

Policy:	200813	Effective Date:	04/01/2025
SUBJECT:	Artificial Intervertebral Disc Replacement	Annual Review Date:	01/28/2025
	<ul><li>Cervical</li><li>Thoracic</li></ul>	Last Revised Date:	01/28/2025

• Lumbosacral

### Prior approval is required for some or all procedure codes listed in this Corporate Medical Policy. Some or all procedure codes listed in this Corporate Medical Policy may be considered experimental/investigational.

**Definition:** Artificial intervertebral disc replacement (AIDR) is a surgical procedure that involves removal of a degenerated intervertebral disc followed by implantation of an artificial intervertebral disc. AIDR was developed as an alternative to spinal fusion for the treatment of symptomatic degenerative disc disease (DDD) that has not responded to conservative treatment. The goal of AIDR is to relieve pain, restore disc height, maintain motion of the natural spine, and prevent degeneration of adjacent discs. Artificial disc devices have been developed for use in cervical, thoracic and lumbosacral portions of the spine.

### Medical Necessity:

- I. Cervical AIDR: The Company considers cervical AIDR at *1 or 2 contiguous levels* between C3 and C7 medically necessary and eligible for reimbursement providing that *all* of the following medical criteria are met:
  - FDA-approved artificial disc (vertebra-specific); and
  - Age  $\geq 18$  years and skeletally mature; and
  - Candidate for anterior cervical discectomy and fusion (ACDF); and
  - Symptomatic cervical disc disease (neck or arm [radicular] pain and/or a functional/neurological deficit with ≥ 1 of the following conditions confirmed by imaging [CT, MRI, or x-rays]: herniated nucleus pulposus, spondylosis [defined by the presence of osteophytes], and/or loss of disc height); and
  - Significant vertebral osteophyte formation and/or herniated nucleus pulposus believed to be responsible for the clinical findings; and
  - Failure of, intolerance to, or unable to receive ≥ 6 weeks of conventional medical therapy including *all* of the following:
    - 1. Physical therapy; and
    - 2. Anti-inflammatory medication; and
    - 3. Analgesic medication; and

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### 4. Avoidance of exacerbating activities.

### AND

- *None* of the following is present:
  - 1. Active systemic infection or infection at the operating site; or
  - 2. Allergy or sensitivity to implant materials; or
  - 3. Osteopenia or osteoporosis (bone density T-score -2.5 or lower measured by dual energy x-ray absorptiometry [DEXA]); or
  - 4. Moderate to advanced spondylosis characterized by any bridging osteophytes, marked reduction or absence of motion, or collapse of the intervertebral disc space of >50% of its normal height.
  - 5. Marked cervical instability on imaging (e.g., signs of subluxation >3.5 mm or angulation of the disc space >11° greater than adjacent segments); or
  - 6. Severe facet joint arthropathy; or
  - 7. Significant cervical anatomical deformity or compromised vertebral bodies at the index level due to systemic disease, diffuse idiopathic skeletal hyperostosis, ankylosing spondylitis, degeneration, trauma, and surgery related trauma
  - 8. Significant kyphotic deformity, significant reversal of lordosis significant spondylolisthesis; or
  - 9. Symptoms necessitating surgical treatment at > 2 cervical level; or
  - 10. Congenital stenosis; or
  - 11. Previous surgery at the involved level; or
  - 12. Spinal metastases; or
  - 13. Current medical condition requires long-term use of medications affecting bone quality and fusion rates (e.g., systemic corticosteroids); or
  - 14. Medical-surgical clearance not obtained from appropriate specialty provider(s).
- II. Thoracic AIDR: Based upon our findings, the Company has determined thoracic AIDR, implantation, removal and revision have not demonstrated equivalence or superiority to currently accepted standard means of treatment. The Company considers thoracic AIDR, implantation, removal and revision investigational and not eligible for reimbursement.
- **III.** Lumbosacral AIDR: The Company considers lumbosacral AIDR at any *single level* between L3 and S1 medically necessary and eligible for reimbursement providing that *all* of the following medical criteria are met:
  - FDA-approved artificial disc (vertebra-specific); and
  - Age 18 to 60 years and skeletally mature; and
  - Spondylolisthesis at the involved level per the FDA-approved artificial disc specific limits; and
  - Candidate for lumbosacral spinal fusion; and

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- Symptomatic lumbosacral DDD (discogenic back pain with degeneration of the disc confirmed by imaging [CT, MRI, or x-rays]), which has failed at least 6 months of conservative treatment, including *all* of the following:
  - 1. Physical therapy; and
  - 2. Anti-inflammatory medication; and
  - 3. Analgesic medication; and
  - 4. Avoidance of exacerbating activities.

### AND

- *None* of the following is present:
  - 1. Active systemic infection or infection at the operating site; or
  - 2. Allergy or sensitivity to implant materials; or
  - 3. Osteopenia or osteoporosis (bone density T-score -2.5 or lower measured by dual energy x-ray absorptiometry [DEXA]); or
  - 4. Moderate to advanced spondylosis characterized by bridging osteophytes, marked reduction or absence of motion, or collapse of the intervertebral disc space of >50% of its normal height; or
  - 5. Marked lumbosacral instability on imaging (e.g., signs of subluxation >3.5 mm or angulation of the disc space >11° greater than adjacent segments); or
  - 6. Severe facet joint arthropathy; or
  - 7. Significant lumbosacral anatomical deformity or compromised vertebral bodies at the index level due to systemic disease, diffuse idiopathic skeletal hyperostosis, ankylosing spondylitis, degeneration, trauma, and surgery related trauma.
  - 8. Significant kyphotic deformity, significant reversal of lordosis, or significant spondylolisthesis; or
  - 9. Symptoms necessitating surgical treatment at > 1 lumbosacral level; or
  - 10. Congenital stenosis; or
  - 11. Previous surgery at the involved level; or
  - 12. Spinal metastases; or
  - 13. Nerve root compression; or
  - 14. Stenosis; or
  - 15. Current medical condition requires long-term use of medications affecting bone quality and fusion rates (e.g., systemic corticosteroids); or
  - 16. Medical-surgical clearance not obtained from appropriate specialty provider(s).

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- **IV. Revision or Replacement of a Cervical and Lumbar Artificial Intervertebral Disc:** The Company considers revision or replacement of a cervical and lumbar artificial intervertebral disc, at the same level as the previous surgery **medically necessary** and eligible for reimbursement when ALL the following criteria are met:
  - Original surgery was performed with an FDA-approved device, and in accordance with those approved indications; and
  - Imaging studies confirm implanted device mechanical failure (e.g., dislodgement, implanted device breakage, infection loosening, vertebral body fracture); and
  - Symptoms were relieved by original procedure, but reoccurred upon failure of the implanted device

### **Documentation Requirements:**

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member, and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results, and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply, and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

Prior approval is required for CPT Codes 22856, 22857, 22858, 22860, 22861, 22862, 22899; Category III Codes 0095T, 0098T, 0164T, 0165T; and applicable ICD-10-CM Procedure Codes.

**CPT** Code 22899 (when unlisted procedure, spine [22899] is determined to be thoracic artificial disc replacement) and applicable ICD-10-CM Procedure Codes are considered investigational and not eligible for reimbursement.

NOTE: After reviewing the relevant documentation, the Company reserves the right to apply this policy to the service, or procedure, supply, product, or accommodation performed or furnished regardless of how the service, or procedure, supply, product, or accommodation was coded by the Provider.

Approval or clearance by the U.S. Food and Drug Administration alone is not a basis for coverage.

Coverage may differ for Medicare Advantage plan members; please see any applicable national and/or local coverage determinations for details. This information may be available at the Centers for Medicare & Medicaid Services (CMS) website.

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Applicable Code(s):	
CPT:	22856, 22857, 22858, 22860, 22861, 22862, 22864, 22865, and 22899
	Category III 0095T, 0098T, 0164T, and 0165T
HCPCS:	
ICD10 Procedure Codes:	0RR30JZ, 0RR50JZ, 0RP90JZ, 0RPB0JZ, 0RR50JZ, 0RR90JZ, 0RRB0JZ, 0RW50JZ, 0RW53JZ, 0RW54JZ, 0RW90JZ, 0RW93JZ, 0RW94JZ, 0RWB0JZ, 0RWB3JZ, 0RWB4JZ, 0SR20JZ, 0SR40JZ, 0SW20JZ, 0SW23JZ, 0SW24JZ, 0SW40JZ, 0SW43JZ and 0SW44JZ

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