Supplementary Table 1. Patient-level distribution of instrumented levels and segment-level annotations

Patient	L1–2	L2–3	L3–4	L4–5	L5–S1	Instrumented levels, n
Patient 1	Yes	Yes	Yes	Yes	Yes	5
Patient 2	Yes	Yes	Yes	Yes	Yes	5
Patient 3	Yes	Yes	Yes	Yes	Yes	5
Patient 4	Yes	Yes	Yes	Yes	Yes	5
Patient 5	Yes	Yes	Yes	Yes	Yes	5
Patient 6	Yes	Yes	Yes	Yes	Yes	5
Patient 7	—	Yes	Yes	Yes	Yes	4
Patient 8	—	Yes	Yes	—	Yes	3
Patient 9	—	Yes	Yes	Yes	Yes	4
Patient 10	—	—	Yes	—	Yes‡	2
Patient 11	Yes	Yes	Yes	Yes	—	4
Patient 12	—	—	Yes	Yes	Yes	3
Patient 13	Yes	Yes	Yes	Yes	Yes*	5
Patient 14	—	Yes	Yes	Yes	Yes	4
Patient 15	Yes	Yes	Yes	Yes	—	4
Patient 16	Yes	Yes	Yes	Yes	—	4
Patient 17	—	Yes	Yes	Yes	Yes	4
Patient 18	—	Yes	Yes	Yes	—	3
Patient 19	Yes†	Yes†	Yes	Yes	—	4
Patient 20	—	Yes	Yes	Yes	Yes	4
Patient 21	Yes	Yes	Yes	Yes	Yes	5
Patient 22	Yes	Yes	Yes	Yes	Yes	5
Patient 23	—	Yes	Yes	Yes	Yes	4
Patient 24	Yes†	Yes†	Yes*	Yes*	Yes*	5
Patient 25	Yes*	Yes*	Yes*	Yes†	Yes†	5
Patient 26	—	Yes†	Yes†	Yes*	Yes*	4
Patient 27	Yes†	Yes†	Yes*	Yes*	Yes*	5
Patient 28	Yes†	Yes†	Yes*	Yes*	Yes*	5

Yes indicates an instrumented level; — indicates that the level was not instrumented. Unmarked instrumented levels were included in the final analysis. The final column shows the number of instrumented levels before exclusions.
*MRI diagnostic confidence score < 5; 30 side-specific segments across 15 bilateral levels were excluded for this reason.
†Interbody cage or crosslink present; 24 side-specific segments across 12 bilateral levels were excluded for this reason.
‡Level with unilateral pedicle screw instrumentation.
Each side of an instrumented level was treated as one segment. The initial cohort included 28 patients with 120 instrumented levels: 119 bilaterally instrumented levels and one unilaterally instrumented level, corresponding to 239 side-specific segments. Exclusion of 30 segments because of MRI diagnostic confidence scores < 5 and 24 segments because of interbody cages or crosslinks left 93 instrumented levels and 185 segments in 23 patients. Patients 24–28 had no eligible segments after these exclusions. MRI, magnetic resonance imaging.