

Appendix 1: Search of literature

Medline: 1946 to February 28th, 2021

<i>Degenerative Lumbar Spine Disease</i>	<i>Analysis of Gait and Walking Metrics</i>
<i>Anatomy:</i>	10. Exp gait/
1. Exp lumbar vertebrae/	11. Exp gait analysis/
2. Exp zygapophyseal joint/	12. (gait OR gait metric*).ti,ab,kw.
3. Exp intervertebral disc/	13. 1-9 OR/
<i>Pathology:</i>	14. 10-12 OR/
6. Exp spinal stenosis/	15. 13 AND 14
7. Exp intervertebral disc degeneration/	16. Limit 15 to (English language and Humans)
8. Exp low back pain/	
9. (lumbar adj3 stenosis OR dis? Adj3 herniat* OR degenerative dis? Disease).ti,ab,kw.	

This search strategy was also translated for Embase and PubMed.

Embase: 1974 to February 28th, 2021

Pubmed: 1966 to February 28th, 2021

<i>Search Source (Database)</i>	<i>Record Hits</i>
PubMed	756
Medline	573
Embase	660
Records identified	1989
Duplicate records identified and removed	691
Unique records identified	1298
Included Studies (after title, abstract screening)	47
Included Studies (after full text review)	17
Included Studies (Lumbar Spinal Stenosis)	5
Included Studies (Lumbar Disc Herniation)	2
Included Studies (Low Back Pain)	10

Appendix 2 Flow-diagram of included articles

