

June 10, 2021

Shandong Shengshixincheng Medical Science & Technology Co., % Boyle Wang
Official Correspondent
Shanghai Truthful Information Technology Co., Ltd.
RM.608,No.738,Shangcheng Rd.,Pudong
Shanghai, Shanghai 200120
China

Re: K210522

Trade/Device Name: Disposable Vinyl Examination Gloves

Regulation Number: 21 CFR 880.6250

Regulation Name: Non-powdered patient examination glove

Regulatory Class: Class I, reserved

Product Code: LYZ Dated: April 28, 2021 Received: May 5, 2021

#### Dear Boyle Wang:

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/efdocs/efpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/efdocs/efpmn/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/medical-devices/device-advice-comprehensive-regulatory-assistance</a>) and CDRH Learn (<a href="https://www.fda.gov/training-and-continuing-education/cdrh-learn">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">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 (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Clarence W. Murray, III, Ph.D.
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: 06/30/2023 See PRA Statement below.

K210522				
Device Name				
Disposable Vinyl Examination Gloves				
Indications for Use (Describe)				
The Disposable Vinyl Examination Gloves are disposable devices examiner's hands to prevent contamination between patient and ex				
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.\*

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# 510(k) Summary (K210522)

This summary of 510(k) is being submitted in accordance with 21 CFR 807.92.

#### 1.0 Submitter's Information

Name: Shandong Shengshixincheng Medical Science & Technology Co., Ltd. Address: No.28 Aluminum Deep Processing Industrial Park, Changshan Town,

Zouping, Binzhou, Shandong Province, China.

Phone Number: +86-15550323002

Contact: Ping Wang

Date of Preparation: 06/03/2021

#### **Designated Submission Correspondent**

Mr. Boyle Wang

Shanghai Truthful Information Technology Co., Ltd.

Room 608, No. 738 Shangcheng Rd., Pudong Shanghai, 200120 China

Tel: +86-21-50313932

Email: Info@truthful.com.cn

#### 2.0 Device Information

Trade name: Disposable Vinyl Examination Gloves

Common name: Vinyl Patient Examination Glove

Classification name: Non-powdered Patient Examination Glove

Model(s): S, M, L, XL

#### 3.0 Classification

Production code: LYZ

Regulation number: 21CFR880.6250

Classification: Class I

Panel: General Hospital

#### 4.0 Predicate Device Information

Manufacturer: Hebei Hongtai Plastic Products Company Limited

Device: Vinyl Patient Examination Gloves (White, Blue, Yellow)

510(k) number: K163168

#### 5.0 Indication for Use

The Disposable Vinyl Examination Gloves are disposable devices intended for medical purposes that are worn on the examiner's hands to prevent contamination between patient and examiner.

## 6.0 Device Description

The subject device is powder free vinyl patient examination gloves. The subject devices have two color: blue and clear. The design of subject device is addressing the standards as ASTM D6124, ASTM D5151, and ASTM D5250. The subject device is non-sterile.

## 7.0 <u>Technological Characteristic Comparison Table</u>

**Table1-General Comparison** 

Item	Subject device	Predicate device	Comparison
510(k) number	K210522	K163168	1
Product Code	LYZ	LYZ	Same
Regulation No.	21CFR880.6250	21CFR880.6250	Same
Class	I	I	Same
Intended Use	The Disposable Vinyl	The Vinyl Examination	Same
	Examination Gloves are	Glove (White, Blue, or	
	disposable devices	Yellow) is a disposable	
	intended for medical	device intended for	
	purposes that are worn	medical purposes that	
	on the examiner's hands	is worn on the	
	to prevent contamination	examiner's hands to	
	between patient and	prevent contamination	
	examiner.	between patient and	
		examiner.	
Color	Blue, Clear	White, Blue, or Yellow	Different
Powdered or Powered free	Powdered free	Powdered free	Same
Design Feature	Ambidextrous	Ambidextrous	Same
Labeling Information	Single use, powder free,	Single use, powder	Similar
	device color, device	free, device color,	
	name, glove size and	device name, glove	
	quantity, product name,	size and quantity,	
	Non-Sterile	product name, Non-	
		Sterile	

Analysis: The proposed device has different colors as compared to the predicate device. To address this concern, biocompatibility test has been performed on proposed device and the test result can meet the requirements of ISO 10993 standards.

**Table2 Device Dimensions Comparison** 

Table 2 201100 2 miletione Companies.							
Predicate	Designation	Size				Tolerance	
Device(K163168)		XS	S	М	L	XL	
	Length, mm	230	230	235	245	245	min
	Width, mm	80	85	95	105	115	±5
		Thickness, mm:					
	Finger		0.05			min	
	Palm	0.08			min		
Subject	Designation	Size				Tolerance	
Device(K210522)		S I		М	L	XL	
	Length, mm	230 85		230	230	230	min
	Width, mm			95	105	115	±5
		Thickness, mm:					
	Finger	0.08			min		
	Palm				min		
Remark	Similar						

Analysis: The physical dimensions are different with that of the predicate, but they all meet the requirements of ASTM D5250.

**Table3 Performance Comparison** 

Item			Subject device	Predicate device	Comparison
			(K210522)	(K163168)	
Colorant		Clear, Blue	White, Blue, Yellow	Different	
Physical	Before	Tensile	14MPa, min	15MPa, min	Analysis
Properties	Aging	Strength			
		Ultimate	500%min	380%min	Analysis
		Elongation			
	After	Tensile	14MPa, min	15MPa, min	Analysis
	Aging	Strength			
		Ultimate	400%min	380%min	Analysis
		Elongation			
	Comply v	vith ASTM D5250		Comply with ASTM D5250	Same
Freedom fro	Freedom from Holes		Be free from holes	Be free from holes when	Same
			when tested in	tested in accordance with	
			accordance with	ASTM D5151 AQL=2.5	
			ASTM D5151		
		AQL=2.5			
Powder Content		Meet the	Meet the requirements of	Similar	
		requirements of	ASTM D6124		
			ASTM D6124		

Analysis: 1. The proposed device has different colorants as compared to the predicate device. To address

this concern, biocompatibility test has been performed on proposed device and the test result can meet the requirements of ISO 10993 standards.

2. The tensile strength and ultimate elongation are different with that of the predicate, but they all meet the requirements of ASTM D5250.

**Table4 Safety Comparison** 

Item		Subject device	Predicate device	Comparison
		(K210522)	(K163168)	
Material		Vinyl	Vinyl	Same
Biocompatibility	Irritation	Under the conditions of the	Comply with	Same
		study, not an irritant	ISO10993-10	
	Sensitization	Under conditions of the		
		study, not a sensitizer.		
	Cytotoxicity	Under conditions of the	Not provided	Different
		study, did not show		
		potential toxicity to L-929		
		cells.		
Label and Labeling		Meet FDA's Requirement	Meet FDA's	Same
			Requirement	

# 8.0 Discussion of Non-clinical and Clinical Test Performed

Non-clinical tests were conducted to verify that the proposed device met all design specifications. The test results demonstrated that the proposed device complies with the following standards:

ISO 10993-10:2010 Biological Evaluation Of Medical Devices - Part 10: Tests For Irritation And Skin Sensitization.

ISO 10993-5:2009 Biological Evaluation Of Medical Devices - Part 5: Tests For In Vitro Cytotoxicity

ASTM D6124-06 (Reapproved 2017), Standard Test Method for Residual Powder on Medical Gloves

ASTMD5151-19, Standard Test Method for Detection of Holes in Medical Gloves.

ASTM D5250-19, Standard Specification for Poly (vinyl chloride) Gloves for Medical Application.

#### 9.0 Clinical Test Conclusion

Clinical testing is not needed for this device.

# 10.0 <u>Conclusion</u>

The conclusions drawn from the nonclinical tests demonstrate that the proposed device, Disposable Vinyl Examination Gloves, are as safe, as effective, and performs as well as or better than the legally marketed predicated device in K163168.