May 9<sup>th</sup>, 2014 Medcomp Traditional Premarket Notification Celerity System

# 510(k) Summary

K140799

Date Prepared: May 9<sup>th</sup>, 2014

JUN 1 3 2014

A. Submitter Information

*Ineccomp* 1499 Delp Drive Harleysville, PA 19438 Tel:215-256-4201 Fax:215-256-1787 www.medcompnet.com

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Trade Name	Celerity <sup>™</sup> System
Common Name:	PICC placement accessory
Classification Name:	Percutaneous, implanted, long-term intravascular Catheter
Product Code:	LJS,
CFR:	21CFR880.5970
Class:	II
Predicate Devices	K093775;
	Sapiens <sup>TM</sup> Tip Location System
	Romedex International Srl
Common Name:	PICC placement accessory
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Product Code:	LJS,
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Class:	II · · ·

# D. Device Description

The Celerity System includes the Celerity Monitor/Software, ECG Patient Cable, Remote Control Cable, Battery, Power Supply Cord and ECG Clip Cable (alligator clip). Procedural accessories including ECG Snap Leads, ECG Electrodes, Cable Cover and Prep Pads are provided as a convenience for the clinician.

## E. Intended Use

The Celerity System is intended to provide real time tip location information of a central venous catheter by utilization of ECG to observe P-wave changes as the tip approaches the right atrium of the heart via the superior vena cava.



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# F. Indications for Use

The Celerity System is indicated for use as a supplemental aid in positioning of Peripherally Inserted Central Catheters (PICC) in adult patients. It provides real-time catheter tip location information by using the patient's cardiac electrical activity. Confirmation of tip placement should be verified according to clinical judgment and established hospital protocol (e.g., chest x-ray, fluoroscopy).

*Note:* Limiting, but not contraindicated, situations for this technique, are patients where cardiac rhythms may change presentation of the P wave.

- Atrial fibrillation
- Atrial flutter
- Severe tachycardia
- Pacemaker driven rhythm
- Chronic obstructive pulmonary disease (COPD)

Such patients are easily identified prior to PICC insertion. Use of additional confirmation method is necessary to confirm catheter tip location.

#### G. Technological Characteristics

Technological Characteristics of the Celerity System are equivalent with respect to the basic system design and function to that of the predicate device. The differences between the predicate and proposed devices do not raise new questions of safety or effectiveness.

# H. Safety and Performance

Design Verification and Validation activities were performed in accordance with Design Control requirements per 21 CFR 820.30 and demonstrate that the subject Celerity System meets predetermined performance specifications.

The performance evaluation plan included testing per the following recognized standards to assess conformance to IEC 60601 (3<sup>rd</sup> Edition).

IEC 60601-1	Medical Electrical Equipment – Part 1: General Requirements for Safety
IEC 60601-1-2	Medical Electrical Equipment – Part 2: General Requirements for Basic Safety and Essential Performance – Collateral Standard Electro Magnetic Compatibility – Requirements and Test

1. Substantial Equivalence Conclusion

The proposed device is substantially equivalent to the predicate device based on:

- The Intended Use
- Operating principles/technology
- Results of safety and performance testing
- Responses to questions raised in the FDA 510(k) decision tree

5-3



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

June 13, 2014

Medcomp® C/O Ms. Lorraine M. Hanley Medical Components, Inc., d.b.a Medcomp 25 Forest Drive Marlborough, MA 01752

Re: K140799

Trade/Device Name: Celerity <sup>™</sup> System Regulation Number: 21 CFR 880.5970 Regulation Name: Percutaneous, Implanted, Long-term Intravascular Catheter Regulatory Class: II Product Code: LJS Dated: May 27, 2014 Received: May 27, 2014

Dear Ms. Hanley:

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>.

Page 2 - Ms. Hanley

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 devicerelated 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 contact the Division of Industry and Consumer Education 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. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 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 Industry and Consumer Education 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.

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Sincerely yours,

Mary S. Bunner -S

Erin I. Keith, M.S. Division Director Division of Anesthesiology, General Hospital, Respiratory, Infection Control and Dental Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

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Food	F HEALTH AND HUMAN and Drug Administration	;	Form Approved: OMB No. 0910-0120 Expiration Date: January 31, 2017
Indi	cations for Use		See PRA Statement below.
10(k) Number (if known)			
K 140	199	·	
Device Name Celerity PICC Tip Confirmation Syst	em		
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Note: Limiting, but not contraindi presentation of the P wave.	cated, situations for thi	s technique, are patien	ts where cardiac rhythms may change
Atrial fibrillation	·	1 1 3	
Atrial flutter		• • •	
Severe tachycardia Pacemaker driven rhythm			
Chronic obstructive pulmonary d	isease (COPD)		
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