

Supplementary Table 1. Search strategy for databases.

MEDLINE (Ovid)

1. Blood Transfusion/
2. Blood Component Transfusion/
3. Erythrocyte Transfusion/
4. ((erythrocyte* or red cell* or blood or RBC*) adj5 (transfus* or unit*)).tw,kf.
5. ((red cell* or RBC* or erythrocyte* or red blood cell* or whole blood or transfus*) adj5 (trigger* or level* or threshold* or rule* or target* or restrict* or liberal* or reduc* or limit*)).tw,kf.
6. (allogeneic blood or (unit* adj2 blood) or allogenic blood or (blood adj2 exposure) or donor blood or blood product* or blood component* or blood support).ti,ab.
7. (h?emotransfus* or hypertransfus* or h?emotherap*).tw,kf.
8. (red cell* or erythrocyte* or transfus* or whole blood or RBC*).ti.
9. Blood Component Transfusion/ not (Exchange Transfusion, Whole Blood/ or Plasma Exchange/ or Platelet Transfusion/ or Exp Leukocyte Transfusion/)
10. Erythrocytes/ or (red cell* or red blood cell* or erythrocyte* or RBC*).ti.
11. 9 and 10
12. or/1-8,11
13. Exp Myocardial Ischemia/
14. ((myocardial or myocardium or subendocardial or transmural or cardiac or cardial or coronary or heart) adj2 (infarct* or postinfarct* or hypoxi* or anoxi* or failure* or decompensation or insufficien*)).tw.
15. (heart disease* or coronary disease* or IHD or CIHD or CHD).tw.
16. (myocardial dysfunction or angina or stenocardia).tw.
17. ((ischemi* or ischaemi*) adj2 (myocardium or myocardial or heart or coronary or cardiac or cardial or subendocardial or cardiomyopath*)).tw.
18. ((artery occlusion* or artery disease* or arterioscleros* or atheroscleros*) adj2 coronary).tw.
19. or/13-18
20. Acute Coronary Syndrome/
21. Exp Myocardial Infarction/
22. Exp Coronary Thrombosis/
23. Coronary Thrombosis.tw.
24. Acute Coronary.tw.
25. Exp Angina, Unstable/
26. Myocardial Infarct*.tw.
27. Heart Infarct*.tw.
28. Acs.tw.
29. Ami.tw.

30. (Coronary Adj3 Syndrome*).tw.
31. Acute Angina.tw.
32. (Unstable Adj3 Angina).tw.
33. Unstable Coronary.tw.
34. or/20-33
35. 19 or 34
36. 12 and 35

CENTRAL (Cochrane Library)

- #1 MeSH Descriptor: [Blood Transfusion] This Term Only
- #2 MeSH Descriptor: [Blood Component Transfusion] Explode All Trees
- #3 MeSH Descriptor: [Erythrocyte Transfusion] This Term Only
- #4 (erythrocyte* or "red cell" or "red cells" or blood or RBC*) Near/3 (transfus* or unit*)
- #5 ("red cell" or "red cells" or RBC* or erythrocyte* or "red blood cell" or "red blood cells" or "whole blood" or transfus*) Near/3 (trigger* or level* or threshold* or rule* or target* or restrict* or liberal* or reduc* or limit*)
- #6 ("red cell" or "red cells" or blood) Near/3 (management or sparing or support or strateg*)
- #7 ("allogeneic blood" or (unit* Near/2 blood) or "allogenic blood" or (blood Near/2 exposure) or "donor blood" or "blood product" or "blood products" or "blood component" or "blood components" or "blood support")
- #8 (*hemotransfus* or hypertransfus* or *hemotherapy*)
- #9 ("red cell" or "red cells" or "red blood cell" or "red blood cells" or RBC* or transfus*):ti
- #10 #1 Or #2 Or #3 Or #4 Or #5 Or #6 Or #7 Or #8 Or #9
- #11 MeSH Descriptor: [Myocardial Ischemia] Explode All Trees
- #12 ((myocardial or myocardium or subendocardial or transmural or cardiac or cardial or coronary or heart) Adj2 (infarct* or postinfarct* or hypoxi* or anoxi* or failure* or decompensation or insufficien*))
- #13 (heart disease* or coronary disease* or IHD or CIHD or CHD)
- #14 (myocardial dysfunction or angina or stenocardia)
- #15 ((ischemi* or ischaemi*) Adj2 (myocardium or myocardial or heart or coronary or cardiac or cardial or subendocardial or cardiomyopath*))
- #16 ((artery occlusion* or artery disease* or arterioscleros* or atheroscleros*) Adj2 coronary)
- #17 #11 Or #12 Or #13 Or #14 Or #15 Or #16
- #18 MeSH Descriptor: [Acute Coronary Syndrome] Explode All Trees
- #19 MeSH Descriptor: [Myocardial Infarction] Explode All Trees
- #20 MeSH Descriptor: [Coronary Thrombosis] Explode All Trees
- #21 Coronary Thrombosis
- #22 Acute Coronary
- #23 MeSH Descriptor: [Angina, Unstable] Explode All Trees

#24 Myocardial Infarct*
 #25 Heart Infarct*
 #26 Acs
 #27 Ami
 #28 (Coronary Adj3 Syndrome*)
 #29 Acute Angina
 #30 (Unstable Adj3 Angina)
 #31 Unstable Coronary
 #32 #18 Or #19 Or #20 Or #21 Or #22 Or #23 Or #24 Or #25 Or #26 Or #27 Or #28 Or #29 Or #30 Or #31
 #33 #17 Or #32
 #35 #10 And #33

Embase (Ovid)

1. *Blood Transfusion/
2. Blood Component Therapy/
3. Erythrocyte Transfusion/
4. ((Erythrocyte* Or Red Blood Cell* Or Red Cell* Or Blood Or RBC*) Adj5 (Transfus* Or Unit*)).Tw,Kw.
5. ((Red Cell* Or RBC* Or Erythrocyte* Or Red Blood Cell* Or Whole Blood Or Transfus*) Adj3 (Trigger* Or Level* Or Threshold* Or Rule* Or Target* Or Restrict* Or Liberal* Or Reduc* Or Limit*)).Tw,Kw.
6. (Allogeneic Blood Or (Unit* Adj2 Blood) Or Allogenic Blood Or (Blood Adj2 Exposure) Or Donor Blood Or Blood Product* Or Blood Component* Or Blood Support).Tw,Kw.
7. (H?emotransfus* Or H?emotherap* Or Hypertransfus*).Tw,Kw.
8. (Transfus* Or Red Cell* Or Red Blood Cell* Or RBC* Or Whole Blood).Ti.
9. Or/1-8
10. Exp Heart Muscle Ischemia/
11. ((Myocardial Or Myocardium Or Subendocardial Or Transmural Or Cardiac Or Cardial Or Coronary Or Heart) Adj2 (Infarct* Or Postinfarct* Or Hypoxi* Or Anoxi* Or Failure* Or Decompensation Or Insufficien*)).Tw.
12. (Heart Disease* Or Coronary Disease* Or IHD Or CIHD Or CHD).Tw.
13. (Myocardial Dysfunction Or Angina Or Stenocardia).Tw.
14. ((Ischemi* Or Ischaemi*) Adj2 (Myocardium Or Myocardial Or Heart Or Coronary Or Cardiac Or Cardial Or Subendocardial Or Cardiomyopath*)).Tw.
15. ((Artery Occlusion* Or Artery Disease* Or Arterioscleros* Or Atheroscleros*) Adj2 Coronary).Tw.
16. Or/10-15
17. Exp Acute Coronary Syndrome/
18. Exp Heart Infarction/

19. Coronary Artery Thrombosis/
20. Coronary Thrombosis.Tw.
21. Acute Coronary.Tw.
22. Exp Unstable Angina Pectoris/
23. Myocardial Infarct*.Tw.
24. Heart Infarct*.Tw.
25. Acs.Tw.
26. Ami.Tw.
27. (Coronary Adj3 Syndrome*).Tw.
28. Acute Angina.Tw.
29. (Unstable Adj3 Angina).Tw.
30. Unstable Coronary.Tw.
31. Or/17-30
32. 16 or 31
33. 9 and 32

ClinicalTrials.gov

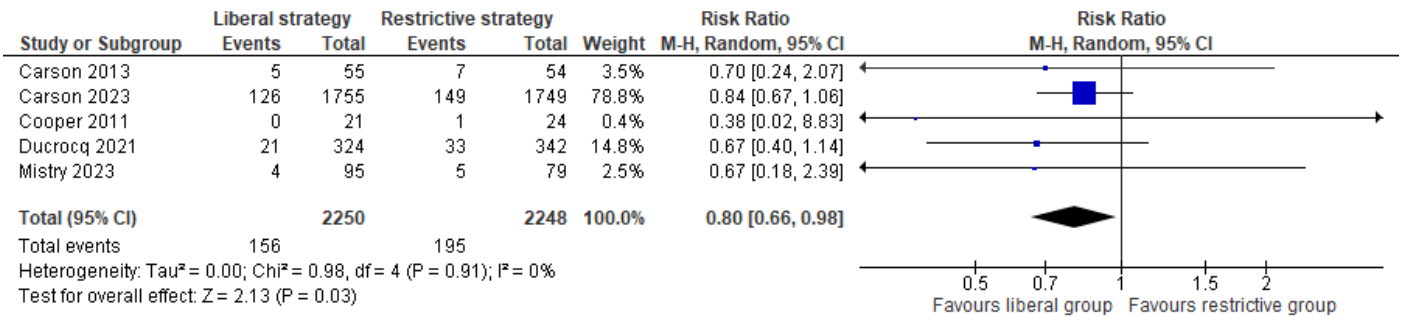
Condition: "acute coronary syndrome," "ischaemic heart disease," "stemi," "nSTEMI," or "unstable angina"

Interventions: "red cell transfusion," "blood transfusion," "red cells," "rbc," or "red blood cells"

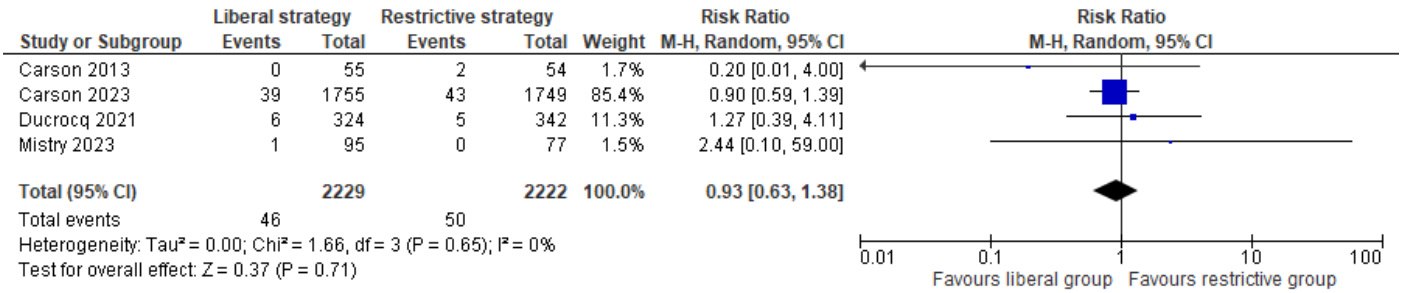
Supplementary Table 2. Grading of recommendations assessment, development, and evaluation (GRADE) summary of findings from randomized controlled trials.

Outcome	No. of participants (studies)	Effect estimate (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality of Evidence (GRADE)
Major adverse cardiovascular events	4509 (5)	RR 0.91 (0.68, 1.21)	Not serious	Serious	Not serious	Not serious	⊕⊕⊕⊖ Moderate
All-cause mortality	4510 (5)	RR 0.85 (0.72, 1.00)	Not serious	Not serious	Not serious	Serious	⊕⊕⊕⊖ Moderate

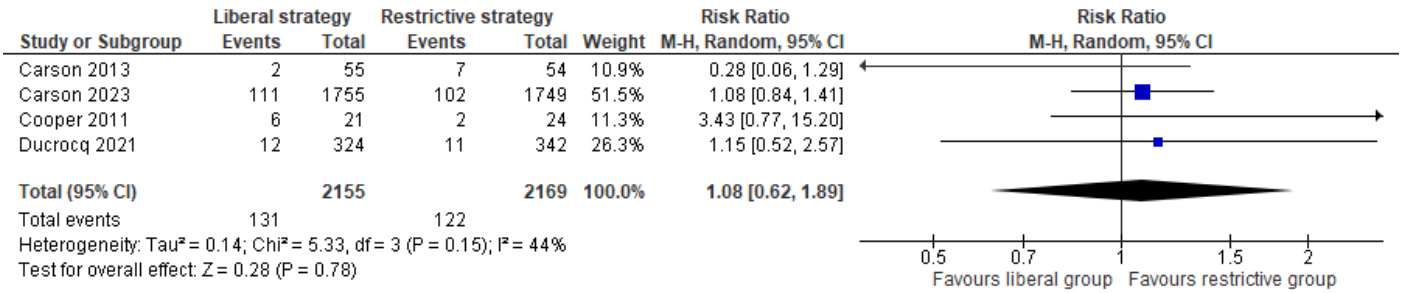
Supplementary Figure 1. Effect of liberal vs. restrictive red blood cell transfusion on the risk of myocardial infarction.



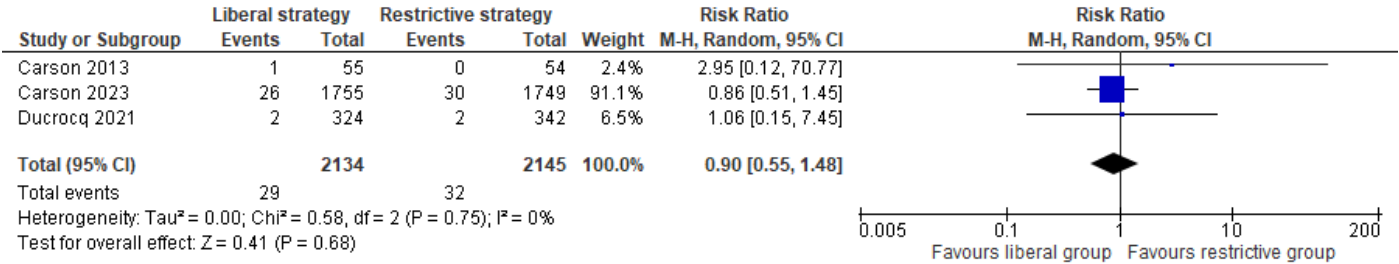
Supplementary Figure 2. Effect of liberal vs. restrictive red blood cell transfusion on the risk of revascularization.



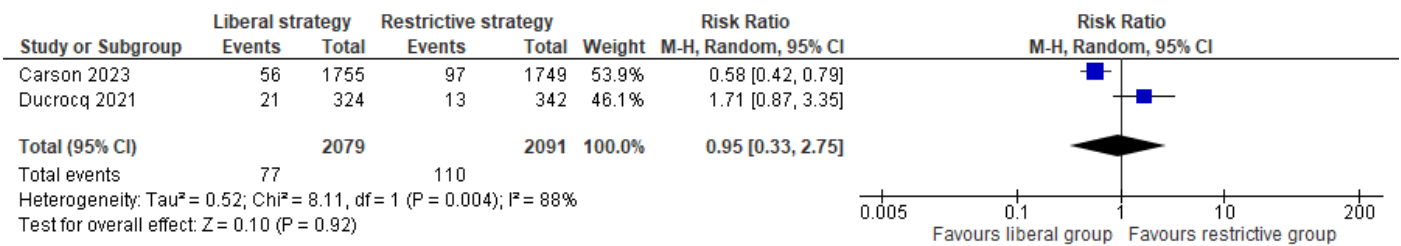
Supplementary Figure 3. Effect of liberal vs. restrictive red blood cell transfusion on the risk of heart failure.



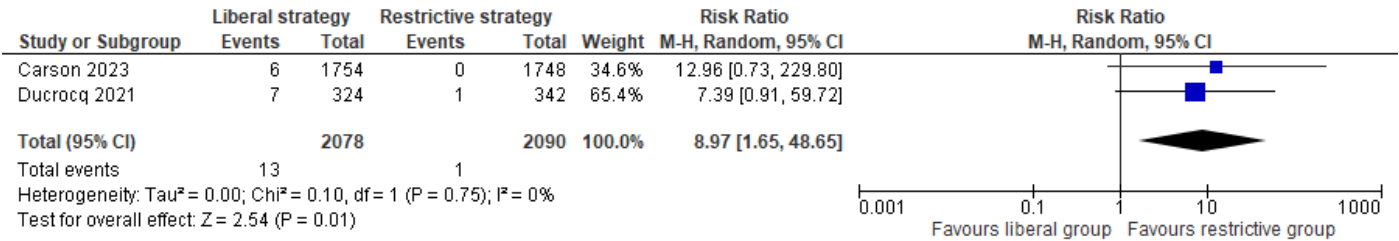
Supplementary Figure 4. Effect of liberal vs. restrictive red blood cell transfusion on the risk of stroke.



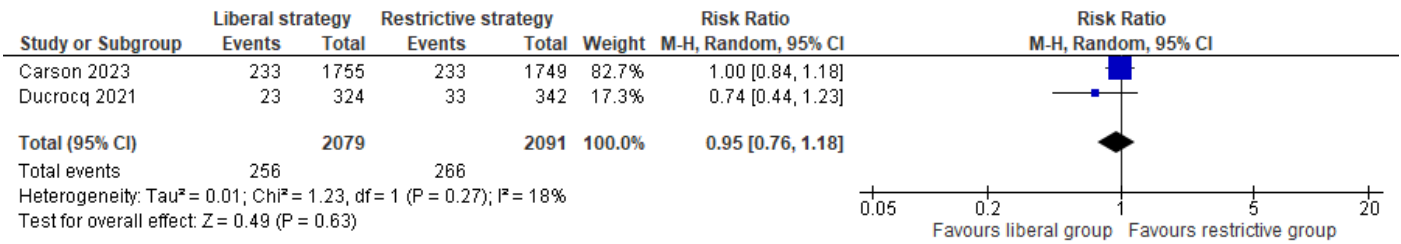
Supplementary Figure 5. Effect of liberal vs. restrictive red blood cell transfusion on the risk of cardiac mortality.



Supplementary Figure 6. Effect of liberal vs. restrictive red blood cell transfusion on the risk of acute lung injury.



Supplementary Figure 7. Effect of liberal vs. restrictive red blood cell transfusion on the risk of acute kidney injury or failure.



Supplementary Figure 8. Effect of liberal vs. restrictive red blood cell transfusion on the risk of pneumonia, bacteremia, or infection.

