

## Appendix 4 (as supplied by the authors): Key diagnostic inclusion and exclusion

### criteria of included studies to define low back pain or lumbar radicular pain

| Study                                    | n   | Pathology                | Inclusion criteria   |
|--|-----|--------------------------|--|
| <b>Atkinson<br/>2016</b> <sup>26</sup>   | 108 | LBP ± radiating leg pain | <u>Clinical diagnosis</u><br>Nonspecific low back pain primarily in the lumbar region with or without radiation proximal or distal to the knee   |
| <b>Baron<br/>2010</b> <sup>27</sup>      | 217 | Lumbar radicular pain    | <u>Clinical diagnosis</u><br>Pain radiating to the calf or foot in L5 or S1 distribution, co-localized with areas of sensory changes or muscle weakness  |
| <b>Khoromi<br/>2005</b> <sup>28,a</sup>  | 42  | Lumbar radicular pain    | <u>Clinical ± radiographic diagnosis</u><br>Pain in buttocks or legs and at least one of these ipsilateral features: (1) sharp and shooting pain below the knee; (2) pain evoked by straight leg raising to <60 degrees; (3) decreased/absent ankle reflex; (4) weakness of muscles below the knee; (5) sensory loss in L5/S1 distribution; (6) electromyographic evidence for L4, L5, or S1 root denervation; (7) imaging (MRI, CT, myelogram) evidence of nerve root compression (e.g. lateral recess syndrome, neural foramen stenosis, canal stenosis, combination) in the lower lumbar region |
| <b>Markman<br/>2015</b> <sup>29,a</sup>  | 29  | Lumbar radicular pain    | <u>Clinical + radiographic diagnosis</u><br>At least one level of radiographically confirmed lumbar spinal stenosis and symptoms of neurogenic claudication.   |
| <b>Mathieson<br/>2017</b> <sup>31</sup>  | 207 | Lumbar radicular pain    | <u>Clinical diagnosis</u><br>Radiating pain into one leg below the knee, accompanied by nerve-root or spinal-nerve involvement (dermatomal leg pain, myotomal weakness, sensory deficits, or diminished reflex)  |
| <b>McCleane<br/>2000</b> <sup>30,a</sup> | 30  | LBP ± radiating leg pain | <u>Clinical diagnosis</u><br>Mid-line lumbar pain with tenderness over a single interspinous ligament and with pain exacerbated by flexion of back   |

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|---|----|--------------------------|---|
| <b>McCleane<br/>2001</b> <sup>32</sup>    | 80 | LBP ± radiating leg pain | <u>Clinical diagnosis</u><br>Lumbar and associated leg pain.<br>Paravertebral lumbar tenderness at one vertebral level and pain worse on extension of back  |
| <b>Muehlbacher<br/>2006</b> <sup>33</sup> | 96 | LBP ± radiating leg pain | <u>Clinical diagnosis</u><br>Nonspecific low back pain with or without leg pain, without neurological deficits  |
| <b>Yildirim<br/>2003</b> <sup>34</sup>    | 50 | Lumbar radicular pain    | <u>Clinical + radiographic diagnosis</u><br>Radiating pain secondary to L5 or S1 radiculopathy and radiological diagnosis of L4-5 and/or L5-S1 disc bulging and/or protrusion without significant spinal stenosis |

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<sup>a</sup> Crossover trial. LBP = Low Back Pain