

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 <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 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 <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 <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)
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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: K202628

### I Submitter

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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 <sup>1</sup>
	Nose piece	Iron wire covered by polyethylene	White aluminum strip covered by PP covering	Different <sup>1</sup>
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 <sup>2</sup>
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 <sub>2</sub> O/cm <sup>2</sup>	Average 2.7 mmH <sub>2</sub> O/cm <sup>2</sup>	
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:

<sup>1</sup> 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.

<sup>2</sup> 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.