



November 21, 2022

Sichuan Prius Biotechnology Co., Ltd.
% Diana Hong
General Manager
Mid-Link Consulting Co., Ltd
P.O.box 120-119
Shanghai, 200120
China

Re: K221075

Trade/Device Name: Infusion Sets for Single Use
Regulation Number: 21 CFR 880.5440
Regulation Name: Intravascular Administration Set
Regulatory Class: Class II
Product Code: FPA
Dated: October 21, 2022
Received: October 21, 2022

Dear Diana Hong:

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) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

A handwritten signature in black ink that reads "David Wolloscheck". The signature is written in a cursive style. In the background, there is a large, light blue watermark of the letters "FDA".

David Wolloscheck, Ph.D.

For Joyce M. Whang, Ph.D.

Acting Director

DHT3C: Division of Drug Delivery and
General Hospital Devices,
and Human Factors

OHT3: Office of GastroRenal, ObGyn,
General Hospital and Urology Devices

Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)
K221075

Device Name
Infusion Sets for Single Use

Indications for Use (Describe)

The Infusion Sets for Single Use is intended to administer fluids from a container to a patient's vascular system through a needle or catheter inserted into the vein.

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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K221075 - 510(k) Summary

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

The assigned 510(k) Number: K221075

1. Date of Preparation: 11/21/2022
2. Sponsor Identification

Sichuan Prius Biotechnology Co., Ltd.

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3. Designated Submission Correspondent

Ms. Diana Hong (Primary Contact Person)

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4. Identification of Proposed Device

Trade Name: Infusion Sets for Single Use

Common Name: Intravascular Administration Set

Regulatory Information

Classification Name: Intravascular Administration Set

Classification: II

Product Code: FPA

Regulation Number: 21 CFR 880.5440

Review Panel: General Hospital

Indication for Use Statement:

The Infusion Sets for Single Use is intended to administer fluids from a container to a patient's vascular system through a needle or catheter inserted into the vein.

Device Description

The proposed device consists of basic configuration and optional components. The basic configuration consists of protective cap of spike, spike, drip chamber, drip tube, flow regulator, flexible tube, and conical fitting. Air vent, fluid filter, clamp, and injection site are optional components. The device is provided sterile, single use.

5. Identification of Predicate Device

510(k) Number: K163160

Product Name: Sterile Single-use Infusion Set

6. Substantially Equivalent (SE) Comparison

Table 1 General Comparison

ITEM	Proposed Device	Predicate Device K163160	Remark
Product Code	FPA	FPA	Same
Regulation Number	21 CFR 880.5440	21 CFR 880.5440	Same
Class	Class II	Class II	Same
Indication for Use	The Infusion Sets for Single Use is intended to administer fluids from a container to a patient's vascular system through a needle or catheter inserted into	The device is intended to administer fluids from a container to a patient's vascular system through a needle or catheter inserted into the vein.	Same

	the vein.			
Configuration	Basic Configuration	Protective cap of spike	Protector Cap of Spike	Same
		Spike	Spike	Same
		Drip chamber	Drip chamber	Same
		Flexible Tube	Flexible Tube	Same
		Conical fitting (luer lock or luer slip)	Conical fitting (luer lock or luer slip)	Same
	Optional configuration	Injection site	Injection Site	Same
		Fluid filter	Fluid filter	Same
		Air vent	Air vent	Same
Clamp		Clamp	Same	
Operation Mode	For manual use only	For manual use only	Same	
Label/Labeling	Conform with 21 CFR Part 801	Conform with 21 CFR Part 801	Same	
Filter Characteristics	15µm	15µm	Same	
Tubing Diameter	3.9mm	3.9mm	Same	
Length (mm)	1635mm, 1665mm	1610, 1900mm	Different	
Capacity (ml)	18ml	19, 21ml	Different	
Infusion Set Performance	Comply with ISO 8536-4	Comply with ISO 8536-4	Same	
Patient contact Material				
Spike	Acrylonitrile Butadiene Styrene (ABS)	High-density Polyethylene (HDPE)	Different	
Drip chamber	Poly Vinyl Chloride (PVC)	Acrylonitrile Butadiene Styrene (ABS)	Different	
Flexible Tube	Poly Vinyl Chloride (PVC)	Poly Vinyl Chloride (PVC)	Same	
conical fitting	Poly Vinyl Chloride (PVC)	Poly Vinyl Chloride (PVC)	Same	
Injection site	Poly Vinyl Chloride (PVC)	Acrylonitrile Butadiene Styrene (ABS)	Different	
Fluid filter	Acrylonitrile Butadiene Styrene (ABS)	Acrylonitrile Butadiene Styrene (ABS)	Same	
Biocompatibility				
Cytotoxicity	No Cytotoxicity	No Cytotoxicity	Same	
Intracutaneous Reactivity	No Intracutaneous Reactivity	No Intracutaneous Reactivity		
Skin Sensitization	No Skin Sensitization	No Skin Sensitization		
Acute Systemic Toxicity	No Acute Systemic Toxicity	No Acute Systemic Toxicity		
Hemolysis	No Hemolysis	No Hemolysis		
Pyrogen	No Pyrogen	No Pyrogen		
Subacute Systemic Toxicity	No subacute systemic toxicity	/		
Sterilization				

Method	EO sterilized	EO sterilized	Same
SAL	10 ⁻⁶	10 ⁻⁶	Same
Endotoxin Limit	20 EU per device	20 EU per device	Same

Different-Length

The total length for the proposed device is different from predicate device. However, the performance test has been conducted on the proposed device and the test result can meet the requirements of ISO 8536-4. Therefore, this difference does not raise new questions of safety and effectiveness for the proposed device.

Different-Capacity

The total capacity for the proposed device is different from predicate device. However, the performance test has been conducted on the proposed device and the test result can meet the requirements of ISO 8536-4. Therefore, this difference does not raise new questions of safety and effectiveness for the proposed device.

Different –Patient Contact Material

The patient contact materials for proposed device are different from predicate device. However, the biocompatibility testing per ISO 10993-1 was performed and the results show there are no adverse effect. Therefore, the differences do not raise new questions of safety and effectiveness for the proposed device.

Similar- Biocompatibility

The biocompatibility test was performed on the proposed device and one additional endpoint was evaluated compared to the predicate device, which is subacute toxicity. The test results for the endpoints show there is no adverse effect on the material. Therefore, the provided biocompatibility testing supports substantial equivalence to the predicate device.

7. Non-Clinical Test Conclusion

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 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: Test for irritation and skin sensitization
- ISO 10993-11:2017 Biological evaluation of medical devices- Part 11: Tests for systemic toxicity
- ASTM F756-17 Standard Practice for Assessment of Hemolytic Properties of Materials
- ISO 10993-7:2008 Biological Evaluation of Medical Devices-Part 7: Ethylene Oxide

Sterilization Residuals

- ASTM F88/F88M-15, Standard Test Method for Seal Strength of Flexible Barrier Materials. (Sterility)
- ASTM F1929-15 Standard Test Method for Detecting Seal Leaks in Porous Medical Package by Dye Penetration
- ASTM F1886/F1886M-16 Standard Test Method for Determining Integrity of Seals for Flexible Packaging by Visual Inspection
- ISO 80369-7:2016 Small-bore connectors for liquids and gases in healthcare applications-Part 7: Connectors for intravascular or hypodermic applications
- ISO 80369-20:2015 Small-bore connectors for liquids and gases in healthcare applications-Part 20: Common test methods.
- ISO 8536-4:2019 Infusion equipment for medical use- Part 4: Infusion Sets for Single Use, gravity feed.
- ISO 8536-14:2016 Clamps and flow regulators for transfusion and infusion equipment without fluid contact
- USP <151>Pyrogen Test
- USP <85> Bacterial Endotoxins Test
- USP <788> Particulate Matter in Injections.

8. Clinical Test Conclusion

No clinical study is included in this submission.

9. Substantially Equivalent (SE) Conclusion

Based on the comparison and analysis above, the proposed device is determined to be Substantially Equivalent (SE) to the predicate device with respect to the indications for use, target populations, treatment method, and technological characteristics.