

Search strategy in electronic databases, Supplemental Digital Content 1

Cochrane Library

Search Name:	Nonunion	
Date Run:	14th of April	
Comment:	All blocks	
ID	Search	Hits
#1	MeSH descriptor: [Fracture Fixation, Internal] explode all trees	1296
#2	fract* fixat*	4326
#3	osteosynthes*	1083
#4	MeSH descriptor: [Open Fracture Reduction] explode all trees	25
#5	open reduction	887
#6	MeSH descriptor: [Closed Fracture Reduction] explode all trees	12
#7	Closed reduction	471
#8	Bone fixa*	3571
#9	MeSH descriptor: [Fracture Fixation] explode all trees	1671
#10	Fracture reduction	567
#11	Skeletal fixa*	207
#12	MeSH descriptor: [Fracture Fixation, Intramedullary] explode all trees	336
#13	intramedullary nailing	633
#14	Intramedul* fract* fixa*	710
#15	Osteosynthesis intramedullary	158
#16	Intramedullary nail*	921
#17	Marrow nail*	49
#18	Medullary nail*	54
#19	MeSH descriptor: [Bone Screws] explode all trees	769
#20	Bone screw*	2067
#21	skelet* screw*	188
#22	fract* screw*	1668
#23	Cannulated screw*	144
#24	Compression screw*	305
#25	Biodegradable screw*	70
#26	Lock* screw*	302
#27	Fixati* Screw*	1875
#28	MeSH descriptor: [Bone Nails] explode all trees	419
#29	bone nail*	1040
#30	Nail* fixa*	977
#31	skelet* nail*	99
#32	fract* nail*	1434
#33	bone pin*	1728

#34	Pin fixa*	324
#35	skelet* pin*	405
#36	fract* pin*	1535
#37	Rod fixa*	96
#38	Bone rod*	1115
#39	skelet* rod*	383
#40	fract* rod*	1064
#41	Surgical wire	574
#42	Intraosseous wire*	9
#43	Wire* fixat*	515
#44	MeSH descriptor: [Bone Wires] explode all trees	174
#45	bone wire*	526
#46	skelet* wire*	124
#47	fract* wire*	650
#48	Kirschner wire*	222
#49	MeSH descriptor: [Bone Plates] explode all trees	574
#50	bone plate*	5122
#51	Compression plate*	558
#52	Plate fixa*	1310
#53	fract* plate*	3208
#54	skelet* plate*	526
#55	MeSH descriptor: [Suture Anchors] explode all trees	64
#56	Suture anchor*	358
#57	Bone Anchor	115
#58	Anchor fixa*	79
#59	cerclage	392
#60	tension band*	338
#61	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #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 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60	17713
#62	MeSH descriptor: [Risk Factors] explode all trees	23722
#63	Risk factor*	94824
#64	Population at risk	734
#65	MeSH descriptor: [Risk] explode all trees	36086
#66	MeSH descriptor: [Comorbidity] explode all trees	3434
#67	comorbid*	23601
#68	Epidemiological data	6093
#69	MeSH descriptor: [Morbidity] explode all trees	14268
#70	Morbid*	46012

#71	Multidiseas*	27
#72	Multi-diseas*	18
#73	MeSH descriptor: [Multiple Chronic Conditions] explode all trees	27
#74	Multiple chronic conditions	3337
#75	Multimorbid*	460
#76	Multi-morbid*	107
#77	Population Characteristic*	18562
#78	Predict*	93255
#79	MeSH descriptor: [Epidemiology] explode all trees	38
#80	epidemiolog*	67707
#81	smoking cessation	10023
#82	MeSH descriptor: [Smoking Cessation] explode all trees	3901
#83	MeSH descriptor: [Smoke] explode all trees	382
#84	smoking	31446
#85	MeSH descriptor: [Cigarette Smoking] explode all trees	83
#86	cigarette smoking	5586
#87	MeSH descriptor: [Smoking] explode all trees	5998
#88	cigar smoking	8
#89	tobacco smok*	13316
#90	MeSH descriptor: [Obesity] explode all trees	13219
#91	Obesi*	37149
#92	Adiposi*	2724
#93	Excess body weight	1896
#94	MeSH descriptor: [Overnutrition] explode all trees	13235
#95	Overnutrition	181
#96	Overweight	16083
#97	MeSH descriptor: [Body Weight] explode all trees	26999
#98	Body weight	61788
#99	MeSH descriptor: [Diabetes Mellitus] explode all trees	30348
#100	Diabet*	93669
#101	MeSH descriptor: [Alcohols] explode all trees	37147
#102	Alcoholism	7427
#103	Alcohol dependence	5179
#104	Alcohol*	32197
#105	MeSH descriptor: [Alcoholism] explode all trees	3501
#106	Alcohol abuse	5308
#107	Alcohol addiction	2785
#108	nonsteroid antiinflammatory agent	1686
#109	Anti-Inflammatory Agents, Non-Steroidal	7106
#110	MeSH descriptor: [Anti-Inflammatory Agents] explode all trees	13091
#111	antiinflammatory agent	4767
#112	anti inflammat* drug*	25391

#113	nonsteroid antiinflammatory agent	1686
#114	MeSH descriptor: [Staphylococcus] explode all trees	1083
#115	Staphylococcus*	4600
#116	Infect*	135439
#117	bone infection*	6015
#118	Bone tissue infection	1335
#119	MeSH descriptor: [Bone Diseases, Infectious] explode all trees	368
#120	osteomyelit*	639
#121	#62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75 OR #76 OR #77 OR #78 OR #79 OR #80 OR #81 OR #82 OR #83 OR #84 OR #85 OR #86 OR #87 OR #88 OR #89 OR #90 OR #91 OR #92 OR #93 OR #94 OR #95 OR #96 OR #97 OR #98 OR #99 OR #100 OR #101 OR #102 OR #103 OR #104 OR #105 OR #106 OR #107 OR #108 OR #109 OR #110 OR #111 OR #112 OR #113 OR #114 OR #115 OR #116 OR #117 OR #118 OR #119 OR #120	552705
#122	MeSH descriptor: [Fracture Healing] explode all trees	520
#123	MeSH descriptor: [Fractures, Ununited] explode all trees	148
#124	Fractures ununited	142
#125	Non-union	316
#126	Nonunion*	899
#127	No* union*	4586
#128	Delayed fracture heal*	478
#129	Fracture heal* impairment	442
#130	MeSH descriptor: [Pseudarthrosis] explode all trees	23
#131	Pseudoarthro*	77
#132	pseudo arthrosis	10
#133	Delayed union	429
#134	False joint*	40180
#135	Bone heal* fail*	2744
#136	Ununited	144
#137	Deossification	0
#138	#122 OR #123 OR #124 OR #125 OR #126 OR #127 OR #128 OR #129 OR #130 OR #131 OR #132 OR #133 OR #134 OR #135 OR #136 OR #137	47032
#139	#61 AND #121 AND #138	2419
#140	#123 OR #124 OR #125 OR #126 OR #127 OR #128 OR #129 OR #130 OR #131 OR #132 OR #133 OR #134 OR #135 OR #136 OR #137	46845
#141	#61 AND #121 AND #140	2376

Embase + Medline the 14 th of April 2020 at 2.27 PM		
# ▲	Searches	Results
1	Fracture fixation, internal.mp. or exp osteosynthesis/	43363
2	Fracture osteosynthe*.mp.	131
3	Fracture fixation.mp. or exp fracture fixation/	94577
4	Osteosynthe*.mp.	49394
5	Open reduction.mp.	18568
6	Closed reduction.mp.	6636
7	Bone fixation.mp.	952
8	Fracture reduction*.mp. or exp fracture reduction/	13114
9	Skeletal fixa*.mp.	890
10	Fracture fixation, intramedullary.mp. or exp intramedullary nailing/	15366
11	Intramedul* fract* fixa*.mp.	50
12	Osteosynthesis intramedullary.mp.	15
13	Intramedullary nail*.mp.	18958
14	Marrow nail*.mp.	71
15	Medullary nail*.mp.	835
16	Bone screw*.mp. or exp bone screw/	36295
17	skelet* screw*.mp.	2
18	fract* screw*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	128
19	Cannulated screw*.mp. or exp cannulated screw/	1988
20	Compression screw*.mp. or exp compression screw/	1849
21	Biodegradable screw*.mp. or exp biodegradable screw/	218
22	Lock* screw*.mp. or exp locking screw/	1906
23	Fixati* Screw*.mp.	601
24	Bone nail*.mp. or exp bone nail/	9758
25	Nail* fixa*.mp.	842
26	skelet* nail*.mp.	4
27	fract* nail*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	91
28	Bone pin*.mp. or exp bone pin/	866
29	Pin fixa*.mp.	979
30	skelet* pin*.mp.	37
31	fract* pin*.mp.	86
32	Rod fixa*.mp.	589
33	Bone rod*.mp.	41
34	skelet* rod*.mp.	41
35	fract* rod*.mp.	32
36	exp surgical wire/ or Surgical wire.mp.	33832

37	Intraosseous wire*.mp.	61
38	Wire fixation.mp. or exp wire fixation/	3477
39	wire* fix*.mp.	3618
40	Bone wire*.mp. or exp bone wire/	9072
41	skelet* wire*.mp.	15
42	fract* wire*.mp.	52
43	Kirschner wires*.mp. or exp Kirschner wire/	8739
44	Bone plate*.mp. or exp bone plate/	19472
45	Compression plate*.mp. or exp compression plate/	2801
46	Plate fixa*.mp. or exp plate fixation/	9697
47	fract* plate*.mp.	263
48	skelet* plate*.mp.	29
49	Suture anchor*.mp. or exp suture anchor/	4177
50	Bone Anchor.mp.	271
51	Anchor fixa*.mp.	322
52	cerclage.mp.	5776
53	tension band*.mp.	1525
54	Risk factor*.mp. or exp risk factor/	1339228
55	Population at risk.mp.	5168
56	Comorbid*.mp. or exp comorbidity/	383219
57	Epidemiological data.mp. or exp epidemiological data/	3539765
58	Morbidity.mp. or exp morbidity/	666297
59	Multidiseas*.mp.	72
60	Multi-diseas*.mp.	190
61	Multiple chronic conditions.mp. or exp multiple chronic conditions/	3854
62	Multimorbid*.mp.	6268
63	Multi-morbid*.mp.	1254
64	Population Characteristic*.mp.	4039
65	Predictor.mp.	303926
66	exp epidemiology/ or Epidemiology.mp.	4050692
67	exp smoking/ or exp cigarette smoking/ or Smoking.mp. or exp smoking habit/ or exp cigar smoking/	485910
68	tobacco smok*.mp.	32514
69	exp obesity/ or Obesity.mp.	588843
70	Obesi*.mp.	548268
71	Adiposi*.mp.	37912
72	Excess body weight.mp.	2254
73	Overnutrition.mp. or exp overnutrition/	530312
74	Overweight.mp.	105039
75	Body weight.mp. or exp body weight/	647962
76	Diabetes mellitus.mp. or exp diabetes mellitus/	1030860
77	Diabet*.mp.	1173619

78	Alcoholism.mp. or exp alcoholism/	141603
79	Alcohol dependence.mp.	15431
80	Alcohol*.mp.	698716
81	Alcohol abuse.mp. or exp alcohol abuse/	48826
82	Alcohol addiction.mp.	2320
83	Anti-Inflammatory Agents, Non-Steroidal.mp. or exp nonsteroid antiinflammatory agent/	753196
84	antiinflammatory agent.mp. or exp antiinflammatory agent/	1998638
85	anti inflammat* drug*.mp.	50135
86	nonsteroid antiinflammatory agent.mp. or exp nonsteroid antiinflammatory agent/	753182
87	Staphylococcus.mp. or exp Staphylococcus/	272187
88	Infect*.mp.	2981222
89	bone infection*.mp. or exp bone infection/	12978
90	Bone tissue infection.mp.	3
91	osteomyelitis/ or Osteomyelitis.mp.	44195
92	Fractures, ununited.mp. or exp fracture nonunion/	26568
93	Non-union*.mp.	6753
94	Nonunion*.mp.	20496
95	No* union*.mp.	6902
96	Delayed fracture heal*.mp.	368
97	Fracture heal* impairment.mp.	10
98	Pseudoarthrosis.mp. or pseudarthrosis/	15206
99	pseudo arthrosis.mp.	216
100	Pseudarthro*.mp.	16628
101	Delayed union.mp.	2875
102	False joint*.mp.	194
103	Bone heal* fail*.mp.	12
104	Ununited.mp.	996
105	Deossification.mp.	22
106	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 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 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53	176797
107	92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 or 100 or 101 or 102 or 103 or 104 or 105	37901
108	54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 or 89 or 90 or 91	11167239
109	106 and 107 and 108	8848

ID	Name	Query	Documents	Date last run	Actions
#7	Final search Nonunion 14 mart...kken 15.32	<pre>((TITLE-ABS-KEY ("Risk factor*" OR "Population at risk" OR "Comorbid*" OR "comorbidity" OR "Epidemiological data" OR morbid* OR multidiseas* OR "Multi* diseas*" OR "Multiple chronic conditions" OR multimorbid* OR "Multi-morbid*" OR "Population Characteristic*" OR predictor OR epidemiolo*)) OR (TITLE-ABS-KEY ("smoking cessation" OR smok* OR "cigarette smoking" OR smoking OR "smoking habit" OR "cigar smoking" OR "tobacco smok*") OR (TITLE-ABS-KEY (obesity OR obesi* OR adiposi* OR "Excess body weight" OR overnutriti* AND overver eight* OR "Body weight")) OR (TITLE-ABS-KEY ("Diabetes mellitus" OR diabet*)) OR (TITLE-ABS-KEY (alcohol* OR "Alcohol dependence" OR "Alcohol abuse" OR "Alcohol addiction")) OR (TITLE-ABS-KEY ((anti AND inflammato ry AND agents AND non AND steroidal) OR (nonsteroid AND antiinflammatory AND agent) OR "antiinflammatory agent" OR "anti inflammat* drug*" OR (nonsteroid AND antiinflammatory AND agent))) OR (TITLE-ABS-KEY (sta phylococcus OR infect* OR "bone infect*" OR "Bone tissue infection" OR osteomyelitis))) AND (TITLE-ABS-KEY (fractures AND ununite*) OR "fracture nonunion" OR "Non-union" OR nonunion* OR "No* union*" OR "Delayed fracture heal*" OR "Fracture heal* impairment" OR pseudoarthro* OR "pseudo arthros*" OR "Delayed union" OR "F alse joint*" OR "Bone heal* fail*" OR ununited OR deossification)) AND ((TITLE-ABS-KEY ("fracture fixation intern al" OR "osteosynthes*" OR "Fracture* osteosynthes*" OR "Fracture fixation" OR "Open reduction*" OR "Closed redu ction*" OR "Bone fixat*" OR "Fracture reduction*" OR "Skeletal fixa*")) OR (TITLE-ABS-KEY ((fracture AND fixatio n AND intramedullary) OR "intramedullar* nail*" OR "Intramedul* fract* fixa*" OR "Osteosynthesis intramedullary" OR "Marrow nail*" OR "Medullary nail*")) OR (TITLE-ABS-KEY ("bone screw*" OR "skelet* screw*" OR "fract* scre w*" OR "Cannulated screw*" OR "Compression screw*" OR "Biodegradable screw*" OR "Lock* screw*" OR "Fixati* Screw*")) OR (TITLE-ABS-KEY ("Bone nail*" OR "Nail* fixa*" OR "skelet* nail*" OR "fract* nail*")) OR (TITLE-ABS-KEY ("Bone pin*" OR "Pin fixa*" OR "skelet* pin*" OR "fract* pin*" OR "Rod fixa*" OR "Bone rod*" OR "skelet* r od*" OR "fract* rod*")) OR (TITLE-ABS-KEY ("surgical wire*" OR "Intraosseous wire*" OR "Wire* fixat*" OR "Bon e wire*" OR "skelet* wire*" OR "fract* wire*" OR "Kirschner wires*" OR "Suture anchor*" OR "Bone Anchor" OR "A nchor fixa*" OR cerclage OR "tension band*")) OR (TITLE-ABS-KEY ("Bone plate*" OR "Compression plate*" OR " Plate fixa*" OR "fract* plate*" OR "skelet* plate*"))))</pre>	6,882	14 Apr 2020	    
		View Less  Edit query			

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((TITLE-ABS-KEY ("Risk factor*" OR "Population at risk" OR "Comorbid*" OR "comorbidity" OR "Epidemiological data" OR morbid* OR multidiseas* OR "Multi* diseas*" OR "Multiple chronic conditions" OR multimorbid* OR "Multi-morbid*" OR "Population Characteristic*" OR predictor OR epidemiolo*)) OR (TITLE-ABS-KEY ("smoking cessation" OR smok* OR "cigarette smoking" OR smoking OR "smoking habit" OR "cigar smoking" OR "tobacco smok*") OR (TITLE-ABS-KEY (obesity OR obesi* OR adiposi* OR "Excess body weight" OR overnutriti* AND overver eight* OR "Body weight")) OR (TITLE-ABS-KEY ("Diabetes mellitus" OR diabet*)) OR (TITLE-ABS-KEY (alcohol* OR "Alcohol dependence" OR "Alcohol abuse" OR "Alcohol addiction")) OR (TITLE-ABS-KEY ((anti AND inflammato ry AND agents AND non AND steroidal) OR (nonsteroid AND antiinflammatory AND agent) OR "antiinflammatory agent" OR "anti inflammat* drug*" OR (nonsteroid AND antiinflammatory AND agent))) OR (TITLE-ABS-KEY (staphylococcus OR infect* OR "bone infect*" OR "Bone tissue infection" OR osteomyelitis))) AND (TITLE-ABS-KEY (fractures AND ununite*) OR "fracture nonunion" OR "Non-union" OR nonunion* OR "No* union*" OR "Delayed fracture heal*" OR "Fracture heal* impairment" OR pseudoarthro* OR "pseudo arthros*" OR "Delayed union" OR "False joint*" OR "Bone heal* fail*" OR ununited OR deossification)) AND ((TITLE-ABS-KEY ("fracture fixation internal" OR "osteosynthes*" OR "Fracture* osteosynthes*" OR "Fracture fixation" OR "Open reduction*" OR "Closed reduction*" OR "Bone fixat*" OR "Fracture reduction*" OR "Skeletal fixa*")) OR (TITLE-ABS-KEY ((fracture AND fixation AND intramedullary) OR "intramedullar* nail*" OR "Intramedul* fract* fixa*" OR "Osteosynthesis intramedullary" OR "Marrow nail*" OR "Medullary nail*")) OR (TITLE-ABS-KEY ("bone screw*" OR "skelet* screw*" OR "fract* screw*" OR "Cannulated screw*" OR "Compression screw*" OR "Biodegradable screw*" OR "Lock* screw*" OR "Fixati* Screw*")) OR (TITLE-ABS-KEY ("Bone nail*" OR "Nail* fixa*" OR "skelet* nail*" OR "fract* nail*")) OR (TITLE-ABS-KEY ("Bone pin*" OR "Pin fixa*" OR "skelet* pin*" OR "fract* pin*" OR "Rod fixa*" OR "Bone rod*" OR "skelet* rod*" OR "fract* rod*")) OR (TITLE-ABS-KEY ("surgical wire*" OR "Intraosseous wire*" OR "Wire* fixat*" OR "Bone wire*" OR "skelet* wire*" OR "fract* wire*" OR "Kirschner wires*" OR "Suture anchor*" OR "Bone Anchor" OR "Anchor fixa*" OR cerclage OR "tension band*")) OR (TITLE-ABS-KEY ("Bone plate*" OR "Compression plate*" OR "Plate fixa*" OR "fract* plate*" OR "skelet* plate*"))))
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