

March 19, 2021

Qinghai Zhong Dao Win-win Medical Protective Equipment Co., % Shelley Li Director Shanghai Landlink Medical Information Technology Co., Ltd. Room 703, 705, Baohua International Plaza, West Guangzhong Road 555, Jingan Shanghai, 200071 China

Re: K202628

Trade/Device Name: Disposable Medical Face Mask Regulation Number: 21 CFR 878.4040 Regulation Name: Surgical Apparel Regulatory Class: Class II Product Code: FXX Dated: February 5, 2021 Received: February 16, 2021

Dear Shelley Li:

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 <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

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

Sincerely,

For CAPT Elizabeth Claverie, M.S. 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)* K202628

Device Name Disposable Medical Face Mask

Indications for Use (Describe)

The Disposable medical Face Masks are intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. This is a single use, disposable device(s), provided non-sterile.

| Type of Use (Select one or both, as app | alioahla) |
|---|-----------|
| | JIICaple) |

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."

510(k) summary: K202628

I Submitter

Qinghai Zhong Dao Win-win Medical Protective Equipment Co., Ltd. No.36 Jingsan Road, Biological Park, Xining City 810000, Qinghai Province, China Establishment Registration Number: 3016998435 Contact person: Zhaochu Chen Position: QC Manager Tel.: +86-13381230018 Fax: ++086-010-67083032 E-mail: chenzhaochu@jingzhuzangyao.com

Preparation date: March 17, 2021

II Proposed Device

| Trade Name of Device: | Disposable Medical Face Mask |
|-----------------------|------------------------------|
| Regulation Name: | Surgical Apparel |
| Regulation Number: | 21 CFR 878.4040 |
| Regulatory Class: | Class II |
| Product code: | FXX |
| Review Panel | General Hospital |

III Predicate Devices

| 510(k) Number: | K173062 |
|------------------|---|
| Trade name: | Non Woven Face Mask (Models: VQN0185W (earloop) and VQN0185B (ties) |
| Regulation Name: | Surgical Apparel |
| Classification: | Class II |
| Product Code: | FXX |
| Manufacturer | V&Q Manufacturing Corporation |

IV Device description

The Disposable Medical Face Masks are Flat Pleated type mask, utilizing Ear Loops way for wearing, and they all have Nose Piece design for fitting the face mask around the nose. The Disposable Medical Face Masks are manufactured with three layers. The outer layer is made of spun-bonded polypropylene (PP) non-woven fabric with blue color. The middle layer with filtration function is made of melt blown

polypropylene (PP) non-woven fabric. The inner layer contact with face is made of spun-bonded polypropylene (PP) non-woven fabric with white color.

The Disposable Medical Face Masks are single use, disposable device, provided non-sterile.

V Indication for use

The Disposable medical Face Masks are intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. This is a single use, disposable device(s), provided non-sterile.

| Item | | Proposed device | Predicate device | Remark |
|--------------|---------|--|---|--------|
| | | (K202628) | (K173062) | |
| Product r | name | Disposable Medical Face Mask | Non Woven Face Mask (Models: VQN0185W (earloop) and VQN0185B (ties) | / |
| Product (| Code | FXX | FXX | Same |
| Regulatio | n No. | 21 CFR 878.4040 | 21 CFR 878.4040 | Same |
| Class | S | Class II | Class II | Same |
| Mask st | tyle | Flat-pleated, ear loop, 3 layers | Flat-pleated, ear loop, 3 Layers | Same |
| Indication f | for use | The Disposable medical Face Masks are intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. This is a single use, disposable device(s), provided non-sterile. | Non Woven Face Mask (Models: VQN0185W (earloop) and VQN0185B (ties) is intended for single use by operating room personnel and other general healthcare workers to protect the both patients and healthcare workers against transfer of microorganisms, blood and body fluids, and particulate material. | Same |
| Material | Inner | Spun-bond polypropylene | Spun-bond polypropylene | Same |

VI Comparison of technological characteristics with the predicate devices

| | layer | | | |
|---|-----------------|--|---|------------------------|
| | Middle layer | Melt blown polypropylene filter | Melt blown polypropylene filter | Same |
| | Outer layer | Spun-bond polypropylene | Spun-bond polypropylene | Same |
| | Ear loop | Polyamide fiber+ Polyurethane | Urethane elastic fiber or spun-bond polypropylene | Different ¹ |
| | Nose piece | Iron wire covered by polyethylene | White aluminum strip covered by PP covering | Different ¹ |
| Cole | or | Blue | Blue | Same |
| Length | | 17.5cm | 17.5cm | Same |
| Width | | 9.5cm | 9.5cm | Same |
| OTC use | | Yes | Yes | Same |
| sterile | | Non-sterile | Non-sterile | Same |
| Single for | use | Yes | Non-sterile | Same |
| Latex | | Not made with natural rubber latex | Not made with natural rubber latex | Same |
| Fluid Resis Performan ASTM F18 | се | Pass at 120mmHg | pass at 120mmHg | Similar ² |
| Particulate Filtration Efficiency ASTM F22 | | ≥98% | Average 99.74% at 0.1µm | |
| Bacterial F Efficiency ASTM F21 | | ≥98% | Average 99.4% | |
| Differentia Pressure EN 14683 | I | <6.0mmH ₂ O/cm ² | Average 2.7 mmH ₂ O/cm ² | |
| Flammabil 16 CFR 16 | • | Class I non flammable | Class 1 Non Flammable | |
| Biocompat | tibility | Confirm to the requirements of ISO | Confirm to the requirements of ISO | Same |

| ards |
|------|
| |
| |
| |
| |

Analysis:

¹ The difference in the materials and colors does not raise additional questions for safety and effectiveness of the device. The biocompatibility evaluation test of the subject devices have been performed on the final finished device which includes all construction materials and color additives. The test results shows pass the requirements.

² The performance of proposed device have been performed the performance test according to method given in the ASTM F2100-19. The test results demonstrate that met the requirements in the standards. The minor difference between the proposed and predicate device does not affect the safety and effectiveness of the device.

VII Non-Clinical Testing

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

- 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.
- ASTM F2100-19, Standard Specification for Performance of Materials Used In Disposable Surgical Mask.
- ASTM F1862M-17, Standard Test Method For Resistance Of Disposable Surgical Mask To Penetration By Synthetic Blood (Horizontal Projection Of Fixed Volume At A Known Velocity)
- EN 14683:2019 Medical Face Masks-Requirements and Test Methods
- ASTM F2101-19, Standard Test Method For Evaluating The Bacterial Filtration Efficiency (BFE) Of Medical Face Mask Materials, Using A Biological Aerosol Of Staphylococcus Aureus;
- ASTM F2299-03, Stand test method for determining the initial efficiency of materials used in Disposable Surgical Mask to penetration by particulates using latex spheres;
- 16 CFR 1610, Standard for the Flammability of clothing textiles;

VIII Clinical Testing

No clinical study is included in this submission.

IX Conclusion

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