**Introduction:** Patients presenting with discogenic low back pain along with radicular or neurological symptoms secondary to nerve root compression due to disc prolapse represent a difficult and challenging patient population for the spinal surgeon to diagnose and treat. For these patients who have failed conservative care, currently there is no other treatment option other than discectomy followed by fusion of the accompanying motion segment. Fusion, however, represents the end stage of the treatment continuum. In this continuum of treatment for DDD that is unresponsive to conservative care, minimal invasive disc arthroplasty is preferred for patients with early to moderate DDD over a more aggressive and comparatively higher risk treatment, such as total disc replacement or fusion. NUBAC is a nucleus replacement device consistent with this premise. Clinical evaluation of the NUBAC is ongoing and results are presented.

**Methods:** The major indication for NUBAC is discogenic back pain with or without leg pain caused by DDD in patients who have failed conservative care for at least 6 months. Patient pathology and surgeon preference determined which of the three surgical approaches was used to implant the NUBAC device - posterior, lateral or anterolateral.

47 patients with an average age of 37 years were implanted with the device. Twenty-seven completed one year follow-up and eighteen completed two year follow-up. 53% were male, 96% underwent single level surgery. 72% were implanted at the L5S1 level with the remainder at L4L5. 2 patients (4%) were implanted anterolaterally, 10 patients (21%) laterally (ALPA approach) and 33 posteriorly (70%) after a microscopic microdiscectomy.

Intra-operative and post-operative vascular and neurological complications as well as ODI and VAS scores at pre-op, 6w, 3m, 6m, 12m and 24m were recorded.

**Results:** The average operating time was 85 minutes with an average estimated blood loss of 36 mL. There were no major intra-operative complications. ODI scores improved preoperatively from 50.3 and 54.9, to 20.9 and 13.3 at one year, and 21.8 and 12.3 at two years, for the lateral and posterior approaches, respectively. VAS scores improved preoperatively from 73.1 and 81.4, to 31.1 and 14.0 at one year, and 33.1 and 13.9 at two years, for the lateral and posterior approaches, respectively. Average disc height was 8 mm preoperatively and at 12 months was 9 mm.

**Conclusions:** In this series of patients, Nubac has demonstrated to be an effective surgery for DDD and can be considered a valid tool for slowing down the degenerative cascade of the lumbar disc. Selection of the patients is demanding as well the surgical technique when using the posterior approach. An international multicentric study is now involving more patients.