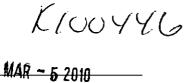
#### **SECTION 5**



# 510(K) SUMMARY

## Submitter:

Devon Medical, Inc.

# **Contact Person:**

Ruth Wu, COO

1100 First Avenue, Suit 100 King of Prussia, PA 19406 Phone: 800.571.3135

Fax: 484.636.3380

#### **Common Classification & Proprietary Names:**

Common Names:

Sequential Compression Device

Proprietary Name:

CircuFlow 5100

#### Date Prepared:

December 31<sup>st</sup> 2009

#### Classification

The classification name, 21 CFR Part and Paragraph number, product code and classification of the CircuFlow 5100.

Classification Name	21 CFR Section	Product Code	Class
Compressible Limb Sleeve	. 870.5800	JOW	11

#### **Predicate Devices:**

The CircuFlow 5100 Sequential Compression Device is substantially equivalent to the following.

Predicate Device	Manufacturer	510(k)#
SC-3008 Sequential Circulator	Bio Compression Systems Inc.	K043423
GS-128 Sequential Compression	MedMark Technologies	K050584
System		

#### **Device Description**

The CircuFlow 5100 is a sequential pneumatic compression device designed to apply compression to a limb. The device is composed of two components:

- Pneumatic manual pump
- Limb sleeve or garment composes of 4 chambers

The CircuFlow 5100 enables different treatment pressures (0-120mmHg) and treatment times (30 minutes to continue) that should be used according to physician prescription. When activated, air flows into chamber, the pump provides gradient pressurization to the chambers (sequential inflation of distal to proximal, with distal chambers inflated to a greater pressure than the proximal ones).

After each chamber is inflated, the pressure is held constant until all chambers are inflated, in

#### **SECTION 5**

order to prevent reverse gradient flow. Once all chambers are inflated, they are then all released simultaneously, and the cycle repeats. Pressure within chambers are adjustable –pressure to chamber 1 is controlled by user-adjusted regulator on the pump. Pressure in chambers 2, 3 & 4 are individually lowered according to the default factory settings.

A calibrated dial gauge displays pressure in the range of 0-200 mmHg.

Garments are available in 8 sizes, and custom garments are available in variations from standard sizes.

#### **Intended Use:**

The CircuFlow 5100 is a sequential gradient compression pneumatic device, intended for the primary or adjunctive treatment of primary or secondary lymphedema. The device is also intended for the additional or alternate treatment of venous insufficiency, and chronic venous static ulcers associated with venous insufficiency, as well as general treatment of swelling of the extremities. The device is intended for home or hospital use.

#### **Technological Characteristics:**

The manufacturer believes that the technological characteristic of the CircuFlow 5100 are substantially similar to those of the predicate devices.

The CircuFlow 5100 has very similar components to its predicate devices and very similar principles of operation. The device consists of an electrically generated source of compressed air, tubing to convey the pressurized air to the sleeve, like the predicates, pressure is applied cyclically for a specified period of time, according to the physician's prescription.

#### **Performance Testing**

Bench and laboratory testing was performed and assures that the product meets its specifications. The manufacturer believes that the technological characteristics of the CircuFlow 5100 are substantially similar to those of the predicate devices. The performance testing includes the following tests:

Electrical Safety Tests	:	
Dielectric Strength Test		
Leakage Current Test		
Gradient Performance Test		
Garment Tests		,
Pressure Performance Test		
Tensile Strength Test		
Material Biocompatibility Tests	÷.	
Cytotoxicity Test		
Sensitization Test		
Irritation and Intracutaneous Reactivity Test		

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# **Standards**

The CircuFlow 5100 conforms to the following standards:

IEC 60601-1-1

IEC 60601-1-2

UL 60601-1

ISO 10993

ISO 14971

#### **Statement of Substantial Equivalence**

The CircuFlow 5100 is substantially equivalent in technology, function, operating parameters, and intended use to predicate devices that are currently commercially available and in distribution, and does not raise any new questions of safety or effectiveness.

#### **Conclusions**

In accordance with the Federal Food, Drug and Cosmetic Act and 21 CFR Part 807, and based on the information provided in this pre-market notification, Devon Medical Inc, believes that the CircuFlow 5100, is safe and effective and substantially equivalent to the predicate devices as described herein.





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room W-066-0609 Silver Spring, MD 20993-0002

MAR - 5 2010

Devon Medical Inc. c/o Mr. Mark Job Regulatory Reviewer Regulatory Technology Services, LLC 1394 25th Street, NW Buffalo, MN 55313

Re: K100446

Circuflow 5100 Sequential Compression Device

Regulation Number: 21 CFR 870.5800

Regulation Name: Compressible Limb Sleeve

Regulatory Class: Class II (two)

Product Code: JOW Dated: February 16, 2010 Received: February 17, 2010

Dear Mr. Job:

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. 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); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. 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

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Bram D. Zuckerman, M.D.

Dung R. Louhner

Director

Division of Cardiovascular Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

# INDICATIONS FOR USE STATEMENT

510(k) Number (if known): <u>¥ 100446</u>	_					
Device Name: the Devon CircuFlow 5100 Sequential Compression Device						
Indications for Use:	·					
The CircuFlow 5100 Sequential Compression Device is a manual, sequential, pneumatic compression device, intended for the primary or adjunctive treatment of primary or secondary lymphedema. The device is also intended for the additional or alternate treatment of venous insufficiency, and chronic venous stasis ulcers associated with venous insufficiency, as well as general treatment of swelling of the extremities.  The device is intended for home or hospital use.						
Prescription UseX AND/OR	Over-The-Counter Use					
(Part 21 CFR 801 Subpart D)	(21 CFR 807 Subpart C)					
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)						
Concurrence of CDRH, Office of Device Evaluation (OD  \( \text{\tin\text{\text	E)					