

JUL 16 2013



Helping all people
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510(k) SUMMARY OF SAFETY AND EFFECTIVENESS

Date of Summary Preparation: May 9, 2013

1. **Submitted By/Contact:**

Pasquale Amato
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2. **Device Name:**

Trade Name: BD 31G and 32G Extra Thin Wall (XTW) Pen
Needles with PentaPoint™

Common Names: Insulin Pen Needle

Classification Name: Needle, Hypodermic, Single Lumen

Classification: Class II, 21 CFR 880.5570 FMI

3. **Predicate Device:**

BD Pen Needles:

- K123300, BD 31G and 32G Extra Thin Wall (XTW) Pen Needles with PentaPoint™
- K100005 BD Pen Needle 32G x 4mm

- K051899 31G x 8mm and the 31G x 5mm Pen Needles
Manufactured by: Becton, Dickinson and Company

4. **Device Description:**

Like the predicate devices, BD pen needles are single use, sterile, medical devices designed to be used in conjunction with pen injectors and pen cartridges. Pen needles are used by consumers, caregivers and health care professionals. They are offered in various gauge sizes and lengths. BD Pen Needles are sterile (gamma irradiation sterilization), non-toxic and non-pyrogenic.

The pen needle assembly consists of a doubled-ended cannula that is assembled into an injection-molded hub using adhesive. The hub has internal threads, which allow it to be screwed onto the pen-injector device. This allows the Non Patient (NP) end of the cannula to penetrate through the rubber septum of the cartridge. The Patient end and NP end of the cannula are lubricated using silicone based lubes for ease of injection and rubber septum penetration. An injection-molded inner shield is assembled over the Patient end of the Cannula to protect the point from damage and accidental needle-sticks. This needle assembly is inserted into a protective injection-molded outer cover and sealed with a peel-away (tear drop) label to provide sterile barrier and tamper evidence. The outer cover is also used to remove the hub and cannula from the pen. The peel-away label is pre-printed with information, which includes the lot number and needle gauge / length. The individual needle assemblies are packaged in polybags and / or cartons, and placed into shippers with appropriate labeling. The shipper cases are palletized and sterilized to an SAL 10^{-6} by gamma irradiation. The above information is the same as the predicate device.

The purpose of this Traditional 510(k) is to provide substantiation for the label claims.

5. **Statement of Intended Use/Indications for Use:**

BD Pen Needle is intended for use with pen injector device for subcutaneous injection of drugs, including insulin and exenatide.

The intended use for the principal device remains the same as the predicate devices.

6. **Technological Characteristics:**

The principal device, BD 31G and 32G XTW Pen Needles with PentaPoint™, of this Premarket Notification has the same design and all design control activities have been conducted in accordance with Quality System Regulations. The principal device is substantially equivalent to the predicate devices given:

- Has the same intended use and indications for use as the predicate devices
- Uses the same operating principles
- Incorporates the same design
- Is manufactured from the same materials
- Is sterilized using the same mode
- Is sterilized to SAL of 10^{-6}
- Is packaged using same unit and case materials
- Same scientific technology
- Same manufacturing process

There are little to no differences between the principal device BD 31G and 32G XTW Pen Needles with PentaPoint™ and the predicate devices.

7. **Performance:**

Bench tests relating to the performance of the BD 31G and 32G XTW Pen Needle with PentaPoint™ were conducted.

The principal device demonstrated equivalent performance to the predicate devices during bench testing. Bench testing consisted of:

| | |
|--|--|
| Tubing diameters | Per ISO 11608-2, section 4.3.1 (tubing dimensions meet OD and ID requirement). |
| Patency of lumen | Per ISO 11608-2, section 4.4 (stylet, having a diameter equivalent to $80\% \pm 2\%$ of lumen ID passes through freely). |
| Needle points | Per ISO 11608-2, section 4.5 (visually sharp at 2.5X magnification, designed to minimize coring and fragmentation). |
| Type A Needle (length) | Per ISO 11608-2, section 4.3.2 (patient end within indicated length ± 1.25 mm) |
| Cannula load test (No pre-conditioning) | Per ISO 11608-2, section 4.9 and 9. ISO 7864 Section 13.1(cannula holds force of 22N for 5 seconds). |
| Cannula load test (with pre-conditioning) | Per ISO 11608-2, section 4.9 and 9. ISO 7864 section 13(cannula holds force of 22N for 5 seconds). |
| Lubrication | Per ISO 11608-2, section 4.7 (no visible droplets inside/outside surfaces of cannula). |
| Compatibility Testing | Per ISO 11608-2, section 4.10 (connectivity (torque)). |

| | |
|----------------------|--|
| Freedom form Defects | Per ISO 11608-2, Section 4.6 (needle to be straight and of regular cross section and wall thickness) |
| Needle Dislocation | Per ISO 11608-2, section 4.8 and 8 (Patient end max dislocation from center for 4mm PN=0.58mm; 5mm PN=0.65mm; 8mm PN=0.9mm. The angular deviation on the patient end shall not exceed $\pm 3^\circ$ |
| Penetration Testing | Per BD Test Method TP700279 |
| Thumb Force Testing | Per BD Test Method TP700381 |

8. **Substantial Equivalence:**

The principal device, BD 31G and 32G XTW Pen Needles with PentaPoint™ is the same as the predicate device cleared in K123300, which was found substantially equivalent to the devices previously submitted and cleared in K100005 and K051899, and is therefore substantially equivalent in intended use, function and composition is not affected.



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

July 16, 2013

Becton Dickinson & Company
Mr. Pasquale Amato
Staff Regulatory Affairs Specialist
1 Becton Drive
FRANKLIN LAKES NJ 07417-1885

Re: K131358
Trade/Device Name: BD 31G and 32G Extra Thin Wall (XTW) Pen Needles with
PentaPont™
Regulation Number: 21 CFR 880.5570
Regulation Name: Hypodermic Single Lumen Needle
Regulatory Class: II
Product Code: FMI
Dated: May 9, 2013
Received: May 10, 2013

Dear Mr. Amato:

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" (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,

Mary S. Runner -S
Susan Runner DDS, MA 2013.07.16
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Kwame Ulmer M.S.
Acting Division 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): K131358

Device Name: BD 31G and 32G Extra Thin Wall (XTW) Pen Needles with PentaPoint™

Indications For Use:

BD Pen Needle is intended for use with pen injector device for subcutaneous injection of drugs, including insulin and exenatide.

Prescription Use _____ AND/OR Over-The-Counter Use X _____
(Part 21 CFR 801 Subpart D) (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
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(Division Sign-Off)
Division of Anesthesiology, General Hospital
Infection Control, Dental Devices

510(k) Number: K131358