



December 14, 2022

PingAn Medical Products Co.,Ltd.  
% Boyle Wang  
Shanghai Truthful Information Technology Co., Ltd.  
RM. 608, No. 738, Shangcheng Rd., Pudong  
Shanghai, Shanghai 200120  
China

Re: K222527

Trade/Device Name: Nitrile Patient Examination Glove  
Regulation Number: 21 CFR 880.6250  
Regulation Name: Non-Powdered Patient Examination Glove  
Regulatory Class: Class I, reserved  
Product Code: LZA  
Dated: November 14, 2022  
Received: November 14, 2022

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 <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,

  
**Bifeng Qian -S**

Bifeng Qian, M.D., Ph.D.  
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

## Indications for Use

510(k) Number (if known)  
K222527

Device Name  
Nitrile Patient Examination Glove

### Indications for Use (Describe)

The Nitrile Patient Examination Glove is a non-sterile disposable device intended for medical purposes that is worn on the examiner's hands or finger to prevent contamination between patient and examiner.

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.

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# 510(k) Summary

## (K222527)

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

### **1.0 Submitter's Information**

Name: PingAn Medical Products Co.,Ltd.  
Address: Zheji road, High-tech Industrial Zone of Hukou County, Jiujiang City,  
Jiangxi Province, China  
Phone Number: +86-15247135174  
Contact: Zhou Ziyu  
Date of Preparation: 2022.07.20

### **Designated Submission Correspondent**

Mr. Boyle Wang  
Shanghai Truthful Information Technology Co., Ltd.  
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### **2.0 Device Information**

Trade name: Nitrile Patient Examination Glove  
Common name: Patient Examination Gloves  
Classification name: Non-powdered patient examination glove  
Model(s): S, M, L, XL

### **3.0 Classification**

Production code: LZA  
Regulation number: 21CFR880.6250  
Classification: Class I  
Panel: General Hospital

### **4.0 Predicate Device Information**

Manufacturer: Yingxiang Glove Products Co., Ltd.  
Device: Nitrile Patient Examination Gloves  
510(k) number: K211914

## 5.0 Indication for Use

The Nitrile Patient Examination Glove is a non-sterile disposable device intended for medical purposes that is worn on the examiner's hands or finger to prevent contamination between patient and examiner.

## 6.0 Device Description

The subject device is powder free nitrile examination gloves. The subject device is blue. The subject device is non-sterile.

## 7.0 Technological Characteristic Comparison Table

**Table1-General Comparison**

<b>Item</b>	<b>Subject Device (K222527)</b>	<b>Predicated Device (K211914)</b>	<b>Remark</b>
Product Code	LZA	LZA	Same
Regulation No.	21CFR880.6250	21CFR880.6250	Same
Class	I	I	Same
Intended Use / Indication for Use	The Nitrile Patient Examination Glove is a non-sterile disposable device intended for medical purposes that is worn on the examiner's hands or finger to prevent contamination between patient and examiner.	The Nitrile Patient Examination Gloves is a disposable device intended for medical purposes that is worn on the examiner's hands to prevent contamination between patient and examiner.	Same
Powdered or Powered free	Powdered free	Powdered free	Same
Design Feature	Ambidextrous	Ambidextrous	Same
Labeling Information	Single-use indication, powder free, device color, device name, glove size and quantity, Nitrile Glove Powder Free Blue, Non-Sterile	Single-use indication, powder free, device color, device name, glove size and quantity, Disposable Powder Free Nitrile Examination Glove, Non-Sterile	Same

**Table2 Device Dimensions Comparison**

	Designation		Size				Tolerance	
			S	M	L	XL		
Predicate Device (K211914)	9-inch	Length, mm	220	230	230	230	min	
		Width, mm	80	95	110	120	±10	
	12-inch	Length, mm	220	230	230	230	min	
		Width, mm	80	95	110	120	±10	
	Thickness, mm:							
	9-inch/ 12-inch	Finger	0.05				min	
Palm		0.05				min		
Subject Device	12 inch	Designation	Size				Tolerance	
			S	M	L	XL		
		Length, mm	220	230	230	230	min	
		Width, mm	80	95	110	120	±10	
		Thickness, mm:						
		Finger	0.05				min	
Palm	0.05				min			
Remark	SIMILAR							

Analysis: The physical dimensions of subject device are same with the 12 inch ones of the predicate device, and they all meet the requirements of ASTM D6319-19.

**Table3 Performance Comparison**

Item			Subject device (Pending)	Predicated device (K211914)	Remark
Colorant			Blue	Blue	Same
Physical Properties	Before Aging	Tensile Strength	14MPa, min	14MPa, min	Same
		Ultimate Elongation	500% min	500% min	Same
	After Aging	Tensile Strength	14MPa, min	14MPa, min	Same
		Ultimate Elongation	400%min	400%min	Same
	Comply with ASTM D6319			Comply with ASTM D6319	Same
Freedom from Holes			Be free from holes when tested in accordance with ASTMD5151 AQL=2.5	Be free from holes when tested in accordance with ASTMD5151 AQL=2.5	Same

Powder Content	0.24 mg/glove	Meet the requirements of ASTM D6124	Similar
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**Table4 Safety Comparison**

Item		Subject device (Pending)	Predicated device (K211914)	Remark
Material		Nitrile	Nitrile	Same
Biocompatibility	Irritation (ISO 10993-10:2010 Biological Evaluation of Medical Devices - Part 10: Tests For Irritation And Skin Sensitization)	Under the conditions of the study, not an irritant	Comply with ISO10993-10	Same
	Sensitization (ISO 10993-10:2010 Biological Evaluation of Medical Devices - Part 10: Tests For Irritation And Skin Sensitization)	Under conditions of the study, not a sensitizer.		
	Cytotoxicity (ISO 10993-5:2009 Biological Evaluation of Medical Devices - Part 5: Tests For In Vitro Cytotoxicity)	Under conditions of the study, device extract is not cytotoxic	Comply with ISO10993-5	Similar
Label and Labeling		Meet FDA's Requirement	Meet FDA's Requirement	SAME

**8.0 Summary of Non-Clinical Performance Testing**

The following performance data has been provided to demonstrate that the subject device meets the acceptance criteria in the standard.

**Table 5 Summary of Non-Clinical Performance Testing**

No.	Name of the Test Methodology / Standard	Purpose	Acceptance Criteria	Results
1	ISO 10993-10:2010 Biological Evaluation Of Medical Devices - Part 10: Tests For Irritation And Skin Sensitization.	This part of ISO 10993 assesses possible contact hazards from chemicals released from medical devices, which may produce skin and mucosal irritation, eye irritation or skin sensitization.	Skin Sensitization Test: provided grades less than 1, otherwise sensitization.	All grades are 0.  All animals were survived and no abnormal signs were observed during the study.
2			Skin Irritation Test: If the primary irritation index is 0-0,4, the response category is Negligible. 0,5-1,9 means slight 2-4,9 means moderate 5-8 means severe	The primary irritation index is 0.  The response of the proposed device was categorized as negligible under the test condition
3	ISO 10993-5:2009 Biological Evaluation Of Medical Devices - Part 5: Tests For In Vitro Cytotoxicity	This part of ISO 10993 describes test methods to assess the in vitro cytotoxicity of medical devices.	The viab.% of the 100% extract of the test article is the final result, and if viability is reduced to <70% of the blank, it has cytotoxic potential.	Viab.% of 100% test article extract is 74.2%  It means the proposed device have potential toxicity to L-929 in the MTT method
4	ASTM D6124-06 (Reapproved 2017), Standard Test Method for Residual Powder on Medical Gloves	This standard is designed to determine the amount of residual powder (or filter-retained mass) found on medical gloves	powder residue limit of 2.0 mg	0.24 mg /glove
5	ASTM D5151-06(Reapproved 2015), Standard Test Method for Detection of Holes in Medical Gloves.	This test method covers the detection of holes in medical gloves.	Samples number: 125 gloves AQL: 2.5 (ISO 2859) Criterion ≤7 gloves for water leakage	0 glove water leakage found



6	<p>ASTM D6319-10(Reapproved 2015),Standard Specification For Nitrile Examination Gloves For Medical Application.</p>	<p>This specification covers certain requirements for nitrile rubber gloves used in conducting medical examinations and diagnostic and therapeutic procedures.</p>	<p>Sterility: no need</p> <p>Freedom from holes: pl. Refer to No. 5 in table 5</p> <p>Dimensions:</p> <p>S: width <math>80 \pm 10</math>mm Length <math>\geq 220</math> mm</p> <p>M: width <math>95 \pm 10</math>mm Length <math>\geq 230</math> mm</p> <p>L: width <math>110 \pm 10</math>mm Length <math>\geq 230</math> mm</p> <p>XL: width <math>120 \pm 10</math>mm Length <math>\geq 230</math> mm</p> <p>Thickness:</p> <p>Finger <math>\geq 0.05</math> mm Palm <math>\geq 0.05</math> mm</p> <p>Physical properties:</p> <p>Before aging Tensile strength <math>\geq 14</math>MPa Ultimate Elongation <math>\geq 500\%</math></p> <p>After Accelerated Aging Tensile strength <math>\geq 14</math>MPa Ultimate Elongation <math>\geq 400\%</math></p> <p>Powder-free Residue: pl. Refer to No. 4 in table 5</p>	<p><b>Lot no.:</b>JX220117</p> <p>Dimensions:</p> <p>S: width: 84-86 mm Length 295-304 mm</p> <p>Thickness:</p> <p>Finger 0.136-0.155 mm Palm 0.109-0.125 mm</p> <p>M: width 94-97 mm Length 296-302mm</p> <p>Thickness:</p> <p>Finger 0.136-0.155 mm Palm 0.109-0.125 mm</p> <p>L: width 104-107 mm Length 297-302 mm</p> <p>Thickness:</p> <p>Finger 0.150-0.171 mm Palm 0.112-0.125 mm</p> <p>XL: width 113-117 mm Length 296-303 mm</p> <p>Thickness:</p> <p>Finger 0.154-0.168 mm Palm 0.113-0.129 mm</p> <p>Physical properties:</p> <p>Before aging Tensile strength 17.9-40.5MPa Ultimate Elongation 508.945% - 574.078%</p> <p>After Accelerated Aging Tensile strength 14.2-27.1 MPa Ultimate Elongation 402.900% - 538.033%</p> <p>Powder-free Residue: pl. Refer to No. 4 in table 5</p>
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## 9.0 Discussion of Clinical and Performance Testing

Clinical testing is not needed for this device.

## **10.0 Conclusion**

The conclusions drawn from the nonclinical tests demonstrate that the proposed device is as safe, as effective, and performs as well as or better than the legally marketed predicated device.