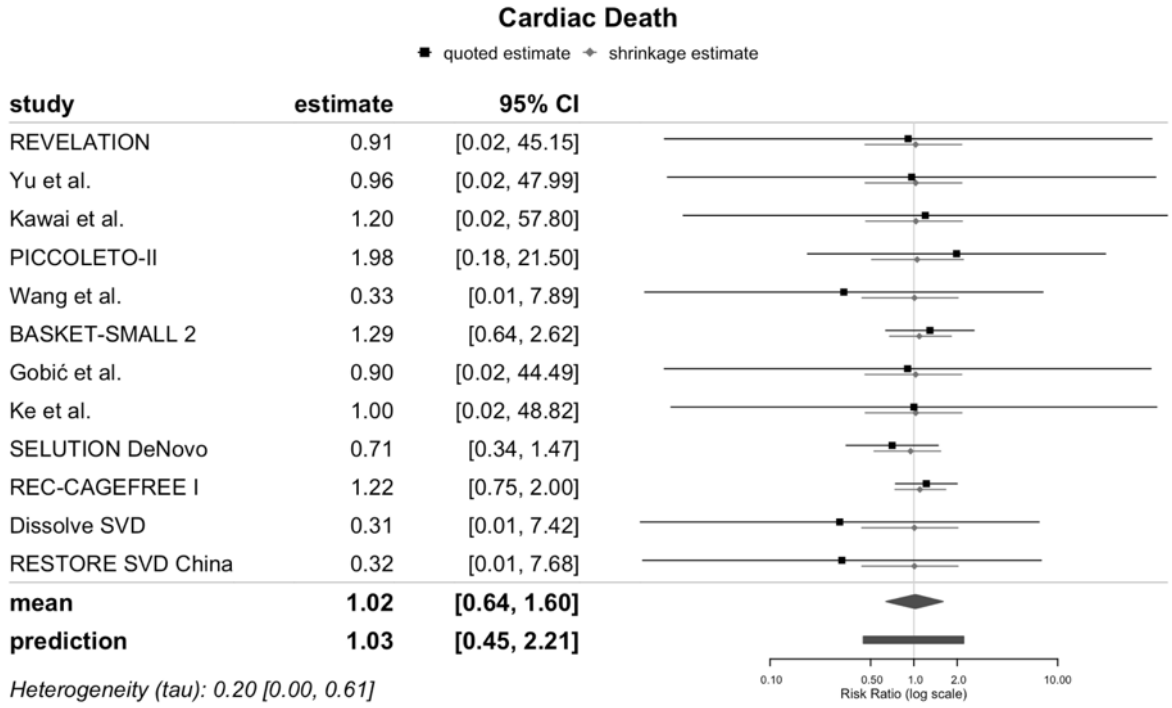
E)


Vessel Thrombosis
quoted estimate
shrinkage estimate
study
estimate
95% CI
PICCOLETO-II 0.11 [0.01, 2.02]
Wang et al. 0.98 [0.02, 48.70]
BASKET-SMALL 2 0.33 [0.07, 1.62]
Gobić et al. 0.90 [0.13, 6.09]
Ke et al. 1.00 [0.02, 48.82]
SELUTION DeNovo 0.83 [0.36, 1.92]
REC-CAGEFREE I 1.34 [0.30, 5.98]
Dissolve SVD 0.92 [0.02, 45.77]
RESTORE SVD China 0.95 [0.02, 47.38]
mean 0.74 [0.37, 1.44]
prediction 0.74 [0.26, 2.03]
Heterogeneity (tau): 0.24 [0.00, 0.73]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

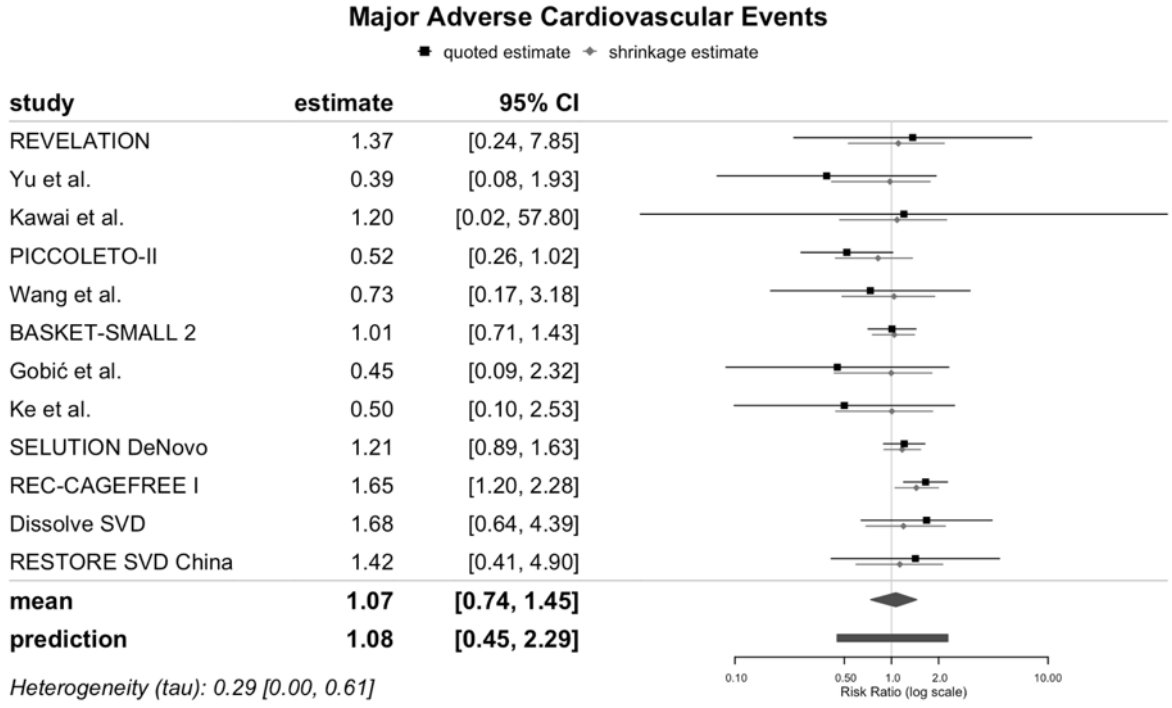
F)


All-Cause Death
quoted estimate
shrinkage estimate
study
estimate
95% CI
Yu et al. 0.96 [0.02, 47.99]
Kawai et al. 1.20 [0.02, 57.80]
PICCOLETO-II 0.99 [0.25, 3.85]
Wang et al. 0.98 [0.06, 15.37]
BASKET-SMALL 2 1.03 [0.62, 1.70]
Ke et al. 1.00 [0.02, 48.82]
SELUTION DeNovo 0.86 [0.53, 1.39]
REC-CAGEFREE I 1.26 [0.84, 1.91]
Dissolve SVD 0.91 [0.06, 14.46]
RESTORE SVD China 0.95 [0.06, 14.97]
mean 1.04 [0.73, 1.49]
prediction 1.05 [0.54, 1.97]
Heterogeneity (tau): 0.16 [0.00, 0.51]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

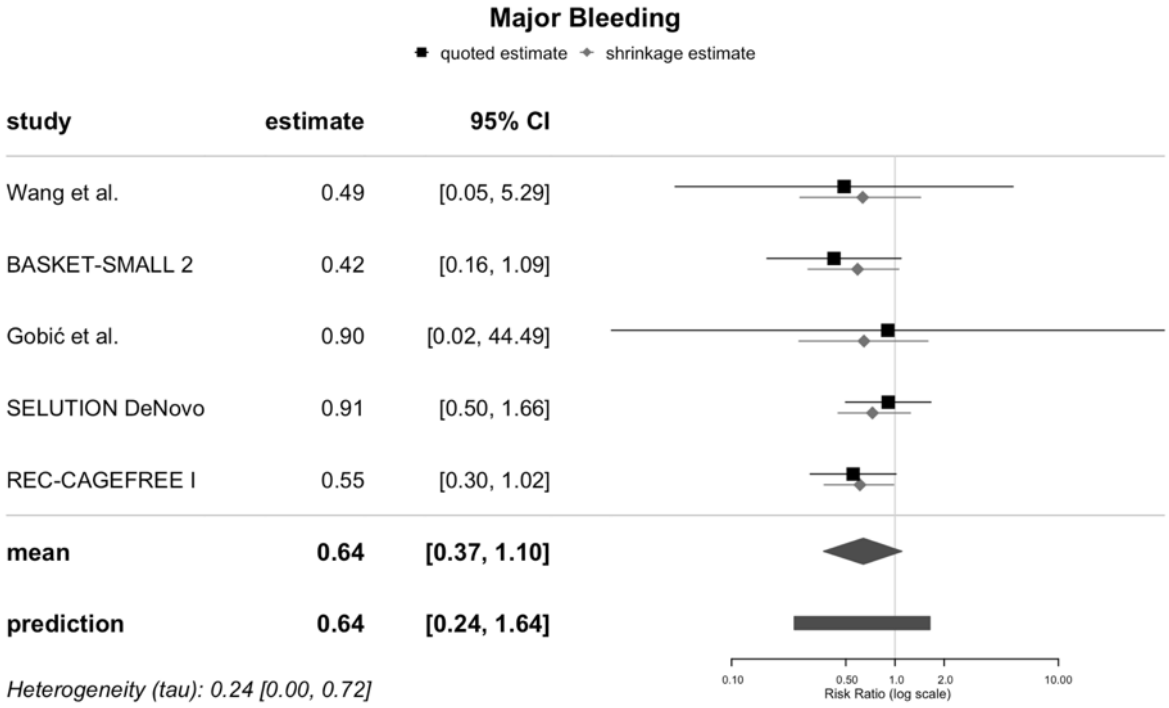
G)


Cardiac Death
quoted estimate
shrinkage estimate
study
estimate
95% CI
REVELATION 0.91 [0.02, 45.15]
Yu et al. 0.96 [0.02, 47.99]
Kawai et al. 1.20 [0.02, 57.80]
PICCOLETO-II 1.98 [0.18, 21.50]
Wang et al. 0.33 [0.01, 7.89]
BASKET-SMALL 2 1.29 [0.64, 2.62]
Gobić et al. 0.90 [0.02, 44.49]
Ke et al. 1.00 [0.02, 48.82]
SELUTION DeNovo 0.71 [0.34, 1.47]
REC-CAGEFREE I 1.22 [0.75, 2.00]
Dissolve SVD 0.31 [0.01, 7.42]
RESTORE SVD China 0.32 [0.01, 7.68]
mean 1.02 [0.64, 1.60]
prediction 1.03 [0.45, 2.21]
Heterogeneity (tau): 0.20 [0.00, 0.61]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

H)

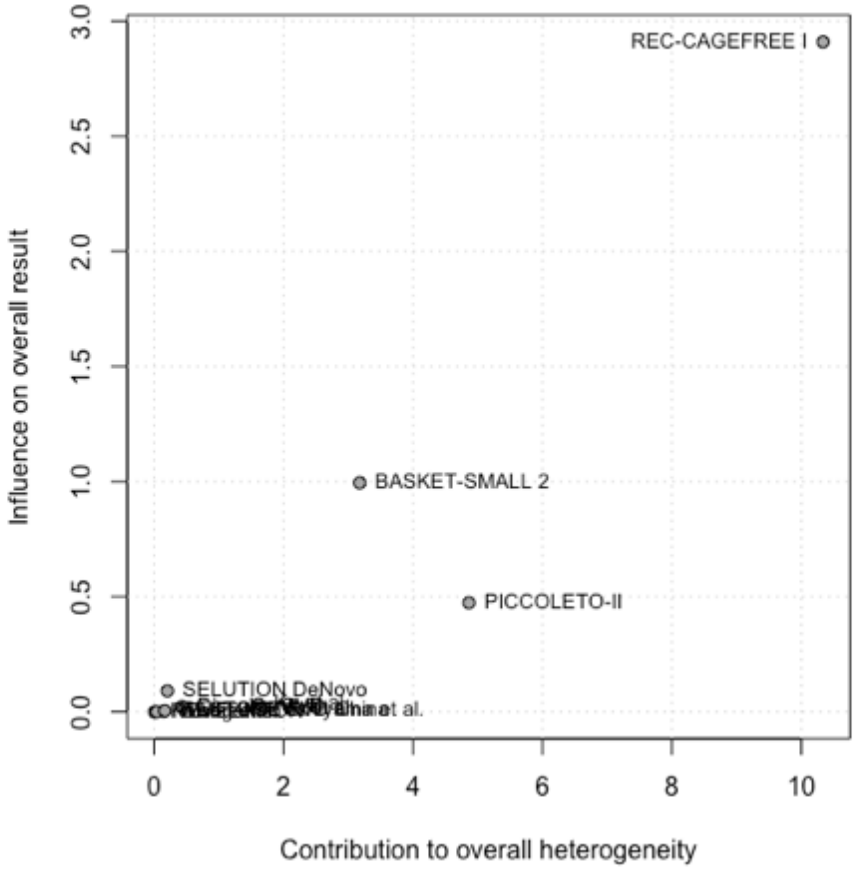

Major Adverse Cardiovascular Events
quoted estimate
shrinkage estimate
study
estimate
95% CI
REVELATION 1.37 [0.24, 7.85]
Yu et al. 0.39 [0.08, 1.93]
Kawai et al. 1.20 [0.02, 57.80]
PICCOLETO-II 0.52 [0.26, 1.02]
Wang et al. 0.73 [0.17, 3.18]
BASKET-SMALL 2 1.01 [0.71, 1.43]
Gobić et al. 0.45 [0.09, 2.32]
Ke et al. 0.50 [0.10, 2.53]
SELUTION DeNovo 1.21 [0.89, 1.63]
REC-CAGEFREE I 1.65 [1.20, 2.28]
Dissolve SVD 1.68 [0.64, 4.39]
RESTORE SVD China 1.42 [0.41, 4.90]
mean 1.07 [0.74, 1.45]
prediction 1.08 [0.45, 2.29]
Heterogeneity (tau): 0.29 [0.00, 0.61]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

I)

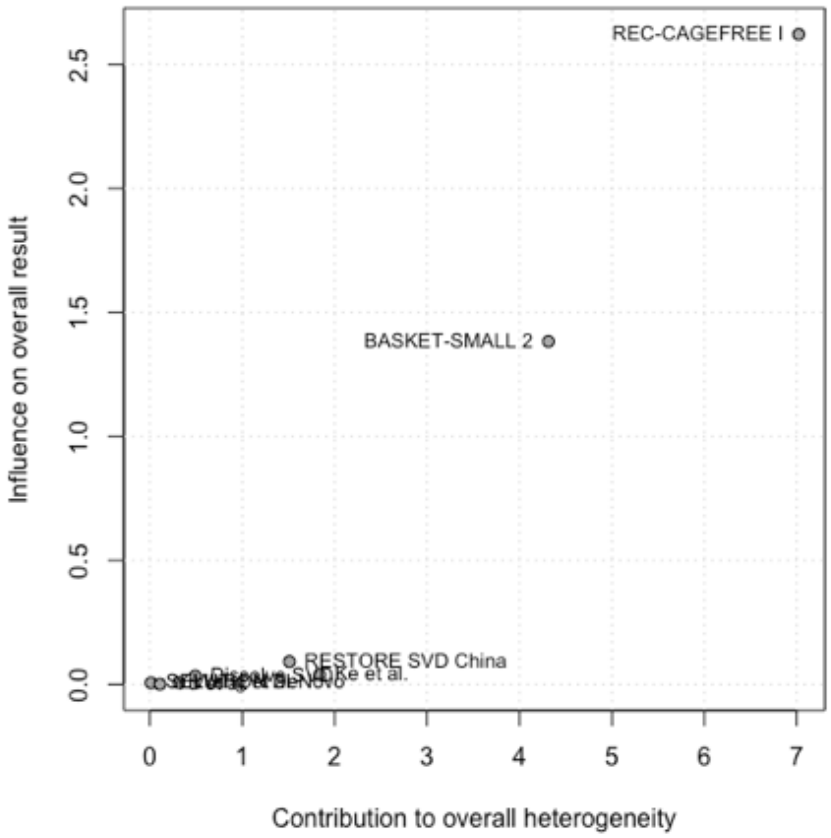

Major Bleeding
quoted estimate
shrinkage estimate
study
estimate
95% CI
Wang et al.
0.49
[0.05, 5.29]
BASKET-SMALL 2
0.42
[0.16, 1.09]
Gobić et al.
0.90
[0.02, 44.49]
SELUTION DeNovo
0.91
[0.50, 1.66]
REC-CAGEFREE I
0.55
[0.30, 1.02]
mean
0.64
[0.37, 1.10]
prediction
0.64
[0.24, 1.64]
Heterogeneity (tau): 0.24 [0.00, 0.72]
0.10
0.50
1.0
2.0
10.00
Risk Ratio (log scale)

Supplementary Figure 18. Baujat plots for endpoints with high heterogeneity, i.e., target lesion revascularization (A), target vessel revascularization (B), and late lumen loss (C)

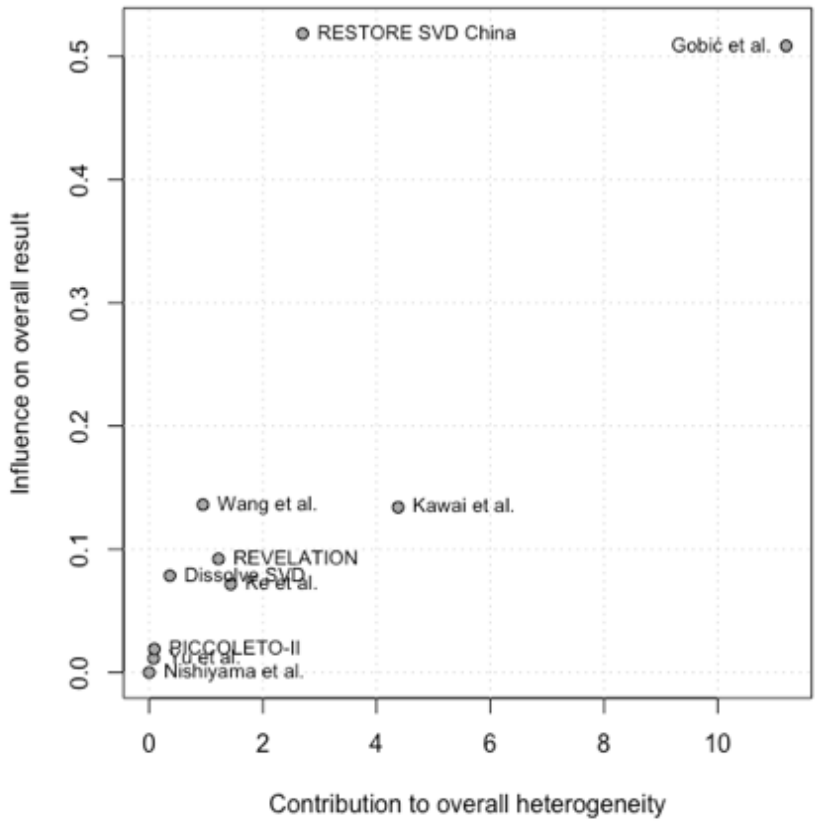
A)



B)

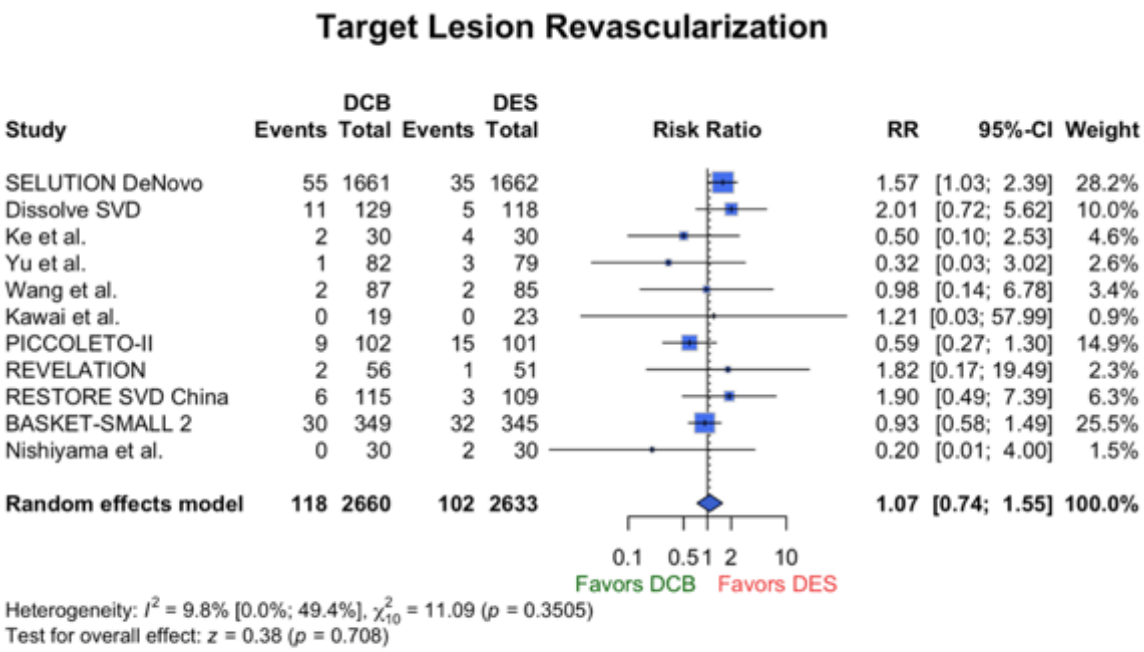

REC-CAGEFREE I
BASKET-SMALL 2
RESTORE SVD China
Influence on overall result
Contribution to overall heterogeneity
0.0
0.5
1.0
1.5
2.0
2.5
0
1
2
3
4
5
6
7

C)

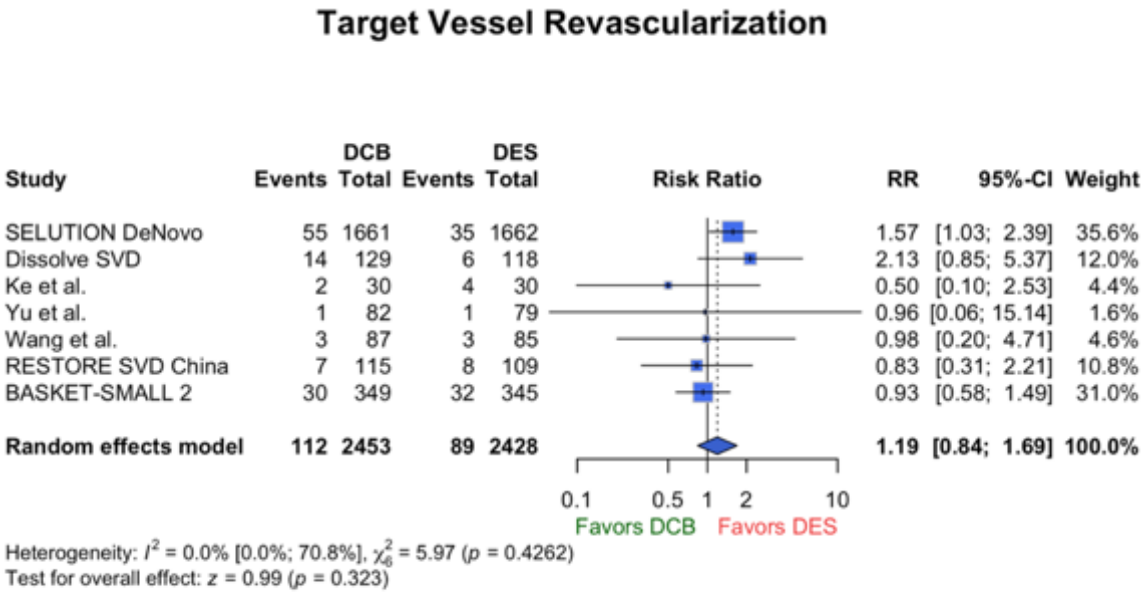

RESTORE SVD China
Gobić et al.
Wang et al.
Kawai et al.
REVELATION
Dissolve SVD
Ke et al.
PICCOLETO-II
Yu et al.
Nishiyama et al.
Influence on overall result
0.0
0.1
0.2
0.3
0.4
0.5
0
2
4
6
8
10
Contribution to overall heterogeneity

Supplementary Figure 19. Sensitivity analysis by excluding the trials that contributed the most to overall heterogeneity for target lesion revascularization (A), target vessel revascularization (B), and late lumen loss (C)

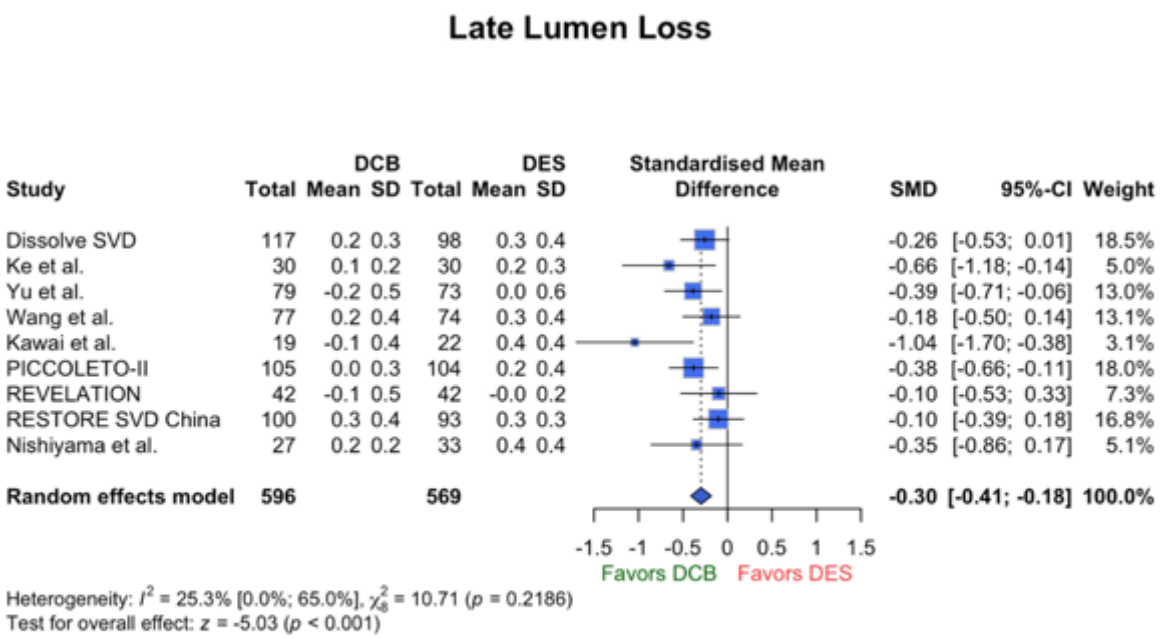
A)



B)



C)


Late Lumen Loss
Study
DCB Total Mean SD
DES Total Mean SD
Standardised Mean Difference
SMD 95%-CI Weight
Dissolve SVD 117 0.2 0.3 98 0.3 0.4 -0.26 [-0.53; 0.01] 18.5%
Ke et al. 30 0.1 0.2 30 0.2 0.3 -0.66 [-1.18; -0.14] 5.0%
Yu et al. 79 -0.2 0.5 73 0.0 0.6 -0.39 [-0.71; -0.06] 13.0%
Wang et al. 77 0.2 0.4 74 0.3 0.4 -0.18 [-0.50; 0.14] 13.1%
Kawai et al. 19 -0.1 0.4 22 0.4 0.4 -1.04 [-1.70; -0.38] 3.1%
PICCOLETO-II 105 0.0 0.3 104 0.2 0.4 -0.38 [-0.66; -0.11] 18.0%
REVELATION 42 -0.1 0.5 42 -0.0 0.2 -0.10 [-0.53; 0.33] 7.3%
RESTORE SVD China 100 0.3 0.4 93 0.3 0.3 -0.10 [-0.39; 0.18] 16.8%
Nishiyama et al. 27 0.2 0.2 33 0.4 0.4 -0.35 [-0.86; 0.17] 5.1%
Random effects model 596 569 -0.30 [-0.41; -0.18] 100.0%
-1.5 -1 -0.5 0 0.5 1 1.5
Favors DCB
Favors DES
Heterogeneity: I^2 = 25.3% [0.0%; 65.0%], χ^2_8 = 10.71 (p = 0.2186)
Test for overall effect: z = -5.03 (p < 0.001)