



October 13, 2023

Alphatec Spine, Inc.  
Neha Mohindroo  
Associate, Regulatory Affairs  
1950 Camino Vida Roble  
Carlsbad, California 92008

Re: K232504

Trade/Device Name: Calibrate CCX Interbody System  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral Body Fusion Device  
Regulatory Class: Class II  
Product Code: MAX  
Dated: August 17, 2023  
Received: August 18, 2023

Dear Ms. Mohindroo:

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 (the 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 available 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.

Additional information about changes that may require a new premarket notification are provided in the FDA guidance documents entitled "Deciding When to Submit a 510(k) for a Change to an Existing Device" (<https://www.fda.gov/media/99812/download>) and "Deciding When to Submit a 510(k) for a Software Change to an Existing Device" (<https://www.fda.gov/media/99785/download>).

Your device is also subject to, among other requirements, the Quality System (QS) regulation (21 CFR Part 820), which includes, but is not limited to, 21 CFR 820.30, Design controls; 21 CFR 820.90, Nonconforming product; and 21 CFR 820.100, Corrective and preventive action. Please note that regardless of whether a change requires premarket review, the QS regulation requires device manufacturers to review and approve changes to device design and production (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

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 Part 803) for devices or postmarketing safety reporting (21 CFR Part 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 Part 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR Parts 1000-1050.

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

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). 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 (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email ([DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

**Brent Showalter -S**

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)

K232504

Device Name

Calibrate CCX Interbody System

Indications for Use (Describe)

The Calibrate CCX Interbody System is indicated for spinal fusion procedures from L1 to S1 in skeletally mature patients for the treatment of symptomatic degenerative disc disease (DDD), degenerative spondylolisthesis, and/or spinal stenosis at one or two adjacent levels. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies.

Additionally, the Calibrate CCX Interbody System can be used as an adjunct to fusion in patients diagnosed with multilevel degenerative scoliosis and sagittal deformity.

The Calibrate CCX Interbody System is intended for use on patients who have had at least six months of non-operative treatment. It is intended for use with autograft and/or allogenic bone graft comprised of cortical, cancellous, and/or corticocancellous bone, and/or demineralized allograft bone with bone marrow aspirate and supplemental fixation systems that are cleared by FDA for use in the lumbar spine.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

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

### CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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This 510(k) summary of safety and effectiveness is being submitted in accordance with the requirements of 21 CFR 807.92.

**I. SUBMITTER:** Alphatec Spine, Inc.  
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Contact Person: Neha Mohindroo  
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Contact Phone: (760) 356-6596

Date Summary Prepared: October 3, 2023

**II. DEVICE**

Name of Device: Calibrate CCX Interbody System  
Common or Usual Name: Intervertebral body fusion device  
Classification Name: Intervertebral fusion device with bone graft, lumbar  
Regulation Number: 21 CFR 888.3080  
Regulatory Class: Class II  
Product Code: MAX

**III. LEGALLY MARKETED PREDICATE DEVICES**

510(k)	Product Code	Trade Name	Manufacturer
<b>Primary Predicate Device</b>			
K231438	MAX	Calibrate PSX Interbody System	Alphatec Spine
<b>Additional Predicate Devices</b>			
K171848	MAX	Globus Rise Spacers	Globus Medical
K180480	MAX, PHM	A TEC Universal Spacer System	Alphatec Spine
K222028	MAX, PHM, OVD	IdentiTi and Transcend Interbody System	Alphatec Spine

**IV. DEVICE DESCRIPTION**

The subject Calibrate CCX Interbody System is an expandable lumbar intervertebral body fusion system designed to be inserted through a posterior or transforaminal surgical approach. The subject interbody spacers are manufactured from titanium alloy (Ti-6Al-4V ELI) per ASTM F136. The Calibrate CCX Interbody System consists of a variety of shapes and sizes of interbody spacers, inserters, trials, and general instruments to create parallel expansion, restore sagittal alignment, and provide indirect decompression. Implants are offered with anti-migration teeth and grit-blast treatment on the bone-contacting endplate surfaces.

The purpose of this 510(k) is to receive clearance for Calibrate CCX Interbody System.

## V. INDICATIONS FOR USE

The Calibrate CCX Interbody System is indicated for spinal fusion procedures from L1 to S1 in skeletally mature patients for the treatment of symptomatic degenerative disc disease (DDD), degenerative spondylolisthesis, and/or spinal stenosis at one or two adjacent levels. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies.

Additionally, the Calibrate CCX Interbody System can be used as an adjunct to fusion in patients diagnosed with multilevel degenerative scoliosis and sagittal deformity.

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## VI. TECHNOLOGICAL COMPARISON TO PREDICATES

The technological design features of the subject Calibrate CCX Interbody System are substantially equivalent to the primary predicate Calibrate PSX Interbody Systems (K231438) and additional predicates Globus Rise Spacers (K171848), ATEC Universal Spacer System (K180480), and IdentiT<sub>i</sub> and Transcend Interbody System (K222028). The technological design features of the subject implants were compared to the predicates in intended use, indications for use, design, function, and technology and it was demonstrated that they are substantially equivalent.

## VII. PERFORMANCE DATA

Nonclinical testing performed on the Calibrate CCX Interbody System supports substantial equivalence to other predicate devices. The following testing was performed:

- Static and Dynamic Axial Compression (per ASTM F2077)
- Static and Dynamic Compression-Shear (per ASTM F2077)
- Static Push-Out
- Static Subsidence (per ASTM F2267)

The results demonstrate that the subject Calibrate CCX Interbody System is substantially equivalent to other predicate devices for nonclinical testing.

## Clinical Information

Not applicable; determination of substantial equivalence is not based on an assessment of clinical performance data.

## **VIII. CONCLUSION**

Based upon the information provided in this 510(k) submission, it has been determined that the subject devices are substantially equivalent to legally marketed devices in regard to indications for use, intended use, design, technology, and performance.