

This guidance was written prior to the February 27, 1997 implementation of FDA's Good Guidance Practices, GGP's. It does not create or confer rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statute, regulations, or both. This guidance will be updated in the next revision to include the standard elements of GGP's.

**DRAFT GUIDANCE
FOR THE PREPARATION OF A PREMARKET NOTIFICATION
FOR A NON-INTERACTIVE WOUND AND BURN DRESSING***

Plastic and Reconstructive Surgery Devices Branch
Division of General and Restorative Devices
Office of Device Evaluation
Prepared September 1, 1993
Revised March 31, 1995

*Contents of this document are subject to change.

**DRAFT GUIDANCE
FOR THE PREPARATION OF A PREMARKET NOTIFICATION
FOR A WOUND AND BURN DRESSING**

This guidance document provides device manufacturers with a summary of the information which is to be contained in a premarket notification submission for wound dressings, including the hydrophilic (procode KMF), occlusive (procode MGP), hydrogel (procode MGQ), and porcine dressings (procode KGN). Manufacturers who seek permission to market these wound dressings must demonstrate substantial equivalence of their product to a device which is legally marketed in the United States. In order to obtain marketing clearance for these dressings, manufacturers must supply the following information:

- I. Introductory information
 - A. The trade or proprietary name of the device.
 - B. The common or usual name or classification name of the device.
 - C. The establishment registration number, if applicable, of the owner or operator submitting the premarket notification submission.
 - D. The class in which the device has been placed under section 513 of the Act and the panel. (Currently, these products are all unclassified.)
 - E. The name, address, and telephone number of the contact person responsible for the submission.
- II. Table of Contents
- III. Summary of information regarding safety and effectiveness upon which an equivalence determination can be made, or a statement that such information will be made available to interested persons upon request.
- IV. Statement of intended use for the device. The indications for use for the device must comply with the labeling restrictions as stated in [Section X](#) of this document.
- V. Description of the device.

Provide a complete description of the device, including the physical dimensions, materials, and physical properties of the device. A table comparing the similarities and differences in these parameters between the device and predicate devices of this type should also be presented.

VI. Specification of all material components of the device.

All material components of the device must be identified including the base material of which the dressing is composed, all preservatives or drug components such as antimicrobials, zinc oxide, etc., and the adhesive.

If collagen is a component of the dressing, the type of collagen as well as the species and the tissue from which it was derived must be identified. In addition, if the collagen is derived from cattle from a herd outside the United States, certification that the herd is not infected with Bovine Spongiform Encephalopathy must be provided.

VII. In accordance with the Tripartite Biocompatibility Guidance for Medical Devices, acceptable test results must be supplied for the biological tests listed below. Standard protocols such as those identified by the USP or ASTM must be used in conducting the biocompatibility testing. For components of the dressing which will contact intact skin, the following tests must be performed:

Dermal Irritation
Dermal Sensitization
Cytotoxicity

For components of the wound dressing which will contact breached or compromised skin, the above three tests as well as the tests lists below must be performed:

Acute Systemic Toxicity
Hemocompatibility/Hemolysis

The above tests may not be relevant or necessary in all cases, such as when a manufacturer submits a marketing application for a device which has the exact same material specifications as a previously marketed dressing, and for which the tradename and device claims are the only changes being made.

If the wound dressing is to be labeled "pyrogen free" or "nonpyrogenic," satisfactory results from the USP Pyrogen Test (Rabbit), performed on the final end product, must be provided.

Similarly, if the wound dressing is to be labeled "hypoallergenic", the sponsor must subject the dressing to a skin sensitization test known as the Modified Draize Repeat Insult Patch Test. This test must be performed on at least 200 randomly chosen individuals who have completed the test. A "negative" test result would qualify the product for the "hypoallergenic" claim. To be noted, however, is that the Center for Devices and Radiological Health (CDRH) is currently reviewing the suitability of this claim as applied to all medical devices. Therefore, it is possible that this claim may not be permitted for any medical devices, including wound dressings, in the future, or that requirements for maintaining the claim may be changed.

VIII. The manufacturer must supply the following information with regard to sterilization of the device:

- a. method of sterilization
- b. method that will be used to validate the sterilization cycle
- c. sterility assurance level (SAL) to be achieved
- d. product release criteria

If the method of sterilization is ethylene oxide (EtO), the maximum levels of ethylene oxide, ethylene chlorhydrin, and ethylene glycol residues which remain on the device must be identified. Residual levels of ethylene oxide, ethylene chlorhydrin, and ethylene glycol which remain on the device following EtO sterilization should comply with the maximum limits proposed in the Federal Register of June 23, 1978 for medical devices contacting skin or mucosa. If radiation sterilization is used, the dose must be specified.

In general, a SAL of 10^{-6} is required for all devices unless there is substantial justification for not being able to achieve this level. This can be the case with certain wound dressings having material components that would be compromised by the sterilization process such as certain hydrogels and burn dressings that have collagen matrices. For such products, the manufacturer must supply information demonstrating a reduced bioburden (<10 colony forming units/ml or /gm) for the product and a description of the quality assurance procedures which will be used to monitor the bioburden level for adherence to this limit both during the manufacturing process and for the final end product.

IX. A description of the packaging to be used to maintain the sterility of the device.

X. All labeling information for the dressing must be supplied, including individual package labeling, package inserts, and promotional literature. The labeling must specify the intended use of the dressing, contraindications, warnings, precautions, directions for use if applicable, and product claims. Currently, manufacturers whose devices are found substantially equivalent are restricted to limited statements of intended use and claims for wound dressings as follows:

- a. The device may not be labeled as a treatment or a cure for any type of wound. Similarly, the tradename for the product may not imply that the device will cure the wound.
- b. The device may not be labeled for use on third degree burns.
- c. The device may not be labeled as having any accelerating effect on the rate of wound healing or epithelialization.

- d. The device may not be labeled as a long-term or permanent, no change dressing.

To date, clinical data for Stage II-IV pressure ulcers has not been reviewed, and therefore, device labeling does not usually differentiate between these stages of ulcers. Dressings which meet the biocompatibility requirements referenced above would be suitable for the management of Stage I-IV ulcers.

- XI. According to the "Intercenter Agreement Between the Center for Drug Evaluation and Research and the Center for Devices and Radiological Health," medicated wound dressings are regulated by CDRH using device authorities. This authority would apply to wound dressings which incorporate a drug component with the combination product having the primary intended purpose of fulfilling a device function and for which the drug or the chemical form of the drug has been legally marketed in the United States as a human drug for the intended effect. CDRH may require demonstration that the drug is being used within its approved use, dosage, and indications and that processing (e.g. sterilization) of the medicated dressing will not adversely affect the drug component. This latter requirement would necessitate testing for biocompatibility and effectiveness (antimicrobial activity) on the final end product. For medicated wound dressings incorporating a drug or a chemical form of the drug which has not been legally marketed in the United States as a human drug for the intended effect, intercenter consultation with the Center for Drug Evaluation and Research would be required.

- ** Although interactive or biologically active wound and burn dressings have not been finally classified, the General and Plastic Surgery Devices Advisory Panel proposed that these devices be classified as Class III devices (Federal Register, Vol. 54, No. 180, p. 38605). Furthermore, FDA is not aware of any preamendment devices to which these dressing could be found substantially equivalent. Currently, in order to market such a product, a manufacturer must supply valid scientific evidence of the safety and effectiveness of the dressing in a Premarket Approval Application (PMA) for the product. This would include extensive manufacturing information, preclinical studies, and clinical data. Because these products are considered by the FDA to present a significant risk to the patient, clinical data demonstrating the safety and effectiveness of the device must be gathered under the provisions of the IDE regulations (21 CFR 812). For information on the preparation of an Investigational Device Exemption application, see the guidance document entitled, "Draft Guidance for the Preparation of an IDE Submission for an Interactive Wound and Burn Dressing".

The "[Checklist for a Wound Dressing 510\(k\)](#)" will be used in conjunction with the "510(k) Checklist for Acceptance Decision" by FDA reviewers to determine if the submitted wound dressing 510(k) is sufficiently complete to permit an in-depth scientific review. Documents which lack important regulatory elements or are grossly deficient in scientific content may be returned to the manufacturer without benefit of a scientific review. Therefore, before a manufacturer submits a 510(k) for a wound dressing, the contents of the document should be compared with both of these checklists. If further information is needed, please contact Ms. Gail Gantt at (301) 594-3090.

CHECKLIST for a WOUND AND BURN DRESSING 510(k)

	Yes	No/NA
☞ Complete description of the device, including a table comparing characteristics of the device with those of predicate devices?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Specification of all material components of the device including the base material, adhesive, preservatives, and drug components, etc.? If collagen is a component, has all information specified in this guidance document (page 3) been provided?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Biocompatibility test results?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Test results to support claims such as "nonpyrogenic" or "hypoallergenic"?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Sterilization information according to this guidance document (page 4)?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Description of packaging to maintain sterility of device ?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Does labeling comply with the limitations identified in this guidance document (page 4)?	<input type="checkbox"/>	<input type="checkbox"/>
☞ Information required for medicated wound dressings as outlined in this document (page 5)?	<input type="checkbox"/>	<input type="checkbox"/>
