Valeris Medical
Brendan Thies
Medical Device Engineer
200 Cobb Pkwy N, Building 200, Suite 210
Marietta, Georgia 30062

Re: K192810
  Trade/Device Name: Apollo Suture Anchor System
  Regulation Number: 21 CFR 888.3040
  Regulation Name: Smooth Or Threaded Metallic Bone Fixation Fastener
  Regulatory Class: Class II
  Product Code: MBI
  Dated: February 11, 2020
  Received: February 13, 2020

Dear Mr. Thies:

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.


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) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Laura C. Rose -S

Laura C. Rose, Ph.D.
Acting 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)
K192810

Device Name
Apollo Suture Anchor System

Indications for Use (Describe)
Apollo Medial, Medial with Needles, and Apollo XT Suture Anchor:

Shoulder
• Rotator Cuff Repair
• Bankart Repair
• SLAP Lesion Repair
• Biceps Tenodesis
• Acromio-Clavicular Separation Repair
• Deltoid Repair
• Capsular Shift or Capsuloabral Reconstruction

Foot/Ankle
• Lateral Stabilization
• Medial Stabilization
• Achilles Tendon Repair

Knee
• Medial Collateral Ligament Repair
• Lateral Collateral Ligament Repair
• Posterior Oblique Ligament Repair
• Iliotibial Band Tenodesis

Elbow
• Biceps Tendon Reattachment
• Ulnar or Radial Collateral Ligament Reconstruction

Hip
• Capsular Repair
• Acetabular Labral Repair
Apollo Knotless Anchor:

Shoulder
• Rotator Cuff Repair
• Bankart Repair
• SLAP Lesion Repair
• Biceps Tenodesis
• Acromio-Clavicular Separation Repair
• Deltoid Repair
• Capsular Shift or Capsulolabral Reconstruction

Wrist/Hand
• Scapholunate Ligament Reconstruction
• Ulnar/Radial Collateral Ligament Reconstruction

Foot/Ankle
• Lateral Stabilization
• Medial Stabilization
• Achilles Tendon Repair/Reconstruction
• Hallux Valgus Reconstruction
• Mid- and Forefoot Reconstruction

Elbow
• Biceps Tendon Reconstruction
• Ulnar or Radial Collateral Ligament Reconstruction
• Lateral Epicondylitis Repair (PEEK Anchor Only)

Knee
• Medial Collateral Ligament Repair
• Lateral Collateral Ligament Repair
• Posterior Oblique Ligament Repair
• Joint Capsular Closure
• Iliotibial Band Tenodesis
• Patellar Ligament/Tendon Repair

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

☐ Prescription Use (21 CFR 801 Subpart D)  ☐ Over-The-Counter Use (21 CFR 801 Subpart D)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."
# 510(k) Summary

(as required by 21 CFR 807.92)

| Date Prepared | February 11, 2020 |
| Manufacturer | Valeris Medical |
| Address | 200 Cobb Pkwy N  
Building 200, Suite 210  
Marietta, GA 30062 |
| Telephone | 888-404-3980 Ext 105 |
| Fax | 770-575-4052 |
| Contact Person | Brendan Thies  
Medical Device Engineer |
| Address | Valeris Medical  
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Building 200, Suite 210  
Marietta, GA 30062 |
| Telephone | 888-404-3980 Ext 105 |
| Fax | 770-575-4052 |
| Email | Brendan@Valerismedical.com |

| Trade Name | Apollo Suture Anchor System |
| Common Name | Screw, Fixation, Bone |
| Panel Code | Orthopaedics/87 |
| Classification Name | Fastener, Fixation, Nondegradable, Soft Tissue |
| Class | Class II |
| Regulation Number | 21 CFR 888.3040 |
| Product Code | MBI |

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<th>Name of Predicate Device</th>
<th>510(k) #</th>
<th>Manufacturer</th>
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<tr>
<td>Apollo Suture Anchor System and Titan Screws</td>
<td>K142230</td>
<td>Valeris Medical</td>
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## Description

Apollo Family

The Apollo Medial Suture Anchor, Medial with Needles, XT Suture Anchor, Knotless Anchor Delivery Systems are delivery systems for anchors for use in fixation of ligament, tendon, bone, or soft tissue to bone in knee, shoulder, foot/ankle, elbow, and hand/wrist procedures. These anchors consist of cannulated anchors with integrated suture attachment or separate suture punch eyelet. The Anchors are provided loaded on individual insertioners with and without integrated sutures, sterile, for single use only.

Implants are fabricated from Solvay Zeniva ZA-500, ZA-600, or ZA-600 CF30 PEEK (ASTM F2026).

## Indications and Intended Use

Apollo Medial, Medial with Needles, and Apollo XT Suture Anchor:

- **Shoulder**
  - Rotator Cuff Repair
  - Bankart Repair
  - SLAP Lesion Repair
  - Biceps Tenodesis
  - Acromio-Clavicular Separation Repair
  - Deltoid Repair
  - Capsular Shift or Capsulolabral Reconstruction

- **Foot/Ankle**
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**Technological Characteristics and Substantial Equivalence**

Documentation was provided to demonstrate that the Subject device, Apollo Suture Anchor System is substantially equivalent to the Predicate Apollo Suture Anchor System and Titan Screws (K142230). The Subject device is substantially equivalent to the predicate device in intended use, indications for use, materials, technological characteristics, performance and labeling.

Materials: The subject device is very similar to the predicate device in that they are both fabricated from Solvay ZENIVA PEEK; the subject device will offer additional configurations Solvay Zeniva PEEK (ZA-600 and ZA-600 CF). These materials share a MAF.

An additional suture manufacturer is being proposed that will provide UHMWPE sutures that have been demonstrated to be substantially equivalent to those used in the predicate device.

Design Features: The additional configuration of the subject device anchor is the same design as the predicate but with the suture or tape pre-threaded for ease of use. Needles will be attached to certain configurations of the subject device to provide additional options for the user.

Other minor design enhancements to instruments used with the system have been made in an effort for continuous improvement, including addition of lateral suture whips and modifications to handles.

Sterilization and Shelf-Life: The subject and predicate devices are offered sterile (EtO), and have a shelf-life of 2 years.

Biocompatibility: Biocompatibility was established according to ISO 10993-1. Bacterial endotoxins for the implantable components are determined using LAL testing to meet endotoxin limit specifications.

The subject device is substantially equivalent to the predicate device in that they are comprised of similar materials, share the same fundamental technology, are intended for the same indications and utilize similar designs. They are capable of achieving fixation in the same way.

**Performance Data**

Axial Pull-Out per ASTM F543-17 testing was conducted to confirm the material additive did not introduce any new risk.

Bacterial Endotoxin testing meets pyrogen limit specifications.

**Conclusion**

Based on the intended use, indications for use, technological characteristics, and comparison to the predicate device, the Subject device has been shown to be substantially equivalent to the legally marketed predicate device and is safe and effective for the intended use.