

March 2, 2020

Yunyi (Beijing) Medical Device Co., LTD % Diana Hong General Manager Mid-Link Consulting Co. Ltd P.O Box 120-119 Shanghai, 200120 Cn

Re: K192637

Trade/Device Name: High Strength Suture Regulation Number: 21 CFR 878.5000

Regulation Name: Nonabsorbable Poly(Ethylene Terephthalate) Surgical Suture

Regulatory Class: Class II Product Code: GAT

Dated: September 20, 2019 Received: September 24, 2019

#### Dear Ms. Hong:

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 <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> 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 <u>Federal Register</u>.

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 <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); 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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

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

Sincerely,

For Cindy Chowdhury, Ph.D., M.B.A.
Acting Assistant Director
DHT4B: Division of Infection Control
and Plastic Surgery Devices
OHT4: Office of Surgical
and Infection Control Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

## **Indications for Use**

510(k) Number (if known)

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2020 See PRA Statement below.

K192637			
Device Name High Strength Suture			
Indications for Use (Describe)			
The device is indicated for use in general soft tissue approximation and/or ligation, including use in allograft tissues for			
orthopedic procedures			
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.

#### \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

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:

Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

"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."

## **Tab #6 510(k) Summary**

This 510(k) Summary is being submitted in accordance with requirements of Title 21, CFR Section 807.92.

The assigned 510(k) Number: K192637

1. Date of Preparation: 08/06/2019

#### 2. Sponsor Identification

### Yunyi (Beijing) Medical Device Co., LTD.

Floor 1-4, Building 4, No. 9 Tianfu Street, Biomedical Base, Daxing District, Beijing 102600, People's Republic of China

Establishment Registration Number: Not registered

Contact Person: Xiaowei Liu Position: General Manager Tel: +86-10-57234533 Fax: +86-10-57234533

Email:liuxiaowei@yunyimedical.com

## 3. Designated Submission Correspondent

Ms. Diana Hong (Primary Contact Person) Mr. Ying Xu (Alternative Contact Person)

#### Mid-Link Consulting Co., Ltd

P.O. Box 120-119, Shanghai, 200120, China

Tel: +86-21-22815850 Fax: 360-925-3199

Email: info@mid-link.net

#### 4. Identification of Proposed Device

Trade Name: High Strength Suture

Common Name: Polyblend Suture, Non-absorbable Surgical Sutures

Size: UP-(2-0) W, UP-0W, UP-2W, UP-5W and UP-7W

#### **Regulatory Information**

Classification Name: Nonabsorbable Poly (Ethylene Terephthalate) Surgical;

Classification: II; Product Code: GAT;

Regulation Number: 21 CRFR878.5000 Review Panel: General& Plastic Surgery;

Indication for Use:

The device is indicated for use in general soft tissue approximation and/or ligation, including use in allograft tissues for orthopedic procedures.

#### Device Description

The proposed device is a braided synthetic, non-absorbable surgical suture made of ultra-high molecular weight polyethylene and medical adhesive at both ends of the suture. The proposed device is undyed and uncoated. The sutures are available in a range of sizes. The device does not contain needle. And the device is provided in sterile.

#### 5. Identification of Predicate Device

510(k) Number: K190817

Product Name: HS Fiber® Suture Manufacturer: Riverpoint Medical

#### 6. Non-Clinical Test Conclusion

Non clinical tests were conducted to verify that the proposed device met all design specifications as was Substantially Equivalent (SE) to the predicate device. The test results demonstrated that the proposed device complies with the following standards:

- ➤ USP 41-NF 36:2018 Non-absorbable Surgical Suture
- ➤ USP 41-NF 36:2018 <881> Tensile Strength

- ➤ USP 41-NF 36:2018 <861> Sutures Diameter
- ASTM F88/F88M-15 Standard test method for seal strength of flexible barrier materials
- ➤ ASTM F1929-15 Standard Test Method for Detecting Seal Leaks in Porous Medical Packaging by Dye Penetration
- ➤ ISO 10993-5:2009 Biological Evaluation Of Medical Devices Part 5: Tests For In Vitro Cytotoxicity
- ➤ ISO 10993-10:2010 Biological Evaluation Of Medical Devices Part 10: Tests For Irritation And Skin Sensitization
- ➤ ISO 10993-7:2008 Biological Evaluation Of Medical Devices Part 7: Ethylene Oxide Sterilization Residuals
- ➤ ISO 10993-11:2017 Biological Evaluation Of Medical Devices Part 11: Tests For Systemic Toxicity
- ➤ USP 41 NF 36 <151> Pyrogen Test (USP Rabbit Test)
- ➤ ISO 10993-3:2014 Biological Evaluation Of Medical Devices Part 11: Tests For Systemic Toxicity
- ➤ ISO 10993-6:2016 Biological Evaluation Of Medical Devices -- Part 6: Tests For Local Effects After Implantation
- ➤ USP 41 NF 36 <85> Bacterial Endotoxins Test

#### 7. Clinical Test Conclusion

No clinical study is included in this submission.

## 8. Substantially Equivalent (SE) Comparison

Table 1 Comparison of Technology Characteristics

Item	Proposed Device	Predicate Device
		K190817
Product Code	GAT	GAT
Regulation Number	21 CRFR878.5000	21 CRFR878.5000
Indication for Use	The device is indicated for use in	HS Fiber sutures are indicated for
	general soft tissue approximation	use in general soft tissue
	and/or ligation, including use in	approximation and/or ligation,
	allograft tissues for orthopedic	including use in cardiovascular
	procedures.	surgery, and the use of allograft
		tissues for orthopedic procedures.
Material	ultra-high molecular weight	ultra-high molecular weight
	polyethylene	polyethylene
Color	Undyed	Dyeing
Absorbable /	Non-absorbable	Non-absorbable
Non-absorbable		
Braided /	Braided	Braided
Monofilament		
Sterile	EO Sterilized	Unknown
Suture Size	UP-(2-0) W, UP-0W, UP-2W,	Unknown
	UP-5W ,UP-7W	
Single Use	Yes	Yes
Performance	Comply with:	Comply with:
	USP 41 <861>	USP <861>
	USP 41 <881>	USP <881>
Biocompatibility		
Cytotoxicity	No cytotoxicity	
Intracutaneous Study	No irritation	
Sensitization	No sensitization	
Pyrogenicity Test	No pyrogenicity	
Acute Systemic Toxicity	No systemic toxicity	Comply with ISO 10993
Bacterial Reverse Mutation	Not induce backward mutation	
Gene Mutation Test	Non-mutagenic	
Muscle Implantation Test	Non-irritant to the muscle tissue	
Subchronic Toxicity Test	No subchronic toxicity	

## 9. Substantially Equivalent (SE) Conclusion

Based on the comparison and analysis above, the proposed devices are determined to be Substantially Equivalent (SE) to the predicate devices.