Supplemental Material
**Table S1. PRISMA checklist.**

| Section/Topic | Checklist Item | Description |
|---------------|----------------|-------------|
| **METHODS**   | 1              | Identify the report as a systematic review, meta-analysis, or both. |
|               | 2              | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. |
|               | 3              | Describe methods of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. |
|               | 4              | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. |
|               | 5              | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. |
|               | 6              | State the principal summary measures (e.g., risk ratio, difference in means). |
|               | 7              | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$) for each meta-analysis. |
|               | 8              | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). |
|               | 9              | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). |
|               | 10             | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). |
|               | 11             | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. |
|               | 12             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 13             | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). |
|               | 14             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 15             | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). |
|               | 16             | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. |
|               | 17             | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. |
|               | 18             | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. |
|               | 19             | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). |
|               | 20             | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. |
|               | 21             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 22             | Present results of any assessment of risk of bias across studies (see Item 15). |
|               | 23             | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). |
|               | 24             | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). |
|               | 25             | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). |

**RESULTS**

| Section/Topic | Checklist Item | Description |
|---------------|----------------|-------------|
|               | 1              | Indicate if a review protocol exists (e.g., for a meta-analysis), and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. |
|               | 2              | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. |
|               | 3              | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. |
|               | 4              | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. |
|               | 5              | State the principal summary measures (e.g., risk ratio, difference in means). |
|               | 6              | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$) for each meta-analysis. |
|               | 7              | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). |
|               | 8              | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). |
|               | 9              | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). |
|               | 10             | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. |
|               | 11             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 12             | Present results of any assessment of risk of bias across studies (see Item 15). |
|               | 13             | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). |
|               | 14             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 15             | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. |
|               | 16             | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. |
|               | 17             | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). |
|               | 18             | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. |
|               | 19             | Present the main results of the review. If meta-analyses done, include for each, confidence intervals and measures of consistency. |
|               | 20             | Present results of any assessment of risk of bias across studies (see Item 15). |
|               | 21             | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 16-17 |
|---|---|---|---|
| **FUNDING** | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | 17 |
Table S2. Retrieval and filtering.

### Search code

| Data search   | Duplicates | Total |
|---------------|------------|-------|
| 1. Pubmed     | 0          | +945  |
| 2. Embase     | 762        | +802  |
| 3. Cochrane   | 7          | +2    |
| **Total**     |            | **1749 articles to screen** |

### PubMed/MEDLINE search:

| Name search                           | Search | PubMed query                                                                                                                                                                                                 | Results  |
|---------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| SCAD or ACS or PCI or CABG            | #1     | (((((((coronary artery disease[MeSH Major Topic]) OR (coronary artery disease[Title/Abstract])) OR (coronary heart disease[Title/Abstract])) OR (chronic coronary syndrome[Title/Abstract])) OR (myocardial infarction[Title/Abstract])) OR (acute coronary syndrome[Title/Abstract])) OR (percutaneous coronary intervention[MeSH Major Topic])) OR (percutaneous coronary intervention[Title/Abstract])) OR (coronary artery bypass grafting[Title/Abstract]) | 357,366  |
| Antiplatelet therapy                  | #2     | (((aspirin[Title/Abstract]) OR (clopidogrel[Title/Abstract])) OR (prasugrel[Title/Abstract]) OR (ticagrelor[Title/Abstract])) OR (P2Y12 inhibitors[Title/Abstract])) OR (thienopyridine[Title/Abstract]) | 56,967   |
| Anticoagulant therapy                 | #3     | (((((warfarin[Title/Abstract]) OR (vitamin K antagonists[Title/Abstract])) OR (dabigatran[Title/Abstract])) OR (rivaroxaban[Title/Abstract])) OR (apixaban[Title/Abstract])) OR (edoxaban[Title/Abstract])) OR (factor Xa inhibitor[Title/Abstract])) OR (new oral anticoagulants[Title/Abstract]) | 33,462   |
| Combined search | #4 | #1 AND #2 AND #3 | 945 |
|-----------------|----|------------------|-----|

**OVID/EMBASE Search:**

| Name search | Search | EMBASE query | Results |
|-------------|--------|--------------|---------|
| SCAD or ACS or PCI or CABG | #1 | 'coronary artery disease':ab,ti OR 'coronary heart disease':ab,ti OR 'chronic coronary syndrome':ab,ti OR 'myocardial infarction':ab,ti OR 'acute coronary syndrome':ab,ti OR 'percutaneous coronary intervention':ab,ti OR 'coronary artery bypass graft':ab,ti OR 'coronary stenting':ab,ti | 473321 |
| Antiplatelet therapy | #2 | aspirin:ab,ti OR clopidogrel:ab,ti OR prasugrel:ab,ti OR ticagrelor:ab,ti OR 'p2y12 inhibitors':ab,ti OR thienopyridine:ab,ti | 88420 |
| Anticoagulant therapy | #3 | warfarin:ab,ti OR 'vitamin k antagonists':ab,ti OR dabigatran:ab,ti OR rivaroxaban:ab,ti OR apixaban:ab,ti OR edoxaban:ab,ti OR 'factor xa inhibitor':ab,ti OR 'new oral anticoagulants':ab,ti | 56111 |
| Combined search | #4 | #1 AND #2 AND #3 | 1564 |

**Cochrane Database search:**

| Name search | Search | Cochrane query | Results |
|-------------|--------|----------------|---------|
| SCAD or ACS or PCI or CABG | #3=#1 or #2 | #1 - (coronary artery disease):ti,ab,kw OR (coronary heart disease):ti,ab,kw OR (chronic coronary syndrome):ti,ab,kw OR (myocardial infarction):ti,ab,kw OR (acute coronary syndrome):ti,ab,kw" (Word variations have been searched) #2 - (percutaneous coronary intervention):ti,ab,kw OR (coronary artery bypass grafting):ti,ab,kw OR (coronary stenting):ti,ab,kw" (Word variations have been searched) | 261 |
| Antiplatelet therapy | #6=#4 or #5 | #4 - (aspirin):ti,ab,kw OR (clopidogrel):ti,ab,kw OR (prasugrel):ti,ab,kw OR (ticagrelor):ti,ab,kw OR (P2Y12 inhibitors):ti,ab,kw" (Word variations have been searched) #5 - (thienopyridine):ti,ab,kw" (Word variations have been searched) | 112 |
Anticoagulant therapy

#9 = #7 or #8

#7 - (warfarin):ti,ab,kw OR (vitamin K antagonists):ti,ab,kw OR (dabigatran):ti,ab,kw OR (rivaroxaban):ti,ab,kw OR (apixaban):ti,ab,kw” (Word variations have been searched)

#8 - (edoxaban):ti,ab,kw OR (factor Xa inhibitor):ti,ab,kw OR (new oral anticoagulants):ti,ab,kw” (Word variations have been searched)

Combined search #10 #3 AND #6 AND #9

Articles excluded after full text screening:

| Number | Excluded references                                                                 | Reason for exclusion                                                                 |
|--------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 18     | Berger JS, Abramson BL, Lopes RD, Heizer G, Rockhold FW, Baumgartner I, Fowkes F, Held P, Katona BG, Norgren L, et al. Ticagrelor versus clopidogrel in patients with symptomatic peripheral artery disease and prior coronary artery disease: Insights from the EUCLID trial. VASC MED. 2018;23(6):523-530. | The principle of randomization is broken by post analysis without prior plan (i.e., lack of baseline balance and interaction tests, etc)41. |
| 19     | Eisen A, Harrington RA, Stone GW, Steg PG, Gibson CM, Hamm CW, Price MJ, Prats J, Deliargyris EN, Mahaffey KW, et al. Cangrelor compared with clopidogrel in patients with prior myocardial infarction - Insights from the CHAMPION trials. INT J CARDIOL. 2018;250:49-55. | The principle of randomization is broken by post analysis without prior plan. |
| 20     | Alexopoulos D, Despotopoulos S, Xanthopoulou I, Davlouros P. Low-Dose Ticagrelor Versus Clopidogrel in Patients With Prior Myocardial Infarction. J AM COLL CARDIOL. 2017;70(16):2091-2092. | There are no endpoints of interest. |
| 21     | Wiviott SD, Braunwald E, McCabe CH, Montalescot G, Ruzyllo W, Gottlieb S, Neumann FJ, Ardissino D, De Servi S, Murphy SA, et al. Prasugrel versus clopidogrel in patients with acute coronary syndromes. N Engl J Med. 2007;357(20):2001-2015. | There are no endpoints of interest. |
| 22     | Roe MT, Armstrong PW, Fox KA, White HD, Prabhakaran D, Goodman SG, Cornel JH, Bhatt DL, Clemmensen P, Martinez F, et al. Prasugrel versus clopidogrel for acute | There are no endpoints of interest. |
| Number | Reference                                                                 | Endpoints of Interest |
|--------|---------------------------------------------------------------------------|------------------------|
| 23     | Orme RC, Parker W, Thomas MR, Judge HM, Baster K, Sumaya W, Morgan KP, McMellon HC, Richardson JD, Grech ED, et al. Study of Two Dose Regimens of Ticagrelor Compared with Clopidogrel in Patients Undergoing Percutaneous Coronary Intervention for Stable Coronary Artery Disease (STEEL-PCI). CIRCULATION. 2018;138(13):1290-1300. | There are no endpoints of interest. |
| 24     | Ohman EM, Roe MT, Steg PG, James SK, Povsic TJ, White J, Rockhold F, Plotnikov A, Mundl H, Strony J, et al. Clinically significant bleeding with low-dose rivaroxaban versus aspirin, in addition to P2Y12 inhibition, in acute coronary syndromes (GEMINI-ACS-1): a double-blind, multicentre, randomised trial. LANCET. 2017;389(10081):1799-1808. | There are no endpoints of interest. |
| 25     | Bhatt DL, Flather MD, Hacke W, Berger PB, Black HR, Boden WE, Cacoub P, Cohen EA, Creager MA, Easton JD, et al. Patients with prior myocardial infarction, stroke, or symptomatic peripheral arterial disease in the CHARISMA trial. J AM COLL CARDIOL. 2007;49(19):1982-1988. | Non stable coronary artery disease patients are included in the included subjects. |
| 26     | Bohula EA, Aylward PE, Bonaca MP, Corbalan RL, Kiss RG, Murphy SA, Scirica BM, White H, Braunwald E, Morrow DA. Efficacy and Safety of Vorapaxar With and Without a Thienopyridine for Secondary Prevention in Patients With Previous Myocardial Infarction and No History of Stroke or Transient Ischemic Attack: Results from TRA 2°P-TIMI 50. CIRCULATION. 2015;132(20):1871-1879. | No re-randomization during follow-up after completion of dual antiplatelet therapy. |
| 27     | A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). CAPRIE Steering Committee. LANCET. 1996;348(9038):1329-1339. | No re-randomization during follow-up after completion of dual antiplatelet therapy. |
| 28     | Alexander JH, Lopes RD, James S, Kilaru R, He Y, Mohan P, Bhatt DL., Goodman S, Verheugt FW, Flather M, et al. Apixaban with antiplatelet therapy after acute coronary syndrome. N Engl J Med. 2011;365(8):699-708. | No re-randomization during follow-up after completion of dual antiplatelet therapy. |
| 29     | Hurlen M, Abdelnoor M, Smith P, Erikssen J, Arnesen H. Warfarin, aspirin, or both after myocardial infarction. N Engl J Med. 2002;347(13):969-974. | No re-randomization during follow-up after completion of dual antiplatelet therapy. |
| 30 | Mega JL, Braunwald E, Wiviott SD, Bassand JP, Bhatt DL, Bode C, Burton P, Cohen M, Cook-Bruns N, Fox KA, et al. Rivaroxaban in patients with a recent acute coronary syndrome. N Engl J Med. 2012;366(1):9-19. | No re-randomization during follow-up after completion of dual antiplatelet therapy. |
| 31 | Vranckx P, Valgimigli M, Jüni P, Hamm C, Steg PG, Heg D, van Es GA, McFadden EP, Onuma Y, van Meijeren C, et al. Ticagrelor plus aspirin for 1 month, followed by ticagrelor monotherapy for 23 months vs aspirin plus clopidogrel or ticagrelor for 12 months, followed by aspirin monotherapy for 12 months after implantation of a drug-eluting stent: a multicentre, open-label, randomised superiority trial. LANCET. 2018;392(10151):940-949. | It does not conform to the conventional dual antiplatelet principle. |
| Characteristic      | THEMIS                     | COMPASS                    | PEGASUS-TIMI 54     | DAPT                  |
|--------------------|----------------------------|----------------------------|---------------------|-----------------------|
| Initiation         | February 10, 2014          | March 12, 2013             | October 10, 2010    | August 13, 2009       |
| Completion         | May 24, 2016               | May 10, 2016               | May 2013            | July 1, 2011          |
| Publication        | September 1, 2019          | November 11, 2017          | March 14, 2015      | November 16, 2014     |
| Design             | Prospective, randomised, double-blind, placebo-controlled | Prospective, randomised, double-blind, placebo-controlled | Prospective, randomised, double-blind, placebo-controlled | Prospective, randomised, double-blind, placebo-controlled |
| Administration method | Patients were assigned to receive ticagrelor at a dose of 90 mg twice daily and later changed to 60 mg twice daily, or placebo alone. And all the patients also received aspirin (75 to 150 mg once daily) | Patients were assigned to receive low-dose rivaroxaban (2.5 mg twice daily) plus aspirin (100 mg once daily) or rivaroxaban alone (5 mg twice daily), or aspirin alone (100 mg once daily) | Patients were assigned receive ticagrelor orally at a dose of 90 mg twice daily, ticagrelor orally at a dose of 60 mg twice daily, or placebo. And all the patients also received aspirin (75 to 150 mg once daily) | Patients were assigned receive clopidogrel at a maintenance dose of 75 mg daily or prasugrel at a maintenance dose of 10 mg daily (with a dose of 5 mg daily. And all the patients also received aspirin (75 to 162 mg once daily). |
| Main inclusion criteria | Patients had a known history of at least one vessel stenosis ≥ 50% after PCI or CABG or angiography, and a history of type 2 diabetes mellitus. | Patients had either myocardial infarction within 20 years, multivessel coronary disease with symptoms or with history of stable or unstable angina, previous multi-vessel PCI, previous multi-vessel CABG, or coronary disease with peripheral arterial disease. | Patients had a spontaneous MI 1 to 3 years. | Patients had undergoing PCI with stent deployment for 12 months and there was no MACEs and major bleeding during this period. |
| Main exclusion criteria | Patients had a known history of MI or stroke, or patients were receiving dual antiplatelet therapy or anticoagulant therapy. | Patients were receiving dual antiplatelet therapy or anticoagulant therapy. | Patients were receiving dual antiplatelet therapy or anticoagulant therapy. | Patients were receiving dual antiplatelet therapy or anticoagulant therapy. |
| Efficacy endpoints | The primary efficacy outcome was a composite of cardiovascular death, myocardial infarction, or stroke. Secondary efficacy outcomes were tested hierarchically according to the following sequence: cardiovascular death, myocardial infarction, ischemic stroke, and death from any cause. | The primary efficacy outcome was a composite consisting of the first occurrence of stroke, myocardial infarction, or cardiovascular death. These secondary outcomes were a composite of coronary heart disease death, myocardial infarction, ischaemic stroke, or acute limb ischaemia; occurrence of myocardial infarction, ischaemic stroke, cardiovascular death, or acute limb ischaemia; and overall mortality. | The primary efficacy end point was the composite of cardiovascular death, myocardial infarction, or stroke. | The coprimary efficacy end points were the cumulative incidence of definite or probable stent thrombosis (as assessed according to the Academic Research Consortium definitions) and of major adverse cardiovascular and cerebrovascular events (defined as the composite of death, myocardial infarction, or stroke). |
| Safety endpoints | The primary safety outcome was major bleeding, which was defined according to the TIMI classification. | The primary safety outcome was major bleeding defined as fatal bleeding, symptomatic bleeding into a critical organ or area, surgical site bleeding leading to reoperation, or bleeding leading to hospital visit or admission. | The primary safety end point was TIMI major bleeding. Other safety end points included intracranial hemorrhage and fatal bleeding. | The primary safety end point was the incidence of moderate or severe bleeding during this same period (as assessed according to the Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Arteries [GUSTO] criteria). |
| Follow-up | 39.9 months | 23.4 months | 33.0 months | 18.0 months |
| Types of CCS | 3 or 4 | 3 or 4 | 4 | 4 |

CABG: coronary-artery bypass grafting, CCS: chronic coronary syndromes, GUSTO: Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Arteries criteria, MACEs: major adverse cardiovascular and cerebrovascular events, MI: myocardial infarction, PCI: percutaneous coronary intervention, TIMI: Thrombolysis in Myocardial Infarction criteria.
Table S4. Main characteristics of patients enrolled among trials included in the meta-analysis.

| Characteristic | Treatment Regimen | THEMIS | COMPASS | PEGASUS-TIMI 54 | DAPT |
|----------------|-------------------|--------|---------|----------------|------|
| No. of participants | Ticagrelor + Aspirin | 9619 | 9601 | 8313 | 8250 | 8261 | 7050 | 7045 | 7050 |
| Age, mean ±SD, years | Aspirin | 66.0 ± 8.1 | 66.0 ± 8.1 | 69.0 ± 5.9 | 69.0 ± 5.9 | 69.0 ± 5.9 | 65.4 ± 8.4 | 65.2 ± 8.4 | 65.4 ± 8.3 | 61.8 ± 10.2 | 61.6 ± 10.1 |
| BMI, mean ±SD, kg/m² | Rivaroxaban + Aspirin | 29.0 ± 4.8 | 29.1 ± 5.0 | 28.4 ± 4.7 | 28.4 ± 4.6 | 28.5 ± 4.7 | NA | NA | NA | 30.5 ± 5.8 | 30.6 ± 5.8 |
| Female sex, % | Aspirin | 31.6 | 31.1 | 21.0 | 20.0 | 20.0 | 23.9 | 23.6 | 24.3 | 24.7 | 26.0 |
| Current smoker, % | Rivaroxaban | 11.0 | 10.8 | 20.0 | 20.0 | 20.0 | 16.8 | 17.1 | 16.2 | 24.6 | 24.7 |
| Hypertension, % | Ticagrelor (H) + Aspirin | 71.1 | 71.4 | 62.9 | NA | 63.6 | 86.9 | 86.3 | 86.7 | 91.1 | 91.4 |
| Dyslipidemia, % | Ticagrelor (L) + Aspirin | 87.2 | 87.1 | NA | NA | NA | 76.7 | 76.4 | 77.1 | NA | NA |
| Diabetes, % | Aspirin | 100.0 | 100.0 | 37.0 | 37.0 | 37.0 | 31.8 | 31.9 | 31.0 | 30.1 |
| Peripheral artery disease | Thienopyridine + Aspirin | 8.6 | 9.0 | 20.0 | 20.0 | 20.0 | 5.3 | 5.2 | 5.7 | 5.8 | 5.8 |
| Multivessel coronary artery disease | Aspirin | 61.9 | 62.3 | 63.0 | 63.0 | 61.0 | 58.9 | 59.5 | 59.6 | NA | NA |
| PCI | Aspirin | 57.8 | 58.3 | 60.0 | 60.0 | 59.0 | 83.0 | 83.5 | 82.6 | 100.0 | 100.0 |
| CABG | Aspirin | 22.0 | 21.6 | 33.0 | 31.0 | 31.0 | NA | NA | NA | 11.3 | 11.8 |

BMI: body mass index, CABG: coronary-artery bypass grafting, NA: not available, PCI: percutaneous coronary intervention, SD: standard deviation. * (L) and (H) indicate low- and high-dose schemes of ticagrelor used in the PEGASUS-TIMI 54 trial.
### Table S5. Evaluation of risk of bias of included trials.

| Risk bias assessment | THEMIS | COMPASS | PEGASUS-TIMI 54 | DAPT |
|----------------------|--------|---------|----------------|------|
| **Random sequence generation** | Randomization codes were generated in blocks of constant size. | A computer-generated randomisation schedule was generated by the Population Health Research Institute and used to allocate participants to treatment. | Randomization was performed with the use of a central computerized telephone or Web-based system. | A computer-generated randomization schedule stratified patients according to the type of stent they had received (drug-eluting vs. bare-metal), hospital site, type of thienopyridine drug, and presence or absence of at least one prespecified clinical or lesion-related risk factor for stent thrombosis. |
| **Authors’ judgement** | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| **Allocation concealment** | Eligible patients were randomly assigned in a 1:1 ratio to the ticagrelor group or the placebo group by means of an interactive voice-response or Web-response system. Randomization codes were generated in blocks of constant size. The trial-group assignment was conducted in a double blind manner. | We used a central internet web-based randomisation for the allocation of participants to receive one of the three antithrombotic therapy treatments in a double-blind manner. | Randomization was performed with the use of a central computerized telephone or Web-based system, and assignment was double-blinded. | Randomization was performed by a central Interactive Voice Response System (IVRS) for all studies, except the Boston Scientific Liberté study, which used its own IVRS system. |
| **Authors’ judgement** | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| **Blinding of participants & personnel** | The trial-group assignment was conducted in a double blind manner. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | Each treatment group was double dummy, and the patients, investigators, and central study staff were masked to treatment allocation. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | Assignment was double-blinded. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | Assignment was double-blinded. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. |
| **Authors’ judgement** | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| **Blinding of outcome assessment** | An academic clinical events committee adjudicated endpoint events in a blinded manner. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | Each treatment group was double dummy, and the patients, investigators, and central study staff were masked to treatment allocation. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | A central clinical-events committee, whose members were unaware of the treatment assignments, adjudicated all efficacy end points and bleeding episodes. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. | A single clinical-events committee whose members were unaware of the group assignments adjudicated events, and an unblinded, independent, central data and safety monitoring committee oversaw the safety of all patients. And because the endpoint events are objective events, there is no subjective evaluation, so the blind method will not be destroyed. |
| **Authors’ judgement** | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| **Incomplete outcome data** | Data regarding vital status were available for 99.9% of the patients at the end of the trial and were missing for 21 patients (13 in the ticagrelor group and 8 in the placebo group); of these patients, 10 were lost to follow-up, and 11 withdrew consent and had unknown vital status. | Mean duration of follow-up was 1.95 years, follow-up was 99.8% complete. | The median duration of follow-up was 33 months (interquartile range, 28 to 37), resulting in 56,004 patient-years of follow-up. Ascertainment of the primary end point was complete for 99.2% of the potential patient-years of follow-up. | 94.3% of the participants completed the follow-up |
| **Authors’ judgement** | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| Authors’ judgement | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Selective reporting| It was consistent with the outcomes of the protocol. | It was consistent with the outcomes of the protocol. | It was consistent with the outcomes of the protocol. | It was consistent with the outcomes of the protocol. |
| Authors’ judgement | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
| Other bias (the status of pharmaceutical sponsor) | Site selection was conducted jointly by the national lead investigators and representatives of AstraZeneca, who performed site monitoring and supervision and handled the collection, storage, and analysis of the data. The Baim Clinical Research Institute independently validated all the data that are reported, with funding from AstraZeneca. | The study was designed by the Steering Committee, which included scientists from the sponsor, Bayer AG, who collaborated in study design, manuscript review and decision to publish. Site management and data collection and analysis were done at the Population Health Research Institute, Hamilton Health Sciences, and McMaster University in Hamilton, ON, Canada. | The raw database was provided to the TIMI Study Group, which conducted all the data analyses independently of the sponsor. | The stent manufacturers who funded the trial had contributing roles in the design of the trial and in the collection of the data. The Harvard Clinical Research Institute was responsible for the scientific conduct of the trial and an independent analysis of the data. |
| Authors’ judgement | Low risks of bias | Low risks of bias | Low risks of bias | Low risks of bias |
Table S6. Summary estimates for efficacy and safety outcomes from network meta-analysis.

Odds ratio (95% credible intervals) between column and row treatment regimens are reported. Odds ratio smaller than 1 means that the odds of having an event for the column treatment regimen is lower than the row treatment regimen. Statistically significant results, where the 95% credible interval does not include 1.

(1) Trial-defined major adverse cardiovascular and cerebrovascular events

|                          | Ticagrelor+Asprin | 0.97 (0.83,1.14) | Rivaroxaban | 0.83 (0.72,0.96) | 0.81 (0.64,1.01) | 1.12 (0.98,1.29) | 1.17 (1.00,1.38) | 1.2 (1.04,1.39) | Rivaroxaban+Asprin | 0.97 (0.77,1.22) | 1.35 (1.17,1.56) | 1.21 (0.99,1.47) | 1.24 (0.99,1.56) | 1.03 (0.82,1.30) | Thienopyridine+Asprin | 1.4 (1.16,1.67) | 0.86 (0.80,0.93) | 0.89 (0.78,1.02) | 0.74 (0.64,0.85) | 0.72 (0.60,0.86) | Asprin |
|--------------------------|-------------------|------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|

(2) Death from any cause

|                          | Ticagrelor+Asprin | 1.03 (0.86,1.24) | 0.97 (0.81,1.16) | 0.79 (0.66,0.95) | 1.36 (0.99,1.87) | 1.04 (0.95,1.14) | 1.03 (1.05,1.52) | 1.22 (1.04,1.45) | Rivaroxaban+Asprin | 1.72 (1.22,2.43) | 1.31 (1.12,1.55) | 0.73 (0.53,1.01) | 0.71 (0.50,1.00) | 0.58 (0.41,0.82) | Thienopyridine+Asprin | 0.76 (0.56,1.04) | 0.96 (0.88,1.05) | 0.93 (0.80,1.09) | 0.76 (0.65,0.90) | 1.31 (0.97,1.78) | Asprin |

(3) Cardiovascular death

|                          | Ticagrelor+Asprin | 1.02 (0.72,1.43) | 0.80 (0.56,1.14) | 1.01 (0.62,1.65) | 1.07 (0.89,1.29) | 0.98 (0.70,1.38) | 0.78 (0.58,1.06) | 0.99 (0.58,1.70) | 1.05 (0.79,1.40) | 1.25 (0.88,1.77) | 1.27 (0.94,1.72) | Rivaroxaban+Asprin | 1.26 (0.73,2.18) | 1.34 (0.99,1.81) | 0.99 (0.61,1.62) | 1.01 (0.59,1.73) | 0.79 (0.46,1.37) | Thienopyridine+Asprin | 1.06 (0.67,1.68) | 0.93 (0.78,1.12) | 0.95 (0.71,1.27) | 0.75 (0.55,1.01) | 0.94 (0.60,1.49) | Asprin |

(1) Trial-defined major adverse cardiovascular and cerebrovascular events

(2) Death from any cause

(3) Cardiovascular death
(4) Myocardial infarction

| Treatment                  | Odds Ratio (95% CI) |
|----------------------------|---------------------|
| Ticagrelor+Asprin          | 1.09 (0.87,1.38)    |
| 0.92 (0.73,1.15)           |                     |
| 0.96 (0.76,1.22)           |                     |
| 1.71 (1.31,2.24)           |                     |
| 0.83 (0.74,0.92)           |                     |
| 0.70 (0.52,0.94)           |                     |
| 1.44 (1.06,1.94)           |                     |
| 0.95 (0.57,1.59)           |                     |
| 0.81 (0.62,1.04)           |                     |
| 0.70 (0.53,0.93)           |                     |
| 0.78 (0.59,1.02)           |                     |
| 0.56 (0.42,0.75)           |                     |
| Rivaroxaban                | 0.95 (0.77,1.18)    |
| 0.66 (0.39,1.12)           |                     |
| 0.65 (0.40,0.56)           |                     |
| Rivaroxaban+Asprin         | 0.56 (0.41,0.77)    |
| 0.95 (0.57,1.59)           |                     |
| 1.51 (1.08,1.46)           |                     |
| 1.11 (0.73,1.33)           |                     |
| 0.90 (0.57,1.59)           |                     |
| 0.66 (0.39,1.12)           |                     |
| 0.94 (0.76,1.34)           |                     |
| 0.70 (0.53,0.93)           |                     |
| 0.78 (0.59,1.02)           |                     |
| 0.56 (0.42,0.75)           |                     |

(5) Storke

| Treatment                  | Odds Ratio (95% CI) |
|----------------------------|---------------------|
| Ticagrelor+Asprin          | 1.01 (0.75,1.36)    |
| 0.99 (0.73,1.33)           |                     |
| 1.42 (1.03,1.96)           |                     |
| 0.94 (0.59,1.50)           |                     |
| 0.80 (0.69,0.93)           |                     |
| 0.70 (0.51,0.97)           |                     |
| 0.70 (0.52,0.94)           |                     |
| 0.95 (0.57,1.59)           |                     |
| 0.81 (0.62,1.04)           |                     |
| 0.70 (0.53,0.93)           |                     |
| 0.78 (0.59,1.02)           |                     |
| 0.56 (0.42,0.75)           |                     |
| Rivaroxaban                | 0.70 (0.52,0.94)    |
| 0.66 (0.39,1.12)           |                     |
| 0.65 (0.40,0.56)           |                     |
| Rivaroxaban+Asprin         | 1.11 (0.93,1.33)    |
| 0.66 (0.39,1.12)           |                     |
| Thienopyridine+Asprin      | 1.18 (0.76,1.84)    |
| 0.59 (0.39,1.12)           |                     |
| 0.66 (0.39,1.12)           |                     |
| 0.81 (0.62,1.04)           |                     |

(6) Trial-defined major bleeding

| Treatment                  | Odds Ratio (95% CI) |
|----------------------------|---------------------|
| Ticagrelor+Asprin          | 0.70 (0.53,0.93)    |
| 1.42 (1.08,1.88)           |                     |
| 1.28 (0.98,1.69)           |                     |
| 2.15 (1.78,2.59)           |                     |
| 0.78 (0.59,1.02)           |                     |
| 1.11 (0.93,1.33)           |                     |
| 0.90 (0.75,1.08)           |                     |
| 1.51 (1.23,1.85)           |                     |
| 0.46 (0.39,0.56)           |                     |
| 0.66 (0.54,0.81)           |                     |
| 0.60 (0.49,0.73)           |                     |
| 1.68 (1.37,2.05)           |                     |
| 0.78 (0.59,1.02)           |                     |
| 1.11 (0.93,1.33)           |                     |
| 0.90 (0.75,1.08)           |                     |
| 1.51 (1.23,1.85)           |                     |
| 0.46 (0.39,0.56)           |                     |
| 0.66 (0.54,0.81)           |                     |
| 0.60 (0.49,0.73)           |                     |
| 1.68 (1.37,2.05)           |                     |

(7) GUSTO major bleeding

| Treatment                  | Odds Ratio (95% CI) |
|----------------------------|---------------------|
| Rivaroxaban                | 0.69 (0.43,1.10)    |
| 1.45 (0.91,2.31)           |                     |
| 1.07 (0.51,2.23)           |                     |
| 1.54 (0.95,2.50)           |                     |
| 0.94 (0.45,1.96)           |                     |
| 0.94 (0.45,1.96)           |                     |
| 0.74 (0.34,1.57)           |                     |
| 1.06 (0.63,1.79)           |                     |
| 0.69 (0.41,1.17)           |                     |
| 0.65 (0.40,1.05)           |                     |
| 0.65 (0.40,1.05)           |                     |
| 0.65 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
| 0.60 (0.40,1.05)           |                     |
(8) Trial-defined minor bleeding

| Treatment                | Control | 0.46 (0.28,0.77) | 0.52 (0.31,0.87) | 0.29 (0.18,0.48) |
|--------------------------|---------|------------------|------------------|------------------|
| Ticagrelor+Asprin        |         | 2.17 (1.30,3.62) | 1.13 (1.01,1.26) | 0.64 (0.56,0.72) |
| 1.92 (1.15,3.20)         | Rivaroxaban | 0.88 (0.79,0.99) | 0.57 (0.50,0.64) | |
| 3.39 (2.07,5.57)         |         | 1.56 (1.38,1.77) | 1.77 (1.57,2.00) | Asprin |

(9) GUSTO moderate bleeding

| Treatment                | Control | 1.26 (0.82,1.93) | 1.03 (0.58,1.84) | 0.61 (0.40,0.94) |
|--------------------------|---------|------------------|------------------|------------------|
| Rivaroxaban              |         | 0.79 (0.52,1.22) | 0.82 (0.41,1.65) | 0.49 (0.29,0.83) |
| 0.97 (0.54,1.74)         | Rivaroxaban+Asprin | 1.22 (0.61,2.46) | 0.60 (0.41,0.87) | |
| 1.63 (1.07,2.49)         |         | 2.05 (1.20,3.49) | 1.68 (1.16,2.43) | Asprin |

(10) Intracranial hemorrhage

| Treatment                | Control | 1.33 (0.74,2.39) | 0.80 (0.42,1.50) | 0.71 (0.53,0.95) |
|--------------------------|---------|------------------|------------------|------------------|
| Ticagrelor+Asprin        |         | 0.75 (0.42,1.35) | 0.60 (0.37,0.98) | 0.53 (0.32,0.88) |
| 1.26 (0.67,2.37)         | Rivaroxaban | 1.67 (1.03,2.72) | 0.89 (0.51,1.56) | |
| 1.41 (1.05,1.90)         |         | 1.88 (1.13,3.12) | 1.12 (0.64,1.97) | Asprin |
Table S7. Subgroup results based on whether the subjects undergoing percutaneous coronary intervention (PCI) or not.

(1) Summary estimates for efficacy and safety outcomes from network meta-analysis

Odds ratio (95% credible intervals) between column and row treatment regimens are reported. Odds ratio smaller than 1 means that the odds of having an event for the column treatment regimen is lower than the row treatment regimen. Statistically significant results, where the 95% credible interval does not include 1.

① Trial-defined major adverse cardiovascular and cerebrovascular events in PCI subgroup

| Treatment | Odds Ratio (95% CI) | Odds Ratio (95% CI) | Odds Ratio (95% CI) |
|-----------|---------------------|---------------------|---------------------|
| Ticagrelor+Asprin | 0.87 (0.69,1.09) | 0.86 (0.68,1.08) | 1.20 (1.04,1.37) |
| 1.15 (0.91,1.46) | Rivaroxaban+Asprin | 0.99 (0.76,1.29) | 1.38 (1.15,1.67) |
| 1.17 (0.93,1.47) | 1.01 (0.78,1.31) | Thienopyridine+Asprin | 1.40 (1.16,1.68) |
| 0.84 (0.73,0.96) | 0.72 (0.60,0.87) | 0.72 (0.60,0.86) | Asprin |

② Trial-defined major adverse cardiovascular and cerebrovascular events in non PCI subgroup

| Treatment | Odds Ratio (95% CI) | Odds Ratio (95% CI) |
|-----------|---------------------|---------------------|
| Ticagrelor+Asprin | 0.84 (0.62,1.14) | 1.11 (0.94,1.30) |
| 1.19 (0.88,1.60) | Rivaroxaban+Asprin | 1.31 (1.02,1.70) |
| 0.90 (0.77,1.06) | 0.76 (0.59,0.98) | Asprin |

③ Trial-defined major bleeding in PCI subgroup

| Treatment | Odds Ratio (95% CI) | Odds Ratio (95% CI) |
|-----------|---------------------|---------------------|
| Ticagrelor+Asprin | 0.95 (0.64,1.43) | 0.55 (0.40,0.75) |
| 1.05 (0.70,1.57) | Rivaroxaban+Asprin | 0.58 (0.45,0.75) |
| 1.82 (1.33,2.49) | 1.73 (1.34,2.24) | Asprin |

④ Trial-defined major bleeding in non PCI subgroup

| Treatment | Odds Ratio (95% CI) |
|-----------|---------------------|
| Ticagrelor+Asprin | 0.69 (0.44,1.10) |
| 0.43 (0.31,0.60) |
| Rivaroxaban+Asprin | 0.62 (0.45,0.86) |
|-------------------|------------------|
| 1.44 (0.91,2.29)  | 2.32 (1.67,3.22) | 1.61 (1.16,2.21) | Asprin |
(2) SUCRA values\textsuperscript{a} for each treatment regimen and outcomes in subgroup.

| Efficacy outcome | Treatment Regimen | Aspirin | Ticagrelor + Aspirin | Rivaroxaban + Aspirin | Rivaroxaban | Thienopyridine + Aspirin |
|------------------|-------------------|---------|----------------------|-----------------------|-------------|--------------------------|
| 
| PCI subgroup     | Trial-defined MACEs | 99.8    | 59.8                 | 21.37                 | NA          | 18.7                     |
| 
| Non PCI subgroup | Trial-defined MACEs | 93.5    | 48.9                 | 7.6                   | NA          | NA                       |
| 
| Safety outcome   | PCI subgroup       |         |                      |                       |             |                          |
| 
| Non PCI subgroup | Trial-defined major bleeding | 0      | 79.6                 | 76.4                  | NA          | NA                       |
| 

MACEs: major adverse cardiovascular and cerebrovascular events; NA: not available, PCI: percutaneous coronary intervention. \textsuperscript{a}The smaller the SUCRA value, the less incidence of adverse outcomes, which means the better the treatment regimen performance.
Table S8. Subgroup results based on whether the subjects undergoing prior myocardial infarction (MI) or not.

(1) Summary estimates for efficacy and safety outcomes from network meta-analysis

Odds ratio (95% credible intervals) between column and row treatment regimens are reported. Odds ratio smaller than 1 means that the odds of having an event for the column treatment regimen is lower than the row treatment regimen. Statistically significant results, where the 95% credible interval does not include 1.

① Trial-defined major adverse cardiovascular and cerebrovascular events in prior MI subgroup

| Treatment Regimen            | Prior MI subgroup | Odds Ratio (95% CI) |
|------------------------------|-------------------|--------------------|
| Ticagrelor+Aspirin           | 0.88 (0.68,1.15)  | 0.82 (0.56,1.21)   | 1.19 (1.01,1.40) |
| 1.13 (0.87,1.47)             |                   |                    |
| Rivaroxaban+Aspirin          | 0.93 (0.62,1.40)  | 1.35 (1.09,1.66)   |
| 1.22 (0.83,1.79)             | 1.08 (0.72,1.62)  | Thienopyridine+Aspirin |
| 0.84 (0.71,0.99)             | 0.74 (0.60,0.91)  | 0.69 (0.48,0.98)   | Aspirin |

② Trial-defined major adverse cardiovascular and cerebrovascular events in non prior MI subgroup

| Treatment Regimen            | Non prior MI subgroup | Odds Ratio (95% CI) |
|------------------------------|-----------------------|--------------------|
| Ticagrelor+Aspirin           | 0.83 (0.48,1.42)      | 0.83 (0.45,1.51)   | 1.12 (0.86,1.47) |
| 1.21 (0.70,2.07)             |                       |                    |
| Rivaroxaban+Aspirin          | 1.00 (0.70,1.43)      | 1.36 (0.97,1.91)   |
| 1.21 (0.66,2.21)             | 1.00 (0.70,1.44)      | Thienopyridine+Aspirin |
| 0.89 (0.68,1.16)             | 0.74 (0.52,1.03)      | 0.74 (0.50,1.07)   | Aspirin |

③ Trial-defined major bleeding in prior MI subgroup

| Treatment Regimen            | Odds Ratio (95% CI) |
|------------------------------|--------------------|
| Ticagrelor+Aspirin           | 0.72 (0.48,1.08)   | 0.44 (0.32,0.60)   |
| 1.39 (0.93,2.06)             | Rivaroxaban+Aspirin | 0.61 (0.47,0.79)   |
| 2.27 (1.67,3.09)             | 1.64 (1.27,2.11)   | Aspirin |

④ Trial-defined major bleeding in non prior MI subgroup
| Drug Combination         | Hazard Ratio | 95% Confidence Interval |
|--------------------------|--------------|-------------------------|
| Ticagrelor+Aspirin       | 0.85 (0.49,1.45) | 0.48 (0.35,0.67)       |
| 1.18 (0.69,2.03)         | Rivaroxaban+Aspirin | 0.57 (0.39,0.84)       |
| 2.08 (1.50,2.87)         | 1.76 (1.20,2.58)  | Aspirin                |
(2) SUCRA values\textsuperscript{a} for each treatment regimen and outcomes in subgroup.

| Treatment Regimen | Aspirin | Ticagrelor + Aspirin | Rivaroxaban + Aspirin | Rivaroxaban | Thienopyridine + Aspirin |
|-------------------|---------|----------------------|-----------------------|-------------|--------------------------|
| **Efficacy outcome** |         |                      |                       |             |                          |
| Prior MI subgroup  |         |                      |                       |             |                          |
| Trial-defined MACEs | 98.8    | 55.7                 | 27.6                  | NA          | 17.9                     |
| Non prior MI subgroup |         |                      |                       |             |                          |
| Trial-defined MACEs | 90.4    | 56.7                 | 26.0                  | NA          | 27.0                     |
| **Safety outcome** |         |                      |                       |             |                          |
| Prior MI subgroup  |         |                      |                       |             |                          |
| Trial-defined major bleeding | 0       | 97.3                 | 52.7                  | NA          | NA                       |
| Non prior MI subgroup |         |                      |                       |             |                          |
| Trial-defined major bleeding | 0.1     | 86.3                 | 63.6                  | NA          | NA                       |

MACEs: major adverse cardiovascular and cerebrovascular events; NA: not available, MI: myocardial infarction. \textsuperscript{a}The smaller the SUCRA value, the less incidence of adverse outcomes, which means the better the treatment regimen performance.
Figure S1. Flow diagram of study search and selection.

RCTs: randomized controlled trials; SCAD = stable coronary artery disease.
Figure S2. Risk of bias of included trials using the Cochrane risk assessment tool.
Figure S3. Homogeneity assumption in network meta-analysis.

The homogeneity assumption was completed by $\chi^2$-based Q-test, and if the p value was greater than 0.1, it was considered that the results were homogeneous, otherwise, there was heterogeneity. If the results were heterogeneous, the degree of heterogeneity was completed by $I^2$ test ($I^2= 0–25\%$, no heterogeneity; $I^2= 25–50\%$, moderate heterogeneity; $I^2= 50–75\%$, large heterogeneity; $I^2= 75–100\%$, extreme heterogeneity).

(1) Trial-defined major adverse cardiovascular and cerebrovascular events

D+L: DerSimonian-Laird random effects model, M-H: Mantel-Haenszel fixed effects model.

(2) Cardiovascular death
### Myocardial infarction

| Study | Events | Events | Weight |
|-------|--------|--------|--------|
| THEMIS | 0.83 (0.70, 0.98) | 376/9619 | 336/9601 | 41.81 |
| PEGASUS-TIMI 54 | 0.82 (0.73, 0.93) | 820/16895 | 790/16887 | 88.19 |
| M-H Overall (I-squared = 59.6%, p = 0.111) | 0.82 (0.73, 0.93) | 843/33714 | 806/33688 | 100.00 |

**NOTE:** Weights are from random effects analysis.

### Stroke

| Study | Events | Events | Weight |
|-------|--------|--------|--------|
| THEMIS | 0.83 (0.70, 0.98) | 376/9619 | 336/9601 | 41.81 |
| PEGASUS-TIMI 54 | 0.82 (0.73, 0.93) | 820/16895 | 790/16887 | 88.19 |
| M-H Overall (I-squared = 0.0%, p = 0.954) | 0.83 (0.70, 0.98) | 843/33714 | 806/33688 | 100.00 |

**NOTE:** Weights are from random effects analysis.
### Death from any cause

| Study          | Events, | Events, | Weight |
|----------------|---------|---------|--------|
| THEMIS         | 0.81 (0.66, 0.98) | 185/16419 | 331/6031 | 87.81 |
| PEGASUS-TIMI 54 | 0.78 (0.63, 0.94) | 168/16609 | 120/7087 | 42.69 |
| M-H Overall (I-squared = 0.0%, p = 0.62%) | 0.80 (0.69, 0.93) | 371/3714 | 349/16988 | 100.00 |

**NOTE:** Weights are from random effects analysis

### Trial-defined major bleeding

| Study          | Events, | Events, | Weight |
|----------------|---------|---------|--------|
| THEMIS         | 0.97 (0.87, 1.08) | 679/6719 | 939/9403 | 87.47 |
| PEGASUS-TIMI 54 | 0.94 (0.85, 1.04) | 168/16609 | 306/7987 | 42.63 |
| M-H Overall (I-squared = 0.0%, p = 0.72%) | 0.90 (0.80, 1.00) | 1196/29714 | 918/16988 | 100.00 |

**NOTE:** Weights are from random effects analysis
(7) Intracranial hemorrhage

| Study          | Events, Ticagrelor+Aspirin (OR, 95% CI) | Events, Aspirin (OR, 95% CI) | Weight (D+L) |
|----------------|-----------------------------------------|-------------------------------|---------------|
| THEMIS         | 2.08 (1.45, 2.96) 269/1963              | 3.95 (1.59, 9.52) 709/2387    | 50.20         |
| PEGASUS-TIMI 54| 2.27 (1.20, 3.25) 207/964                | 4.81 (0.97, 24.41) 248/9531   | 59.72         |
| Excl. Overall  | 2.16 (1.37, 3.38) 448/2658              | 4.78 (0.70, 36.28) 582/19567  | 106.09        |
| M-H Overall    | 2.16 (1.37, 3.38) 448/2658              | 4.78 (0.70, 36.28) 582/19567  | 106.09        |

NOTE: Weights are from random effects analysis.
Figure S4. Transitivity assumption in network meta-analysis.

The transitivity assumption was completed by comparing the distribution of clinical variables, which were considered as interfering factors that might affect outcomes.

(1) Age

![Mean age (years)](image)

1 = Asprin; 2 = Ticagrelor+Asprin; 3 = Rivaroxaban; 4 = Rivaroxaban+Asprin; Thienopyridine+Asprin.

(2) Hypertension

![Proportion of hypertension](image)

|        | Total  | Hypertension |
|--------|--------|--------------|
| 2-1    | 40382  | 34183        |
| 3-1    | 16574  | 12498        |
| 4-1    | 16511  | 12432        |
| 5-1    | 9961   | 7745         |
(3) Diabetes

Proportion of diabetes

|       | 2-1 | 3-1 | 4-1 | 5-1 |
|-------|-----|-----|-----|-----|
| Total | 40382 | 16574 | 16511 | 9933 |
| Diabetes | 26026 | 6083 | 6055 | 3037 |

(4) Multivessel coronary artery disease

Proportion of multivessel coronary artery disease

|       | 2-1 | 3-1 | 4-1 |
|-------|-----|-----|-----|
| Total | 40378 | 16574 | 16511 |
| Multivessel coronary artery disease | 24493 | 10157 | 10217 |

(5) Percutaneous coronary intervention
History of percutaneous coronary intervention

| Month | Total | History of percutaneous coronary intervention |
|-------|-------|----------------------------------------------|
| 2-1   | 40379 | 23712                                        |
| 3-1   | 16573 | 9876                                         |
| 4-1   | 16511 | 9891                                         |
| 5-1   | 9961  | 9961                                         |

Total

Graph showing the distribution of percutaneous coronary intervention over months.
Figure S5. Cumulative rank probability plot for efficacy and safety outcomes.

The smaller the area under the curve, the lower the incidence of adverse events, which means the better treatment regimen performance.

(1) Trial-defined major adverse cardiovascular and cerebrovascular events

(2) Death from any cause

(3) Cardiovascular death
(4) Myocardial infarction

(5) Storke

(6) Trial-defined major bleeding
(7) GUSTO major bleeding

(8) Trial-defined minor bleeding
(9) GUSTO moderate bleeding

(10) Intracranial hemorrhage
Graphs by Treatment
Figure S6. Subgroup results based on whether the subjects undergoing percutaneous coronary intervention (PCI) or not.

(1) Forest plots for efficacy and safety outcomes

(2) Cumulative rank probability plot for efficacy and safety outcomes. The smaller the area under the curve, the lower the incidence of adverse events, which means the better treatment regimen performance.

 Trial-defined major adverse cardiovascular and cerebrovascular events in PCI subgroup
② Trial-defined major adverse cardiovascular and cerebrovascular events in non PCI subgroup

③ Trial-defined major bleeding in PCI subgroup
Trial-defined major bleeding in non PCI subgroup
**Figure S7.** Subgroup results based on whether the subjects undergoing prior myocardial infarction (MI) or not.

(1) Forest plots for efficacy and safety outcomes

| Study ID | Exploratory | Favors | Aspirin | OR (95% CI) |
|----------|-------------|--------|---------|-------------|
| A        |             |        |         |             |
|          |             |        |         |             |
| B        |             |        |         |             |
|          |             |        |         |             |

(3) Cumulative rank probability plot for efficacy and safety outcomes. The smaller the area under the curve, the lower the incidence of adverse events, which means the better treatment regimen performance.

1. Trial-defined major adverse cardiovascular and cerebrovascular events in prior MI subgroup
② Trial-defined major adverse cardiovascular and cerebrovascular events in non prior MI subgroup

③ Trial-defined major bleeding in prior MI subgroup
④ Trial-defined major bleeding in non prior MI subgroup