

Supplementary Table 5. Fusion rate in the prospective comparative studies*							
Studies	Fusion modalities	Fusion assessment methods	Percutaneous group		Open group		Follow-up† (months)
			Fusion success	Total number of patients	Fusion success	Total number of patients	
Parker et al. ¹⁹	TLIF	Pseudarthrosis defined as new back pain or recurrence of back pain, evidence of screw haloing on computed tomography or motion of flexion/extension films	50	50	50	50	24‡, 24
Gu et al. ²¹	TLIF	Bridwell posterior fusion grade I or II Grade I: solid trabeculated transverse process and facet fusions bilaterally Grade II: thick fusion mass on one side and difficult to visualize on the other side	41	44	35	38	20.6 ± 4.5, 20.0 ± 3.3
Lee et al. ²²	TLIF	Bridewell anterior fusion grade I or II Grade I: Fused with remodeling and trabeculae present Grade II: Graft intact, not fully remodeled and incorporated, but no lucency present	70	72	71	72	24, 24
Mobbs et al. ²³	PLIF	Pseudarthrosis defined as complaints of worsening mechanical lower back pain at operation site, significant motion and subsidence on flexion-extension lateral radiographs and CT scans	37	37	28	30	11.5 (5.4-20.1), 18.7 (8.1-40.0)
Kotani et al. ²⁴	PLF	Bony continuity between consecutive facet joints and transverse processes on plain radiographs and parasagittal CT scans	42	43	37	37	32 (24-49), 40 (24-60)
Wang et al. ²⁵	TLIF	Trabecular bony bridge formation between contiguous vertebral bodies at the instrumented levels, intact hardware, and less than 3° segmental movement on static and dynamic plain radiographs	24	25	26	27	Overall, 27.5 (12-38)
Wang et al. ²⁶	TLIF	Trabecular bony bridge formation between contiguous vertebral bodies at the instrumented levels, less than 4° segmental movement on static and dynamic plain radiographs	41	42	42	43	Overall, 26.3 (13-35)
Schizas et al. ²⁷	TLIF	Pseudarthrosis defined as increasing back pain, evidence of screw loosening or breakage on plain radiographs and confirmed using CT scans	15	18	18	18	22, 24
Park et al. ²⁹	PLIF	Bridging interbody bone, no motion on lateral flexion-extension radiographs, and absence of continuous interbody radiolucent lines	31	32	28	29	12, 12

* TLIF = transforaminal lumbar interbody fusion, PLIF = posterior lumbar interbody fusion, PLF = posterolateral fusion, and CT = computed tomography. † The values are given as the mean, with the range in parenthesis. ‡ The values appear in order of percutaneous group and open group.