

MAY 9 2013

26 Forest Street  
Marlborough, MA 01752  
Tel 508.658.7990[www.navilystmedical.com](http://www.navilystmedical.com)**510(k) Summary for the PICC Maximal Barrier Nursing Kit**

Date prepared: 11 April 2013

**A. Sponsor**Navilyst Medical, Inc.  
26 Forest Street  
Marlborough, MA 01752**B. Contact**Marion W. Gordon  
Sr. Project Manager  
Global Regulatory Affairs  
Phone: 508-658-7942or Lorraine M. Hanley  
Vice President  
Global Regulatory Affairs  
Phone: 508-494-1129**C. Device Name**

Trade Name:	PICC Maximal Barrier Nursing Kits
Common/Usual name:	Peripherally Inserted Central Catheter (PICC)
Classification Name:	Catheter, Intravascular Therapeutic, short and long-term greater than 30 days
	21 CFR §880.5970, Class II
Classification Panel:	General Hospital Device Panel

**D. Predicate Device**

Common/Usual name:	Peripherally Inserted Central Catheter (PICC)
Classification Name:	Catheter, Intravascular Therapeutic, short and long-term greater than 30 days
	21 CFR §880.5970, Class II
Premarket Notification	K122882, K121089, K111906, K093366, K091261, K070002

**E. Device Description**

The PICC Maximal Barrier Nursing Kit is a packaging configuration containing a specified NMI PICC, along with (1) procedural aides typically used for PICC placement and (2) *maximal barrier precaution* devices based upon recommendations of Center of Disease Control and Prevention (CDC).

**F. Intended Uses**

- PICC Maximal Sterile Barrier Kit with NMI HPICC III

**NON-VALVED VERSION**

The NMI HPICC III is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for central venous pressure monitoring and for power injection of contrast media. Non-valved lumens are indicated for central venous pressure monitoring. The maximum power injection flow rate for the NMI HPICC III is 6 mL/sec.

- PICC Maximal Sterile Barrier Kit with NMI PICC III

**NON-VALVED VERSION**

The NMI PICC III is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, for central venous pressure monitoring and for power injection of contrast media.

**Maximum Power Injection Flow Rate:**

- 4F Single Lumen/55 cm 3.5 mL/sec
- 5F Single Lumen/55 cm 5 mL/sec
- 5F Dual Lumen/55 cm 4 mL/sec
- 6F Dual Lumen/55 cm 5 mL/sec

**VALVED VERSION**

The NMI PICC III is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media.

**Maximum Power Injection Flow Rate:**

- 3F Single Lumen/55 cm 1 mL/sec
- 4F Single Lumen/55 cm 3.5 mL/sec
- 5F Single Lumen/55 cm 5 mL/sec
- 5F Dual Lumen/55 cm 4 mL/sec
- 6F Dual Lumen/55 cm 5 mL/sec
- 6F Triple Lumen/55 – 6 mL/sec

- PICC Maximal Sterile Barrier Kit with Xcela® Hybrid with PASV® Valve Technology:

for short or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media. Non-valved lumens are indicated for central venous pressure monitoring. The maximum power injection flow rate for the Xcela Hybrid PICC with PASV Valve Technology is 6 mL/sec.

- PICC Maximal Sterile Barrier Kit with NMI PICC II; or with NMI PICC; or with BSC PICC:  
for short or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media.

#### **G. Summary of Similarities and Differences in Technological Characteristics and Performance**

##### Similarities

The proposed PICC Maximal Barrier Nursing Kit contains one of the identified predicate PICCs packaged with a variety of procedural aide componentry typically used during PICC placement. The proposed PICC indications for use, technological characteristics, materials and operating principles are identical.

##### Differences

The proposed packaging configuration differs from the predicate PICC kit packaging in order to contain a selection of procedural aides used in PICC placement including those identified as maximal barrier precaution devices. All packaging is manufactured from packaging materials that are well characterized and commonly used in the medical industry.

#### **H. Performance**

- No performance standards have been established under section 514 of the Food, Drug and Cosmetic Act for these devices. The performance evaluation of the PICC Maximal Barrier Nursing Kit was conducted based upon a risk analysis and included testing conducted in accordance with the following national/international standards and FDA guidance documents:
- AAMI/ANSI/ISO 10993-7 *Biological evaluation of medical devices—Part 7: Ethylene oxide sterilization residuals* (2008)
- AAMI/ANSI/ISO 11607-1 *Packaging for terminally sterilized medical devices—Part 1: Requirements for materials, sterile barrier systems, and packaging systems* (2006)
- AAMI/ANSI/ISO 11607-2 *Packaging for terminally sterilized medical devices Part 2: Validation requirements for forming, sealing and assembly processes* (2006)
- *Deciding When to Submit a 510(k) for a Change to an Existing Device*, 10 January 1997
- *Convenience Kits, Interim Regulatory Guidance: 20 May 1997*
- *Sterilized Convenience Kits for Clinical and Surgical Use: 7 January 2002*
- *Bundling Multiple Devices or Multiple Indications in a Single Submission: 22 June 2007*

#### **I. Safety and Performance Testing**

The successful results of the following key tests demonstrate that the proposed PICC Maximal Barrier Nursing Kit has met the pre-determined acceptance criteria applicable to the safe use of the devices.

- |               |                                |
|---------------|--------------------------------|
| <b>Tests:</b> | 1. Packaging Standards Testing |
|               | 2. EO Sterilization Testing    |

#### **J. Conclusion**

Results of testing according to recognized standards and in consideration to the responses posed in FDA's *Guidance on the CDRH Premarket Notification Review Program, 510(k) Decision Making Tree*, the proposed PICC Maximal Barrier Nursing Kit is determined to be substantially equivalent to the predicate NMI PICCs.



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

May 9, 2013

Ms. Marion W. Gordon  
Senior Project Manager  
Navilyst Medical, Incorporated  
26 Forest Street  
MARLBOROUGH, MA 01752

Re: K131038

Trade/Device Name: PICC Maximal Barrier Nursing Kit

Regulation Number: 21 CFR 880.5970

Regulation Name: Percutaneous, Implanted, Long-Term Intravascular Catheter

Regulatory Class: II

Product Code: LJS

Dated: April 11, 2013

Received: April 17, 2013

Dear Ms. Gordon:

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 contact 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>. 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,

A handwritten signature in black ink, appearing to read "Anthony D. Watson". The signature is stylized and includes the word "with" and "white" in a smaller, less legible script below the main name.

Anthony D. Watson, B.S., M.S., M.B.A.  
Director  
Division of Anesthesiology, General Hospital,  
Respiratory, Infection Control and  
Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**Indications for Use**

510(k) Number (if Known): \_\_\_\_\_

Device Name: PICC Maximal Barrier Nursing Kit  
with NMI PICC III

Indications for Use:

**NON-VALVED VERSION**

The NMI PICC III is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, for central venous pressure monitoring and for power injection of contrast media.

Maximum Power Injection Flow Rate:

- 4F Single Lumen/55 cm 3.5 mL/sec
- 5F Single Lumen/55 cm 5 mL/sec
- 5F Dual Lumen/55 cm 4 mL/sec
- 6F Dual Lumen/55 cm 5 mL/sec

**VALVED VERSION**

The NMI PICC III with PASV Vale Technology is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media.

Maximum Power Injection Flow Rate:

- 3F Single Lumen/55 cm 1 mL/sec
- 4F Single Lumen/55 cm 3.5 mL/sec
- 5F Single Lumen/55 cm 5 mL/sec
- 5F Dual Lumen/55 cm 4 mL/sec
- 6F Dual Lumen/55 cm 5 mL/sec
- 6F Triple Lumen/55 – 6 mL/sec

Prescription Use  
(21 CFR 801 Subpart D)



And/Or

AND/OR Over-The-Counter Use:  
(21 CFR 801 Subpart C)



(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Kathleen E. Fitzgerald

Designated by Catheter & Pipette  
Systems, Inc., 10000 West 16th Avenue,  
Denver, CO 80202-3100, USA  
Date: 01/26/00 12:00:00 AM

(Division Sign-Off)

Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

4-3

510(k) Number: K131038

**Indications for Use**

510(k) Number (if Known): \_\_\_\_\_

Device Name: PICC Maximal Barrier Nursing Kit  
with NMI HPICC III

Indications for Use:

**NON-VALVED VERSION**

The NMI HPICC III is indicated for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for central venous pressure monitoring and for power injection of contrast media. Non-valved lumens are indicated for central venous pressure monitoring. The maximum power injection flow rate for the NMI HPICC III is 6 mL/sec.

Prescription Use  
(21 CFR 801 Subpart D)



And/Or

AND/OR Over-The-Counter Use:  
(21 CFR 801 Subpart C)



(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

---

Concurrence of CDRH, Office of Device Evaluation (ODE)

**Kathleen E. Fitzgerald**  
Digitally signed by Kathleen E. Fitzgerald  
DN: c=US, o=U.S. Government, ou=HHS,  
ou=FDA, ou=People,  
0.9.2342.19200300.100.1.1=0010093027,  
cn=Kathleen E. Fitzgerald  
Date: 2013.05.09 15:27:55 -0400

(Division Sign-Off)

Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

510(k) Number: K131038

**Indications for Use**

510(k) Number (if Known): K 131038

Device Name: PICC Maximal Barrier Nursing Kit  
with Xcela® Hybrid PICC with PASV® Valve Technology

Indications for Use:

for short- or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media. Non-valved lumens are indicated for central venous pressure monitoring. The maximum power injection flow rate for the Xcela Hybrid PICC with PASV Valve Technology is 6 mL/sec.

Prescription Use  
(21 CFR 801 Subpart D)



And/Or

AND/OR Over-The-Counter Use:  
(21 CFR 801 Subpart C)



(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)



Richard C. Chapman  
2013.05.07 12:39:02  
-04'00'

(Division Sign-Off)

Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

510(k) Number: K131038

**Indications for Use**

510(k) Number (if Known): \_\_\_\_\_

Device Name:                    PICC Maximal Barrier Nursing Kit  
   with NMI PICC II  
   Or  
  
   PICC Maximal Barrier Nursing Kit  
   with NMI PICC  
   Or  
  
   PICC Maximal Barrier Nursing Kit  
   with BSC PICC

**Indications for Use:**

for short or long-term peripheral access to the central venous system for intravenous therapy, including but not limited to, the administration of fluids, medications and nutrients, the sampling of blood, and for power injection of contrast media.

Prescription Use  
(21 CFR 801 Subpart D)



And/Or

AND/OR Over-The-Counter Use:  
(21 CFR 801 Subpart C)



(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

**Kathleen E. Fitzgerald**  
Digitally signed by Kathleen E. Fitzgerald  
DN: c=US, o=U.S. Government, ou=HHS,  
ou=FDA, ou=People,  
0.9.2342.19200300.100.1.1=0010093027,  
cn=Kathleen E. Fitzgerald  
Date: 2013.05.09 15:27:31 -04'00'

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

510(k) Number: K 131038