



July 27, 2020

Arthrex Inc.  
Samantha Passman  
Regulatory Affairs Associate  
1370 Creekside Boulevard  
Naples, Florida 34108-1945

Re: K201132

Trade/Device Name: Arthrex Compression Screws  
Regulation Number: 21 CFR 888.3030  
Regulation Name: Single/Multiple Component Metallic Bone Fixation Appliances And Accessories  
Regulatory Class: Class II  
Product Code: HRS, HWC  
Dated: April 22, 2020  
Received: April 28, 2020

Dear Samantha Passman:

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 <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,

for

Shumaya Ali, MPH  
Assistant Director  
DHT6C: Division of Restorative, Repair  
and Trauma 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)  
K201132

Device Name  
Arthrex Compression Screws

### Indications for Use (Describe)

The Arthrex KreuLock Compression Screws (2.0-3.0 mm solid) are intended to be used in a plate-screw system for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, and wrist. When used with a plate, the screw may be used with the Arthrex Low Profile Plate, Small Fragment Plates, Distal Extremity Plates, Mesh Plates (2.7-3.0) and Distal Radius Plates.

The Arthrex KreuLock Compression Screws (3.5 mm and larger, solid) are intended to be used in a plate-screw system for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, wrist, clavicle, scapula, olecranon, humerus, radius, ulna, tibia, calcaneus, femur and fibula. When used with a plate, the screws may be used with the Arthrex Low Profile Plate, Small Fragment Plates, Fracture Plates, Distal Extremity Plates, Distal Radius Plates, Humeral Fracture Plates, Osteotomy Plates, and Ankle Fusion Plates.

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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The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

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## Indications for Use

510(k) Number (if known)

K201132

Device Name

Arthrex Compression Screws

Indications for Use (Describe)

The Arthrex Compression FT Screws (2.0-3.0 mm cannulated) are intended to be used as stand-alone bone screws for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, and wrist.

The Arthrex Compression FT Screws (3.5 mm and larger, cannulated) are intended to be used as stand-alone bone screws for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, wrist, clavicle, scapula, olecranon, humerus, radius, ulna, tibia, calcaneus, femur and fibula.

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)

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## 510(k) Summary

<b>Date Prepared</b>	July 27, 2020
<b>Submitter</b>	Arthrex Inc. 1370 Creekside Boulevard Naples, FL 34108-1945
<b>Contact Person</b>	Samantha Passman Regulatory Affairs Associate 1-239-643-5553, ext. 71595 Samantha.passman@arthrex.com
<b>Name of Device</b>	Arthrex Compression Screws
<b>Common Name</b>	Screw, fixation, bone
<b>Product Code</b>	HRS, HWC
<b>Classification Name</b>	21 CFR 888.3030: Single/multiple component metallic bone fixation appliances and accessories (Primary) 21 CFR 888.3040: Smooth or threaded metallic bone fixation fastener
<b>Regulatory Class</b>	II
<b>Predicate Device</b>	K103705: Arthrex Low Profile Screws (Primary) K111253: Arthrex Distal Extremity Plate System K131474: Arthrex Distal Radius Plate System K141735: Arthrex Ankle Fusion Plating System K151732: Arthrex Fracture Plates K170547: Arthrex Mesh Plates
<b>Purpose of Submission</b>	This Traditional 510(k) premarket notification is submitted to obtain clearance for the Arthrex KreuLock Compression Screws as a line extension to the Arthrex Low Profile Screw family of products. This submission is also seeking to obtain Low Profile Screw indications for the Arthrex Compression FT Screws cleared under K132217, K170382, and K182361.
<b>Device Description</b>	<p>The Arthrex KreuLock Compression Screws are a family of screws that are offered in a diameter range of 2.4 to 4.5 mm, length range of 10 to 80 mm, in a fully threaded design, solid, and locking design. The Arthrex KreuLock Compression Screws are intended to be used with plates in the same applications as existing Arthrex Low Profile Screws. Those plates remain unchanged. The Arthrex KreuLock Compression Screws are manufactured from either Titanium or Stainless Steel materials and are available in straight or variable angle configurations. The screws are sold sterile or non-sterile and single-use.</p> <p>The Arthrex Compression FT Screws are a family of screws that are offered in a diameter range of 2.8 to 7.0 mm, length range of 8 to 140 mm, in a fully threaded and cannulated design. The Arthrex Compression FT Screws are manufactured from Titanium. The screws are sold sterile or non-sterile and single-use.</p>
<b>Indications for Use</b>	<p>The <b>Arthrex KreuLock Compression Screws (2.0-3.0 mm solid)</b> are intended to be used in a plate-screw system for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, and wrist. When used with a plate, the screw may be used with the Arthrex Low Profile Plate, Small Fragment Plates, Distal Extremity Plates, Mesh Plates (2.7-3.0) and Distal Radius Plates.</p> <p>The <b>Arthrex KreuLock Compression Screws (3.5 mm and larger, solid)</b> are intended to be used in a plate-screw system for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, wrist, clavicle, scapula, olecranon, humerus, radius, ulna, tibia, calcaneus, femur and fibula. When used with a plate, the screws may be used with the Arthrex Low</p>

	<p>Profile Plate, Small Fragment Plates, Fracture Plates, Distal Extremity Plates, Distal Radius Plates, Humeral Fracture Plates, Osteotomy Plates, and Ankle Fusion Plates.</p> <p>The <b>Arthrex Compression FT Screws (2.0-3.0 mm cannulated)</b> are intended to be used as stand-alone bone screws for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, and wrist.</p> <p>The <b>Arthrex Compression FT Screws (3.5 mm and larger, cannulated)</b> are intended to be used as stand-alone bone screws for internal bone fixation for bone fractures, fusions, osteotomies and non-unions in the ankle, foot, hand, wrist, clavicle, scapula, olecranon, humerus, radius, ulna, tibia, calcaneus, femur and fibula.</p>
<b><i>Performance Data</i></b>	<p>Push-out, insertion torque/failure torque, and compression testing were conducted to demonstrate that the proposed compression screws perform statistically equivalent to the predicate. MR compatibility testing was also conducted per ASTM F2052-15 (displacement force), ASTM F2213-17 (torque), ASTM F2119-13 (image artifact), and ASTM F2182-11a (RF Heating).</p>
<b><i>Conclusion</i></b>	<p>The Arthrex Compression Screws are substantially equivalent to the predicate devices in which the basic design features and intended uses are the same. Any differences between the proposed devices and the predicate devices are considered minor and do not raise different questions concerning safety or effectiveness.</p> <p>The submitted mechanical testing data demonstrates that the push-out, torque, and compression strength of the proposed devices are substantially equivalent to that of the predicate devices for the desired indications.</p> <p>Based on the indications for use, technological characteristics, and the summary of data submitted, Arthrex Inc. has determined that the proposed devices are substantially equivalent to the currently marketed predicate device.</p>