

February 17, 2022

Dezhou Hengchang Medical Technology Co., Ltd. % Boyle Wang
Official Correspondent
Shanghai Truthful Information Technology Co., Ltd
RM.1801,No.161 Lujiazui East Rd.,Pudong
Shanghai, Shanghai 200120
China

Re: K213625

Trade/Device Name: 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: November 11, 2021 Received: November 17, 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/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/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.
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

Expiration Date: 06/30/2023 See PRA Statement below.

| Prescription Use (Part 21 CFR 801 Subpart D)   | Over-The-Counter Use (21 CFR 801 Subpart C)           |
|--|---|
| Type of Use (Select one or both, as applicable)  |   |
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| to prevent contamination between patient and examiner.   |   |
| Indications for Use (Describe) The Vinyl Examination Glove is a disposable device intended for | medical purposes that is worn on the examiner's hands |
| Indications for Line (December)  |   |
| Vinyl Examination Gloves   |   |
| Device Name  |   |
| K213625  |   |

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.\*

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 K213625

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

#### 1.0 Submitter's Information

Name: Dezhou Hengchang Medical Technology Co., Ltd.

Address: West Side of South Tiandingfeng Road, Xingtong Sub-district Office, Linyi

County, Dezhou City, Shandong Province, China.

Phone Number: +86 15963319855

Contact: Jing Li

Date of Preparation: Nov.11, 2021

#### **Designated Submission Correspondent**

Mr. Boyle Wang

Shanghai Truthful Information Technology Co., Ltd.

Room 1801, No. 161 East Lujiazui Rd., Pudong, Shanghai 200120, China

Tel: +86-21-50313932

Email: Info@truthful.com.cn

#### 2.0 Device Information

Trade name: 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: 21 CFR 880.6250

Classification: Class I

Panel: General Hospital

#### 4.0 Predicate Device Information

Manufacturer: ZHICHENG TRADING CO., LTD.

Device: Vinyl Examination Glove (Clear, Non-Colored)

510(k) number: K180861

#### 5.0 Indication for Use

The Vinyl Examination Glove is a disposable device intended for medical purposes that is worn on the examiner's hands to prevent contamination between patient and examiner.

## 6.0 <u>Device Description</u>

The subject device is powder free vinyl examination gloves. The subject device's color is clear. It can be available in four specifications: S,M,L and XL. The subject device is non-sterile.

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

**Table1-General Comparison** 

| Item                        | Subject Device<br>(K213625)  | Predicated Device<br>(K180861)  | Comparison            |
|-----------------------------|--|---|-----------------------|
| Product Code                | LYZ  | LYZ   | Same                  |
| Regulation No.              | 21CFR880.6250  | 21CFR880.6250   | Same                  |
| Class                       |  |   | Same                  |
| Intended Use                | The Vinyl Examination Glove is a disposable device intended for medical purposes that is worn on the examiner's hands to prevent contamination between patient and examiner. | The Vinyl Examination Glove (Clear, Non-Colored) is a disposable device intended for medical purposes that is worn on the examiner's hands to prevent contamination between patient and examiner. | Same                  |
| Material                    | Vinyl  | Vinyl   | Same                  |
| Powdered or<br>Powered free | Powdered free  | Powdered free   | Same                  |
| Design Feature              | Ambidextrous   | Ambidextrous  | Same                  |
| Colorant                    | Clear  | Clear   | Same                  |
| Labeling<br>Information     | Single-use indication, powder free, device color, device name, glove size and quantity, Non-Sterile  | Single-use indication, powder free, device color, device name, glove size and quantity, Non-Sterile   | Same                  |
| Dimensions(mm)              | Length:<br>S/M/L/XL: ≥230;<br>Width:<br>S: 85±5;   | Length:<br>S≥230;<br>M≥235;<br>L≥245;   | Similar<br>Analysis 1 |

|   |                | M: 95±5;   |                      | XL≥245;                          |                      |                       |               |
|---|----------------|--|----------------------|----------------------------------|----------------------|-----------------------|---------------|
|   |                | L: 105±5;  |                      | Width:                           |                      |                       |               |
|   |                | XL: 115±5  |                      | S: 85±5;                         |                      |                       |               |
|   |                | AL. 11010  |                      | M: 95±5;                         |                      |                       |               |
|   |                |  |                      | L: 105±5;                        |                      |                       |               |
|   |                |  |                      | XL: 115±5                        |                      |                       |               |
|   |                | Finger: ≥0.08;   |                      | Finger: ≥0.05;                   |                      | Similar               |               |
| Thicknes  | Thickness(mm)  |  | Palm: ≥ 0.08         |                                  | Palm: ≥0.08          |                       |               |
|   |                | Tensile  | 11MPa,               | Tensile                          | 15MPa,               | Analysis 1 Similar    |               |
|   | Befor          | Strength   | min                  | Strength                         | min                  | Analysis 2            |               |
|   | е              | Ultimate   |                      | Ultimate                         |                      | Similar               |               |
| Physical  | Aging          | Elongation   | 300% min             | Elongation                       | 380% min             | Analysis 2            |               |
| Properti  |                | Tensile  | 11MPa,               | Tensile                          | 15MPa,               | Similar               |               |
| es  | After          | Strength   | min                  | Strength                         | min                  | Analysis 2            |               |
|   | Aging          | Ultimate   |                      | Ultimate                         |                      | Similar               |               |
|   | 7.55           | Elongation   | 300%min              | Elongation                       | 380%min              | Analysis 2            |               |
|   |                |  | holes when           |                                  | holes when           | 7 triary or 2         |               |
| Freedom   | Freedom from   |  | tested in accordance |                                  | tested in accordance |                       |               |
| Hole  |                | with ASTMD5151   |                      |                                  | ASTMD5151            | Similar<br>Analysis 3 |               |
| 11010   | 110165         |  | AQL=2.5              |                                  | AQL=1.5              |                       |               |
|   |                | Meet the requirements of   |                      | Meet the requirements of         |                      | Same                  |               |
| Powder C  | Powder Content |  | ASTM D6124           |                                  | ASTM D6124           |                       |               |
|   |                | ISO 10993-10;<br>Under the conditions of<br>the study, not an irritant |                      | Comply with ISO10993-10          |                      |                       |               |
|   |                |  |                      |                                  |                      |                       |               |
|   |                |  |                      |                                  |                      | Same                  |               |
|   |                | or a sensitizer  |                      |                                  |                      |                       |               |
|   |                |  |                      | Under conditions of the          |                      |                       |               |
|   |                |  | ISO 10993-5          |                                  | study, did not show  |                       |               |
|   |                |  | itions of the        | potential toxicity to L-929      |                      | ,                     |               |
| Biocompatibility  Study, device extract is cytotoxic  ISO 10993-11; Under the condition of acute systemic toxicity test, the test article did not show acute systemic toxicity in vivo. |                | •  |                      | cells. Complies with ISO 10993-5 |                      | ,                     |               |
|   |                |  |                      |                                  |                      |                       | ISO 10003-11: |
|   |                | •  |                      |                                  |                      |                       |               |
|   |                |  |                      |                                  |                      |                       |               |
|   |                |  |                      | 1                                |                      | 1                     |               |
|   |                | '  |                      |                                  |                      |                       |               |
|   |                |  |                      |                                  |                      |                       |               |
|   |                | •  |                      |                                  |                      |                       |               |
|   |                |  |                      |                                  |                      |                       |               |

Analysis 1: The physical dimensions are different with that of the predicate, but they all meet the requirements of ASTM D5250.

Analysis 2: The tensile strength and ultimate elongation are different with that

of the predicate, but they all meet the requirements of ASTM D5250.

Analysis 3: Freedom from holes of subject device is similar with that of the predicate, but they all meet the requirements of ASTMD5151.

### 8.0 Summary of Non-clinical Testing

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 10993-5 Third edition 2009-06-01, 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 10993-11:2017, Biological evaluation of medical devices - Part 11: Tests for systemic toxicity.

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

ASTM D5151-19, Standard Test Method for Detection of Holes in Medical Gloves.

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

Table 2 - Summary of non-clinical performance testing

| Test          | Purpose                        | Acceptance Criteria   | Results   |
|---------------|--------------------------------|---|---|
| Method        |                                |   |   |
| ASTM<br>D5250 | Physical<br>Dimensions<br>Test | Length(mm): S/M/L/XL: ≥230; Width(mm): S: 85±5; M: 95±5; L: 105±5; XL: 115±5  Thickness (mm): Finger: ≥0.08 | Length(mm): > 230/Pass; Width(mm): S: 81-88 /Pass M: 90-98/ Pass L: 100-109/ Pass XL:110-118/ Pass Thickness (mm): Finger: 0.08-0.14/Pass |
|               |                                | Palm: ≥0.08   | Palm: 0.08/Pass   |
| ASTM          | Watertightness                 | Meet the requirements of ASTM D5151   | 0/125/Pass  |

| D5151    | Test for      | AQL 2.5         |                  |                         |                      |
|----------|---------------|-----------------|------------------|-------------------------|----------------------|
|          | Detection of  |                 |                  |                         |                      |
|          | Holes         |                 |                  |                         |                      |
| ASTM     | Powder        | Meet the re     | equirements of A | 0.10-0.18mg/Pass;       |                      |
| D6124    | Content       | 2.0mg           |                  |                         |                      |
|          |               | Before          | Tensile          | ≥11MPa                  | 11-21MPa/Pass;       |
|          |               | Aging           | Strength         |                         |                      |
|          |               |                 | Ultimate         | ≥300%                   | 300-477%/Pass;       |
| ASTM     | Physical      |                 | Elongation       |                         |                      |
| D412     | properties    | After           | Tensile          | ≥11MPa                  | 11-17MPa/Pass;       |
|          |               | Aging           | Strength         |                         |                      |
|          |               |                 | Ultimate         | ≥300%                   | 303-412%/Pass;       |
|          |               |                 | Elongation       |                         |                      |
| ISO      | Cytotoxicity  | In Vitro Cy     | totoxicity       | Under conditions of     |                      |
| 10993-5  |               |                 |                  |                         | the study, device    |
|          |               |                 |                  | extract is cytotoxic.   |                      |
| ISO      | Cytotoxicity  | Non- acute      | systemic         | Under conditions of     |                      |
| 10993-11 |               | toxicity        | toxicity         |                         | the study, did not   |
|          |               |                 |                  |                         | show acute systemic  |
|          |               |                 |                  | toxicity in vivo / Pass |                      |
| ISO      | Irritation    | Non-irritating  |                  |                         | Under the conditions |
| 10993-10 |               |                 |                  |                         | of the study, not an |
|          |               |                 |                  |                         | irritant/ Pass       |
| ISO      | Sensitization | Non-sensitizing |                  |                         | Under conditions of  |
| 10993-10 |               |                 |                  |                         | the study, not a     |
|          |               |                 |                  |                         | sensitizer./ Pass    |

## 9.0 Summary of Clinical Testing

Clinical testing is not needed for this device.

## 10.0 Conclusion

The conclusions drawn from the nonclinical tests demonstrate that the subject device Vinyl Examination Glove is as safe, as effective, and performs as well as or better than the legally marketed predicated device K180861.