

March 2, 2021

Huizhou Foryou Medical Devices Co., Ltd Guosheng Tan Development Engineer No. 1 Shangxia North Road, Dongjiang Hi-tech Industry Park Huizhou, Guangdong 516005 China

Re: K201852

Trade/Device Name: Surgical Mask-Model Number: Ear Loop, Flat-Pleated

Regulation Number: 21 CFR 878.4040 Regulation Name: Surgical Apparel

Regulatory Class: Class II Product Code: FXX Dated: January 27, 2021 Received: February 1, 2021

## Dear Guosheng Tan:

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,

For Ryan Ortega, PhD
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

Form Approved: 0MB No. 0910-0120 Expiration Date: 0613012020 See PRA Statement below.

510(k) Number *(if known)* **K201852** 

Device Name Surgical Mask

Indications for Use (Describe)

The Surgical Mask is intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. These face masks are intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non-sterile.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

X 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.

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## 510(k) Summary

This 510(k) Summary information is being submitted in accordance with the requirements of Title 21, CFR Section 807.92.

The assigned 510(k) Number: K201852

## 1. Submitter:

Huizhou Foryou Medical Devices Co., Ltd.

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Park, Huizhou, Guangdong, China

Phone: +86-0752-5302185 Fax: +86-0752-5302020

Contact Person: Guosheng Tan
Date Prepared: March 2, 2021

## 2. Subject Device:

Trade Name: Surgical Mask
Common Name: Surgical Mask
Classification Name: Mask, Surgical
Review Panel: General Hospital

Product Code: FXX

Regulation Number: 21 CFR §878.4040

Device Class: Class II

### 3. Predicate Device:

K182515

Surgical Face Mask

Wuhan Dymex Healthcare Co., Ltd

## 4. Device Description:

The Surgical Mask is a single use, Flat Pleated mask with ear loops and nose piece. The Surgical Mask is consisting of three layers, the inner and outer layers are made of spunbonded polypropylene, and the middle layer is made of melt blown polypropylene filter. The Surgical Mask uses different colors to distinguish the inner and outer layers, the inner layer is white and the outer layer is blue. The ear loops are held in place over the users' mouth and nose by two elastic ear loops welded to the facemask. The nose piece in the layers of facemask is to allow the user to fit the facemask around their nose, which is made of polypropylene and metal wire. The Surgical Mask is sold non-sterile and is intended to be single use, disposable devices.

#### 5. Indications for Use:

The Surgical Mask is intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. These face masks are intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non-sterile.

### 6. Technological Characteristics Comparison

Table 5.1 Comparison of technological characteristics between subject device and predicate device

Item	Subject Device	Predicate Device	Comparison	
	(K201852)	(K182515)		
Intended Use	The Surgical Mask is	The Surgical Face Masks	Same	
	intended to be worn to	are intended to be worn to		
	protect both the patient	protect both the patient		
	and healthcare personnel	and healthcare personnel		
	from transfer of	from transfer of		
	microorganisms, body	microorganisms, body		

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		fluids and particulate	fluids and particulate		
		material. These face masks	material. These face masks		
		are intended for use in	are intended for use in		
		infection control practices infection control practices			
		to reduce the potential	al to reduce the potential		
		exposure to blood and body	exposure to blood and		
		fluids. This is a single use,	body fluids. This is a single		
		disposable device(s),	use, disposable device(s),		
		provided non-sterile.	provided non-sterile.		
Model		Ear Loops, Flat Pleated, 3	Ear Loops, Flat Pleated, 3	Same	
		layers	layers		
Material	Outer	Spun-bond polypropylene	Spun-bond polypropylene	Same	
	layer				
	Middle	Melt blown polypropylene	Melt blown polypropylene	Same	
	layer	filter	filter		
	Inner layer	Spun-bond polypropylene	Spun-bond polypropylene	Same	
	Nosepiece	Malleable polypropylene	Malleable polyethylene	Similar	
		and metal wire	wire		
	Ear loops	Spandex	Spandex	Same	
Color		Blue/White	Yellow	Different*	
Dimension	Length	17.5cm±1cm	17.5cm±0.2cm	Same	
	Width	9.5cm±1cm	9.5cm±0.2cm	Same	
Sterility		Non-Sterile	Non-Sterile	Same	
Use		Single Use, Disposable	Single Use, Disposable	Same	
ASTM F2100 Level		Level 2	Level 2	Same	

<sup>\*</sup>The difference in the color does not raise additional questions for safety and effectiveness. Performance testing including biocompatibility evaluation has been performed on the final finished device which includes all color additives.

## 7. Non-Clinical Performance Testing

Non-clinical tests were conducted to verify that the subject device met all design specifications as the predicate device. The test results demonstrate that the subject device conforms to the recognized standards ASTM F2100-19, ISO 10993-5 and ISO 10993-10 in addition to the requirements stated in the Guidance for Industry and FDA Staff: Surgical Masks–Premarket Notification [510(k)] Submission issued on March 5, 2004. Detailed test results are shown in the table 5.2.

Table 5.2 Summary of Non-clinical Performance Testing

Performance	Test Method	Acceptance Criteria	Test Result
Characteristics			
Fluid Resistance	ASTM	29 out of 32 passes at	32 out of 32 passes at
Performance	F1862/F1862M-17	120mmHg	120mmHg
Particulate	ASTM	≥98%	99.79%
Filtration	F2299/F2299M-03		
Efficiency			
Bacterial Filtration	ASTM F2101-19	≥98%	99.70%
Efficiency			
Differential	MIL-M-36954C	<6.0mmH <sub>2</sub> O/cm <sup>2</sup>	3.813 mm H <sub>2</sub> O/cm <sup>2</sup>
Pressure ( $\Delta P$ )			
Flammability	16 CFR 1610	Class 1	Class 1
Cytotoxicity	ISO 10993-5:2009	Under the conditions of	Non-cytotoxic
		the study, the device is	
		non-cytotoxic.	
Irritation	ISO 10993-10:2010	Under the conditions of	Non-irritating
		the study, the device is	
		non-irritating.	
Sensitization	ISO 10993-10:2010	Under the conditions of	Non-sensitizing
		the study, the device is	
		non-sensitizing.	

# 8. Clinical Performance Test

No clinical study is included in this submission.

## 9. Conclusion

The conclusion 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 predicated K182515, Surgical Face Mask, Wuhan Dymex Healthcare Co., Ltd.