Appendix 1. Search methods

PubMed (U.S. National Library of Medicine, National Institutes of Health) search strategy:
("Lumbar Vertebrae"[Majr] OR lumbar[tiab] OR lumbosacral[tiab] OR "Intervertebral Disc Displacement"[Majr] OR intervertebral[ti]) AND (herniat*[tiab] OR reherniat*[tiab]) AND ("Recurrence"[Mesh] OR recurren*[tiab] OR reherniat*[tiab]) AND ("Reoperation"[Mesh] OR reoperat*[tiab] OR repeat[ti] OR repeated[tiab] OR residives[tiab] OR revision[tiab] OR "second operation"[tiab] OR reconstruct*[tiab] OR subsequent[tiab] OR following[ti] OR after[ti]) AND ("annular closure device"[tiab] OR ALIF[tiab] OR arthrodesis[tiab] OR decompression[tiab] OR "Diskectomy"[Mesh] OR discectom*[tiab] OR diskectom*[tiab] OR fusion[tiab] OR hemilaminectom*[tiab] OR herniotom*[tiab] OR "Intervertebral Disc Displacement/surgery"[Majr] OR laminectom*[tiab] OR LIF[tiab] OR LLIF[tiab] OR "Lumbar Vertebrae/surgery"[Mesh] OR microdiscectom*[tiab] OR microdiskectom*[tiab] OR microsurg*[tiab] OR MIS-PLIF[tiab] OR MIS-TLIF[tiab] OR OLIF[tiab] OR operat*[ti] OR PEID[tiab] OR PLF[tiab] OR PLIF[tiab] OR "Reoperation"[Mesh] OR reoperat*[tiab] OR repair[tiab] OR "Spinal Fusion"[Mesh] OR surg*[ti] OR TLIF[tiab]) NOT ("case report"[ti] OR "case series"[ti] OR "Comment"[Publication Type] OR "Letter"[Publication Type] OR "Meta-Analysis"[Publication Type] OR meta-analysis[ti] OR "Review"[Publication Type] OR "Systematic Review"[Publication Type] OR "systematic review"[ti]) NOT("Animals"[Mesh] NOT "Humans"[Mesh])

- Filters/limits: English
- Date searched: December 6, 2024
- # of records identified: 599

Scopus (Elsevier) search strategy (line-by-line search):
#1: TITLE: lumbar OR lumbosacral OR "intervertebral disc displacement" OR intervertebral
#2: ABSTRACT: lumbar OR lumbosacral OR "intervertebral disc displacement"
#3: #1 OR #2
#4: TITLE: herniat* OR reherniat*
#5: ABSTRACT: herniat* OR reherniat*
#6: #4 OR #5
#7: TITLE: recurren* OR reherniat*
#8: ABSTRACT: recurren* OR reherniat*
#9: #7 OR #8:
#10: TITLE: reoperat* OR repeat OR repeated OR residives OR revision OR {second operation} OR reconstruct* OR subsequent OR following OR after
#11: ABSTRACT: reoperat* OR repeated OR residives OR revision OR {second operation} OR reconstruct* OR subsequent
#12: #10 OR #11
#13: TITLE: "annular closure device" OR ALIF OR arthrodesis OR decompression OR discectom* OR diskectom* OR fusion OR hemilaminectom* OR herniotom* OR laminectom* OR LIF OR LLIF OR microdiscectom* OR microdiskectom* OR microsurg* OR MIS-PLIF OR MIS-TLIF OR OLIF OR operat* OR PEID OR PLF OR PLIF OR reoperat* OR repair OR "spinal fusion" OR surg* OR TLIF
#14: ABSTRACT: "annular closure device" OR arthrodesis OR decompression OR discectom* OR diskectom* OR fusion OR hemilaminectom* OR herniotom* OR laminectom* OR microdiscectom* OR microdiskectom* OR microsurg* OR reoperat* OR repair OR "spinal fusion"
#15: #13 OR #14
#16: TITLE: {case report} OR {case series} OR {meta-analysis} OR {systematic review}
#17: #15 AND NOT #16

- Filters/limits: English
- Date searched: December 6, 2024
- # of records identified: 537

Scopus (Elsevier) search strategy (Advanced Document Search):
(((TITLE (lumbar OR lumbosacral OR "intervertebral disc displacement" OR intervertebral) OR ABS (lumbar OR lumbosacral OR "intervertebral disc displacement"))) AND ((TITLE (herniat* OR reherniat*) OR ABS (herniat* OR reherniat*))) AND ((TITLE (recurren* OR reherniat*) OR ABS (recurren* OR reherniat*))) AND ((TITLE (reoperat* OR repeat OR repeated OR residives OR revision OR {second operation} OR reconstruct* OR subsequent OR following OR after) OR ABS (reoperat* OR repeated OR residives OR revision OR {second operation} OR reconstruct* OR subsequent))) AND ((TITLE ("annular closure device" OR alif OR arthrodesis OR decompression OR discectom* OR diskectom* OR fusion OR hemilaminectom* OR herniotom* OR laminectom* OR lif OR llif OR microdiscectom* OR microdiskectom* OR microsurg* OR mis-plif OR mis-tlif OR olif OR operat* OR peid OR plf OR plif OR reoperat* OR repair OR "spinal fusion" OR surg* OR tlif) OR ABS ("annular

closure device" OR arthrodesis OR decompression OR discectom* OR diskectom* OR fusion OR hemilaminectom* OR herniotom* OR laminectom* OR microdiscectom* OR microdiskectom* OR microsurg* OR reoperat* OR repair OR "spinal fusion")))) AND NOT (TITLE ({case report} OR {case series} OR {meta-analysis} OR {systematic review})) AND (LIMIT-TO (LANGUAGE , "English"))

CINAHL Complete (EBSCOhost) search strategy:
(MM "Lumbar Vertebrae" OR lumbar OR lumbosacral OR (MM "Intervertebral Disk Displacement" OR TI intervertebral) AND (herniat* OR reherniat*) AND (MH "Recurrence" OR recurren* OR reherniat*) AND (MH "Reoperation" OR reoperat* OR TI repeat OR repeated OR residives OR revision OR "second operation" OR reconstruct* OR subsequent OR TI following OR TI after) AND ("annular closure device" OR ALIF OR arthrodesis OR decompression OR (MH "Diskectomy" OR discectom* OR diskectom* OR fusion OR hemilaminectom* OR herniotom* OR MH "Intervertebral Disk Displacement/SU" OR laminectom* OR LIF OR LLIF OR MH "Lumbar Vertebrae/SU" OR microdiscectom* OR microdiskectom* OR microsurg* OR MIS-PLIF OR MIS-TLIF OR OLIF OR TI operat* OR PEID OR PLF OR PLIF OR (MH "Reoperation" OR reoperat* OR repair OR MH "Spinal Fusion" OR TI surg* OR TLIF) NOT (TI "case report" OR TI "case series" OR TI meta-analysis OR TI "systematic review")

- Filters/limits: English
- Expanders: apply equivalent subjects
- Search mode: proximity
- Date searched: December 6, 2024
- # of records identified: 154

TOTAL # of records identified through database searching: 1,290
# of additional records identified through other sources: 0
# of records after duplicates removed: 721