



January 14, 2022

Jiangxi Ganlong Pharmaceutical Co.,Ltd.  
% Stuart Situ  
Director  
Landlink Healthcare Technology (Shanghai) Co., Ltd.  
Room 1308, Baohua International Plaza, West Guangzhong Road  
Shanghai, 200071  
China

Re: K212913  
Trade/Device Name: Surgical Face Mask  
Regulation Number: 21 CFR 878.4040  
Regulation Name: Surgical Apparel  
Regulatory Class: Class II  
Product Code: FXX  
Dated: September 7, 2021  
Received: September 13, 2021

Dear Stuart Situ:

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,

for 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

## Indications for Use

510(k) Number (if known)  
K212913

Device Name  
Surgical Face Mask

### Indications for Use (Describe)

The Surgical Face Masks are 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 sterile.

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.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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## 510(k) Summary (K212913)

### I Submitter

Jiangxi Ganlong Pharmaceutical Co.,Ltd.

No. 164 Xiangjiang Ave. Ganzhou Economic and Technology Development Zone,  
Ganzhou City, Jiangxi Province, China

Establishment Registration Number: Not yet registration

Contact Person: Niansheng Liao

Position: Manager

Tel.: +86-18907977486

E-mail: Daniel.Liao@glpharma.cn

Preparation date: Sep.07, 2021

### II Proposed Device

Trade Name of Device:	Surgical Face Mask
Model:	SMSE01
Common name:	Surgical Mask
Regulation Number:	21 CFR 878.4040
Regulatory Class:	Class II
Product code:	FXX
Review Panel	General Hospital

### III Predicate Devices

510(k) Number:	K202354
Trade name:	Surgical Mask
Common name:	Surgical Mask
Classification:	Class II
Product Code:	FXX
Manufacturer	Hunan Heng Chang Pharmaceutical Co., Ltd.

### IV Device description

The Surgical Face Masks are Flat Pleated type mask, utilizing Ear straps way for wearing, and they all have Nose clip design for fitting the face mask around the nose. The Surgical Face Masks are manufactured with three layers. The outer layer is made

of polypropylene spun-bond non-woven fabric. The middle layer with filtration function is made of polypropylene melt-blown non-woven fabric. The inner layer contact with face is made of polypropylene spun-bond non-woven fabric. The nose clip is made of polyethylene strip with iron wire inside. The ear straps are made of spandex polyester fiber.

The Surgical Masks are single use, disposable device, provided sterile.

**V Indication for use**

The Surgical Face Masks are 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 sterile.

**VI Comparison of technological characteristics with the predicate devices**

Item	Proposed device	Predicate device (K202354)	Discussion
Product name	Surgical Face Mask	Surgical Mask	Same
Product Code	FXX	FXX	Same
Regulation No.	21 CFR 878.4040	21 CFR 878.4040	Same
Class	Class II	Class II	Same
Mask style	Flat-pleated, ear strap, 3 layers	Flat-pleated, ear strap, 3 layers	Same
Indication for use	The Surgical Face Masks are 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),	The Surgical Masks are 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/	Same

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		provided sterile.	sterile.	
Material	Inner layer	Spun-bond polypropylene	Spun-bond polypropylene	Same
	Middle layer	Melt blown polypropylene filter	Melt blown polypropylene filter	Same
	Outer layer	Spun-bond polypropylene	Spun-bond polypropylene	Same
	Ear strap	spandex polyester fiber	Spandex + Polyester	Different <sup>1</sup>
	Nose clip	polyethylene strip with iron wire inside	malleable polyethylene	Different <sup>1</sup>
Color		Blue	Blue	Same
Length		17.5 cm±5%	17.5 cm±5%	Same
Width		9.5 cm±5%	9.5 cm±5%	Same
OTC use		Yes	Yes	Same
sterile		sterile	Non-sterile, sterile	Similar
Sterilization method		EO	EO	Same
Single for use		Yes	Yes	Same
ASTM F2100 Level		Level 3	Level 1	Different <sup>2</sup>
Biocompatibility		Confirm to the requirements of ISO 10993 series standards	Confirm to the requirements of ISO 10993 series standards	Same

<sup>1</sup> The difference in the materials 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 different level of specification does not affect the indications of the products.

**VII Non-Clinical Testing**

Non clinical tests were conducted to verify that the proposed device met all design specifications as was Substantially Equivalent (SE) to the predicate device. The test

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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 Medical Face Masks.
- ASTM F1862M-17, Standard Test Method For Resistance Of Medical Face Masks To Penetration By Synthetic Blood (Horizontal Projection Of Fixed Volume At A Known Velocity)
- EN 14683:2019, Medical Face Mask-Test-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 medical face masks to penetration by particulates using latex spheres;
- 16 CFR 1610, Standard for the Flammability of clothing textiles;

<b>Test Purpose</b>	<b>ISO/ASTM standard</b>	<b>Acceptance criteria</b>	<b>Results</b>
Fluid Resistance Performance	ASTM F2100-19	29 out of 32 pass at 160mmHg	Meet the requirement
Particulate Filtration Efficiency		≥98%	Meet the requirement
Bacterial Filtration Efficiency		≥98%	Meet the requirement
Differential Pressure		< 6.0 mmH <sub>2</sub> O/cm <sup>2</sup>	Meet the requirement
Flammability		Class I Non-flammable	Meet the requirement
In Vitro Cytotoxicity	ISO 10993-5: 2009	The test article extract did not show potential toxicity to L929 cells.	Meet the requirement
Skin Sensitization	ISO 10993-10: 2010	The test article extracts shows no evidence of causing	Meet the requirement

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		delayed dermal contact sensitization in the guinea pig.	
Skin irritation	ISO 10993-10: 2010	There is no erythema and no edema observed on the skin of the animals treated with the test extracts	Meet the requirement

**VIII Clinical Testing**

No clinical study is included in this submission.

**IX Conclusion**

The proposed device has the same indication for use and has similar design features and technological characteristic as the predicate device. Performance testing data demonstrates that the proposed device is safety and effectiveness as the predicate device. Accordingly, the proposed device is substantially equivalent to the predicate device.