Re: Request For Designation
Tissue Bone Matrix™ Sponge
OUR File: REP-95-15

Dear [Name],

We have completed our review of the above-referenced request for a product jurisdiction determination, accepted for filing on May 29, 1995.

The Tissue Bone Matrix™ Sponge ("TBM Sponge") is described as a bone filling product comprised of 3 allograft from the same donor. The product is intended to fill bony defects and deficits in dental procedures.

In its request, Biocoll recommended that the product be designated as a banked human tissue, and not a device regulated by the Center for Devices and Radiological Health (CDRH). The request stated that for FDA to designate the product as a device, the agency must engage in notice-and-comment rulemaking. Citing FDA's interim rule on Human Tissue Intended for Transplantation, 58 Federal Register 65514-21 (December 14, 1993) to support this conclusion, Biocoll's request stated that:

The mere joining of two "PDC Act-exempt" substances from the same donor does not affect the status of the mixture as "banked human tissue." CDRH's suggestion that joining two unregulated products results in the penalty of Class III device status is both scientifically and legally without basis.

Before CDRH can impose Class III status upon the mixture of two substances otherwise unregulated under the FDC Act or otherwise modify the historical PDC Act-exempt status of all or a subset of banked human tissue, it must lawfully change its existing policy regarding banked human tissue.
Biocoll also stated that the TBM Sponge™ is analogous to

By letter of June 21, 1995 from to Biocoll, Biocoll requested an opportunity to meet with agency staff on this matter. On July 17, 1995, FDA staff met with Biocoll and its representatives and discussed Biocoll's TBM Sponge™ in considerable detail.

After conferring with CDRH and the Center for Biologics Evaluation and Research (CBER), and considering the information presented in Biocoll's submission and at the above-referenced meeting, I do not agree with Biocoll's recommendation that the product be designated as banked human tissue. For the reasons described below, I am designating CDRH as the agency component with primary responsibility for the premarket review and regulation of the TBM Sponge™ as a medical device.

According to the provisions of the interim rule, banked human tissue means any tissue derived from a human body which is recovered, processed, stored, or distributed by methods not intended to change tissue function or characteristics. 21 CFR § 1270.3(b)(2). In addition, according to the interim rule, processing means any activity to prepare, preserve for storage, and/or remove from storage to assure the potency, quality and/or sterility of human tissue for transplantation. 21 CFR § 1270.3(f).

The TBM Sponge™ is combined and processed to an extent that it has ceased to be human tissue intended for transplantation and has become a manufactured product which fits the definition of a medical device, albeit one derived from human tissue. First, the TBM sponge™ is not one tissue but a combination of processed allograft-derived materials. The TBM Sponge™ is comprised of whose function and characteristics have been changed to prepare the product for its intended use in sites and for indications other than . The component is manipulated by methods which are intended to change, and which do change, the function and characteristics of the . As noted in your request, the undergoes extensive processing. In order to enrich the and to reduce the levels of , the processing of to the extent accomplished in this product, so that the resultant material is an example of processing that does not maintain the integrity of the initial tissue. In sum, this extensive
manipulation and combination of allografts makes a new product and takes the TBM Sponge™ outside the scope of the rule.

FDA does not agree that the product with the addition of the Demineralized bone is wholly bone in origin, which is intended to be implanted in bone and to become bone again. The addition of the TBM Sponge™ distinguishes the TBM Sponge™ from demineralized bone, since a major component of the product began as Demineralized bone, but after processing will be implanted in bone to become bone. Finally, CDRH regulates related products such as those intended for implantation and products intended to fill bony defects.

As explained above, FDA does not agree that the product is essentially the same as demineralized bone due to its composition of Demineralized bone. Based on the information Biocoll has presented about the mode of action and the indications for this product, FDA believes the TBM Sponge™ may be reviewed and regulated under the 510(k) premarket notification requirements of the Act (21 U.S.C. § 360(k)). A part of the 510(k) process is a determination that the product is substantially equivalent to a predicate product. Although we disagree that the product is analogous to the agency believes that there is a satisfactory predicate device for the TBM Sponge™ labeled with the same intended use. I have consulted with CDRH and asked the Center to describe, based on the information in your submission, acceptable information for a 510(k) premarket notification for absorbable barrier devices intended for use in the treatment of periodontal disease. See Appendix A.

The Division of General and Restorative Devices (DGRD) in CDRH will be the primary review group, and will consult with review team members in CBRB. Please discuss with DGRD whether the clinical investigations of the product would be conducted in accordance with the investigational device exemption requirements in 21 C.F.R. Part 812. See Appendix A. Questions about submission requirements should be directed to Mr. Louis Hlavinka, Chief, Dental Devices Branch, DGRD (Pilot Division), CDRH, 9205 Corporate Boulevard, HPZ-410, Room 310J, Rockville, MD 20850, 443-8879. Please include a copy of this letter with Biocoll's next communication to that division. Submissions to the 510(k) should be addressed to the

1 The preamble to the interim rule also notes that tissues already regulated as medical devices include "skin and bone products that are processed in ways other than to only reduce infectivity or preserve tissue integrity." 56 Fed. Reg. 65924.
Biocoll may request reconsideration of this designation. See 21 CFR § 3.8(c). As discussed on July 25, 1995 by [redacted], Mr. Unger, of this office, we have agreed to extend Biocoll’s time to request reconsideration until September 15, 1995.

If you have any questions regarding this matter, please contact Ms. Andrea Chaselee, of this office, at 301-443-1306.

Sincerely yours,

[Signature]

Amanda B. Pedersen
Chief Mediator and Ombudsman

cc: James S. Trotman, M.D.
December 4, 1995

Re: Request For Reconsideration
Tissue Bone Matrix™ Sponge
Our File: RFD-95-18

Dear [Name],

We have completed our review of your request on behalf of Biocoll Medical Corporation (Biocoll), dated October 19, 1995, for reconsideration of the product jurisdiction decision for the above-referenced product.

The Food and Drug Administration received Biocoll's request for designation of the Tissue Bone Matrix™ Sponge (TBM Sponge™) on May 22, 1995. The TBM Sponge™ is described as [C] from the same donor. The product is intended to fill bony defects and deficits in dental procedures. In its request, Biocoll recommended that the product be designated as a banked human tissue, and not a device regulated by the Center for Devices and Radiological Health (CDRH). The request was filed on May 29, 1995. In a letter dated June 21, 1995, Biocoll offered to meet with FDA to provide additional information on the product, and a meeting was held on July 17, 1995.

FDA issued a product jurisdiction decision on July 28, 1995. CDRH was assigned the primary responsibility for the premarket review and regulation of the TBM Sponge™. The designation stated that the TBM Sponge™ is subject to the medical device provisions of the Federal Food, Drug, and Cosmetic Act (the Act) (21 U.S.C. § 321 at sec.). Further, the July 28 decision stated that, based on the information Biocoll had presented, FDA believed "the TBM Sponge may be reviewed and regulated under the 510(k) premarket notification requirements of the Act (21 U.S.C. §360(i))."

Biocoll requested an opportunity to meet with CDRH before making a decision on whether to file a request for reconsideration, and scheduled a meeting with CDRH, which occurred on September 25, 1995. FDA granted an extension of time to file a reconsideration
request until October 20, 1995. By letter dated October 19, 1995, Biocoll submitted its request for reconsideration of the product jurisdiction determination. By letter dated November 15, 1995, Biocoll extended the time for FDA to respond to the request for reconsideration until November 30, 1995. As stated in the December 1, 1995 telephone conversation, we regret the brief delay beyond that date.

Biocoll set forth three principal reasons in support of its request for reconsideration. First, Biocoll argued that the TBH Sponge™ meets the definition of banked human tissue contained in the Interim Final Rule on human tissue intended for transplantation. 21 C.F.R. §1270.3(b). Second, Biocoll stated that the designation as a device was founded on novel and invalid criteria not contained in the Interim Rule that "render the agency's designation decision arbitrary and capricious." Finally, Biocoll stated that the agency's decision was inconsistent with previous decisions on similar products and that the difference in regulatory treatment represented "ad hoc, arbitrary decision-making."

I have conferred with CDER and the Center for Biologics Evaluation and Research (CBER), and considered the information presented by Biocoll in support of the request for reconsideration. For the reasons described below, I affirm the previous designation of this product. The Biocoll TBH Sponge™ will be reviewed and regulated as a medical device under the 510(k) premarket notification requirements of the Food, Drug, and Cosmetic Act (21 U.S.C. §360(k)).

Biocoll first argues that the TBH Sponge™ is a banked human tissue within the meaning of the Interim Final Rule. The request notes that the Interim Final Rule provides that processed human tissue products are not subject to FDA regulation as drugs, biologics, or devices unless such processing is intended to change tissue function or characteristics. Specifically, Biocoll argues that, although the TBH Sponge™ is processed, the processing is "expressly not intended to change tissue function or characteristics." Further, the company notes that "[1] fact, the processing performed on the [ ] components, and the processes for mixing [ ] are specifically designed not to change tissue function or characteristics." Biocoll concludes that "the objective is to retain the original characteristics as much as possible." (Emphasis in original.)

The agency does not agree that the TBH Sponge™ is banked human tissue within the meaning of the Interim Rule. As noted above, banked human tissue is defined, in pertinent part, as any human tissue that is "recovered, processed, stored, or distributed by methods not intended to change tissue function or characteristics." However, in the case of TBH Sponge™, the [ ] is processed by a method that significantly changes its function and
characteristics. Specifically, [that is processed using a method in which it loses its essential functional properties] is clearly not to preserve its function, but instead to harvest the [for one of its constituents, i.e.,]. Moreover, because the nature and extent of processing is so great, and the change in function so clear and predictable, it is not reasonable to believe that the change is unintended, whatever the expressed intent of the sponsor. Therefore, as set forth in the July 28 letter of designation, the agency concludes that the TBM Sponge™ is not banked human tissue and the product falls outside the scope of the rule.

Secondly, Biocoll asserts that the agency's designation relied on "invalid, ad hoc criteria" in designating the TBM Sponge™.

The agency does not agree that its decision is based on criteria that do not appear in the Interim Final Rule. As discussed above, the agency's decision is grounded in a reading of the Interim Rule and a conclusion that the TBM Sponge™ is not banked human tissue within the meaning of the rule. In particular, the agency decision is not based merely on the extent of processing, or on the fact that [combined in preparing the TBM Sponge, but on the effect of such processing to change tissue function or characteristics.]

Finally, Biocoll's request for reconsideration suggests that other products that are similar to the TBM Sponge™-- in that they consist, in whole or part, of [1]-- have been included within the scope of the Interim Final Rule on human tissues, and thus exempted from regulation as medical devices, drugs, or biological products. Biocoll specifically cites the example of

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"ad hoc, arbitrary decision-making." The agency does not agree that the TBM Sponge™ is like products that are currently being regulated as banked human tissue. As discussed in the designation letter, [The May 22, 1993 request for designation states that "[T]he goal of processing [is to maintain the structural integrity of the] and to render the material capable of accepting the [upon mixing."]

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are wholly in origin, and are intended to be implanted in to become again. In contrast, "the addition of the distinguishes the TBM Sponge™ from since a major component of the product began as in origin, but after processing will be implanted in bone to become bone."

Nor does the agency agree that the TBM Sponge™ is like Biocoll argues that the plays a functionally similar role to the for essentially the same functional reasons as Biocoll added its human tissue to the TBM Sponge™. The agency believes that and the in the TBM Sponge™ play different roles. While contains the is used solely to suspend the does not contribute to the functionality of the bone transplant, but serves only as an inert carrier or delivery vehicle for the component of the TBM Sponge™ plays an integral role in the functioning of the product, by providing

For the foregoing reasons, I affirm the decision of July 20, 1995, designating CDRH as the agency component with primary responsibility for the premarket review and regulation of the TBM Sponge™ as a medical device.

Sincerely yours,

Amanda B. Pedersen
Chief Mediator and Ombudsman