**Search strategy**

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| **Database (including vendor/platform):** PubMed MEDLINE**Search Date:** 2/21/2024 |
| **Search step** | **Search string** | **Results** |
| 1. *S. aureus*
 | "Staphylococcus aureus"[Mesh] OR "staphylococcus aureus"[tiab] OR "s. aureus"[tiab] OR "s aureus"[tiab] OR "staph aureus"[tiab] OR Staphylococcusaureus[tiab] OR "Methicillin-Resistant Staphylococcus aureus"[Mesh] OR ("Methicillin Resistance"[Mesh] AND "Staphylococcal Infections"[Mesh]) OR mrsa[tiab] | 160,211  |
| 1. Bacteremia
 | "Bacteremia"[Mesh] OR Bacteremia[tiab] OR bacteriaemia[tiab] OR Bacteraemia[tiab] OR Bacteremias[tiab] OR bacteriaemias[tiab] OR Bacteraemias[tiab] OR bacteremic[tiab] OR ((bloodstream[tiab] OR "blood stream"[tiab] OR bloodstreams[tiab] OR "blood streams"[tiab]) AND (infection[tiab] OR infections[tiab] OR infected[tiab] OR infect[tiab] OR infects[tiab] OR infecting[tiab])) | 69,167  |
| 1. endocarditis
 | “Endocarditis"[Mesh] OR Endocarditis[tiab] OR Endocarditides[tiab] OR (("endocardium"[Mesh] OR endocardium[tiab]) AND ("Inflammation"[Mesh] OR inflammation[tiab] OR inflammations[tiab] OR inflamed[tiab] OR inflammatory[tiab])) | 46,611 |
| 1. bacteremia OR endocarditis
 | #2 OR #3 | 111,056  |
| 1. Standard RCT filter (DMCL adapted version of Cochrane Highly Sensitive Strategy hybrid)
 | (“randomized controlled trial”[pt] OR “controlled clinical trial”[pt] OR “drug therapy”[sh] OR randomized[tiab] OR randomised[tiab] OR randomization[tiab] OR randomisation[tiab] OR randomly[tiab] OR placebo[tiab] OR trial[tiab] OR groups[tiab]) | 5,998,478  |
| 1. *S. aureus* + (bacteremia OR endocarditis) + sensitive Cochrane RCT filter
 | #1 AND #4 AND #5  | 5,065 |
| 1. Exclude children
 | #6 NOT (("Adolescent"[Mesh] OR "Child"[Mesh] OR "Infant"[Mesh]) NOT "Adult"[Mesh]) | 4,569 |
| 1. Human filter
 | #7 NOT ("Animals"[mh] NOT "Humans"[mh]) | 4,197 |
| 1. Remove editorials, letters, case reports and comments
 | #8 NOT (Editorial[pt] OR Letter[pt] OR Case Reports[pt] OR Comment[pt] OR Congress[pt]) | 3,293  |
| 1. Exemplar articles/search validation
 | 30152252 OR 19072714 OR 15494904 OR 25977146 OR 16195255 | 4/5 retrieved. 19072714 does not specify *S. aureus*, only gram-positive organisms/culture. |
| **Database (including vendor/platform):** Embase (Elsevier)**Date:** 2/21/2024 |
| **Search step** | **Search string** | **Results** |
| 1. *S. aureus*
 | 'Staphylococcus aureus'/exp OR 'methicillin resistant Staphylococcus aureus'/exp OR 'staphylococcus aureus':ti,ab OR 's. aureus':ti,ab OR 's aureus':ti,ab OR 'staph aureus':ti,ab OR Staphylococcusaureus:ti,ab OR ('methicillin resistance'/exp AND 'Staphylococcus infection'/exp) OR mrsa:ti,ab | 265,725 |
| 1. Bacteremia
 | Bacteremia/exp OR Bacteremia:ti,ab OR bacteriaemia:ti,ab OR Bacteraemia:ti,ab OR Bacteremias:ti,ab OR bacteriaemias:ti,ab OR Bacteraemias:ti,ab OR bacteremic:ti,ab OR ((bloodstream:ti,ab OR 'blood stream':ti,ab OR bloodstreams:ti,ab OR 'blood streams':ti,ab) AND (infection:ti,ab OR infections:ti,ab OR infected:ti,ab OR infect:ti,ab OR infects:ti,ab OR infecting:ti,ab)) | 103,765 |
| 1. Endocarditis
 | 'endocarditis'/exp OR Endocarditis:ti,ab OR Endocarditides:ti,ab OR (('endocardium'/exp OR endocardium:ti,ab) AND ('inflammation'/exp OR inflammation:ti,ab OR inflammations:ti,ab OR inflamed:ti,ab OR inflammatory:ti,ab)) | 76,088 |
| 1. Bacteremia OR Endocarditis
 | #2 OR #3 | 170,687 |
| 1. RCT filter (modified version of Cochrane Highly Sensitive Strategy)
 | 'randomized controlled trial'/exp OR 'controlled clinical trial'/exp OR 'drug therapy'/exp OR randomized:ab,ti OR randomised:ab,ti OR randomization:ab,ti OR randomisation:ab,ti OR randomly:ab,ti OR placebo:ti,ab OR trial:ti,ab OR groups:ti,ab | 8,401,239 |
| 1. *S. aureus* + (bacteremia OR endocarditis) + sensitive Cochrane RCT filter
 | #1 AND #4 AND #5  | 10,484 |
| 1. Exclude children
 | #6 NOT (('adolescent'/exp OR 'child'/exp OR 'infant'/exp) NOT 'adult'/exp) | 9,517 |
| 1. Human filter
 | #7 NOT ([animals]/lim NOT [humans]/lim)  | 9,119 |
| 1. Study type filter
 | #8 NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR [editorial]/lim OR 'letter'/exp OR [letter]/lim OR 'note'/exp OR [note]/lim OR [conference abstract]/lim OR 'conference abstract'/exp OR 'conference abstract'/it) | 5,156 |
| **Database (including vendor/platform):** Cochrane Library**Date:** 2/21/2024 |
| 1. *S. aureus*
 | [mh "Staphylococcus aureus"] OR "staphylococcus aureus":ti,ab OR "s. aureus":ti,ab OR "s aureus":ti,ab OR "staph aureus":ti,ab OR Staphylococcusaureus:ti,ab OR [mh "Methicillin-Resistant Staphylococcus aureus"] OR ([mh "Methicillin Resistance"] AND [mh "Staphylococcal Infections"]) OR mrsa:ti,ab | 3952 |
| 1. Bacteremia
 | [mh Bacteremia] OR Bacteremia:ti,ab OR bacteriaemia:ti,ab OR Bacteraemia:ti,ab OR Bacteremias:ti,ab OR bacteriaemias:ti,ab OR Bacteraemias:ti,ab OR bacteremic:ti,ab OR ((bloodstream:ti,ab OR "blood stream":ti,ab OR bloodstreams:ti,ab OR "blood streams":ti,ab) AND (infection:ti,ab OR infections:ti,ab OR infected:ti,ab OR infect:ti,ab OR infects:ti,ab OR infecting:ti,ab)) | 4263 |
| 1. Endocarditis
 | [mh Endocarditis] OR Endocarditis:ti,ab OR Endocarditides:ti,ab OR (([mh endocardium] OR endocardium:ti,ab) AND ([mh Inflammation] OR inflammation:ti,ab OR inflammations:ti,ab OR inflamed:ti,ab OR inflammatory:ti,ab)) | 694 |
| 1. Bacteremia OR Endocarditis
 | #2 OR #3 | 4791 |
| 1. RCT filter (modified version of Cochrane Highly Sensitive Strategy)
 | ("randomized controlled trial":pt OR "controlled clinical trial":pt OR randomized:ti,ab OR randomised:ti,ab OR randomization:ti,ab OR randomisation:ti,ab OR randomly:ti,ab OR placebo:ti,ab OR trial:ti,ab OR groups:ti,ab) | 1495469 |
| 1. “drug therapy” SH
 | [drug therapy – DT] | 282847 |
| 1. RCT filter OR “drug therapy” SH
 | #5 OR #6 | 1543811 |
| 1. *S. aureus* + (bacteremia OR endocarditis) + sensitive Cochrane RCT filter
 | #1 AND #4 AND #7 | 456 |
| 1. Exclude children
 | #8 NOT (([mh Adolescent] OR [mh Child] OR [mh Infant]) NOT [mh Adult]) | 438 |
| 1. Human filter
 | #9 NOT ([mh Animals] NOT [mh Humans]) | 438 |
| 1. Study type filter
 | #10 NOT (Editorial:pt OR Letter:pt OR "Case Reports":pt OR Comment:pt OR Congress:pt) | 438 |