#### Supplementary Tables

**Table S1** PRISMA checklist

**Table S2** Literature search

 Table S3 Quality assessment of included studies (Newcastle Ottawa Scale)

#### Supplementary Figures

Figure S1. Additional analyses for pooled risk in ACM outcome

A. Subgroup analysis of pooled risk in ACM outcome (1-year follow-up)

B. Baujat plot of pooled risk in ACM outcome (1-year follow-up)

C. Leave-one-out sensitivity analysis of pooled risk in ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.

Figure S2. Pooled sensitivity of high NLR to Predict ACM

Figure S3. Additional analyses for sensitivity in ACM outcome

A. Subgroup analysis of pooled sensititvity in ACM outcome (1-year follow-up)

B. Baujat plot of poolod sensitivity in ACM outcome (1-year follow-up)

C. Leave-one-out sensitivity analysis of pooled sensitivity in the ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.

Figure S4. Pooled specificity of high NLR to Predict ACM

**Figure S5.** Additional analyses for specificity in ACM outcome

A. Subgroup analysis of pooled specificity in ACM outcome (1-year follow-up)

B. Baujat plot of poolod specificity in ACM outcome (1-year follow-up)

C. Leave-one-out sensitivity analysis of pooled specificity in the ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.

Figure S6. Pooled prevalence of ACM between high and low NLR group

Figure S7. Pooled PPV of high NLR to predict ACM

Figure S8. Pooled NPV of high NLR to predict ACM

**Figure S9**. NLR and MACE association (TOP) and its sensitivity and specificity top Predict MACE (Bottom)

Figure S10. Additional analyses for pooled risk in MALE outcome

- A. Subgroup analysis of pooled risk in MALE Outcome (1-year follow-up)
- B. Baujat plot of pooled risk in MALE Outcome (1-year follow-up)
- C. Leave-one-out sensitivity analysis of pooled risk in MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.

Figure S11. Pooled sensitivity of high NLR to Predict MALE

Figure S12. Additional analyses for sensitivity in MALE outcome

- A. Subgroup Analysis of Pooled Sensititvity in MALE outcome (1-year follow-up)
- B. Baujat Plot of Poolod Sensitivity in MALE outcome (1-year follow-up)
- C. Leave-one-out sensitivity analysis of Pooled Sensitivity in the MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.

Figure S13. Pooled specificity of high NLR to Predict MALE

Figure S14. Additional analyses for specificity in MALE outcome

- A. Subgroup analysis of pooled specificity in MALE outcome (1-year follow-up)
- B. Leave-one-out sensitivity analysis of pooled specificity in the MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.

Figure S15. Pooled prevalence of MALE between high and low NLR group

Figure S16. Pooled PPV of high NLR to predict MALE

Figure S17. Pooled NPV of high NLR to predict MALE

Table S1. PRISMA checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	p.1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	p. 3
INTRODUCTION	١		
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	p. 3
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	p. 4
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	p.5
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.	p.5
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	p.5
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.	p. 5-6
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.	p.6
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.	p.6
	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.	p.6
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.	p.6
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.	p.6-7
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	p.7

Section and Topic	Item #	Checklist item	Location where item is reported
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	p.7
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	p.7
	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.	p.7
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	p.7
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	p.7
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	p.7
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	N/A
RESULTS			
16b		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.	
		Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	p.8
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	p.8
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.	p. 11-17
Results of	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	p. 17
syntheses	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.	p. 11-18
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	p. 11-19
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	p. 11-19
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	N/A

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.	N/A					
DISCUSSION	•							
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	p. 18-20					
	23b	Discuss any limitations of the evidence included in the review.						
	23c	Discuss any limitations of the review processes used.						
	23d	Discuss implications of the results for practice, policy, and future research.	p. 20					
OTHER INFORM	//ATION							
Registration 24 and protocol		Provide registration information for the review, including register name and registration number, or state that the review was not registered.						
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	p. 5					
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/A					
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	p. 21					
Competing interests	26	Declare any competing interests of review authors.	p. 21					
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.	N/A					

Table S2. Literature search

#1 (("PAD") OR ("peripheral artery disease") OR ("peripheral arterial disease") OR ("intermittent claudication") OR ("limb ischemia"))

# #2 (("Neutrophil to Lymphocyte") OR ("Neutrophil to Lymphocyte Ratio") OR ("Neutrophil-to-Lymphocyte Ratio") OR ("NLR"))

Database	Keywords	Search Results	Search Time
PubMed	#1 AND #2	102	January 1, 2024
			(20:20, GMT+7)
Science Direct	#1 AND #2	29	January 1, 2024
			(20:20, GMT+7)
Scopus	#1 AND #2	1414	January 1, 2024
			(20:20, GMT+7)
Web of Science	#1 AND #2	102	January 1, 2024
			(20:20, GMT+7)
ProQuest	#1 AND #2	1468	January 1, 2024
			(20:20, GMT+7)
EBSCO	#1 AND #2	20	January 1, 2024
			(20:20, GMT+7)
Cochrane	#1 AND #2	2	January 1, 2024
Cocinanc	"1" (NO "E	_	(20:20, GMT+7)
			(20.20, 61411 17)

 Table S3. Quality Assessment of Included Studies (Newcastle Ottawa Scale)

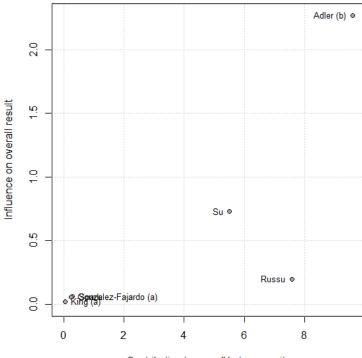
C4J	Ref.	Selection		1	Comparability Outcome			Total (8/8)	Conclusion		
Study		A	В	С	D	E	F	G	Н		
Cohort studies											
Adler, 2022	[42]	o	*	*	*	o	*	*	o	5	Moderate
Bath, 2019	[40]	*	*	*	*	0	*	*	o	6	Moderate
Ertruk, 2014	[43]	o	*	*	*	*	*	*	o	6	Moderate
Gonzalez- Fajardo, 2014	[45]	*	*	*	*	*	*	*	o	7	High
King, 2021	[41]	*	*	*	*	0	*	*	o	6	Moderate
Luo, 2015	[58]	o	*	*	*	*	*	*	o	6	Moderate
Russu, 2022	[44]	o	*	*	*	*	*	*	*	7	High
Spark, 2010	[39]	o	*	*	*	*	*	*	*	7	High
Su, 2021	[46]	o	*	*	*	0	*	*	o	5	Moderate

Figure S1. Additional analyses for pooled risk in ACM outcome

A. Subgroup analysis of pooled risk in ACM outcome (1-year follow-up)

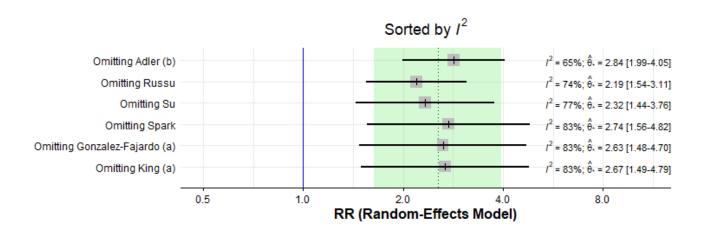
Subgroup	Number of Studies	Interaction P-value	Subgroups Risk Ratio	RR	95%-CI I2
Regio Asia Europe North America	1 2 3	0.03	-m- -m-	- 4.40 [ <sup>2</sup>	[2.44; 6.39] 1.19; 16.24] 83% [1.23; 2.61] 70%
Study Design Cohort Prospective Cohort Retrospective	3	0.07	+		[1.21; 2.72] 70% [1.89; 7.91] 78%
Cut-Off 3 to 4 4.1 to 4.9 5 or more	2 1 3	< 0.01	0.1 0.5 1 2 10	1.23	1.08; 16.74] 85% [0.84; 1.79] [1.80; 3.81] 58%

B. Baujat plot of pooled risk in ACM outcome (1-year follow-up)



Contribution to overall heterogeneity

C. Leave-one-out sensitivity analysis of pooled risk in ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.



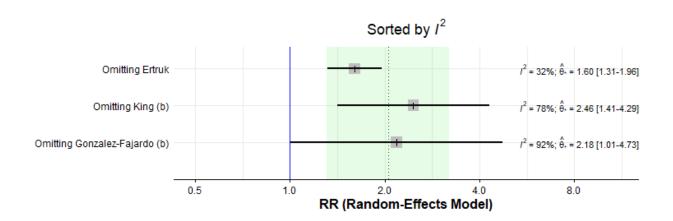


Figure S2. Pooled sensitivity of high NLR to predict ACM

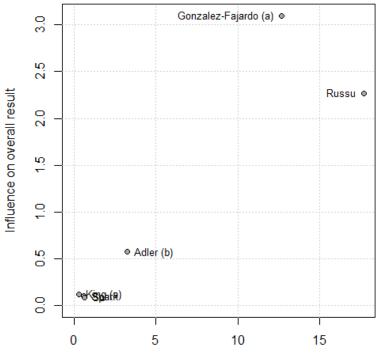
Study	Ref. Event	s Total	Forest Plot	Sensitivity (%)	95% CI
Inhospital ACM Bath	[40] 1	7 20		85.00	[62.11; 96.79]
30-day ACM Adler (a)	[42] 2	1 55		38.18	[25.41; 52.27]
1-year ACM Adler (b) Spark Gonzalez-Fajardo (a) King (a) Su Russu Random effects mode Heterogeneity: I <sup>2</sup> = 86%,	[39] 3 [45] 3 [41] 7 [46] 3 [44] 2	3 27 427		61.29 37.93 58.78 62.00 85.19	[33.74; 58.06] [48.07; 73.40] [27.74; 48.97] [49.85; 67.30] [47.17; 75.35] [66.27; 95.81] [45.34; 70.97]
2-year ACM Gonzalez-Fajardo (b) King (b) Ertruk Random effects mode Heterogeneity: I <sup>2</sup> = 87%,	[41] 12 [43] 4	3 75 457	- <del></del>	48.29 57.33	[23.69; 41.10] [42.11; 54.51] [45.38; 68.69] [31.35; 59.80]
3-year ACM Gonzalez-Fajardo (c) King (c) Random effects mode Heterogeneity: I <sup>2</sup> = 86%,	[41] 15	494	*	44.54	[24.71; 40.42] [39.24; 49.93] [26.60; 50.77]
4-year ACM Gonzalez-Fajardo (d) King (d) Random effects mode Heterogeneity: I <sup>2</sup> = 90%,	[41] 17 	603	<b>+</b>	40.86	[21.63; 35.14] [36.12; 45.72] [22.08; 47.22]
5-year ACM Adler (c) Gonzalez-Fajardo (e) Random effects mode Heterogeneity: I <sup>2</sup> = 89%,	[45] 5			27.09	[35.47; 57.65] [21.11; 33.76] [17.33; 55.17]

Figure S3. Additional analyses for sensitivity in ACM outcome

A. Subgroup analysis of pooled sensitivity in ACM outcome (1-year follow-up)

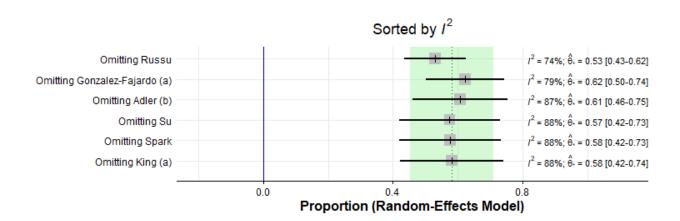
Subgroup	Number of Studies	Interaction P-value	Sensitivity of NLR	Sensitivity	95% CI 12
Regio Asia Europe North America	1 2 3	0.73	——————————————————————————————————————	61.35 [1	[48.55; 75.45] 15.04; 100.00] 97% [46.71; 64.39] 52%
Study Design Cohort Prospective Cohort Retrospective	3 3	0.06			[34.59; 61.44] 76% [52.09; 84.26] 82%
Cut-Off 3 to 4 4.1 to 4.9 5 or more	2 1 3	0.19	0 20 40 60 80 10	45.71 [ 53.31 [	[45.59; 97.30] 91% [34.04; 57.38] [37.42; 69.20] 83%

B. Baujat plot of poolod sensitivity in ACM outcome (1-year follow-up)



Contribution to overall heterogeneity

C. Leave-one-out sensitivity analysis of pooled sensitivity in the ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.



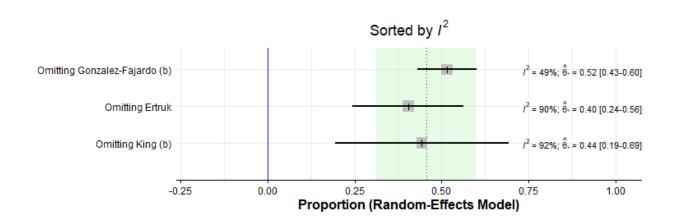


Figure S4. Pooled specificity of high NLR to predict ACM

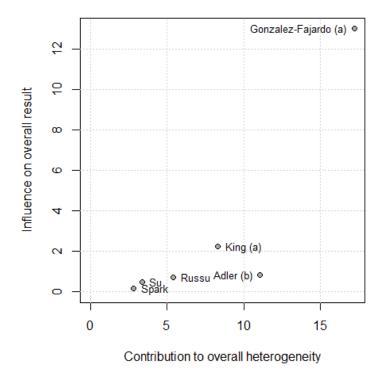
Study	Ref. Events	Total	Forest Plot	Specificity (%)	95% CI
Inhospital ACM Bath	[40] 936	2681		34.91	[33.11; 36.75]
30-day ACM Adler (a)	[42] 118	199	-	59.30	[52.12; 66.19]
1-year ACM Adler (b) Spark Gonzalez-Fajardo (a) King (a) Su Russu Random effects mode Heterogeneity: I <sup>2</sup> = 90%,		357 145 197 1389	——————————————————————————————————————	67.82 83.33 69.19 82.07 68.53	[53.05; 70.41] [56.94; 77.44] [79.67; 86.58] [64.11; 73.94] [74.84; 87.94] [61.55; 74.94] [65.64; 79.62]
2-year ACM Gonzalez-Fajardo (b) King (b) Ertruk Random effects mode Heterogeneity: I <sup>2</sup> = 81%,		225 383 1050	**************************************	73.33 76.76	[79.44; 86.62] [67.05; 78.99] [72.20; 80.90] [72.38; 83.85]
3-year ACM Gonzalez-Fajardo (c) King (c) Random effects mode Heterogeneity: I <sup>2</sup> = 70%,		140 555		77.14	[80.48; 87.70] [69.29; 83.81] [74.46; 88.33]
4-year ACM Gonzalez-Fajardo (d) King (d) Random effects mode Heterogeneity: I <sup>2</sup> = 26%,		67 446	<b>*</b>	77.61	[79.81; 87.46] [65.78; 86.89] [77.45; 87.62]
5-year ACM Adler (c) Gonzalez-Fajardo (e) Random effects mode Heterogeneity: $I^2 = 0\%$ , $\tau^2$		358 403	50 60 70 80	84.08	[62.91; 88.80] [79.87; 87.71] [79.90; 87.14]

Figure S5. Additional analyses for specificity in ACM outcome

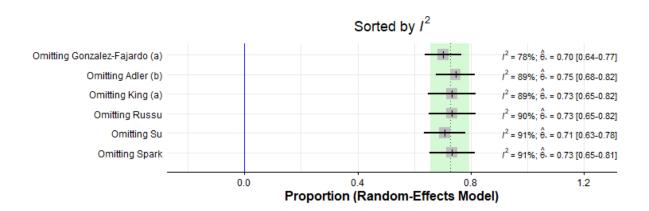
## A. Subgroup analysis of pooled specificity in ACM outcome (1-year follow-up)

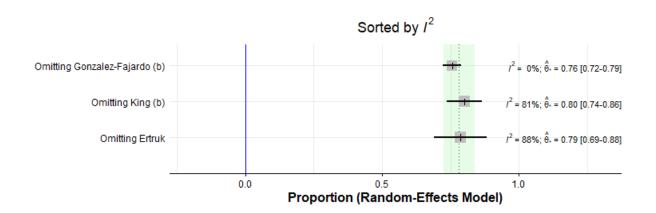
Subgroup	Number of Studies	Interaction P-value	Specificity of NLR	Specificity 95% CI I2
Regio Asia Europe North America	1 2 3	< 0.01	**	82.07 [75.83; 88.31] 76.20 [61.70; 90.70] 94% 67.23 [62.85; 71.60] 6%
Study Design Cohort Prospective Cohort Retrospective	3	0.84	- <u>R</u>	71.61 [58.56; 84.66] 93% 73.18 [64.64; 81.71] 84%
Cut-Off 3 to 4 4.1 to 4.9 5 or more	2 1 3	0.03 г 0	20 40 60 80 1	68.95 [65.10; 72.81] 0% 62.02 [53.64; 70.39] 78.68 [69.88; 87.49] 77%

## B. Baujat plot of poolod specificity in ACM outcome (1-year follow-up)



C. Leave-one-out sensitivity analysis of pooled specificity in the ACM outcome. Top: 1-year follow-up, Bottom: 2-year follow-up.





Subgroup	Number of Studies	Interaction P-value	Forest Plot	Prevalence (%)	95% CI	12
High NLR 1-year ACM 2-year ACM 3-year ACM 4-year ACM 5-year ACM	3 2 2	0.40		- 68.95	[	81% 97% 98% 99% 94%
Low NLR 1-year ACM 2-year ACM 3-year ACM 4-year ACM 5-year ACM	3 2 2	0.12	20 40 60 80		[8.70; 25.95] [3.39; 45.09] [1.81; 84.27] [3.47; 100.00] [21.26; 66.85]	94% 98% 99% 100% 93%

Figure S6. Pooled prevalence of ACM between high and low NLR group

Figure S7. Pooled PPV of high NLR to predict ACM

Study	Ref. Eve	nts '	Total	Forest Plot Pl	PV (%)	95% CI
Inhospital ACM Bath	[40]	17	1762		0.96	[ 0.56; 1.54]
30-day ACM Adler (a)	[42]	21	102	-	20.59	[13.22; 29.73]
1-year ACM Adler (b) Spark Gonzalez-Fajardo (a) King (a) Su Russu Random effects model Heterogeneity: I <sup>2</sup> = 81%, r		32 38 33 77 31 23	81 66 112 187 57 85 588	-*********-	29.46 41.18 54.39 27.06	[28.81; 50.99] [44.79; 69.66] [21.23; 38.82] [34.05; 48.59] [40.66; 67.64] [17.99; 37.79] [31.22; 50.70]
2-year ACM Gonzalez-Fajardo (b) King (b) Ertruk Random effects model Heterogeneity: I <sup>2</sup> = 97%, r	[43]	38 127 43 p < 0	112 187 132 431	——————————————————————————————————————	67.91 32.58	[25.25; 43.48] [60.71; 74.54] [24.68; 41.27] [22.15; 67.72]
3-year ACM Gonzalez-Fajardo (c) King (c) Random effects model Heterogeneity: I <sup>2</sup> = 98%, to		47 155 p < 0	112 187 299		82.89	[32.70; 51.66] [76.71; 87.99] [22.50; 100.00]
4-year ACM Gonzalez-Fajardo (d) King (d) Random effects model Heterogeneity: I <sup>2</sup> = 99%, r		51 172 p < 0	112 187 299		91.98	[36.10; 55.22] [87.12; 95.44] [23.44; 100.00]
5-year ACM Adler (c) Gonzalez-Fajardo (e) Random effects model Heterogeneity: I <sup>2</sup> = 94%, τ		39 55 p < 0	49 112 161 ).01	20 40 60 80 100	49.11	[65.66; 89.76] [39.54; 58.73] [34.30; 94.04]

Figure S8. Pooled NPV of high NLR to predict ACM

Study	Ref. Events	Total	Forest Plot	NPV (%)	95% CI
Inhospital ACM Bath	[40] 936	939		99.68	[99.07; 99.93]
30-day ACM Adler (a)	[42] 118	152	-	77.63	[70.17; 83.98]
1-year ACM Adler (b) Spark Gonzalez-Fajardo (a) King (a) Su Russu Random effects model Heterogeneity: I <sup>2</sup> = 94%, 1		83 449 301 138 139 1228	- <del>*</del>	71.08 87.97 82.06 86.23 97.12	[58.57; 76.10] [60.09; 80.52] [84.60; 90.83] [77.25; 86.23] [79.34; 91.50] [92.80; 99.21] [74.05; 91.30]
2-year ACM Gonzalez-Fajardo (b) King (b) Ertruk Random effects model Heterogeneity: $l^2 = 98\%$ , a		301 326 1076	#	54.82 90.18	[78.08; 85.41] [49.01; 60.53] [86.43; 93.19] [54.91; 96.61]
3-year ACM Gonzalez-Fajardo (c) King (c) Random effects model Heterogeneity: I <sup>2</sup> = 99%, n		301 750	#	35.88	[73.83; 81.70] [30.46; 41.58] [15.73; 98.19]
4-year ACM Gonzalez-Fajardo (d) King (d) Random effects model Heterogeneity: $I^2 = 100\%$ ,		301 750 —	#	17.28	[66.38; 74.99] [13.18; 22.03] [0.00; 96.53]
5-year ACM Adler (c) Gonzalez-Fajardo (e) Random effects model Heterogeneity: $I^2 = 93\%$ , a		449 529	20 40 60 80 10	67.04 55.95	[32.68; 55.30] [62.48; 71.37] [33.15; 78.74]

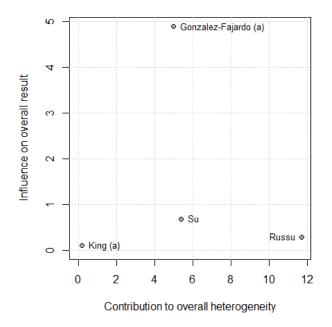
Figure S9. Forest plot of NLR and MACE association

	High N	ILR	Low N	ILR	Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	<b>Events</b>	Total	IV, Random, 95% CI		IV, Rando	m, 95% CI	
Bath et al.	74	1762	29	939	1.36 [0.89, 2.07]		_	<del></del>	
Su et al.	17	57	18	138	2.29 [1.27, 4.11]			<del></del>	_
						0.2	0.5	2	——  5
							Favours [Low NLR]	Favours [High NLR]	

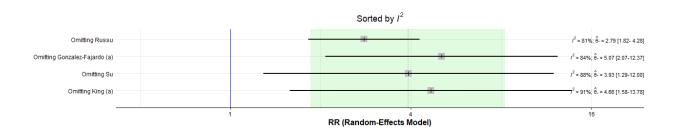
Figure S10. Additional analyses for pooled risk in MALE outcome

Subgroup	Number of Studies	Interaction P-value	Subgroups Risk Ratio	RR	95%-CI	12
Regio Asia Europe North America	1 2 1	0.17		— 5.11 [C	2.81; 7.08] 0.73; 35.89] 2.11; 3.52]	93%
Study Design Cohort Prospective Cohort Retrospective	1 3	0.05	*		1.61; 2.50] 2.07; 12.37]	84%
Cut-Off 3 to 4 5 or more	2 2	0.45	0.1 0.5 1 2 10		1.14; 30.59] 1.33; 6.36]	

- A. Subgroup analysis of pooled risk in MALE outcome (1-year follow-up)
- B. Baujat plot of pooled risk in MALE outcome (1-year follow-up)



C. Leave-one-out sensitivity analysis of pooled risk in MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.



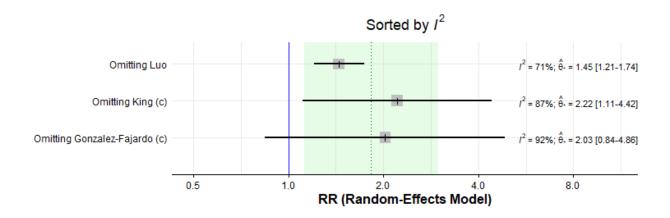
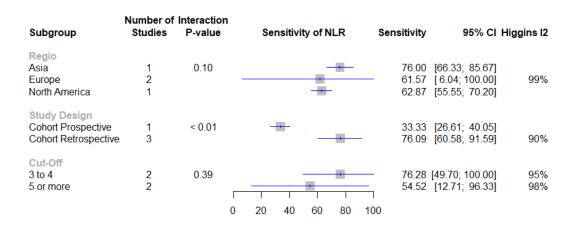


Figure S11. Pooled sensitivity of high NLR to predict MALE

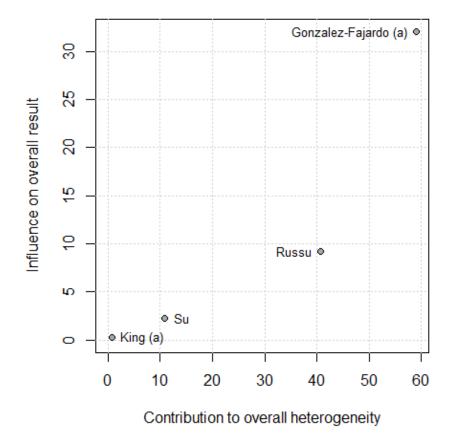
Study	Ref.	Events	Total	Forest Plot	Sensitivity (%)	95% CI
Inhospital MALE Bath	[40]	149	175	-	85.14	[78.99; 90.06]
1-year MALE Su Russu Gonzalez-Fajardo (a) King (a) Random effects model Heterogeneity: I <sup>2</sup> = 97%, τ		57 36 63 105	75 40 189 167 <b>471</b>		90.00 33.33 62.87	[64.75; 85.11] [76.34; 97.21] [26.66; 40.54] [55.07; 70.21] [41.63; 89.15]
2-year MALE Gonzalez-Fajardo (b) King (b) Random effects model Heterogeneity: $l^2 = 96\%$ , $\tau$		67 146 0210, p < 0	229 291 520		50.17	[23.45; 35.61] [44.28; 56.06] [19.23; 60.22]
3-year MALE Gonzalez-Fajardo (c) Luo King (c) Random effects model Heterogeneity: $I^2 = 96\%$ , $\tau$		74 42 166 0429, p < 0	258 59 366 683	<del></del>	71.19 45.36	[23.24; 34.62] [57.92; 82.24] [40.17; 50.61] [24.09; 71.83]
4-year MALE Gonzalez-Fajardo (d) King (d) Random effects model Heterogeneity: /² = 93%, τ		78 177 0088, p < 0	285 431 <b>716</b>	<del>*</del>	41.07	[22.28; 32.94] [36.38; 45.88] [20.84; 47.69]
5-year MALE Gonzalez-Fajardo (e)	[45]	83	307	20 40 60 80	27.04	[22.15; 32.37]

Figure S12. Additional analyses for sensitivity in MALE outcome

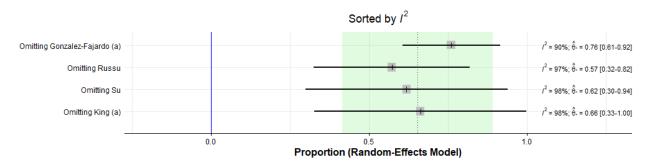
A. Subgroup analysis of pooled sensitivity in MALE outcome (1-year follow-up)



## B. Baujat plot of pooled sensitivity in MALE outcome (1-year follow-up)



C. Leave-one-out sensitivity analysis of pooled sensitivity in the MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.



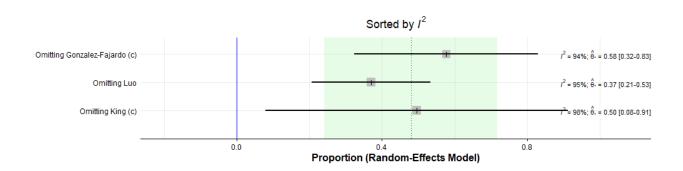


Figure S13. Pooled specificity of high NLR to predict MALE

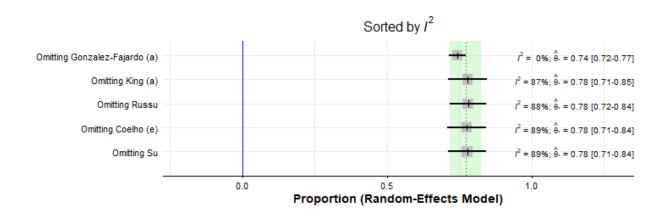
Study	Ref. Ev	ents <sup>1</sup>	Total		F	orest	Plot			Specific	ity (%)	95% (	CI
Inhospital MALE Bath	[40]	913	2526	+							36.14	[34.27; 38.05	5]
1-year MALE Su Russu Gonzalez-Fajardo (a) King (a) Random effects model Heterogeneity: /² = 89%, τ			161 184 372 321 1038				<del></del>		-		73.37 86.83 74.45	[67.08; 81.06 [66.37; 79.66 [82.96; 90.09 [69.32; 79.14 [70.98; 84.34	0] 9] 4]
2-year MALE Gonzalez-Fajardo (b) King (b) Random effects model Heterogeneity: l <sup>2</sup> = 77%, τ		287 156 ), p = 0	332 197 529				_	+	<b>⊢</b>		79.19	[82.29; 89.9 <sup>4</sup> [72.84; 84.63 [76.07; 90.23	3]
3-year MALE Gonzalez-Fajardo (c) Luo King (c) Random effects model Heterogeneity: $I^2 = 83\%$ , $\tau$		265 81 101 2, p < 0	303 113 122 538			_		-	<del> </del>		71.68 82.79	[83.19; 90.9] [62.43; 79.76 [74.90; 89.02 [72.29; 90.17	6] 2]
4-year MALE Gonzalez-Fajardo (d) King (d) Random effects model Heterogeneity: $I^2 = 0\%$ , $\tau^2$		242 47	276 57 333				_	<	<u>-</u>		82.46	[83.21; 91.32 [70.09; 91.25 [83.37; 90.55	5]
5-year MALE Gonzalez-Fajardo (e)	[45]	225	254	40 5	T 50	60	70	80	90		88.58	[84.02; 92.22	2]

Figure S14. Additional analyses for specificity in MALE outcome

A. Subgroup analysis of pooled specificity in MALE outcome (1-year follow-up)

Subgroup	Number of Studies	Interaction P-value	Specificity of NLR	Specificity	95% CI Weight
Regio Asia Europe North America	1 2 1	0.70	*	74.53 80.38 74.45	[67.80; 81.26] [67.20; 93.56] 92% [69.68; 79.23]
Study Design Cohort Prospective Cohort Retrospective	1 3	< 0.01	. *	86.83 74.18	[83.39; 90.26] [70.86; 77.50] 0%
Cut-Off 3 to 4 5 or more	2 2	0.28 	20 40 60 80 1	74.07 81.04 00	[70.24; 77.89] 0% [69.01; 93.06] 90%

B. Leave-one-out sensitivity analysis of pooled specificity in the MALE outcome. Top: 1-year follow-up, Bottom: 3-year follow-up.



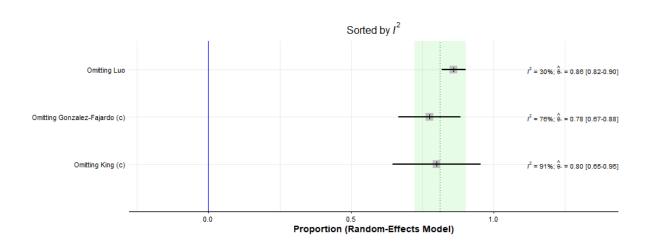


Figure S15. Pooled prevalence of MALE between high and low NLR group

•		Interaction	5 (B) (	5	05% 01 10
Subgroup	Studies	P-value	Forest Plot	Prevalence (%)	95% CI 12
High NLR					
1-year MALE	4	0.03	-	53.70	[47.33; 60.07] 50%
2-year MALE			-		[51.41; 87.16] 91%
3-year MALE	3		-	71.07	[52.18; 89.96] 95%
4-year MALE	2		-	82.47	[57.97; 100.00] 97%
Low NLR			_	40.00	
1-year MALE		< 0.01		16.09	. ,
2-year MALE	2			42.00	[30.15; 53.84] 91%
3-year MALE	3			41.69	[13.98; 69.39] 98%
4-year MALE	2			65.26	[27.74; 100.00] 99%
-					- · · · · ·
		(	0 20 40 60 80 1	00	

Figure S16. Pooled PPV of high NLR to predict MALE

Study	Ref.	Events	Total		Fores	t Plot	:	Р	PV (%)	9	5% CI
Inhospital MALE Bath	[40]	149	1762 +						8.46	[ 7.20;	9.85]
1-year MALE Su Russu Gonzalez-Fajardo (a) King (a) Random effects model Heterogeneity: I <sup>2</sup> = 50%, τ		57 36 63 105	98 85 112 187 <b>482</b> 0.11	_	- - - <	*			42.35 56.25 56.15	[47.77; [31.70; [46.56; [48.72; [47.33;	53.55] 65.61] 63.38]
2-year MALE Gonzalez-Fajardo (b) King (b) Random effects model Heterogeneity: I <sup>2</sup> = 91%, τ		67 146 151, p <	112 187 299 0.01		-	1	<b>+</b>		78.07	[50.14; [71.45; [51.41;	83.78]
3-year MALE Gonzalez-Fajardo (c) Luo King (c) Random effects model Heterogeneity: I <sup>2</sup> = 95%, r		74 42 166 260, p <	373			=	_	<del>-</del>	56.76 88.77	[56.52; [44.72; [83.35; [52.18;	68.23] 92.91]
4-year MALE Gonzalez-Fajardo (d) King (d) Random effects model Heterogeneity: I <sup>2</sup> = 97%, τ		78 177 302, p <	112 187 299 0.01			-		+	94.65	[60.24; [90.39; [57.97; 1	97.41]
5-year MALE Gonzalez-Fajardo (e)	[45]	83	112	20	1 40	60	80	100	74.11	[64.97;	81.92]

Figure S17. Pooled NPV of high NLR to predict MALE

Study	Ref. Events	Total	Forest Plot	NPV (%)	95% CI
Inhospital MALE Bath	[40] 913	939		97.23	[95.97; 98.18]
1-year MALE Su Russu Gonzalez-Fajardo (a) King (a) Random effects mode Heterogeneity: $I^2 = 97\%$ ,		139 449 301 1027	+	97.12 71.94 79.40	[80.17; 92.08] [92.80; 99.21] [67.53; 76.05] [74.39; 83.83] [73.22; 94.60]
2-year MALE Gonzalez-Fajardo (b) King (b) Random effects mode Heterogeneity: I <sup>2</sup> = 91%,		449 301 750 0.01	#	51.83	[59.29; 68.37] [46.02; 57.60] [46.16; 69.85]
3-year MALE Gonzalez-Fajardo (c) Luo King (c) Random effects mode Heterogeneity: I <sup>2</sup> = 98%,		449 98 301 848 0.01	+ -	** 82.65 33.55	[54.31; 63.61] [73.69; 89.56] [28.24; 39.20] [30.61; 86.02]
4-year MALE Gonzalez-Fajardo (d) King (d) Random effects mode Heterogeneity: $I^2 = 99\%$ ,		301 <del>*</del> 750	*	15.61	[49.16; 58.58] [11.70; 20.22] [ 0.00; 72.26]
5-year MALE Gonzalez-Fajardo (e)	[45] 225	449 0 20	40 60 8	50.11 I 0	[45.39; 54.83]