

AUG 13 2002

K020655

**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS**

**Deltec Cozmo™ Insulin Infusion Pump (Model 1700) and Accessories**

**June 3, 2002**

**I. GENERAL INFORMATION**

Applicant's Name and Address: Deltec, Inc.  
1265 Grey Fox Road  
St. Paul, MN 55112

Contact Person: Lisa J. Stone  
Manager, Regulatory Affairs

Common/Usual Name: Insulin Infusion Pump and Accessories

Proprietary Name: Deltec Cozmo™ Insulin Infusion Pump (Model 1700) and Accessories

Equivalence Device Comparison: MiniMed Model 508 Insulin Pump, MiniMed 3.0 ml Reservoir, Deltec CADD-Diplomat® System, and MiniMed Com-Station™ Communication System

**II. DEVICE DESCRIPTION**

The Deltec Cozmo™ Insulin Infusion Pump is a small, ambulatory, battery-powered, microprocessor controlled, external insulin syringe pump. Key features of the pump include: backlit liquid crystal display (LCD), 4-key keypad, separate audio bolus button, AAA-battery power source, waterproof, audible alarm option, vibratory alarm option, real time clock, belt-clip and interface, various basal and bolus delivery rates, stored memory, PC-downloading and programming capability, IR windows, 3-ml cartridge, cartridge cap and child-proof cartridge cap.

The Deltec Cozmo™ 3-ml Cartridge is a syringe style reservoir and is a proprietary design for use specifically with the Deltec Cozmo™ Insulin Infusion Pump. It is not compatible with other pumps. The 3-ml Cartridge is made of three separate pieces: barrel, plunger and rod. The barrel has an integral luer fitting on one end, volume markings, and a raised ring at the opposite end of the luer fitting that acts as a stop for the plunger. The plunger is conical in shape with a double o-ring seal design. The plunger and rod are detachable with a snap-fit design. The rod is removed from the plunger prior to cartridge insertion into the pump.

The Deltec Cozmo™ Treatment Assistant™ PC Communications System is a software program, which allows communications between a personal computer (PC) and an infusion pump. It allows for downloading of information from the pump to a PC and for programming of the pump via a PC. The "connection" between the pump

and the PC is via infra-red (IR) windows on the back of the pump and the computer's IR port. A standard off-the-shelf IR cable connector for the PC may also be used if the user's computer does not have an integral IR port.

### **III. INTENDED USE OF THE DEVICE**

The Deltec Cozmo™ Insulin Infusion Pump (Model 1700) is a syringe infusion pump designed for Continuous Subcutaneous Insulin Infusion (CSII) for the control of diabetes.

The Deltec Cozmo™ 3-ml Cartridge is designed for use with the Deltec Cozmo™ Insulin Pump for Continuous Subcutaneous Insulin Infusion (CSII).

The Deltec Cozmo™ Treatment Assistant™ PC Communications System is designed for use with the Deltec Cozmo™ Insulin Infusion Pump as a tool in optimizing diabetes management. It allows communications between the pump and a computer for accessing data stored in pump memory, and programming of the pump.

### **IV. DEVICE COMPARISON**

The Deltec Cozmo™ Insulin Infusion Pump is similar in design, function, and intended use to the MiniMed Model 508 Insulin Pump (K990801). The pumps are small, ambulatory, battery-powered, microprocessor controlled, external insulin syringe pump delivery systems. Each device is indicated for the delivery of insulin and includes the following features: backlit liquid crystal display (LCD), 4-key keypad, audible alarm option, vibratory alarm option, real time clock, belt-clip and interface, various basal and bolus delivery rates, stored memory, PC-downloading capability, IR windows, and 3-ml medication cartridge.

The Deltec Cozmo™ 3-ml Cartridge is similar in design, function, and intended use to the MiniMed 3-ml Reservoir (K991936). Each device is a syringe style reservoir with a capacity of 3 ml. They are made of the same materials and both are provided with a 22-gauge needle. Each device is indicated for use in the infusion of insulin with an external infusion pump.

The Deltec Cozmo™ Treatment Assistant™ PC Communications System is similar in design, function, and intended use to the Deltec CADD-Diplomat® System (K973917). The products allow communications between a personal computer (PC) and an infusion pump. The software programs allow for downloading of information from the pump to a PC and for programming of the pump via a PC. The Deltec Cozmo™ Treatment Assistant™ PC Communications System is also similar to the MiniMed Com-Station™ Communication System (K993012), which uses IR communication.

**V. SUMMARY OF STUDIES**

**A. Functional Testing**

Test plans associated with software validation, verification of software controlled programming functions, and software related to proper pump operation were certified for the Deltec Cozmo™ Insulin Infusion Pump and the Deltec Cozmo™ Treatment Assistant™ Communications System.

*In-vitro* testing and biocompatibility testing was performed on the Deltec Cozmo™ 3-ml Cartridge.

**B. Clinical Studies**

Clinical studies were not deemed necessary regarding the use of the Deltec Cozmo™ Insulin Infusion Pump and Accessories.

**C. Conclusions Drawn from Studies**

Based upon the information provided above, the Deltec Cozmo™ Insulin Infusion Pump and Accessories are substantially equivalent to other commercially available devices.



AUG 13 2002

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Lisa Stone  
Managing, Regulatory Affairs  
Deltec, Incorporated  
1265 Grey Fox Road  
Saint Paul, Minnesota 55112

Re: K020655

Trade/Device Name: Deltec Cozmo™ Insulin Infusion Pump (Model 1700),  
Deltec Cozmo™ 3-ml Cartridge, and Deltec Cozmo™ Treatment Assistant™ PC  
Communications System

Regulation Number: 880.5725

Regulation Name: Infusion Pump

Regulatory Class: II

Product Code: LZG

Dated: June 3, 2002

Received: June 4, 2002

Dear Ms. Stone

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.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such 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.

Page 2 – Ms. Stone

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); 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.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4618. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



Timothy A. Ulatowski  
Director  
Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): 1K020655

Device Name: Deltec Cozmo™ Insulin Infusion Pump (Model 1700), Deltec Cozmo™ 3-ml Cartridge, and Deltec Cozmo™ Treatment Assistant™ PC Communications System

Indications for Use:

“The Deltec Cozmo™ Insulin Infusion Pump (Model 1700) is a syringe infusion pump designed for Continuous Subcutaneous Insulin Infusion (CSII) for the control of diabetes.”

“The Deltec Cozmo™ 3-ml Cartridge is designed for use with the Deltec Cozmo™ Insulin Infusion Pump for Continuous Subcutaneous Insulin Infusion (CSII).

“The Deltec Cozmo™ Treatment Assistant™ PC Communications System is designed for use with Deltec Cozmo™ Insulin Infusion Pump as a tool in optimizing diabetes management. It allows communications between the pump and a computer for accessing data stored in pump memory, and programming the pump.”

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓ OR          Over-The Counter Use           
(Per 21 CFR 801.109) *Juliana Ciccone*

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

510(k) Number: 1K020655