Supplementary material (1)

SEARCH STRATEGY

Database	number
PubMed (Medline); Keywords & Mesh terms (last searched on 05-01-2025): #1. Search: (Hybrid cervical surgery OR hybrid surgery OR cervical disc arthroplasty OR cervical artificial disc replacement OR cervical disc arthroplasty combined fusion OR artificial disc replacement combined fusion OR Total disc replacement combined fusion) OR (Total Disc Replacement[MeSH Terms]) Filters: Abstract, Clinical Study, Clinical Trial, Comparative Study, Controlled Clinical Trial, Randomized Controlled Trial, English, Humans, Exclude preprints, MEDLINE, from 2000 - 2024 #2. Search: (Anterior cervical discectomy fusion OR cervical discectomy fusion OR cervical discectomy fusion OR cervical discectomy cage) OR (diskectomy[MeSH Terms]) OR (spinal fusion[MeSH Terms]) Filters: Abstract, Clinical Study, Clinical Trial, Comparative Study, Controlled Clinical Trial, Randomized Controlled Trial, English, Humans, Exclude preprints, MEDLINE, from 2000 – 2024 #3. Search: ((Multilevel cervical disc degeneration OR multiple cervical disc herniation OR cervical spondylosis) OR (Spondylosis[MeSH Terms])) OR (Intervertebral Disc Degeneration[MeSH Terms]) Filters: Abstract, Clinical Study, Clinical Trial, Comparative Study, Controlled Clinical Trial, Randomized Controlled Trial, English, Humans, Exclude preprints, MEDLINE, from 2000 – 2024 #4. Search: #1 AND #2 AND #3 Filters: Abstract, Clinical Study, Clinical Trial, Comparative Study, Controlled Clinical Trial, Randomized Controlled Trial, English, Humans, Exclude preprints, MEDLINE, from 2000 - 2024	4,608 5,261 2,113 213
Scopus (last searched on 5-1-2025): (TITLE-ABS-KEY ("anterior cervical discectomy and fusion" OR acdf) AND TITLE-ABS-KEY ("hybrid cervical surgery" OR hybrid OR "hybrid surgery" OR hs OR "cervical disc arthroplasty combined with fusion" OR "artificial disc replacement combined fusion") AND TITLE-ABS-KEY ("multilevel cervical disc" OR " cervical spondylosis")) AND PUBYEAR > 2000 AND PUBYEAR < 2025 AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English"))	36
Ovid (last searched 7-1-2025): ((AllFields:hybrid surgery OR arthroplasty combined fusion OR disc replacement combined fusion) AND (AllFields:anterior cervical discectomy and fusion OR ACDF) AND (AllFields:multi-level cervical disc OR spondylosis) AND (Language:English) AND (PublicationDateRange:["2000-01-01T00:00:00Z" TO "2024-12-31T00:00:00Z"]) AND (PublicationType:article)	28

Cochrane (last searched 7-1-2025): (anterior cervical discectomy and fusion OR acdf):ti,ab,kw AND (hybrid cervical surgery OR hybrid OR hybrid surgery OR hs OR cervical disc arthroplasty combined with fusion OR artificial disc replacement combined fusion):ti,ab,kw AND (multilevel cervical disc OR cervical spondylosis):ti,ab,kw (Word variations have been searched) with Cochrane Library publication date from Jan 2000 to Dec 2024, (Word variations have been searched)	12
Google Scholar (last searched 11-1-2025): "hybrid surgery" OR "hybrid cervical surgery" OR hybrid AND "anterior cervical discectomy and fusion" OR ACDF AND "multilevel cervical disc" Date range: 2000-2024 Language: English	145