Supplemental material

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Search Strategy Results 10th Feb 2022

Table 1. Pubmed (OvidMedline) Search Strategy from 10/02/2022

SEARCH NUMBER	QUERY	RESULTS
1	Lumbar Vertebrae [Mesh]	57,346
2	Low back pain	43,484
3	Back Pain [mesh]	42,330
4	#1 OR #2 OR #3	105,338
5	"EMG"	35,854
6	Electromyography	92,789
7	#5 OR #6	101,090
8	#4 AND #7	2,534
9	Sensitivity and Specificity [mesh]	630,128
10	Reproducibility of Results [mesh]	440,464
11	"Diagnostic Accuracy"	52,324
12	"Clinical Utility"	30,002
13	"Diagnostic Utility"	5,312
14	"Therapeutic Utility"	2,454
15	"Inter-rater reliability"	8,056
16	"Intra-class correlation*"	6,044
17	"Intra-rater reliability"	1,790
18	Inter-class correlation*	221
19	Typical error	530
20	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19	985,013
21	#8 AND #20	232

Table 2. CINAHL Plus (EBSCOhost) Search Strategy From 10/02/2022

SEARCH NUMBER	QUERY	RESULTS
1	Lumbar Vertebrae	20,594
2	Low back pain	28,323
3	Back Pain	46,393
4	#1 OR #2 OR #3	61,357
5	EMG	9,701
6	Electromyography	21,439
7	#7 OR #8	22,632
8	#4 AND #7	1488
9	Sensitivity and Specificity	115,175
10	Reproducibility of Results	72,457
11	"Diagnostic Accuracy"	14,688
12	"Clinical Utility"	8,162
13	"Diagnostic Utility"	1,528
14	"Therapeutic Utility"	239
15	(MH "Interrater reliability")	27,780
16	"Interrater Reliability"	29,534
17	"Inter-rater Reliability"	5,154
18	#15 OR #16 OR #17	31,726
19	(MH "Intraclass Correlation Coefficient")	21,372
20	"Intraclass Correlation Coefficient"	25,501
21	"Intraclass Correlation*"	28,971
22	"Intra-class correlation*"	2,706
23	#19 OR #20 OR #21 OR #22	30,535
24	"Intrarater reliability"	8,451
25	"Intra-rater reliability"	1,065
26	#24 OR #25	8,952
27	"Interclass correlation*"	699
28	"Inter-class correlation*"	73
29	#27 OR #28	772
30	Typical error	1,470
31	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #18 OR #23 OR #26 OR #29 OR #30	226,726
32	#31 AND #8	156

Table 3. Web of Science (Medline) Search Strategy from 15/02/2022
Between the years; 1950 – 2022

SEARCH NUMBER	QUERY	RESULTS
1	Lumbar Vertebrae	64,740
2	Low back pain	49,944
3	Back Pain	79,590
4	#1 OR #2 OR #3	131,986
5	EMG	34,302
6	Electromyography	92,607
7	#5 OR #6	99,697
8	#4 AND #7	2,920
9	"Sensitivity and Specificity"	413,135
10	Reproducibility of Results	461,434
11	Diagnostic Accuracy	138,470
12	Clinical Utility	84,856
13	Diagnostic Utility	45,375
14	Therapeutic Utility	32,658
15	Inter-rater reliability	9,521
16	intraclass correlation*	30,032
17	Intra-rater reliability	2,499
18	Interclass correlation*	1,792
19	Typical error	7,808
20	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19	962,459
21	#8 AND #20	270

Table 4. Embase (Ovid Medline) Search Strategy from 15/02/2022
Between 1947-2022

SEARCH NUMBER	QUERY	RESULTS
1	Lumbar Vertebrae [Mesh]	25,769
2	Low back pain	74,543
3	Back Pain [mesh]	139,195
4	#1 OR #2 OR #3	161,018
5	EMG	53,615
6	Electromyography	103,763
7	#5 OR #6	127,163
8	#4 AND #7	3,191
9	Sensitivity and Specificity	574,921
10	Reproducibility of Results [mesh]	243,375
11	Diagnostic Accuracy	297,124
12	Clinical Utility	44,336
13	Diagnostic Utility	10175
14	Therapeutic Utility	3319
15	Interrater reliability*	11623
16	Intraclass correlation*	26554
17	Intrarater reliability*	7,841
18	Interclass correlation*	2,363
19	Typical error	551
20	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19	103,4905
21	#8 AND #20	158

Table 5: Scopus (Elsevier) Search Strategy from 15/02/2022

SEARCH NUMBER	QUERY	RESULTS
1	"Lumbar Vertebrae"	69,321
2	"Low back pain"	171,415
3	"Back Pain"	223,102
4	#1 OR #2 OR #3	271,344
5	EMG	139,121
6	Electromyography	206,064
7	#5 OR #6	270,441
8	#4 AND #7	19,650
9	"Sensitivity and Specificity"	618,069
10	"Reproducibility of Results"	385,004
11	"Diagnostic Accuracy"	432,186
12	"Clinical Utility"	169,591
13	"Diagnostic Utility"	49,010
14	"Therapeutic Utility"	8,600
15	"Interrater reliability*"	64,308
16	"Intraclass correlation*"	61,219
17	"Intrarater reliability*"	11,206
18	"Interclass correlation*"	2,121
19	"Typical error"	1,132
20	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19	1,798,143
21	#8 AND #20	3,205

Table 6. Google Scholar search strategy from 15/02/2022

SEARCH NUMBER	QUERY	RESULTS
1	Lumbar Vertebrae	33,700
2	Low back pain	872,000
3	Back Pain	957,000
4	#1 OR #2 OR #3	153,000
5	EMG	73,000
6	Electromyography	51,500
7	#5 OR #6	106,000
8	#4 AND #7	10,400
9	Sensitivity and Specificity	582,000
10	"Reproducibility of Results"	4,650
11	"Diagnostic Accuracy"	206,000
12	"Clinical Utility"	190,000
13	"Diagnostic Utility"	21,300
14	"Therapeutic Utility"	8,700
15	Interrater reliability	34,300
16	Intraclass correlation	15,300
17	Intrarater reliability	5,780
18	Interclass correlation	2,590
19	Typical error	397,000
20	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19	116,000
21	#8 AND #20	2,880