**Supplement Figure Legends:**

**Figure 1. A 54‑year‑old female patient underwent dynamic stabilization due to lumbar spinal stenosis with spondylolisthesis. She had never been diagnosed with diabetes and had never smoked. Preoperative MRI demonstrated Modic I changes and Pfirrmann grade III at both L3-4 and L4-5 levels.** (A and B) On preoperative flexion and extension X‑rays, the range of motion (ROM) of L3-5 was 9.4°. (C and D) On flexion and extension X‑rays at 24 months postoperatively, the ROM of L3-5 was 13.8°. (E and F) On flexion and extension X‑rays at 68 months postoperatively, the ROM of L3-5 was also 13.6°.

**Figure 2. A 64‑year‑old female patient underwent dynamic stabilization due to lumbar spinal stenosis with spondylolisthesis. She had been taking diabetes medication for over 20 years and had never smoked. Preoperative MRI demonstrated Modic I changes and Pfirrmann grade III at the L3-4 level, and Modic II changes and Pfirrmann grade V at the L4-5 level.** (A and B) On preoperative flexion and extension X‑rays, the range of motion (ROM) of L3-5 was 6.5°. (C and D) On flexion and extension X‑rays at 21 months postoperatively, the ROM of L3-5 was 6.7°. Neurogenic claudication and left leg pain gradually worsened (visual analog score of 8). (E) Computed tomography showed adjacent segment degeneration at the L5-S1 level. (F) Transforaminal interbody fusion was performed at the L5-S1 level.