

May 16, 2023

Eminent Spine, LLC % Jennifer Palinchik President Jalex Medical 27865 Clemens Rd, Suite 3 Westlake, Ohio 44145

Re: K230219

Trade/Device Name: Eminent Spine 3D Lumbar Interbody Fusion Systems Regulation Number: 21 CFR 888.3080 Regulation Name: Intervertebral body fusion device Regulatory Class: Class II Product Code: MAX Dated: March 14, 2023 Received: March 14, 2023

Dear Jennifer Palinchik:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</u>) and CDRH Learn (<u>https://www.fda.gov/training-and-continuing-education/cdrh-learn</u>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</u>) for more information or contact DICE by email (<u>DICE@fda.hhs.gov</u>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely, Katherine D. Kavlock -S

for

Brent Showalter, Ph.D. Assistant Director DHT6B: Division of Spinal Devices OHT6: Office of Orthopedic Devices Office of Product Evaluation and Quality Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number *(if known)* K230219

Device Name

Eminent Spine 3D Lumbar Interbody Fusion Systems

Indications for Use (Describe)

The Eminent Spine 3D Lumbar Interbody Fusion Systems (PLIF, TLIF, and ALIF) are indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and autograft to facilitate fusion. Hyperlordotic interbody devices ($\geq 20^{\circ}$ lordosis) must be used with at least anterior supplemental fixation.

Type of Use (Select one or both, as applicable)		
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Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

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510(k) Summary

Submitted By:	Eminent Spine, LLC
	2004 Ventura Dr. Suite #100
	Plano, TX 75093
Date:	05/15/2023
Contact Person:	Jennifer Palinchik, President, JALEX Medical
Contact Telephone:	(440) 935-3282
Contact Fax:	(440) 933-7839
Device Trade Name:	Eminent Spine 3D Lumbar Interbody Fusion Systems
Common Name:	Intervertebral Body Fusion Device
Device Classification Name:	Intervertebral Body Fusion Device with Bone Graft, Lumbar
Device Classification:	Class II
Reviewing Panel:	Orthopedic
Product Code:	MAX
Primary Predicate Device:	Eminent Spine Interbody Fusion System (K090064)
Additional Predicate Devices:	Eminent Spine 3D Cervical Interbody Fusion System (K212701)
	CancelleX Porous Titanium Lumbar Interbody Device (K190364)

Device Description:

The Eminent Spine 3D Lumbar Interbody Fusion Systems are intervertebral body fusion systems used in the spine to replace a collapsed, damaged, or unstable disc. The 3D Lumbar Interbody Fusion Systems (PLIF, TLIF, and ALIF) are comprised of various sizes and configurations to accommodate individual patient anatomy. The configurations are designed to provide the surgeon with different surgical approach options, and packed with autogenous bone graft to facilitate fusion. Serrations on the superior and inferior surfaces of each device grip the endplates of the adjacent vertebral bodies to aid in expulsion resistance. The device is intended to provide mechanical support to the implanted level until biologic fusion is achieved.

Indications for Use:

The Eminent Spine 3D Lumbar Interbody Fusion Systems (PLIF, TLIF, and ALIF) are indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and autograft to facilitate fusion. Hyperlordotic interbody devices ($\geq 20^{\circ}$ lordosis) must be used with at least anterior supplemental fixation.

Summary of Technological Characteristics:

The Eminent Spine 3D Lumbar Interbody Fusion Systems and the predicates have the same intended use and fundamental scientific technology. All devices compare similarly in:



- Design features
- Intended use
- Materials
- Dimensions
- Function

Table 1: Dimensions and Technological Characteristics Comparison

Item	Eminent Spine 3D Lumbar Interbody Fusion Systems	Eminent Spine Interbody Fusion System (K090064)	Eminent Spine 3D Cervical Interbody Fusion System	Comparison
			(K212701)	
Classification	Intervertebral Body	Intervertebral Body	Intervertebral Body	Equivalent
Name	Fusion Device	Fusion Device	Fusion Device	
Regulation	888.3080	888.3080	888.3080	Equivalent
Product Code	MAX	MAX, MQP, ODP	ODP	Intervertebral body fusion device code equivalent to primary predicate
Indications for	The Eminent Spine 3D	The Eminent Spine	The Eminent Spine 3D	Intervertebral
Use	Euclider Interbody	System (Sidewinder	Eusion System is	indications
	TI IE and ALIE) are	Bystelli (Sidewillder,	rusion System is	indications
	indicated for	Cottonmouth) is	intervertebral body	primary
	intervertebral body	indicated for	fusion in skeletally	printary
	fusion of the lumbar	intervertebral body	mature patients with	predicate
	spine from L2 to S1 in	fusion of the lumbar	degenerative disc	
	skeletally mature	spine from L2 to S1 in	disease (DDD) of the	
	patients who have had	skeletally mature	cervical spine at one	
	six months of non-	patients who have had	disc level from the C2-	
	operative treatment.	six months of non-	C3 disc to the C7-T1	
	The device is intended	operative treatment.	disc. DDD is defined as	
	for use at either one	The device is intended	discogenic pain with	
	level or two contiguous	for use at either one	degeneration of the disc	
	levels for the treatment	level or two contiguous	confirmed by history	
	of degenerative disc	levels for the treatment	and radiographic	
	disease (DDD) with up	of degenerative disc	studies. The device	
	to Grade I	disease (DDD) with up	system is designed for	
	spondylolisthesis. DDD	to Grade I	use with supplemental	
	is defined as back pain	spondylolisthesis. DDD	fixation and autograft to	
	of discogenic origin	is defined as back pain	facilitate fusion.	
	with degeneration of	of discogenic origin	Patients should have at	
	the disc confirmed by	with degeneration of	least six (6) weeks of	
	history and	the disc confirmed by	non-operative treatment	
	radiographic studies.	history and	prior to treatment with	
	The device system is	radiographic studies.	an intervertebral cage.	
	designed for use with	The device system is		
	supplemental fixation	designed for use with		
	and autograft to	supplemental fixation		
	facilitate fusion.			



	Hyperlordotic interbody	and autograft to		
	devices (≥20° lordosis)	facilitate fusion.		
	must be used with at			
	least anterior	The Eminent Spine		
	supplemental fixation.	System of implants is		
		indicated for use to		
		replace a vertebral body		
		that has been resected		
		or excised (i.e. partial		
		or total vertebrectomy)		
		due to tumor or		
		trauma/fracture. The		
		implant is intended for		
		use in the		
		thoracolumbar spine		
		(from 11 to L5) and is		
		intended for use with		
		supplemental internal		
		inxation and autograft		
		devices are designed to		
		restore the		
		biomachanical integrity		
		of the anterior middle		
		and posterior spinal		
		column even in the		
		absence of fusion for a		
		prolonged period		
Description	The Eminent Spine 3D	The Eminent Spine	The Eminent Spine 3D	Equivalent to
Desemption	Lumbar Interbody	Interbody Fusion	Cervical Interbody	primary
	Fusion Systems are	System is comprised of	Fusion System is	predicate
	intervertebral body	various sizes and	comprised of various	r · · · · · · · ·
	fusion systems used in	configuration to	sizes and configuration	
	the spine to replace a	accommodate	to accommodate	
	collapsed, damaged, or	individual patient	individual patient	
	unstable disc. The 3D	anatomy. The	anatomy. The device is	
	Lumbar Interbody	configurations are	a hollow rectangular	
	Fusion Systems (PLIF,	designed to provide the	shaped block, which is	
	TLIF, and ALIF) are	surgeon with different	available in a parallel or	
	comprised of various	surgical approach	lordotic configurations.	
	sizes and configurations	options.	The device is hollow to	
	to accommodate		allow for placement of	
	individual patient		bone graft. There are	
	anatomy. The		teeth on the superior	
	configurations are		and interior surfaces of	
	designed to provide the		the device to inhibit	
	surgeon with different		movement of the	
	surgical approach		aevice.	
	options, and packed			
	with autogenous bone			
	Servations on the			
	superior and inferior			



	surfaces of each device grip the endplates of the adjacent vertebral bodies to aid in expulsion resistance. The device is intended to provide mechanical support to the implanted level until biologic fusion is achieved.			
Footprints	PLIF: 22-31 mm x 9-12 mm TLIF: 28-34 mm x 11 mm ALIF: 32-42 mm x 21- 28 mm	Python (PLIF): 22-31 mm x 9-12 mm Sidewinder (TLIF): 28- 31 mm x 11 mm Cottonmouth (ALIF): 32-42 mm x 21-28 mm	14x12 mm, 15x13 mm, 17x12 mm, 17x14 mm, 19x16 mm	Equivalent to primary predicate
Heights	PLIF: 6-18 mm TLIF: 6-18 mm ALIF: 10-20 mm	Python (PLIF): 6-18 mm Sidewinder (TLIF): 6- 18 mm Cottonmouth (ALIF): 10-20 mm	5-12 mm	Equivalent to primary predicate
Lordotic angle	6°, 12°, 18°, 24°, 30° (depending on model)	6°, 12°, 18°, 24°, 30° (depending on model)	0°, 6°	Equivalent to primary predicate
Material	Ti-6Al-4V per ASTM F3001	PEEK Optima LT1 and Ti-6Al-4V ELI per ASTM F136	Ti-6Al-4V per ASTM F3001	Equivalent to additional predicate

Mechanical Testing:

Substantial equivalence is supported by the results of mechanical testing, including static axial compression, static axial compression-shear, dynamic axial compression, dynamic axial compression-shear per ASTM F2077, subsidence per ASTM F2267, and expulsion. Results support that the subject device performs as well as or better than the chosen acceptance criteria.

Conclusion:

Based on the indications for use, technological characteristics, and comparison with the predicate device, the subject device has demonstrated substantial equivalence.