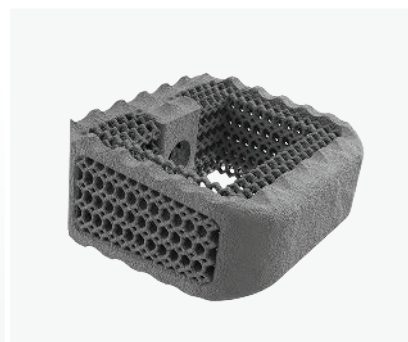
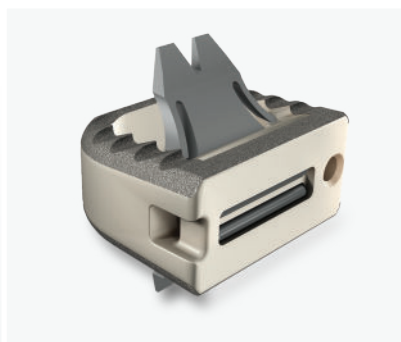


Total Cervical Solutions

Your entire cervical procedure, covered.



 **ZimVie**

ZimVie CERVICAL SOLUTIONS



An industry-leading, clinically backed portfolio

ZimVie's Total Cervical Solutions is a comprehensive portfolio that includes a disc replacement option and a full range of posterior systems, anterior plates, interbodies, and standalone devices in various material types, heights, lordosis options, and footprints. Paired with our proven biologics, ZimVie is a trusted partner for all your cervical cases.

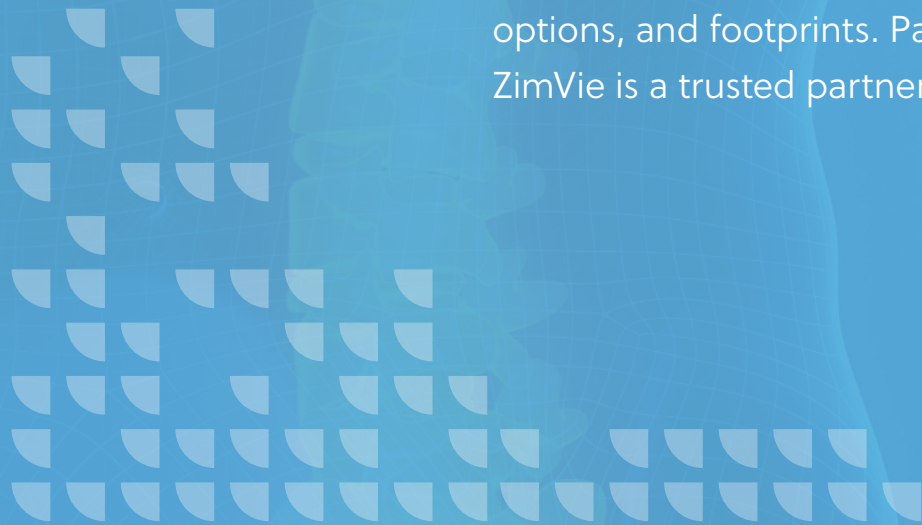




Table of Contents

PORTFOLIO OFFERINGS

Cervical Disc Replacement	4
Posterior Cervical Fixation Systems	5
Anterior Cervical Plating Systems	7
Cervical Interbody Solutions	8
Cervical Standalone Systems	12
Biologics Solutions	14

Mobi-C® Cervical Disc

Mobi-C Cervical Disc was the first cervical disc in the United States approved to treat more than one level of the cervical spine. Mobi-C was determined by the FDA to be statistically superior to fusion at 7 years for two-level cervical disc replacement, based on the primary study endpoint of a prospective, concurrently controlled and randomized, multi-center clinical trial.¹ At 10 years, all-patient reported outcomes were equivalent to or improved from 7 years.^{2,3}

Mobile Bearing Technology

The controlled mobility of the patented mobile core is the foundation of Mobi-C. Mobi-C moves with the spine and does not dictate a predetermined, fixed axis of rotation. This facilitates independent and coupled motion similar to natural cervical spine motion.



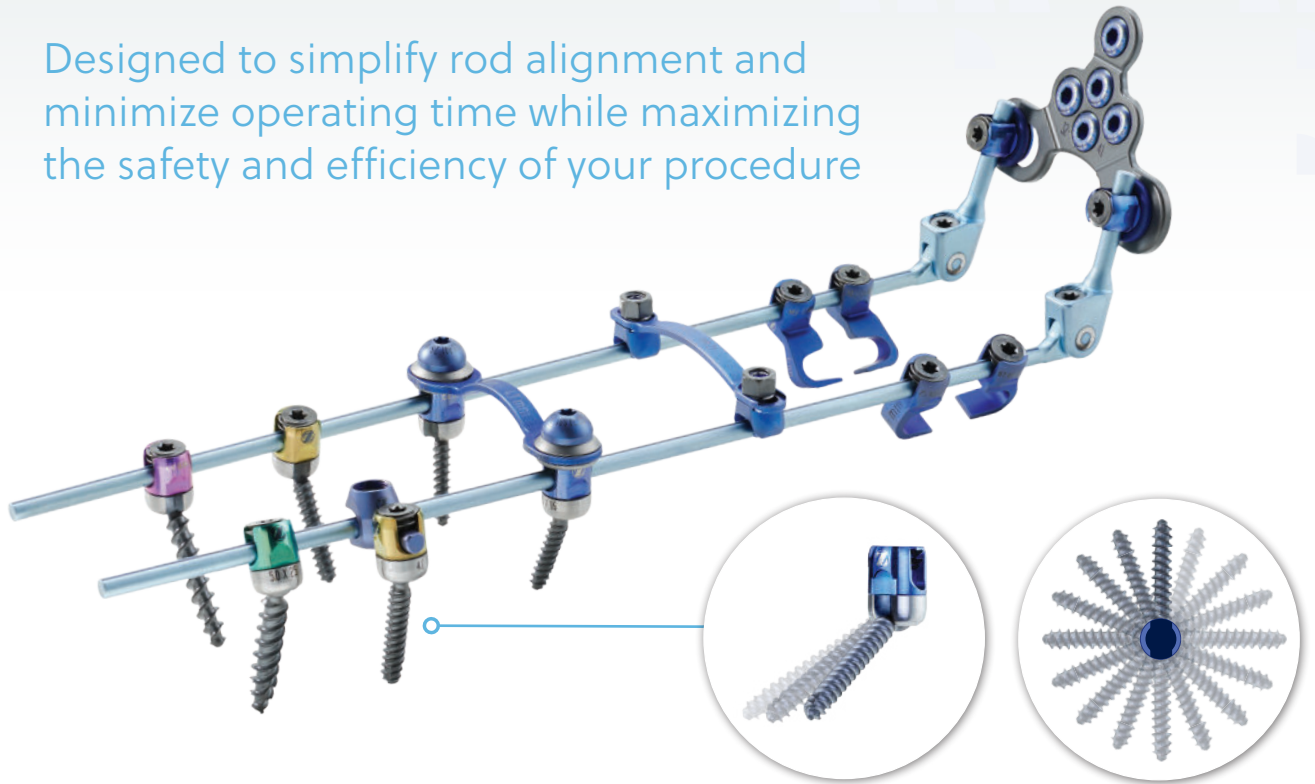
Bone Sparing

Mobi-C is delivered pre-assembled on a disposable PEEK cartridge. Implantation of the Mobi-C requires no invasive keels or screws, no bone removal for keel preparation, and no additional operative steps for keel cutting.



The leading choice for cervical disc replacement.¹

Designed to simplify rod alignment and minimize operating time while maximizing the safety and efficiency of your procedure



POSTERIOR CERVICAL FIXATION SYSTEMS

Virage® OCT Spinal Fixation System

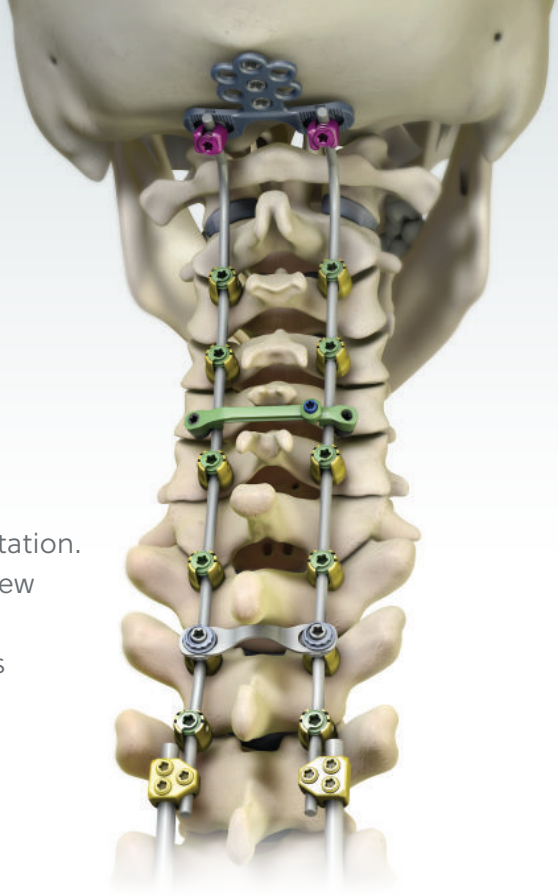
The Virage System is an Occipital-Cervico-Thoracic (OCT) spinal fixation system featuring the innovative 360° Omnidirectional Extreme-Angle Screw that simplifies rod alignment and minimizes operating time.

The Omnidirectional screw allows for 112° of conical range of motion and facilitates optimal screw placement.

The Virage System is ZimVie's first posterior cervical system with a Navigation option. The Virage Navigation System is a series of instruments that are designed to be compatible with commercially available navigation systems and allow the navigation of bone preparation instruments and polyaxial screws in the cervical spine.

Lineum® OCT Spinal System

The Lineum posterior cervical reconstruction system features a broad range of construct options and procedurally efficient instrumentation. The system's game changing Translation™ Screw technology offers 3 mm of medial-lateral translation in the screw head which simplifies screw placement and rod contouring, while minimizing stress to the construct.



Gallery™ Laminoplasty Spine System



The Gallery Laminoplasty System is a comprehensive and intuitive system designed to prevent spinal cord impingement in the lower cervical and upper thoracic spine.

The Gallery Laminoplasty System offers two plate styles. Plates are available in hook or standard configuration and in a variety of lengths from 8 mm to 16 mm (2 mm increments). Both cobra head plate designs are low profile and offer multiple points of fixation for ideal screw placement.



Trinica® and Trinica® Select Anterior Cervical Plate System



Easy and efficient procedures are made possible with only a single hex driver needed to place screws and secure the locking mechanism.

A variety in plate sizes affords surgeons broad choices in implant selection.

Aggressive DiamondTip™ self-drilling screws reduce surgical steps and provide tactile feedback to confirm that the screw is fully seated.

InViZia® Anterior Cervical Plate System

Built on the technology from the Trinica® family of anterior cervical plates, inViZia is an innovative cervical plate system that diminishes profile without sacrificing reliability.

Large graft windows provide clear endplate visualization, and a narrow waist affords generous lateral visibility.

The low-profile plate (less than 2 mm) may reduce postoperative dysphagia in patients.⁴



MaxAn® Anterior Cervical Plate System

The MaxAn System accommodates the widest cephalad/caudal screw angulation sweep of any cervical plate – up to 30° of cephalad/caudal screw angulation – to allow for maximum plate distance from adjacent levels.

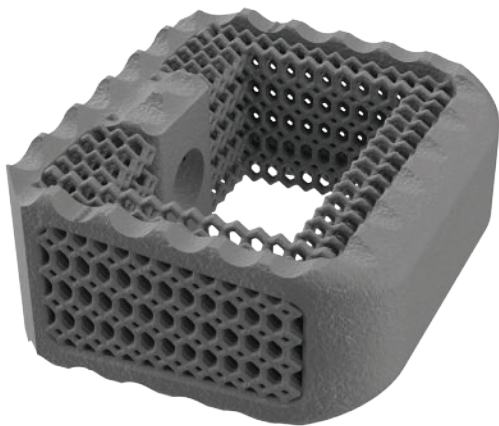
Clinical studies demonstrated that the risk of moderate to severe adjacent-level ossification significantly decreases when the plate-to-disc distance is greater than 5mm from the adjacent level.^{5,6}



MICHELSON
TECHNOLOGY
AT WORK

TrellOss™-C Porous Ti Interbody System

A 3D printed titanium interbody platform featuring a scaffold structure with 70% porosity and a 7 micron roughened surface topography to foster a cellular relevant environment for adhesion and bone ingrowth.⁷



Porosity

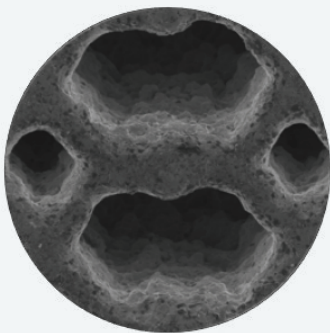
Open architecture with 70% porosity including varying pore sizes of 300, 500, and 700 microns that mimic cancellous bone allowing for a conducive environment for cellular activity.^{7,11,12,13}

Structure

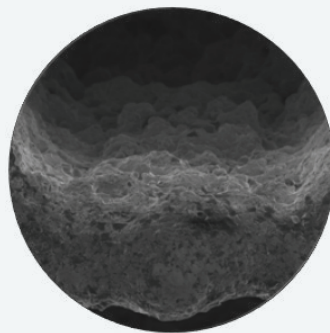
Scaffolding structure provides additional surface area^{8,9} and an elastic modulus similar to PEEK.⁸

Texture

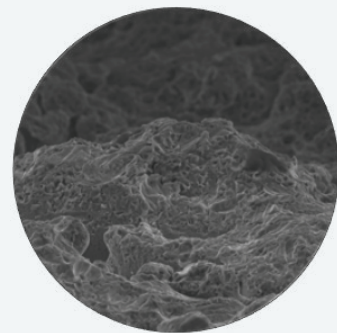
7 micron surface texturing enhances the wicking nature⁹ and creates an environment for potential cellular adhesion.^{8,9,10}



SEM image of TrellOss Surface at 50x magnification



SEM image of TrellOss Surface at 100x magnification



SEM image of TrellOss Surface at 450x magnification



A new foundation for growth.



Trinnect™ Hydrated Anterior Cervical Spacer System

The Trinnect Hydrated Anterior Cervical Spacer System is a line of precision-machined cervical allograft spacers that are packaged using Preservon®, a glycerol-based preservation technology. Preservon allows the spacers to be stored in a fully hydrated state at ambient temperature, doing away with lengthy thawing and rehydration times.



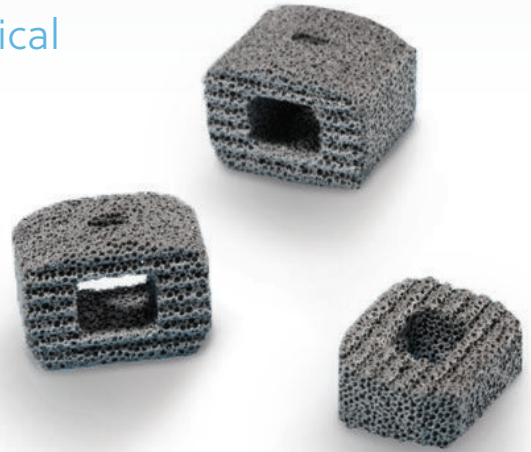
Puros®-S and Puros®-S2 Allografts

The tapered leading edge helps facilitate insertion through distraction. Both are available in an array of size and shape options to accommodate varying patient anatomies.

TM-S Trabecular Metal™ Cervical Fusion Device

Structural, functional, and physiological properties similar to that of bone.

The TM-S Device provides an excellent balance between porosity and strength. With physical and mechanical properties similar to cancellous bone, the TM-S Device offers an environment for bony in-growth and vascularization.



Vista®-S Cervical Interbody Fusion Device

The Vista-S is manufactured from PEEK-OPTIMA®, a load-sharing, radiolucent, biocompatible material with strength and stability. Offered in three footprints and a range of heights, Vista-S implants accommodate the varying anatomy of your patients. The shark-tooth surface pattern reduces the risk of migration, and the leading tapered edge helps facilitate insertion.





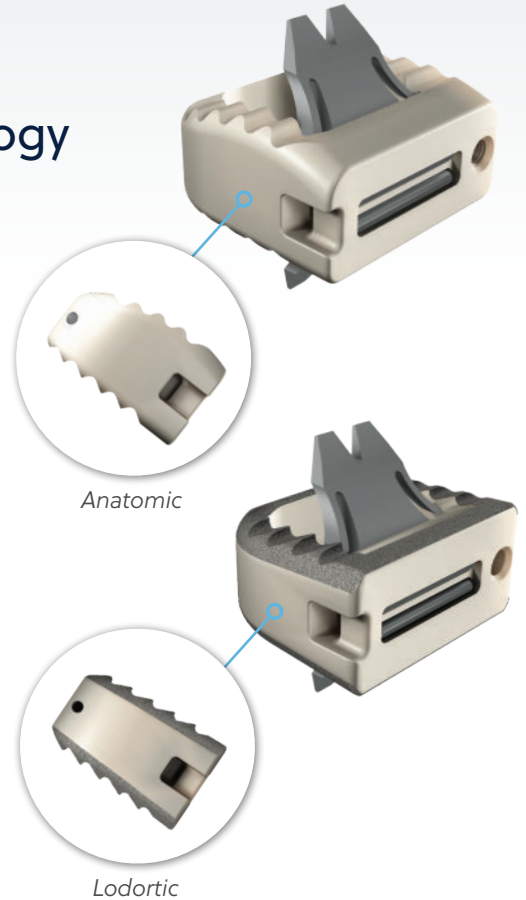
**We reduce pain, increase mobility,
and restore function to daily life.**

ROI-C® Cervical Cage with VerteBRIDGE® Plating Technology

ROI-C with VerteBRIDGE plating offers a sleek and minimalistic standalone solution. Streamlined instrumentation functions in-line with the disc space, requiring minimal exposure, while an innovative implant design leaves minimal hardware in the patient, all without sacrificing stability.

With two geometries, four footprint options, and six heights, surgeons can select the perfect fit for any anatomy.

PEEK® and Titanium-coated PEEK accommodate surgeon choice and preference.



TrelOss™-C SA Porous Ti Interbody System

A 3D printed titanium interbody platform featuring a scaffold structure with 70% porosity and a 7 micron roughened surface topography to foster a cellular relevant environment for adhesion and bone ingrowth.^{7,11,12,13}

TrelOss-C SA possesses the combined functionality and benefits of a cervical interbody and an anterior cervical plate.

The roughened surface provides initial stabilization and integrated turn lock allows for visual confirmation of locked position.

Optio-C®

Anterior Cervical System in PEEK and Allograft Options

The Optio-C System is the industry's first zero-profile, modular stand-alone cervical device that offers allograft¹ and PEEK spacer options and delivers the strength, stability and fusion potential of a traditional anterior cervical discectomy and fusion (ACDF).¹⁴



PEEK or Allograft Spacer Options

Three footprints to accommodate patient anatomy. Allograft consists of cortical and cancellous bone.



Optimize Load Sharing on Spacer

Unique load-sharing interface designed to facilitate fusion.

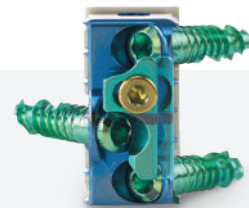
Variable angle screws designed to prevent stress shielding.



Proprietary Screw Performance

DiamondTip™ screw technology reduces surgical steps because screw can be placed without pilot hole.¹⁵

Corticocancellous thread designed to enhance bone purchase.



Confidence in Locking Mechanism

Secure antimigration system provides tactile and visual confirmation.

Pre-assembled locking mechanism secures all screws simultaneously.



Strength without compromise

PrimaGen Advanced™ Allograft

PrimaGen Advanced Allograft is a fresh frozen allograft, which is cryopreserved and processed using a proprietary processing method to retain endogenous components of the native bone that support bone healing. It possesses all three components of the bone healing triad: osteoconductivity, osteoinductivity, and osteogenicity. The combination of morselized cancellous bone and demineralized cortical bone provides a bone grafting scaffold.¹⁸



Combining structure and flexibility
in an osteoinductive scaffold.

InterGro® DBM and DBM Fibers Demineralized Bone Matrix

InterGro DBM has been scientifically formulated to deliver optimized characteristics without compromise: preferred handling, verified osteoinductivity,¹⁶ and optimized active DBM content.¹⁷ The natural quality of the carrier and its outstanding containment and handling characteristics enable the surgeon to mold it to surgical sites, even in the presence of excessive fluids and under lavage. InterGro is available in putty, paste, plus (premixed with resorbable coralline hydroxyapatite/calcium carbonate granules), and fibers (100% DBM, no carrier, and must be hydrated with saline, blood or bone marrow aspirate).





PlatFORM[®] CM Collagen Mineral Bone Graft Matrix

Bone graft substitute composed of carbonate apatite inorganic bone mineral. Carbonate apatite resorption and remodeling is similar to human bone.



PlatFORM[®] BG Bioactive Collagen Mineral Bone Graft Matrix

Bone graft substitute composed of carbonate apatite anorganic bone mineral, bioactive glass, and Type 1 collagen. When combined, they provide an optimal scaffold to support the body's natural ability to regenerate new bone.

A perfect trio of components molded to fit bone defects.  

REFERENCES

1. Data on file. Based on available market data at the time of this publication.
2. Kim K, Hoffman G, Bae H, et al. Ten-Year Outcomes of 1- and 2-Level Cervical Disc Arthroplasty From the Mobi-C Investigational Device Exemption Clinical Trial. *Neurosurgery*. 2021;88(3):497-505.
3. Radcliff K, Davis RJ, Hisey MS, et al. Long-term evaluation of cervical disc arthroplasty with the Mobi-C Cervical Disc: a randomized, prospective, multicenter clinical trial with seven-year follow-up. *Int J Spine Surg* 2017;11(4):244-262.
4. Lee MJ, Bazaz R, Furey CG, Yoo J. Influence of anterior cervical plate design on dysphagia: a 2-year prospective longitudinal follow-up study. *J Spinal Disord Tech*. 2005;18(5):406-9.
5. Park JB, Cho YS, Riew KD. Development of adjacent-level ossification in patients with an anterior cervical plate. *J Bone Joint Surg Am*. 2005;87:558-63.
6. Park JB, Wattanaaphisit T, Riew KD. Timing of development of adjacent-level ossification after anterior cervical arthrodesis with plates. *Spine J*. 2007;7(6):633-36.
7. McGilvray KC, Easley J, Seim HB, et al. Bony ingrowth potential of 3D-printed porous titanium alloy: a direct comparison of interbody cage materials in an in vivo ovine lumbar fusion model. *Spine J* 2018;18(7):1250-1260.
8. Olivares-Navarrete R, Hyzy SL, Slosar PJ et al. Implant materials generate different peri-implant inflammatory factors: poly-ether-ether-ketone promotes fibrosis and microtextured titanium promotes osteogenic factors. *Spine* 2015;40(6):399 -404.
9. Olivares-Navarrete R, Hyzy SL, Gittens RA, et al. Rough titanium alloys regulate osteoblast production of angiogenic factors. *Spine J* 2013;13(11):1563 -70.
10. Rao PJ, Pelletier MH, Walsh WR, et al. Spine Interbody Implants: Material Selection and Modification, Functionalization and Bioactivation of Surfaces to Improve Osseointegration. *Orthop Surg* 2014;6:81 -89.
11. Ponader S, von Wilmowsky C, Widenmayer M, et al. In vivo performance of selective electron beam-melted ti-6al-4v structures. *J Biomed Mater Res A* 2010;92A:56 -62.
12. Li JP, Habibovic P, et al.: Bone ingrowth in porous titanium implants produced by 3D fiber deposition. *Biomaterials* 2007;28:2810.
13. Karageorgiou V, Kaplan D. Porosity of 3D biomaterial scaffolds and osteogenesis. *Biomaterials* 2005;26(27):5474 -91.
14. Data on File. Demonstrated by mechanical testing per ASTM F1717.
15. Konz RJ, Jensen LM, Kincaid BL. Comparison of self-drilling and self-tapping cervical spine screws using ASTM F543-07. *J ASTM Int*. 2011;8(7):1-13.
16. Han B., Tang B., Nimni ME. Quantitative and sensitive in vitro assay for osteoinductive activity of demineralized bone matrix. *J Orthop Res*. 2003;Jul;21(4):648-54.
17. Han B., Tang B., Nimni ME. Combined effects of phosphatidylcholine and demineralized bone matrix on bone induction. *Connect Tissue Res*. 2003;44(3-4):160-6.
18. Martin GJ Jr, Boden SD, Titus L, Scarborough NL. New formulations of demineralized bone matrix as a more effective graft alternative in experimental posterolateral lumbar spine arthrodesis. *Spine (Phila Pa 1976)*. 1999 Apr 1;24(7):637-45.

For more information visit [ZimVie.com](https://www.ZimVie.com)

ZimVie Spine
10225 Westmoor Drive
Westminster, CO 80021



All content herein is protected by copyright, trademarks and other intellectual property rights owned by or licensed to Zimmer Biomet Spine, Inc. (d/b/a ZimVie Inc.) or one of its affiliates unless otherwise indicated, and must not be redistributed, duplicated, or disclosed, in whole or in part, without the express written consent of Zimmer Biomet Spine, Inc. (d/b/a ZimVie Inc.). This material is intended for health care professionals, the ZimVie Spine sales force, and authorized representatives. Distribution to any other recipient is prohibited. ZV0396 REV A 01/23 © 2023 ZimVie Inc. All rights reserved.

For product information, including indications, contraindications, warnings, precautions, potential adverse effects, and patient counseling information, see the package insert and www.ZimVie.com. Common post-operative risks from surgery with the Mobi-C include pain in the neck, arm, back, shoulder, or head, and dysphagia. See the package insert and [ZimVie.com](https://www.ZimVie.com) for full risks and contraindications.