

## Appendix 1. Electronic Search Strategy on Each Database

## MEDLINE

1. "Anterior Cruciate Ligament"[TIAB] OR "Anterior Cruciate Ligaments"[TIAB] OR ACL[TIAB] 18052
2. "Anterior Cruciate Ligament"[Mesh] 11255
3. 1 OR 2 19693
4. Reconstructive[TIAB] OR reconstruction[TIAB] OR Surgical[TIAB] OR Surgery[TIAB] OR Surgeries[TIAB] OR grafts[TIAB] OR Grafting[TIAB] OR graft[TIAB] OR arthroscopy[TIAB] OR Arthroscopic[TIAB] OR Arthroscopies[TIAB] OR reconstructions[TIAB] OR arthrometer[TIAB] OR Arthrometry[TIAB] OR Operative[TIAB] OR Operation[TIAB] OR operations[TIAB] OR Transplantation[TIAB] OR Transplantations[TIAB] 2287524
5. "Reconstructive Surgical Procedures"[Mesh:NoExp] OR "Arthroscopy"[Mesh] OR "Arthrometry, Articular"[Mesh] OR "Tendon Transfer"[Mesh] OR "Minimally Invasive Surgical Procedures"[Mesh:NoExp] OR "Second-Look Surgery"[Mesh] OR "Transplantation"[Mesh] OR allograft[TIAB] OR allotransplantation[TIAB] OR autograft[TIAB] OR autotransplantation[TIAB] OR allografts[TIAB] OR allotransplantations[TIAB] OR autografts[TIAB] OR autotransplantations[TIAB] 539065
6. 4 OR 5 2462891
7. 3 AND 6 12467
8. "Anterior Cruciate Ligament Reconstruction"[Mesh] 2556
9. 7 OR 8 12648
10. "Age Factors"[Mesh] 444997
11. middle-aged[TIAB] OR age[TIAB] OR young[TIAB] OR Elders[TIAB] OR Elder[TIAB] OR Older[TIAB] OR younger[TIAB] OR aged[TIAB] OR elderly[TIAB] OR Adults[TIAB] OR Adult[TIAB] OR 40[TIAB] OR 50[TIAB] OR Forty[TIAB] 4529330
12. 10 OR 11 4683264
13. 9 AND 12 4186
14. 13 NOT "review"[Publication Type] OR "review literature as topic"[MeSH Terms] 3896

## EMBASE

1. "Anterior Cruciate Ligament":ab,ti OR "Anterior Cruciate Ligaments":ab,ti OR ACL:ab,ti 21479
2. 'anterior cruciate ligament'/exp 9691
3. 1 OR 2 23146
4. reconstructive:ab,ti OR reconstruction:ab,ti OR surgical:ab,ti OR surgery:ab,ti OR surgeries:ab,ti OR grafts:ab,ti OR grafting:ab,ti OR graft:ab,ti OR arthroscopy:ab,ti OR arthroscopic:ab,ti OR arthroscopies:ab,ti OR reconstructions:ab,ti OR arthrometer:ab,ti OR arthrometry:ab,ti OR operative:ab,ti OR operation:ab,ti OR operations:ab,ti OR transplantation:ab,ti OR transplantations:ab,ti OR allograft:ab,ti OR allotransplantation:ab,ti OR autograft:ab,ti OR autotransplantation:ab,ti OR allografts:ab,ti OR allotransplantations:ab,ti OR autografts:ab,ti OR autotransplantations:ab,ti 2919721
5. 'plastic surgery'/de OR 'tendon reconstruction'/exp OR 'minimally invasive surgery'/exp OR 'second look surgery'/exp OR 'transplantation'/de OR 'allograft'/exp OR 'allotransplantation'/exp OR 'autograft'/exp OR 'autotransplantation'/exp OR 'arthroscopy'/de OR 'knee arthroscopy'/exp OR 'arthrometry'/exp 338367
6. 4 OR 5 3009187
7. 3 AND 6 14345
8. 'anterior cruciate ligament reconstruction'/exp 5662
9. 7 OR 8 15069
10. middle-aged:ab,ti OR age:ab,ti OR young:ab,ti OR Elders:ab,ti OR Elder:ab,ti OR Older:ab,ti OR younger:ab,ti OR aged:ab,ti OR elderly:ab,ti OR Adults:ab,ti OR Adult:ab,ti OR 40:ab,ti OR 50:ab,ti OR Forty:ab,ti 6106475
11. 9 AND 10 4964
12. 11 NOT 'review'/it 4645
13. 12 NOT ('animal experiment'/de OR 'animal model'/de OR 'animal tissue'/de OR 'nonhuman'/de) 4297

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**Cochrane**


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1. "Anterior Cruciate Ligament" or "Anterior Cruciate Ligaments" or ACL:ti,ab,kw 1821
2. MeSH descriptor: [Anterior Cruciate Ligament] explode all trees 835
3. 1 OR 2 1821
4. Reconstructive or reconstruction or Surgical or Surgery or Surgeries or grafts or Grafting or graft or arthroscopy or Arthroscopic or Arthroscopies or reconstructions or arthrometer or Arthrometry or Operative or Operation or operations or Transplantation or Transplantations:ti,ab,kw 155312
5. MeSH descriptor: [Reconstructive Surgical Procedures] this term only 759
6. MeSH descriptor: [Arthroscopy] explode all trees 1363
7. MeSH descriptor: [Arthrometry, Articular] explode all trees 83
8. MeSH descriptor: [Tendon Transfer] explode all trees 64
9. MeSH descriptor: [Minimally Invasive Surgical Procedures] this term only 1014
10. MeSH descriptor: [Second-Look Surgery] explode all trees 42
11. MeSH descriptor: [Transplantation] explode all trees 11712
12. allograft or allotransplantation or autograft or autotransplantation or allografts or allotransplantations or autografts or autotransplantations:ti,ab,kw 3603
13. 4-12/OR 155899
14. 3 AND 13 1459
15. MeSH descriptor: [Anterior Cruciate Ligament Reconstruction] explode all trees 288
16. 14 OR 15 1461
17. MeSH descriptor: [Age Factors] explode all trees 9585
18. middle-aged or age or young or Elders or Elder or Older or younger or aged or elderly or Adults or Adult or 40 or 50 or Forty:ti,ab,kw 638584
19. 17 or 18 638584
20. 16 and 19 963
21. 20/trials 921

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**SCOPUS**


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1. TITLE-ABS ( "Anterior Cruciate Ligament" OR "Anterior Cruciate Ligaments" OR acl ) 24011
  2. Indexterms ("Anterior Cruciate Ligament") 17584
  3. 1 OR 2 27561
  4. TITLE-ABS (Reconstructive OR reconstruction OR Surgical OR Surgery OR Surgeries OR grafts OR Grafting OR graft OR arthroscopy OR Arthroscopic OR Arthroscopies OR reconstructions OR arthrometer OR Arthrometry OR Operative OR Operation OR operations OR Transplantation OR Transplantations) 4166655
  5. indexterms("Reconstructive Surgical Procedures" OR "Arthroscopy" OR "Arthrometry, Articular" OR "Tendon Transfer" OR "Minimally Invasive Surgical Procedures" OR "Second-Look Surgery" OR "Transplantation") 702415
  6. TITLE-ABS(allograft OR allotransplantation OR autograft OR autotransplantation OR allografts OR allotransplantations OR autografts OR autotransplantations) 82411
  7. 5 or 6 721644
  8. 4 OR 7 4451750
  9. 3 AND 8 16212
  10. indexterms("Anterior Cruciate Ligament Reconstruction") 4624
  11. 9 OR 10 16582
  12. INDEXTERMS ( "Age Factors" ) 396038
  13. TITLE-ABS ( middle-aged OR age OR young OR elders OR elder OR older OR younger OR aged OR elderly OR adults OR adult OR 40 OR 50 OR forty ) 8219158
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14. 12 OR 13 8344656
  15. 11 AND 14 5295
  16. INDEXTERMS ( "review literature as topic" ) 4146
  17. 15 and ( EXCLUDE ( DOCTYPE , "re" ) ) 4903
  18. 17 and not 16 4903
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**Web of Science**

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1. TOPIC: ("Anterior Cruciate Ligament" OR "Anterior Cruciate Ligaments" OR ACL) OR TITLE: ("Anterior Cruciate Ligament" OR "Anterior Cruciate Ligaments" OR ACL) 19502
  2. TOPIC: (Reconstructive OR reconstruction OR Surgical OR Surgery OR Surgeries OR grafts OR Grafting OR graft OR arthroscopy OR Arthroscopic OR Arthroscopies OR reconstructions OR arthrometer OR Arthrometry OR Operative OR Operation OR operations OR Transplantation OR Transplantations) OR TITLE: (Reconstructive OR reconstruction OR Surgical OR Surgery OR Surgeries OR grafts OR Grafting OR graft OR arthroscopy OR Arthroscopic OR Arthroscopies OR reconstructions OR arthrometer OR Arthrometry OR Operative OR Operation OR operations OR Transplantation OR Transplantations) 2552091
  3. TOPIC: (allograft OR allotransplantation OR autograft OR autotransplantation OR allografts OR allotransplantations OR autografts OR autotransplantations) OR TITLE: (allograft OR allotransplantation OR autograft OR autotransplantation OR allografts OR allotransplantations OR autografts OR autotransplantations) 95625
  4. 1 AND (2 OR 3) 11495
  5. TOPIC: (middle-aged OR age OR young OR Elders OR Elder OR Older OR younger OR aged OR elderly OR Adults OR Adult OR 40 OR 50 OR Forty) OR TITLE: (middle-aged OR age OR young OR Elders OR Elder OR Older OR younger OR aged OR elderly OR Adults OR Adult OR 40 OR 50 OR Forty) 5825783
  6. 4 AND 5 3901
  7. 6 Refined by: [excluding] DOCUMENT TYPES: ( REVIEW ) 3713
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