

1 may account for some of the differences.

2 DR. FOOTE: It would seem to me that there are  
3 more opportunities for collaboration between the  
4 international and the United States investigators. The  
5 discussion, for example, about the way that the  
6 international investigators very, very slowly increased the  
7 volume within the bands as opposed to the more rapid filling  
8 up of the bands of the American group is just one of those  
9 examples. And I would encourage the investigators to  
10 collaborate more and to perhaps put forward the learning  
11 curve a little bit quicker for the United States.

12 DR. HIRSCH: The international study is certainly  
13 a reassuring thing. On the other hand, I'm very concerned  
14 about the fact that of the 440 there are only 21 or  
15 something that were not available in the last year of the  
16 study, which suggests to me that something about this  
17 retrospective technique utilized may have selected those who  
18 were more successful than the other--what is it?--39,400.  
19 There were 40,000 of these things sold, so a fairly small  
20 sample and a special technique for collecting it may induce  
21 greater errors, but, otherwise, it's very reassuring.

22 DR. BARANSKI: It would seem that the  
23 international study--if the U.S. study follows the  
24 international study, then the figure shouldn't change a lot  
25 except to improve with the experience. And one wonders

1 whether another year of data from the U.S. study, since we  
2 have data from the international study, is going to really  
3 add anything premarket-wise.

4           The other factor that's going into it, once this  
5 is approved, the U.S. is going to go through the learning  
6 curve again when all the new surgeons start doing the  
7 procedure, whether it's this year, next year, or the year  
8 after, although we may have a little more information that  
9 would give them regarding the complications and long-term  
10 follow-up.

11           DR. LINNER: I was quite surprised that the meta-  
12 analysis showed that the excess weight loss for the LAP-BAND  
13 was 60 percent and the same as it was for the gastric  
14 bypass. And that doesn't quite add up to the way the facts  
15 are, as far as reviewing the literature goes in this  
16 country, to my knowledge. Whether that was an error or just  
17 because it's a retrospective study and that resulted in  
18 better results, probably that's what it was.

19           DR. KALLOO: Okay. Dr. Talamini, will you  
20 summarize, please?

21           DR. TALAMINI: The panel's opinion with regard to  
22 the international study and the literature review is that  
23 those studies are indeed helpful in evaluating the device  
24 and that for the large part, the differences between those  
25 studies and the PMA American study can be explained. The

1 particular point was made that there may be opportunities  
2 for collaboration between the two groups in the future.

3 DR. KALLOO: Okay. We'll now move along to  
4 labeling. Labeling is based on the data contained in the  
5 PMA. Based on your review of those data, please address the  
6 following--and I think what we'll do is to discuss a. and b.  
7 separately, so we'll start off with a. Please discuss  
8 whether the patient and professional labeling, as submitted,  
9 is adequate to accurately inform the user of the risks and  
10 potential benefits of using the device.

11 MS. NEWMAN: I have quite a few comments on this.  
12 I think there needs to be more in the physician labeling  
13 that has come out here as far as you have two sizes. What  
14 is the indication of size? You say just stomach wall. Is  
15 there any data on which size was better? Was one used over  
16 the other? None of that was presented.

17 The other thing is I heard that in Europe they're  
18 doing different things with not injecting for the first  
19 seven weeks. Why don't you put down what is exactly--is  
20 there a protocol for this afterwards? What type of  
21 injection, how much fluid?

22 And then I heard a comment about, you know, the  
23 differences between what you're telling patients, and I  
24 think what--the FDA review of the patient booklet is very  
25 good. I agree with almost all their comments, except I

1 think it should be fifth grade level, not sixth and eighth  
2 grade level.

3 But I feel that you need line drawings in here. I  
4 find patients think their stomach's in their head. They  
5 know their bladder's in their head. I just think that you  
6 don't have any orientation as where exactly is a stomach. I  
7 do a lot of patient education. This book to me was much  
8 higher level than I usually give out when I give out to  
9 consumers.

10 I didn't understand quite well from your picture  
11 of your device. It looks the same to me. One says  
12 deflated, one inflated. They didn't look much different to  
13 me at all. I really think you could, I think, make it a  
14 little bit more consumer-friendly in how you put the  
15 labeling in here as far as for the consumer, for the  
16 patient.

17 DR. SAWICKI: I didn't see in the guidelines for  
18 the physician whether or not you're recommending  
19 prophylactic antibiotics. Is there something I have missed  
20 there? Do the patients receive prophylactic antibiotics  
21 pre-procedure? And are those generally recommended?

22 DR. O'BRIEN: They do receive prophylactic  
23 antibiotics.

24 DR. SAWICKI: What do you give?

25 DR. O'BRIEN: I give Keflex and fluorocloxicillin

1 at the time of--

2 DR. SAWICKI: Flucloxicillin?

3 DR. O'BRIEN: Because of port infections. We've  
4 had seven infections of the port site, so we cover skin  
5 organisms because we're putting a foreign body in the  
6 subcutaneous space. So we cover that and we cover gut  
7 organisms in case there is contamination.

8 DR. SAWICKI: Do you also bowel prep your  
9 patients?

10 DR. O'BRIEN: No.

11 DR. SAWICKI: You do not. Okay.

12 DR. MacDONALD: I am pretty sure in the U.S.  
13 virtually every patient received prophylactic antibiotics.  
14 Even with obesity surgery, it's one of the few  
15 clean/contaminated procedures where there's been much study  
16 proof that peri-operative antibiotics reduce wound infection  
17 rates. And, actually, that was done at our center, so we  
18 give two grams of Anceph. Particularly since a device was  
19 implanted, I feel sure that, whether there's a protocol or  
20 not, everybody did receive it.

21 DR. SAWICKI: Okay. I think that should be  
22 clearly covered.

23 Should every patient have an upper GI pre-op to  
24 evaluate them prior to placing the device?

25 DR. MacDONALD: Yes.

1 DR. SAWICKI: Is that stated in your section and I  
2 missed it?

3 DR. MacDONALD: I thought it was part of the  
4 protocol.

5 DR. SAWICKI: Is it in the labeling information?  
6 Is it or is it not?

7 MS. DUKE: Yes.

8 DR. SAWICKI: It is. Can you tell me where it is?  
9 And then I'll go on while you're finding that.

10 I think the filling instructions should be very  
11 clearly stated and be up front and in bold. I had to read  
12 through most of the protocol before I finally found out that  
13 what you're recommending is a maximum of 4 cc's of  
14 installation of saline, and, in fact, I heard from the  
15 European group that they're sometimes using more than that.  
16 So I'd kind of like to hear some comments whether or not, in  
17 fact, 4 cc's is a guideline or that truly is, in fact, the  
18 maximum allowable based on your performance testing.

19 DR. O'BRIEN: It's a guideline. There are  
20 occasions when we go above 4 cc's. It's very uncommon. But  
21 we have in our practice a maximum of 5 cc's. But we have 5  
22 percent of patients or less would go above 4 cc.

23 DR. SAWICKI: What does your performance testing  
24 show for maximum allowable infusion of saline?

25 DR. O'BRIEN: Five cc's

1 MS. DUKE: [Inaudible comment off microphone.]

2 Yes, our engineer is here, and I'll have her tell  
3 me exactly what the testing went out. But the actual  
4 physical testing of the device went well beyond the  
5 guideline, the clinical guideline for the device. The  
6 clinical guidelines for filling of the device really don't  
7 have anything to do with whether the device will leak or not  
8 or burst at any point.

9 DR. SAWICKI: Okay. So I think that information  
10 should be up front and in bold rather than sort of towards  
11 the end of the packet.

12 In addition, regarding the patient information, I  
13 have a couple of comments. One, I think there should be an  
14 800 number for patients to contact your company for concerns  
15 or questions. Secondly, in the back, you provide  
16 information regarding a warranty in that you will not cover  
17 incidental or consequential losses. And I think you should  
18 be responsible for that and that you should cover  
19 consequential losses or damages.

20 DR. GABRIL: I think it's well covered, but maybe  
21 one more thing to add is the pre-op motility study for  
22 esophageal as well as gastric.

23 DR. KALLOO: I'm sorry. Pre-op which? I just  
24 couldn't hear.

25 DR. GABRIL: Esophageal motility study as well as

1 gastric emptying study.

2 DR. STEINBACH: I have nothing to add.

3 DR. CHOBAN: I have a couple things, primarily on  
4 the patient data. I think, unfortunately, knowing most  
5 doctors in the world, the labeling will never be seen by  
6 them. But for the patients, I think they really read it,  
7 and I think one of the first things is the little picture on  
8 the front with the disclaimer note: "Cover photo is not  
9 meant to represent weight loss." Then don't put it on  
10 there.

11 The next thing would be how--under weight  
12 expectations you say even though the data from the American  
13 study is some place in the 34 to 38 percent range, you're  
14 offering weight losses of a third to two-thirds and helping  
15 patients calculate their weight based on that. I think  
16 either you have to clarify that this was not based on  
17 American data or something to effect. But I think,  
18 otherwise, when patients come in for weight loss therapy, as  
19 much as you tell them the scariest things in the whole  
20 world, they really want to hear the good stuff, and that's  
21 what they listen to. So I think if that's what you show  
22 them, that's what they'll hear. So I think the truth is  
23 you've got to show them some of the scary stuff.

24 The comment that this surgery is patient friendly  
25 I think adds very little to the description of the

1 procedure. I think describing minimally invasive and  
2 laparoscopic surgery, I think, again, patient friendly is a  
3 labeling that maybe is warm and fuzzy, but I think misleads  
4 rather than informs.

5 Thank you.

6 DR. KALLOO: Thank you.

7 Dr. Kozarek had to leave, and he wanted me to make  
8 three comments. The first two you have mentioned, that the  
9 pictures were misleading and it should be removed; that the  
10 complication rate should be accurately stated because  
11 apparently the brochure does not reflect your data; and also  
12 the conversion rate to open should also--needs to be  
13 adjusted to reflect your data.

14 Dr. Talamini?

15 DR. TALAMINI: Nothing to add.

16 DR. NELSON: Just some minutiae. Removing the  
17 band, it says it can usually be removed laparoscopically,  
18 when, in fact, it's less than 50 percent, which sounds to me  
19 like not very often, and or it should be some smaller  
20 number. And something to the effect that that may require  
21 an open surgery, just to be really obvious that the patient  
22 might not get it done laparoscopically.

23 DR. FOOTE: No comments.

24 DR. HIRSCH: Nothing to add.

25 DR. BARANSKI: Just one comment. With an 88

1 percent adverse event, I think maybe a little more emphasis  
2 should be made on the fact that the patient will experience  
3 an adverse event rather than just the probability of it.

4 DR. LINNER: I have no comment.

5 DR. KALLOO: Dr. Talamini, can you summarize?

6 DR. TALAMINI: With respect to part a. of the  
7 labeling question, the panel's opinion is that the consumer  
8 portion of the labeling needs to be made more clear and more  
9 readable and more patient-friendly with the specific points  
10 that it be adjusted to the data that we now have gone over  
11 in great detail today, and that some of the verbiage be made  
12 more precise.

13 With respect to the surgeon or physician  
14 instructions, the two specific points were filling  
15 instructions and pre-operative evaluations that may need to  
16 be added.

17 DR. KALLOO: Thank you. We'll go to the second  
18 section, which is to please discuss any additional  
19 contraindications, warnings, precautions, or instructions  
20 for use that you believe to be appropriate.

21 DR. SAWICKI: I don't have anything further to  
22 add.

23 MS. NEWMAN: I think that--and maybe as far as  
24 warnings or precautions you need to be a little bit stronger  
25 about the complications and what they should expect to find.

1 And what I would like to see you do is put down some of the  
2 issues about what's going to happen post-op but do a whole  
3 separate booklet, because I found your rules very confusing.  
4 Rule 4 was do not drink liquid. Rule 8, please drink enough  
5 liquids during the evening. I did not understand what to do  
6 post-op. I don't understand. This is very, very confusing.  
7 I don't know what you're basing this on. I'm not in the  
8 obesity market so I don't know if this is a standard post-  
9 op, what you should do, but I heard people saying wait seven  
10 weeks before liquids. What do these people do?

11 So I'd like you to pull out and do a book on--  
12 there's some basis within this booklet pre-op so people know  
13 how restricted they're going to be afterwards, but another  
14 booklet to assist them with behavioral mod and what type of  
15 diet do they find. Because I find patients have a lot of  
16 questions, only hear one-third of what you say, and I'm sure  
17 there's not a lot of time spent with them, maybe, unless you  
18 have a nurse clinician there, and they do read these things.

19 So I found this to be very, very confusing and  
20 contradictory.

21 DR. GABRIL: Three more contraindications. The  
22 portal hypertension, as I mentioned before, they defined as  
23 esophageal or gastric varices, but I would like to go  
24 further from that, such as portal gastropathy, ascites, and  
25 so on. And the second would be the motility disorder of

1 esophagus and stomach. And the third one would be chronic  
2 pancreatitis.

3 DR. STEINBACH: I have nothing to add.

4 DR. CHOBAN: Just in the rules, I guess I just had  
5 in the patient handout, again, the brochure, my only  
6 comments would be--well, I guess first I'd have a  
7 clarification from Dr. MacDonald and Dr. O'Brien. Do you  
8 believe that patients who vomit more have more slippage, or  
9 do they have vomiting because they slipped? Because,  
10 otherwise, it sort of sounds like you're blaming the patient  
11 for the slip, and it's really something, I think, that has  
12 been pretty well pointed out. It's probably a surgeon  
13 problem more than a patient problem.

14 DR. MacDONALD: That's the old chicken and the egg  
15 question. It's probably a good bit--I'm sure the vomiting a  
16 lot of times is a consequence--just like we do in a Nissen,  
17 you're afraid that if they vomit with vigor right afterwards  
18 that you're going to induce slippage. I truly have no idea  
19 how much that's responsible for it.

20 DR. O'BRIEN: An important point, and it's a  
21 central part of my plan to avoid prolapse, is to avoid  
22 vomiting. It's the most forceful thing that can happen at  
23 the area of the LAP-BAND. So we have a schedule of eating  
24 rules which minimizes the opportunity to vomit, and  
25 frequently have patients who have had no vomiting over

1 several years. It's unusual for them to vomit. I think  
2 severe vomiting is symptomatic of an obstruction, of a  
3 prolapse.

4 DR. CHOBAN: I just am concerned because it sort  
5 of seems to blame the patient for the problem rather than  
6 making it a team problem.

7 DR. O'BRIEN: We don't--we want them to feel  
8 that's an important thing to avoid.

9 DR. KALLOO: Dr. Talamini?

10 DR. TALAMINI: No additional comments.

11 DR. NELSON: No additional comments.

12 DR. FOOTE: Nothing to add.

13 DR. HIRSCH: Nothing to add.

14 DR. BARANSKI: No comment.

15 DR. LINNER: I would just like to ask: Where is  
16 that port put? In one place it says intramuscular in the  
17 rectus muscle, and another place, right under the fascia. I  
18 was wondering, where do you usually put it?

19 DR. MacDONALD: In the U.S. study, John, we were  
20 told to put it underneath the anterior rectus sheath. Just  
21 with the sac down, make a horizontal incision in the  
22 anterior sheath, dissect the little pouch underneath it with  
23 the finger, and then implant it and put four traction  
24 sutures, horizontal sutures anchoring it to the anterior  
25 sheath, then close it over it.

mc

1 Now, Dr. O'Brien does it differently.

2 DR. O'BRIEN: In the international study and in my  
3 own practice, it was up to the surgeon, but my own practice  
4 is to put it on the anterior rectus sheath. I can access it  
5 without using radiology support. I can do it in the  
6 consulting room. And I've had no ill effect from that  
7 process.

8 DR. LINNER: Did you say you put it on the fascia?

9 DR. O'BRIEN: On--

10 DR. LINNER: Just subcu--subcutaneous only.

11 DR. KALLOO: Any other comments? Dr. Talamini,  
12 can you summarize the panel comments?

13 DR. TALAMINI: The panel's opinion regarding b.  
14 has probably been reflected in a lot of previous discussion,  
15 but primarily in terms of warnings, the panel has the  
16 opinion that frequent--or the possibility of more operations  
17 and problems should be clearer to the consumers, and that  
18 there are three potential contraindications note, those  
19 being portal hypertension and ascites, motility disorders,  
20 and chronic pancreatitis.

21 DR. KALLOO: Okay. Thank you.

22 As you present your comments, please specify the  
23 changes as they relate to each of the following points: If  
24 a post-approval study is required as a condition of  
25 approval, please discuss the adequacy of the post-approval

1 study proposed by the sponsor. If changes to the proposed  
2 study are necessary, please discuss the following: a. the  
3 type of study that is proposed by the sponsor; b. any issues  
4 that should be addressed; c. if there are endpoints other  
5 than percent excess weight loss that should be evaluated;  
6 and the appropriate length for follow-up.

7 Do you want to try each one of those points and  
8 then go around?

9 DR. SAWICKI: Sure. I do think a post-approval  
10 study should be performed, and I think the studies that were  
11 proposed by the sponsor are reasonable, with the exception I  
12 think the length is probably not long enough. And I think  
13 something closer to ten years would be more appropriate  
14 given what we're looking at for this disease and the track  
15 record for devices in this area.

16 In terms of endpoints, I think it is important not  
17 only to monitor weight loss but also comorbidities, to know  
18 whether or not losing weight is really helping the patient.  
19 So I think not only weight should be monitored and  
20 complications, but also comorbidities.

21 MS. NEWMAN: I agree with that. I'm not sure ten  
22 years. It seems long, but I think it should be longer than  
23 what's proposed. Besides weight comorbidities, I'd like to  
24 see if any differentiation could be done between individuals  
25 who were successful in additional things that they tried and

1 those who were not. I think that's a key here. And none of  
2 that is a variable being discussed. It's just the weight.  
3 But we're not--it's for us to then--for you to then say who  
4 are the subpopulations and to narrow down who this really  
5 can be successful so that we can come up with a profile for  
6 an individual patient. I'd like to see, you know, other  
7 things looked at post-device implantation.

8 DR. GABRIL: I think I agree with what has been  
9 commented, but one more thing is about the involvement of  
10 non-Caucasians has to be increased to see if there is any  
11 difference in terms of efficacy.

12 DR. STEINBACH: I have nothing to add.

13 DR. CHOBAN: I think in terms of the post-approval  
14 to continue the current population to the five-year mark  
15 where--beyond the proposed of the three-year. And the  
16 other, which would be the second U.S. study, particularly  
17 looking at the subset of the four centers who are now the  
18 experienced centers, and may be able to have an opportunity  
19 to get to the learning curve question, because, I mean, even  
20 with the additional enrollment, some of those centers aren't  
21 yet to 50 patients. So I'd really push--and I guess the  
22 other question might be whether that should be compacted so  
23 that you can concentrate the--although it's geographically  
24 fairly diverse, that may not increase the experience of any  
25 one particular center.

1           But I think particularly looking at the subset of  
2 the four centers to see if you can answer the learning curve  
3 question in this country.

4           DR. KALLOO: Dr. Talamini?

5           DR. TALAMINI: I would think that the entire  
6 population ought to be studied out five years because that  
7 should give us an idea of rebound weight gain and also begin  
8 to look at the issue of erosion, at least to some degree,  
9 although that may even be further out.

10          DR. NELSON: I guess I'd be comfortable with a  
11 three-year follow-up, and perhaps less intensive follow-up  
12 for a longer period of time, whether that's five or ten  
13 years, to watch for erosion. But I think that could be done  
14 postmarket.

15          DR. FOOTE: As the urologist in the group, I'd  
16 like to add some information about what we know about the  
17 use of the artificial sphincter and erosion of the urethra.  
18 Generally, those erosions are generally far out and are  
19 generally associated with an increased pressure at the site  
20 of the urethra. So I might suggest that if we're looking at  
21 erosion data that the data be stratified so that one is able  
22 to determine how much fluid was put in that balloon, because  
23 you may be able to determine that patients, for example,  
24 when they had more in the balloon may have a higher  
25 incidence of erosion.

1 DR. HIRSCH: I think the five-year observation  
2 period is a reasonable thing to ask. I also would add more  
3 functional studies of the gastrointestinal tract,  
4 particularly the esophageal dilatation and to document how  
5 often that occurs and what meaning it may have.

6 DR. BARANSKI: I would agree with the continuing  
7 study for five years, three years intense possibly, and if  
8 the changes have not occurred in comparison to the other  
9 one, the less intense study, including the comorbidities for  
10 a period of time also.

11 DR. LINNER: I agree with the five-year study.

12 DR. KALLOO: Dr. Talamini, would you summarize the  
13 panel comments?

14 DR. TALAMINI: The panel's average opinion sounds  
15 like a postmarket--they would be in favor of a postmarket  
16 study going out five years with additional issues being  
17 comorbidities, subpopulations that are likely to have more  
18 success with the device, medications that the patients are  
19 on or that they need post-procedure, and functional studies  
20 of the gastrointestinal tract, with another potential  
21 endpoint being erosion in a potentially stratified study.

22 DR. KALLOO: Thank you.

23 Next, physician training. The sponsor is  
24 proposing a physician training program in the use of the  
25 LAP-BAND system. Please discuss the adequacy of the

1 proposed training program.

2 DR. SAWICKI: Can I digress for one second? Is  
3 this device latex-free?

4 VOICE: Yes.

5 DR. SAWICKI: So there is no latex in any part of  
6 it? Okay. I think that should be on the insert somewhere.  
7 It is? On the last page? I guess I didn't get that far.

8 The physician training, I thought that the summary  
9 here was--it was difficult for me to really get a true  
10 perspective of what's really planned here. But I think it's  
11 critical to have a very extensive physician training program  
12 in place and for this panel or some other panel to determine  
13 what type of credentialing would be done by an institution  
14 to ensure that there was good practice with this device.

15 MS. NEWMAN: I think it's almost impossible to do  
16 this part, but if we're saying that the differences seen are  
17 based on sites, and then we heard that a lot of sites have  
18 dropped out, I guess my question to you is: What have you  
19 learned from that? Because what I'm hearing is these are  
20 experts in the field, and that really bothers me. I don't  
21 think a video--I don't know. I just guess my question is:  
22 Did you do a focus group within the groups that did it and  
23 find out these are the issues and then develop a training  
24 program? And I don't know if you did that or not. So I  
25 don't really know what to say about this.

1 DR. GABRIL: I have no comment on this.

2 DR. STEINBACH: I think if it happens, the planned  
3 United States training program is adequate.

4 DR. CHOBAN: Again, I don't know how you enforce  
5 it. Is there going to be something that if a surgeon for  
6 two consecutive years doesn't do 25 procedures a year, they  
7 lose their LAP-BAND purchasing power? Because creden-  
8 tialing--I mean, I don't see how a device manufacturer is  
9 going to basically credential physicians, and that's what it  
10 sounds like is happening. I think between SAGES (?) and the  
11 ASBS there can be recommendations to credentialing bodies,  
12 but, unfortunately, I think it's going to be extraordinarily  
13 difficult to control. The history of the ingrowth hips was  
14 they went out with instructions, always use cement, and all  
15 the orthopedic surgeons just went -- [makes clicking noise].

16 So I'm, unfortunately, cautiously pessimistic.

17 DR. TALAMINI: I agree. I think what's written as  
18 a protocol reflects the company's intentions and desires to  
19 do their best to train the surgical workforce as to how to  
20 put this in properly. But in point of fact, neither the FDA  
21 nor the corporation have ultimate control over those issues.  
22 But I think it is very important that you make as clear as  
23 you can how this device ought to be used, how it ought to be  
24 placed, to have access to surgeons who know how to do it and  
25 can show other surgeons how to do it properly. And I think

1 the plan does reflect the intention to do that.

2 DR. NELSON: I agree with the previous comments.  
3 The only thing is, under the second segment about surgeons,  
4 we're required to confirm that they've done 25 procedures or  
5 completed a course. I know in the ASGE, a gastrointestinal  
6 society, a short course doesn't really teach you how to do a  
7 procedure, and I would eliminate that as a possible venue,  
8 without getting proctored.

9 DR. FOOTE: In the training information there is  
10 no comment about proctoring. I know for myself learning new  
11 urologic procedures, among urologists there is an extensive  
12 system of proctoring available to learn new procedures. And  
13 I'd like to ask the general surgeons on the panel as well as  
14 perhaps the surgeons who are offering their expertise of  
15 this procedure, do you think that proctoring should be  
16 required?

17 DR. SAWICKI: I can answer that from one of the  
18 panelist's perspectives, and that is, our institution for  
19 bariatric surgery, open or laparoscopic--and we do both  
20 procedures--proctoring is mandatory and very carefully  
21 controlled for a variety of reasons, both to protect the  
22 patient and the institution.

23 Secondly, if this device was used at our  
24 institution, it would fall under both auspices, the  
25 proctoring for laparoscopy as well as proctoring for

1 bariatric surgery, and it would require involvement from  
2 both groups.

3 DR. FOOTE: Well, based upon your experience at  
4 your institution, keep in mind that we're being asked as a  
5 panel to offer recommendations for the use of this type of  
6 technology throughout the United States. What do you feel,  
7 based upon your experience, should be the recommendation of  
8 this committee in regards to proctoring?

9 DR. SAWICKI: I think that can be based on the  
10 data that's presented here that we have to set a minimum  
11 number of cases that would need to be proctored, and I'm not  
12 sure what that number is right now. But I think a consensus  
13 can be developed for that.

14 DR. TALAMINI: Well, again, you're caught between  
15 who can regulate and demand these things. All the company  
16 or the FDA can do is say, I believe, that we recommend that  
17 proctoring be done and that X number of cases be proctored.  
18 But I don't believe we can mandate that.

19 DR. KALLOO: Thirty seconds.

20 MS. DUKE: Thirty seconds, okay. In regards to  
21 training, there are 40,000 devices that have been used  
22 internationally, and we did our best to train all the  
23 surgeons that were using that product. And we do have very  
24 firm training guidelines, as you saw, which include  
25 proctoring, in the United States and they include proctoring

1 overseas as well.

2 As far as how we intend to enforce it, actually,  
3 we hope that in the United States we'll have more force  
4 behind this than we did internationally, because this will  
5 be labeling actually approved by the Food and Drug--you  
6 know, set by the Food and Drug Administration regarding the  
7 safe use of this product. And we are proposing labeling  
8 that includes laparoscopic skill, previous bariatric  
9 experience, going to a workshop, getting proctored, having  
10 the OR in-services and having the commitment to do the  
11 number of procedures.

12 Yes, there is a problem if somebody does, you  
13 know, 25 and then falls off and only does six, but typically  
14 what we found internationally is those people stop doing it.  
15 You either have people who get very interested in this and  
16 they are in this business, or they aren't. And that's  
17 usually what we found overseas. But we have a very big  
18 commitment to training. We absolutely understand it's  
19 important. We asked SAGES and ASBS to develop joint  
20 guidelines, which they have done and which they passed and  
21 which we refer to in our labeling. So this is a very big  
22 commitment on our part, and we would appreciate any ideas  
23 that you have as far as how we can enforce those training  
24 guidelines further.

25 Thank you.

1 DR. KALLOO: Thank you. Moving along?

2 DR. HIRSCH: The only comment I have has to do  
3 with the third entry about establishing a bariatric patient  
4 support program, nutrition. I think this is extremely  
5 important and shouldn't just be stated pro forma so that any  
6 way that this could be strengthened by confirming or  
7 documenting the use of it or something and that this  
8 procedure should not be undertaken without such support  
9 facilities.

10 DR. BARANSKI: In any new surgical procedure,  
11 laparoscopic, there will be a learning curve. But we can  
12 hope, and from the experience that you're talking about,  
13 that with the number of procedures, of course, just looking  
14 at the U.S. and the international study, the mortality rate  
15 has been extremely low, next to nothing. And I think  
16 certainly if we can keep it at that level, that certainly  
17 would be wonderful.

18 As far as the other complications, the adverse  
19 events, most of them are--even though they were high in  
20 number, most of them were able to be remedied with  
21 reasonable procedures and not too many further adverse  
22 events.

23 DR. LINNER: I think this is a fairly good program  
24 that they've outlined here. I don't know that a surgeon  
25 would necessarily need 25 Nissen funduplications a year to

1 qualify. I think something equivalent, at least where  
2 they'd have to use suturing technique laparoscopically;  
3 otherwise, I have no other additions.

4 DR. KALLOO: Dr. Talamini, can you summarize  
5 please?

6 DR. TALAMINI: With regard to the training issue,  
7 it sounds as if the panel's opinion is that the applicant  
8 has made a good effort to put a training program together,  
9 but that perhaps between the FDA and the company they  
10 actually come up with a number of proctored procedures that  
11 would be ideal before a surgeon is on his own doing this  
12 operation, and that perhaps in addition a provision be added  
13 for support group availability.

14 I think your point is a good one, Dr. Linner.  
15 There are other operations, laparoscopic operations that  
16 provide a great deal of familiarity with operating in this  
17 region that might somehow be added into this training  
18 scheme, if you will. I'm sure a surgeon that's done 500  
19 laparoscopic Nissens could do this without a lot of trouble.

20 DR. KALLOO: Okay. Thank you.

21 Before we take a vote, does anyone wish to address  
22 the panel? If so, please raise your hand and you may have  
23 an opportunity to speak.

24 MS. DUKE: Thank you. I've learned that there's  
25 obviously a learning curve in advisory panel responsiveness

1 and learning when you can--what's a question and what's not  
2 and when you can talk and when you can't. But I do want to  
3 address the issue of the three-year follow-up on the U.S.  
4 clinical study. And I think the question is we need to look  
5 at what we will learn by waiting for the three-year follow-  
6 up.

7           If you look at the rates of adverse events, which  
8 my colleagues are getting right now, these are going down  
9 all the time, as you see, over the three years. There are  
10 no new findings. There are no new types of complications  
11 that are being identified.

12           The weight is stable. You can just go ahead and  
13 go through those as you bring them up. The weight is  
14 stable, certainly not gastric bypass level weight loss, but,  
15 again, there's enough weight loss for clinical utility.  
16 There's been comorbidity, changes shown, quality of life has  
17 improved, and you're not paying the price of a permanent  
18 change in anatomy or the complications that come with these  
19 procedures.

20           Maybe just as important, we've seen overseas  
21 certainly a much greater patient acceptance to deal with  
22 this widespread problem. We do have 100 patients at three  
23 years already. That's in the data that you're reviewing  
24 now. Over 200 patients have two-year follow-up already, and  
25 there's definitive information on about 239 subjects. And

1 as you saw, there's 88 percent follow-up at the two-year  
2 point.

3 Dr. Choban noted the problem in the learning  
4 curve. It certainly was a problem in this study. Most  
5 surgeons did about 10 procedures, 15 procedures. Some of  
6 them, that was all they did in the whole study. Some of  
7 them, it was that many per year. It's very hard to get  
8 through a learning curve and waiting for another year of  
9 follow-up is going to give us more data on patients that  
10 were dealt with in the middle of that learning curve  
11 situation.

12 So it's almost a catch-22. You almost have to get  
13 to a situation where you have patients who are--you have a  
14 procedure where you can really develop the procedure,  
15 develop expertise in the procedure to get through the  
16 learning curve, and then the clinical study where you're not  
17 getting reimbursement for a procedure. That can be  
18 difficult.

19 Erosions were the reason that this study was  
20 proposed for three years in the first place rather than two  
21 years. Okay? And as you see, the erosion rate has been  
22 low. The erosion rate overseas has been low. I hope the  
23 panel is not just considering the U.S. data, because one of  
24 the reasons that we are coming to you at this point is  
25 because we have a lot of international data to bring to you

1 also to consider. And I believe that that's something in  
2 the literature that erosions are reported at a low rate, and  
3 also they're reported to be related primarily to intra-  
4 operative gastric injury, sometimes not recognized at the  
5 time but found retrospectively. When the surgeon realizes  
6 he has erosion, he goes back and discovers that there was  
7 something suspicious at the time of the operation.

8           There are over 250 publications on this device.  
9 This is not a new device. The meta-analysis showed  
10 significant improvements in complications relative to the  
11 existing procedures offered in the United States.

12           We totally agree with you with the issue of  
13 widespread use, and we are absolutely willing to work with  
14 the FDA in ensuring the best possible results for the  
15 patients.

16           We've already committed to the post-approval  
17 studies, and we started these studies not only for the U.S.  
18 but also for the international population because we are  
19 interested in research to continue improving the results  
20 with this device.

21           Thank you very much for your attention.

22           DR. KALLOO: Thank you.

23           Yes?

24           MS. McAFEE: I have a long list of things that got  
25 on my nerves during this. I'm disappointed. I think the

1 presentation lacked a lot of very important information that  
2 I really wanted, not the least of which is where are the  
3 comorbids for the American population. I'm really stunned  
4 that that was not collected, that there was no analysis done  
5 on that. It seems a very naive view of obesity to equate  
6 there will be weight loss and so these will automatically  
7 improve. There are clearly a lot of problems with that.

8           That's not a good risk indicator to me for this  
9 company that they have that low kind of technical knowledge  
10 about this field.

11           I think that one of the problems is that when we  
12 evaluate risk and benefit, the problem we're going to have  
13 is that this actually has less risk with it because it is  
14 laparoscopic. But the benefit is going--the most benefit is  
15 going to be for super-size people and diabetics, and these  
16 are people who are least successful with it. So we may end  
17 up seeing an essentially healthy population doing this  
18 operation, and, again, doing several operations, having to  
19 come in and get ports fixed and replaced and all that. This  
20 is serious. We will see a population here that we have  
21 never seen before.

22           Make no mistake about it. This will really bust  
23 wide open and everybody will be lined around the block to  
24 get this.

25           When we were at the Redux hearings, after those

1 hearings people told me they were stunned by how many people  
2 took Redux and fen-phen, and I'm not sure why academics  
3 couldn't figure it out. But let me just tell you right now  
4 so there will be no surprise. There will be a lot of these  
5 operations.

6 I'm not saying that's a bad thing, but there's a  
7 lot of them. And so it's a public health situation that's  
8 created that is very considerable, and we need to really  
9 look at that.

10 I would like to see a responder analysis to this.  
11 If you have a 38 percent average weight loss, what of the  
12 lows and highs of that? Because that will tell you  
13 anecdotally with a lot of these operations. It can run from  
14 0 to 200 pounds. And without some kind of really good  
15 responder analysis, as a consumer this is going to be a  
16 very, very difficult decision for me to make.

17 One thing we know about the weight maintenance  
18 mechanism is that it is ruthless, and it never stops trying  
19 to get you back to where it thinks you should be. And we  
20 know from obesity--I think of the Xenical studies. Xenical  
21 looked at two years, and the first year, like all the other  
22 drugs, people lost weight. The second year the regain began  
23 to happen. Even though the drug continued to work the same  
24 way, it was essentially a behavior modification drug, and  
25 people's side effects were cut in half the second year. And

1 my concern is that this is also a behavior modification  
2 procedure, and are we going to eventually see that, too?

3 DR. KALLOO: Okay. Before entertaining a motion  
4 recommending an action on this PMA, Mary will remind the  
5 panel of our responsibilities in reviewing today's premarket  
6 approval application and the voting options open to us.  
7 Mary?

8 MS. CORNELIUS: Before you vote on a  
9 recommendation, please remember that each PMA has to stand  
10 on its own merits. Your recommendation must be supported by  
11 the data in the application or by publicly available  
12 information. You may not consider in fm from other PMAs in  
13 reaching your decision on this PMA.

14 Safety is defined in the Medical Device Amendments  
15 as a reasonable assurance, based on valid scientific  
16 evidence, that the probable benefits to health [under the  
17 conditions of intended use] outweigh any probable risks.  
18 Effectiveness is defined as a reasonable assurance that, in  
19 a significant portion of the population, the use of the  
20 device for its intended uses and conditions of use [when  
21 labeled] will provide clinically significant results.

22 Your recommendation options for the vote are as  
23 follows:

24 First, approvable. There are no conditions  
25 attached.

1 Two, approvable with conditions. You may  
2 recommend that the PMA be found approvable subject to  
3 specified conditions, such as a resolution of clearly  
4 identified deficiencies which have been cited by you or the  
5 FDA staff. Prior to voting, all of the conditions are  
6 discussed by the panel and listed by the panel Chair.

7 Not approvable. If you recommend that the  
8 application is not approvable, we ask that you identify any  
9 measures that you think are necessary for the PMA to be  
10 placed in an approvable form.

11 DR. KALLOO: Thank you, Mary.

12 I'd also like to thank Dr. Talamini for being the  
13 primary reviewer of this device. The recommendations of the  
14 panel may be approvable, approvable with conditions that are  
15 to be met by the applicant, or denial of approval.

16 Mark, will you summarize the panel discussion and  
17 make a motion?

18 DR. TALAMINI: I guess I would summarize the panel  
19 discussion with its most prominent point regarding approval  
20 being the first question, and that is, the issue of whether  
21 the data is adequate at two years. Hearing that the  
22 majority opinion on the panel was the data was not adequate  
23 at two years and the majority opinion being--at least the  
24 way I heard it--that there be three years of data premarket,  
25 prior to approval, I would move that the application be

1 rejected on that basis.

2 DR. STEINBACH: I will second that.

3 DR. KALLOO: Okay. Then we should take a vote.

4 Those in favor of Dr. Talamini's proposal, please raise your  
5 hand. Would you count?

6 [A show of hands.]

7 DR. KALLOO: Six. Those not in favor of Dr.  
8 Talamini's submission, please raise your hand.

9 [A show of hands.]

10 DR. KALLOO: Four. So the motion as proposed by  
11 Dr. Talamini is that it's not approvable. Okay.

12 Dr. Talamini, could you summarize the reasons for  
13 non-approvability?

14 DR. TALAMINI: Personally or on behalf of the  
15 panel?

16 DR. KALLOO: On behalf of the panel, a summary of  
17 the reasons.

18 DR. TALAMINI: The basis of the motion is the  
19 panel's apparent majority opinion that two years of data is  
20 not sufficient for market approval, and that the panel would  
21 want to see three years, the entire three-year study, prior  
22 to market--prior to approval.

23 DR. KALLOO: Okay. This, therefore, concludes the  
24 report and recommendations of the panel on P00008 BioEnteric  
25 Corporation LAP-BAND Adjustable Banding System.

1           On behalf of the FDA, I'd like to thank the entire  
2 panel. The meeting is now adjourned.

3           [Pause.]

4           DR. KALLOO: I'm sorry. There is just one little  
5 piece of housework to be done. That is, each panel member  
6 should give the reasons for their vote, please. So if we  
7 can start with Dr. Sawicki--we can start on my left, the  
8 opposite way.

9           DR. LINNER: The reason I felt it should go three  
10 years, that was the understanding that this study had from  
11 the beginning. And three years is not a long time for this  
12 type of thing, and I really believe that it should go for  
13 the full three-year period.

14           In fact, there may be some better results at the  
15 end of three years, but I do think we'd be on more solid  
16 ground with a three-year study for all of these patients.

17           DR. BARANSKI: I voted against the motion because  
18 I felt that the data was adequate when combined with the  
19 international study. And I'm not too sure how much more is  
20 going to be added by the next year. I don't have any real  
21 objection. I think the more information you have, the  
22 better it is. But I think combining those two studies, it  
23 was reasonable to go ahead with the device, but to have  
24 restrictions on a continuing follow-up basis rather than to  
25 prohibit it from its use.

1 DR. HIRSCH: I voted for the motion to disapprove,  
2 even feeling all day long sort of back and forth because I'm  
3 so anxious to bring anything that can help obese  
4 individuals. We needn't stress the epidemic proportions of  
5 this and the difficulties of the illness.

6 But I do realize that once this is made available  
7 and has the imprimatur of the FDA approval, there are going  
8 to be an awful lot of people who want this and get this, and  
9 I just want to make absolutely certain that the efficacy and  
10 utility of this exceeds the hazards of it. And I feel that  
11 minimally a three-year full complete study is needed to give  
12 that assurance.

13 DR. FOOTE: I felt that it was necessary to have  
14 three years of experience prior to approval, not because of  
15 my concerns about efficacy, because the efficacy does appear  
16 to be fairly reliable over time. My concerns had to do with  
17 the complications. This issue of the esophageal dilatation  
18 was never really clearly addressed. There was no uniform  
19 way, for example, of identifying patients beforehand, nor  
20 afterwards. And I feel that the discussion here today will  
21 give the company and the investigators further information  
22 that they can use to try to stratify patients so they can  
23 give us some more data to let us know and to let future  
24 patients know what patients are more likely to benefit from  
25 the procedure and what patients may be at a high risk for

1 complications.

2 DR. NELSON: I voted to oppose the resolution. I  
3 felt that the information generated was sufficient to  
4 guarantee a reasonable assurance of safety and that with  
5 postmarket--I was actually somewhat swayed by the last  
6 presentation by Ms. Duke. I think postmarket surveillance  
7 for perhaps a prolonged period of time would--and a number  
8 of these other issues that were raised could be assessed in  
9 a postmarket fashion.

10 DR. TALAMINI: I voted for the motion because this  
11 study was designed for three years, and I think history has  
12 taught us that with implantable devices, we need to have as  
13 much data as possible to try and predict their eventual  
14 results in the general population. So for that reason  
15 alone, I feel strongly that we need all three years of  
16 complete data.

17 DR. CHOBAN: I also voted for the motion because I  
18 think the issue of the three-year follow-up is important for  
19 a couple reasons. The issue of the esophageal dilatation I  
20 think will get answered when you've got a very good number  
21 of these upper GIs which you were planning to get at 36  
22 months anyway. I think we can lay that issue to rest at  
23 that point, hopefully.

24 I think the European data does make me feel a  
25 little bit better, but I think the concern I have is when I

1 look at the weight loss data in the American study versus  
2 the weight loss data in the European study and everybody is  
3 walking around going, What's different? What's different?  
4 What's different? And in terms of adverse events, I think I  
5 can believe that's a training issue. In weight loss, it  
6 leaves me a little concerned that maybe we are looking at  
7 different populations and we should be a little careful  
8 about lumping.

9 I think the truth is we also within surgical  
10 treatment of obesity have had some fairly significant roller  
11 coaster rides, and right now credibility is coming up. And  
12 as credibility, in spite of the patient issues, the other  
13 reason people have been reluctant to come is because it has  
14 taken us a long time to convince the referring physicians,  
15 the internists and the primary care docs and everybody else  
16 that this is really effective and credible treatment. And  
17 so I think we need to make very sure we're on solid ground.

18 DR. GABRIL: I voted for the motion based on the  
19 safety data. The efficacy, I didn't have any problem. The  
20 European study has provided that the weight loss was  
21 sustained beyond three years or five years. However, the  
22 safety data was very confusing. There was less adverse  
23 events with the European, and that was suggested due to its  
24 retrospective nature.

25 So I think one more year will give us some kind of

1 reassurance that we are not missing what we didn't see now.

2 DR. SAWICKI: I voted against the motion, and my  
3 rationale was the following: I think that the data  
4 presented suggests that the device is effective--maybe not  
5 as effective as other procedures, then again the device is  
6 not being proposed to replace all current methodology or  
7 supplant it but, rather, be an additional tool in the  
8 surgeon's armamentarium to treat morbid obesity.

9 In terms of additional information which may be  
10 gained over the following year, I don't believe that we'll  
11 find anything new in that one-year period. I think that the  
12 best information is going to come from longer-term studies.  
13 And I base that decision on the fact that I don't see an  
14 alarming trend in complications from the device. In other  
15 words, I don't see erosions increasing in frequency, and I  
16 don't see other problems increasing in frequency with time.

17 So while there may be ongoing complications or  
18 adverse events that are occurring, they don't seem to be  
19 increasing in frequency. And, therefore, I don't think one  
20 more year is going to add a significant amount of  
21 information that would sway my decisionmaking.

22 DR. KALLOO: Okay. Any other comments from the  
23 panel members?

24 [No response.]

25 DR. KALLOO: Okay. Thank you again. I appreciate

1 you coming back.

2 [Whereupon, at 4:54 p.m., the meeting was  
3 adjourned.]

4 - - -

**C E R T I F I C A T E**

I, **PAMELA BRIGGLE**, the Official Court Reporter for Miller Reporting Company, Inc., hereby certify that I recorded the foregoing proceedings; that the proceedings have been reduced to typewriting by me, or under my direction and that the foregoing transcript is a correct and accurate record of the proceedings to the best of my knowledge, ability and belief.

A handwritten signature in cursive script that reads "Pamela Briggli". The signature is written in black ink and is positioned above a solid horizontal line.

**PAMELA BRIGGLE**