

Product Spotlight

spotlight

The Duplex® Drug-Delivery System from B. Braun Medical Inc.

IV ANTIBIOTICS POSE SEVERAL CHALLENGES FOR THE HEALTH-SYSTEM pharmacist. Because IV antibiotic admixture is a time- and labor-intensive process with multiple steps, there is substantial potential for errors and contamination. In addition, certain pre-filled IV antibiotic products are shipped to the pharmacy as frozen solids, requiring cold storage and pre-administration thawing. In answer to these concerns, B. Braun has launched the Duplex Drug Delivery System, a dual-compartment IV container that stores the diluent and the drug powder in separate compartments until administration.

The Duplex system helps pharmacies comply with JCAHO and USP Chapter <797> by offering a “most ready-to-use form” for drug delivery. The Duplex system arrives at the hospital pre-filled with the proper doses of drug and diluent. Because no pharmacy-based compounding is required, the possibility of compounding calculation errors is eliminated. As a closed system, there are no vials to connect, ensuring the sterility and potency of the antibiotic. Duplex can be stored at room temperature (including in nursing-unit-based automated dispensing cabinets), and no thawing is necessary.

Pharmacy simply needs to visually inspect the diluent chamber for particulate matter and the drug chamber for discoloration or foreign matter, and then apply a patient-specific label to each Duplex container, before sending it to the nursing unit.

B. Braun equips each container with a UCC/EAN-128 standard bar code that references the final admixture. The bar code can be scanned at each step of the medication-use process to automate patient charting, track inventory, and facilitate reimbursement.

To activate the Duplex system, the nurse unfolds the container, peels the foil strip from the drug chamber, and points the set port downward. Starting at the hanger tab end, the nurse folds the con-

tainer just below the diluent meniscus, trapping all the air above the fold, and then squeezes the chamber until the seal pops, releasing diluent into the drug powder chamber. The

Because no pharmacy-based compounding is required, the possibility of compounding calculation errors is eliminated.

nurse then shakes the diluent-drug combination until it is thoroughly mixed, and after inspecting the mixture for particulate matter, points the set port downward, folds the container just below the solution meniscus, and squeezes the container to open the seal between the drug solution and the set port. “It’s just ‘pop, shake, and pop,’” says Rob Albert, vice president of marketing for pharmaceuticals and drug delivery at B. Braun. Once the seal is open, the nurse, using proper aseptic technique, removes the set-port cover and attaches a sterile IV set to begin administration.

The following antibiotics are currently available in Duplex system containers:

- 1 g CefTRIaxONE for Injection and Dextrose Injection
- 2 g CefTRIaxONE for Injection and Dextrose Injection
- 1.5 g CefUROXime for Injection USP and Dextrose Injection USP
- 750 mg CefUROXime for Injection USP and Dextrose Injection USP
- 1 g Cefazolin for Injection USP and Dextrose Injection USP

For Duplex users, Albert says, “I think the most important thing is patient safety. With the Duplex system, there is no possibility of delivering the diluent without the drug.”

The Duplex system contains no plasticizers, is latex-free, and PVC-free, increasing safety for patients and the environment. **FR&P**



Photo courtesy of B. Braun Medical Inc.

To activate the Duplex system, “just ‘pop, shake, and pop.’”



1 g CefTRIaxONE for Injection and Dextrose Injection

Photo courtesy of B. Braun Medical Inc.

Where to find it:

B. Braun Medical Inc. Circle reader service #74
or visit www.duplex.bbraunusa.com.

Available on the following GPO contracts:

Broadlane Circle reader service #67
Consorta Circle reader service #68
MedAssets Circle reader service #18
Novation Circle reader service #71
Premier Circle reader service #69