

K101329

**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS**  
(21 CFR 807.92)  
for **SYNERGY™ CT PICC**

**SUBMITTER:**

Health Line International Corporation  
803 N. 1250 W. – STE 1  
Centerville, Utah 84014

AUG 19 2010

**ESTABLISHMENT REGISTRATION NUMBER:**

3006097687

**CONTACT:**

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**DATE PREPARED:**

May 11, 2010

**NAME OF MEDICAL DEVICE:**

Proprietary Name:	<b>SYNERGY™ CT PICC</b>
Regulation Name:	Percutaneous, implanted, long-term intravascular catheter
Common/Usual Name:	Peripherally Inserted Central Catheter (PICC), single, double and triple lumen

**DEVICE CLASSIFICATION:**

Classification Panel:	General Hospital
Regulatory Class:	Class II
Product Code:	LJS
Regulation Number:	21 CFR 880.5970

**PREDICATE DEVICES:**

Proprietary Name:	<b>PICC (CT Rated and Non-Rated) (K083873)</b>
Regulation Name:	Percutaneous, Implanted, Long-term Intravascular Catheter
Common/Usual Name:	Catheter, Intravascular, Therapeutic, Long Term
Classification Panel:	General Hospital
Regulatory Class:	Class II
Product Code:	LJS
Regulation Number:	21 CFR 880.5970

**Proprietary Name:** ***OmniPICC P.I. (K051102)***  
**Regulation Name:** Percutaneous, implanted, long-term intravascular catheter  
**Common/Usual Name:** Peripherally Inserted Central Catheter (PICC), single and double lumen  
**Classification Panel:** General Hospital  
**Regulatory Class:** Class II  
**Product Code:** LJS  
**Regulation Number:** 21 CFR 880.5970

**Proprietary Name:** ***OmniPICC P.I. (K062579)***  
**Regulation Name:** Percutaneous, implanted, long-term intravascular catheter  
**Common/Usual Name:** Peripherally Inserted Central Catheter (PICC), 4 French single and 5 French double lumen  
**Classification Panel:** General Hospital  
**Regulatory Class:** Class II  
**Product Code:** LJS  
**Regulation Number:** 21 CFR 880.5970

**Proprietary Name:** ***PRO-LINE CT Pressure Injectable CVC (K093309)***  
**Regulation Name:** Percutaneous, Implanted, Long-Term intravascular Catheter  
**Common/Usual Name:** Percutaneous, implanted, long-term intravascular catheter  
**Classification Panel:** General Hospital  
**Regulatory Class:** Class II  
**Product Code:** LJS  
**Regulation Number:** 21 CFR 880.5970

#### **DEVICE DESCRIPTION:**

The SYNERGY™ CT PICC is a family of peripherally inserted central venous catheters designed to perform infusion, intravenous therapy, blood sampling and also power injection of contrast media studies. The catheters, made of radiopaque polyurethane tubing, are inserted peripherally. Each SYNERGY™ CT PICC has a kink resistant, reverse tapered catheter design. The SYNERGY™ CT PICC kit includes a catheter and introduction components. The catheter is supplied sterile and non-pyrogenic in a variety of kit configurations.

The SYNERGY™ CT PICC is indicated for dwell times shorter or greater than 30 days. The SYNERGY™ CT PICC catheter assemblies have been tested to withstand power injection of worst-case viscosity injection media at 5 ml/sec with a maximum power injector pressure of 300 psi.

The SYNERGY™ CT PICC product line has catheters in 4 Fr and 5 Fr single lumen, 5 Fr and 6 Fr dual lumen and 6 Fr triple lumen. All catheters are approximately 60 cm long. The catheters are attached to an injection-molded polyurethane hub that has extension legs with Luer

lock fittings for access attachment. All SYNERGY™ CT PICC products have a maximum recommended infusion rating is 5 ml/sec. The maximum pressure or pounds per square inch (psi) of the power injector utilized should not exceed 300 psi.

**INTENDED USE:**

The SYNERGY™ CT PICC is intended to be used by medical professionals for short-term or long-term peripheral access to the central venous system for infusion, intravenous therapy, blood sampling and for power injection of contrast media. The intended use has not changed from that of the predicate devices. All SYNERGY™ CT PICC products have a maximum recommended infusion rating of 5 ml/sec. The maximum pressure or pounds per square inch (psi) of the power injector utilized should not exceed 300 psi.

**INDICATIONS FOR USE:**

The SYNERGY™ CT PICC is indicated for short or long term (less than or greater than 30 days) peripheral access to the central venous system for infusion, intravenous therapy, blood sampling and power injection of contrast media. All SYNERGY™ CT PICC products have a maximum recommended infusion rating of 5 ml/sec.

**TECHNOLOGICAL COMPARISON TO PREDICATE DEVICES:**

**New device is compared to Marketed Device?** Yes. It is compared to legally marketed predicates.

**Does the new device have the same indication statements?** Yes.

**Do the differences alter the intended therapeutic/diagnostic/etc. effect (i.e. deciding may consider impact on safety and effectiveness)?** No, the differences do not alter the intended use of the device.

**Does the new device have the same technological characteristics, e.g. design, material, etc.?** Yes. The PICC device of this submission, the SYNERGY™ CT PICC, is identical to that of (K083873), PICC (CT Rated and Non-Rated). In fact, the SYNERGY™ CT PICC and the PICC (CT Rated and Non-Rated) are manufactured by the same company, Health Line International Corporation, the submitter of this submission. In addition, the SYNERGY™ CT PICC is substantially equivalent to predicate devices, OmniPICC P.I. (K051102) and (K062579) and PRO-LINE CT Pressure Injectable CVC (K093309). The basic fundamental scientific technology of the device has not changed. There may be minor variations in the contents of the introduction kit components.

**Could the new characteristics affect safety or effectiveness?** No.

**Do the new characteristics raise new types of safety and effectiveness questions?** No. There are no new types of safety and effectiveness questions.

**Do accepted scientific methods exist for assessing effects of the new characteristics?** Yes.

The FDA's *Guidance on Premarket Notification [510(k)] Submission for Short-Term and Long-Term Intravascular Catheters*, dated 3/16/95 was used to determine the appropriate methods for evaluating the device's performance.

Sterilization requirements of ISO 11135:2007, *Sterilization of Health Care Products - Requirements for Validation and Routine Control -- Ethylene Oxide Sterilization*.

Biocompatibility requirements according to of ISO-10993, *Biological Evaluation of Medical Devices Part 1: Evaluation and Testing*. Test profiles for externally communicating, blood-contacting, long-term devices will be met.

These and other standards were used to determine the appropriate methods for evaluating the device's performance.

**Are performance data available to assess effects of new characteristics?** Yes. Verification testing was performed according to protocols based on the above-referenced guidance document recommendations and additional standards.

**Do performance data demonstrate equivalence?** Yes. Performance data gathered in design verification testing demonstrated that the **SYNERGY™ CT PICC** is substantially equivalent to the noted predicate devices.

### **CONCLUSION**

The **SYNERGY™ CT PICC** met all established acceptance criteria for performance testing and design verification testing. This testing demonstrated that the **SYNERGY™ CT PICC** is safe and effective for its intended use, and based on FDA's decision tree is substantially equivalent to the following predicate devices: *PICC (CT Rated and Non-Rated)(K083873)*, *OmnipICC P.I. (K051102) and (K062579) and PRO-LINE CT Pressure Injectable CVC (K093309)*.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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

Ms. Nola Benstog  
Quality Assurance/ Regulatory Affairs Director  
Health Line International Corporation  
803 N. 1250 W street, Suite 1  
Centerville, Utah 84014

AUG 19 2010

Re: K101329  
Trade/Device Name: SYNERGY™ CT PICC  
Regulation Number: 21 CFR 880.5970  
Regulation Name: Pertaneous, Implanted, Long-Term Intravascular Catheter  
Regulatory Class: II  
Product Code: LJS  
Dated: July 26, 2010  
Received: July 27, 2010

Dear Ms. Benstog:

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 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); 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.

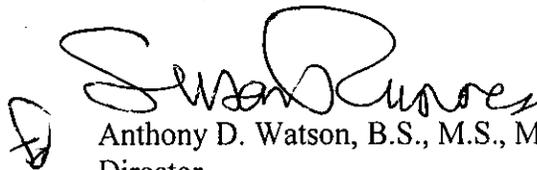
If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

<http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> 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" (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 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,



Anthony D. Watson, B.S., M.S., M.B.A.  
Director

Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

Indications For Use

510(k) Number (if known): K101329

Device Name: **SYNERGY™ CT PICC**

Indications For Use:

The SYNERGY™ CT PICC is indicated for short or long term (less than or greater than 30 days) peripheral access to the central venous system for infusion, intravenous therapy, blood sampling and power injection of contrast media. All SYNERGY™ CT PICC products have a maximum recommended infusion rating of 5 ml/sec.

Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(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 (ODE)

*R. C. Chapman* 8/19/10

(Division Sign-Off)  
Division of Anesthesiology, General Hospital  
infection Control, Dental Devices

510(k) Number: K101329