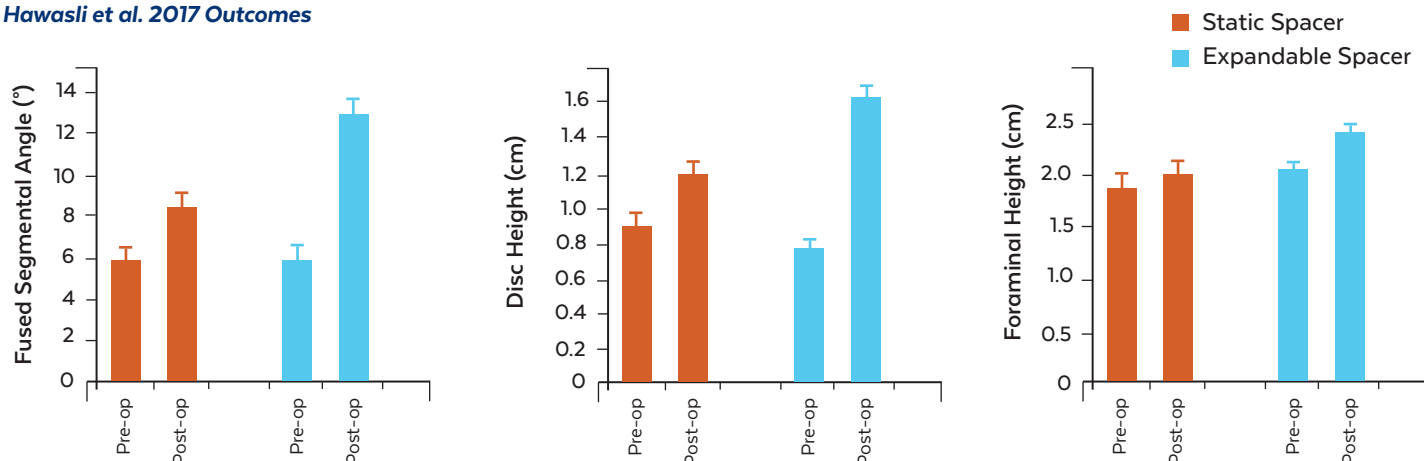
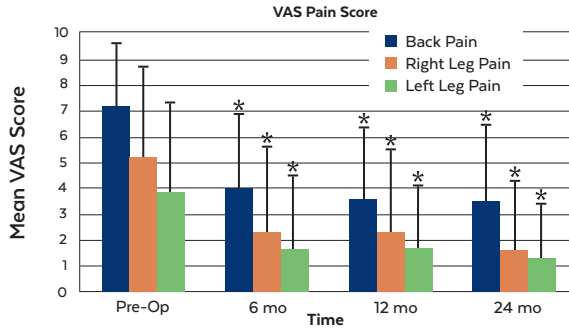
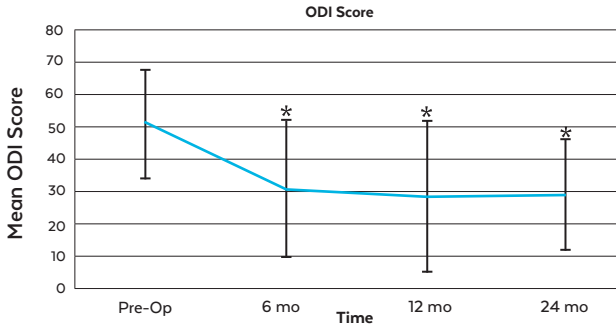


Article	Description	Results/Summary
ALTERA®		
Massie et al. 2018 Assessment of radiographic and clinical outcomes of an articulating expandable interbody cage in minimally invasive transforaminal lumbar interbody fusion for spondylolisthesis <i>Neurosurg Focus 44 (1):E8, 2018</i>	Retrospective review of 1- and 2-level MIS TLIF radiographic and clinical outcomes using ALTERA® expandable spacer <i>Cohorts:</i> 39 patients (1-level) 5 patients (2-level)	MIS TLIF using ALTERA® expandable spacer provided significant restoration of segmental height and lordosis, with improvement in sagittal balance parameters and significant reduction in pain and disability. - Spondylolisthesis was corrected by 4.3mm on average (preoperative=6.69mm, postoperative=2.39mm, $p<0.001$) - Segmental lordosis improved by 4.94° on average (preoperative=5.63°, postoperative=10.58°, $p<0.001$) - Segmental height increased by 3.1mm on average (preoperative=5.09mm, postoperative=8.19mm, $p<0.001$) - Overall fusion rate was 96% - Favorable outcomes demonstrated with 1- and 2-level MIS TLIF
Hawasli et al. 2017 Minimally Invasive transforaminal lumbar interbody fusion with expandable versus static interbody devices, radiographic assessment of sagittal segmental and pelvic parameters <i>Neurosurg Focus 43 (2):E10, 2017</i>	Retrospective review of clinical data following MIS TLIF using the ALTERA® spacer in 44 patients (48 interbody spacers) <i>Cohorts:</i> 28 patients with 29 expandable spacers 16 patients with 19 static spacers	MIS TLIF with ALTERA® led to a greater and longer lasting increase in disc height, foraminal height, and index level segmental lordosis than static interbody devices, especially in patients with a collapsed disc space. - Disc height was 32.7% greater in patients with expandable interbody devices than those with static interbody devices - Foraminal height was 14.8% greater in patients with expandable interbody devices when compared with patients with static devices - Segmental lordosis was 41.9% greater in patients with expandable interbody devices compared to static interbody devices - Mean change in ODI score was 22.3 for the expandable interbody group and 13.6 for the static group

Hawasli et al. 2017 Outcomes



Article	Description	Results/Summary
CALIBER®		
Kim et al. 2016 Minimally invasive transforaminal lumbar interbody fusion using expandable technology: a clinical and radiographic analysis of 50 patients <i>World Neurosurg 90:228-235, 2016</i>	Prospective clinical data from 50 patients treated with CALIBER® expandable interbody spacer and posterior stabilization <i>Cohorts:</i> 38 patients (1-level) MIS TLIF 12 patients (2-level) MIS TLIF 62 operative levels	CALIBER® expandable interbody spacer led to significant improvement in clinical and radiographic outcomes after MIS TLIF, including intervertebral disc height restoration and high fusion rates, with no evidence of device-related complications. • Mean postoperative VAS back and leg pain scores and ODI scores decreased significantly at 6, 12, and 24 months compared to preoperative scores ($p < 0.05$) • Postoperative disc height (8.3 ± 2.7 vs. 11.3 ± 1.9 mm) increased significantly and was maintained through 24 months • Postoperative radiographs showed no evidence of spacer migration, subsidence, or collapse • Radiographic evidence of fusion was seen at all operative levels at 12 months (93%, 54/58) and 24 months (97%, 28/29)
Kim et al. 2016 Outcomes   *Indicates statistically significant differences at $P < 0.05$ from the preoperative time interval		
CALIBER®-L		
Frisch et al. 2018 Clinical and radiographic analysis of expandable versus static lateral lumbar interbody fusion devices with two-year follow-up <i>J Spine Surg 4(1):62-71, 2018</i>	Retrospective comparison of clinical and radiographic outcomes and device-related complications in patients treated with static and CALIBER®-L expandable spacers following LLIF <i>Cohorts:</i> 29 patients had LLIF with static spacer 27 patients had LLIF with CALIBER®-L expandable spacer	LLIF using CALIBER®-L expandable spacers resulted in similar clinical and radiographic outcomes when compared to static spacers, and led to a lower subsidence rate. • Mean VAS and ODI scores improved significantly from preoperative to 24 months follow-up in both groups ($p < 0.05$) • Preoperative intervertebral and neuroforaminal height increased significantly in both groups ($p < 0.01$) • Evidence of radiographic fusion was observed in all operative levels in both static and expandable spacer groups by 24 months • Implant subsidence was reported in 16.1% of static levels and none of the expandable levels ($p < 0.01$)
RISE®-L		
Frisch et al. 2017 Static versus expandable interbody spacers: preliminary 1-year clinical and radiographic results <i>J Clin Neurol Neurosurg Spine 1(1):113, 2017</i>	Retrospective comparison of clinical and radiographic outcomes of expandable versus static interbody spacers following minimally invasive LLIF in 64 patients <i>Cohorts:</i> 32 patients with RISE®-L expandable spacer 32 patients with static spacer	Patients in the RISE®-L expandable spacer group experienced a greater increase in segmental lordosis and a lower subsidence rate than those in the static group. • Patients treated with RISE®-L demonstrated a 17% increase in segmental lordosis from $14^\circ \pm 7.9^\circ$ preoperatively to $16.4^\circ \pm 8.8^\circ$ 12 month postoperative ($p = 0.01$) • No significant increase in segmental lordosis was observed in the static group ($p = 0.40$) • Subsidence was greater in the static group (32.4%) than the expandable group (9.8%) ($p < 0.01$)