GENERAL AND PLASTIC SURGERY DEVICES PANEL
OF THE MEDICAL DEVICES ADVISORY COMMITTEE

Food and Drug Administration – Hilton Washington DC
North Gaithersburg, MD
September 20, 2016

PANEL QUESTIONS - DAY 1

Scope of Questions

These questions pertain to wound dressings combined with drugs, which FDA has grouped under product code "FRO." These products include solid wound dressings, gels, creams, ointments, and liquid wound washes. Excluded from this discussion are Class III dressings intended to improve the time or ability for wound healing compared to the normal physiologic response, where human clinical data have been provided to show superiority in wound healing response.

Level of Evidence

1. Products under product code FRO that are the subject of this panel meeting include: 1) solid wound dressings combined with drugs which are intended to provide or support a moist wound environment, absorb wound exudate, and protect against external contamination, 2) wound gels, creams or ointments combined with a drug which are intended to provide or support a moist wound environment, and 3) wound wash solutions combined with a drug which are intended to rinse or irrigate a wound to remove foreign material, such as debris and wound exudate. Clinical data have not generally been required to support clearance of the wound dressings in product code FRO.

   These dressings may be combined with different categories of antimicrobials, e.g., 1) metals such as silver and bismuth, 2) biguanides such as polyhexamethylene biguanide (PHMB) and chlorhexidine, 3) quaternary ammonium compounds such as benzalkonium chloride, or 4) oxidizing agents such as hydrogen peroxide and hypochlorous acid/sodium hypochlorite, that are claimed to:

   - improve the shelf life of non-sterile products;
   - permit the repeated opening of a container after the sterile seal is broken;
   - prevent bacterial colonization of a dressing; and
   - provide a barrier against microbial entry into a wound.

   a. Is there adequate scientific evidence to demonstrate safety and effectiveness of FRO products for these different uses?

      i. Are there data from adequate well-controlled trials?
      ii. If not, what type of scientific evidence exists?

b. If there is adequate scientific evidence to support the use of FRO products for these different uses, on what endpoints are they based?

c. If not, on what endpoints should they be based? For example, for clinical studies, what endpoints are appropriate (e.g., partial or complete wound healing; amputation rate; patient-reported outcome measures; local or systemic toxicity)?

d. What are the associated risks (such as resistance, systemic absorption and local toxicity) in some or all of these scenarios?

e. Please advise FDA on the additional factors to consider when products contain more than one antimicrobial.

f. In what situations might pre-clinical *in vitro* or *in vivo* (animal) studies be sufficient to predict the clinical safety and/or effectiveness of a product?

Wound Management

2. Please comment on how your selection of a wound dressing would differ for the following clinical settings:

    a. Healing vs. non healing wounds
    b. Infected vs. non infected wounds
    c. Acute vs. chronic wounds
    d. Burn wounds (excluding injuries that require a skin graft)
    e. Other clinically relevant distinctions?

The Benefit/Risk (Individual and Societal) of Wound Dressings

3. Please comment on the questions below in the context of infected and non-infected acute, chronic, and burn wounds (excluding burns requiring skin grafts):

    Is reduction of the colony count on the dressing predictive of clinical benefit to the patient? If yes:

    a. What is this clinical benefit?

    b. What is the evidentiary basis?

    c. How does one balance this with the risks to the patient and society?

4. Dressings with lidocaine and corticosteroids are examples used to highlight the risks of systemic absorption, local toxicity, and the potential for impaired wound healing. Please discuss what clinical evidence should be available to assess patient benefit and the associated risks. These dressings are used on partial and full-thickness wounds, including diabetic

ulcers, venous stasis, pressure, and ischemic ulcers, surgical and traumatic wounds, superficial burns, donor sites, abrasions and lacerations.

Claims and Level of Evidence

5. For each of the claims cited below, please discuss:

    a. Does it represent a clinically meaningful benefit to the patient?

    b. If so, what type of data should be provided to support the claim?

    c. Does it matter which types of wound dressing (e.g., solid versus gel/cream/ointment versus wound wash/irrigation solution)?

Claims

Maintains a moist wound environment
Covers and protects the wound
Provides a barrier to penetration of microbes to the wound, which may reduce the risk of infection
To enhance the microbial barrier function and minimize growth of microbes in the wound dressing
An antimicrobial effect to minimize microbial contamination/colonization of the dressing
Intended for use up to “x” number of days
A non-adherent layer reduces pain during dressing changes
Maintains low bioburden during shelf storage and after repeated openings of the package
Relieves the symptoms of skin irritations, such as itching and burning
Irrigation loosens and removes debris, exudate, and infectious materials from wound