

1 acuity outcomes afterward, postoperatively, as well  
2 as providing us acuity outcomes based on  
3 stratification by preoperative pathology, we would  
4 have some better knowledge as to the origin of  
5 these acuity outcomes.

6 DR. BRADLEY: Just a follow-up question.  
7 Did you have access to an eye by eye pre versus  
8 post acuity data set?

9 DR. LEPRI: They provided a data set that  
10 I think was--

11 DR. BRADLEY: I mean the reason I ask that  
12 is are these--the implication is the 40 percent who  
13 end up with poor acuity started with poor acuity.

14 DR. LEPRI: Right. But we have no  
15 evidence to verify that by providing with an  
16 analysis by the sponsor, and that's one of our  
17 questions to them, whether information that we  
18 would be needing from them.

19 DR. BRADLEY: A second question. Again,  
20 in one of your summaries, you were talking about  
21 capsule contraction.

22 DR. LEPRI: Yes.

23 DR. BRADLEY: After implant. And I just  
24 wondered how is that possible if you have the ring  
25 inside the capsule? How can it contract? Do the

1 contraction forces exceed the expansion forces of  
2 the ring?

3 DR. LEPRI: Well, we're talking about on  
4 the surface of the bag the fibrosis--okay--because  
5 of the histological changes that are occurring--  
6 okay--will change the forces and pull the  
7 epithelial layers on the outside of the capsule  
8 bag. When they're talking about contraction, I  
9 don't think that they necessarily mean that the  
10 whole bag contracts to a smaller state and just  
11 floats there.

12 DR. BRADLEY: Okay.

13 DR. WEISS: I had a question. Jayne  
14 Weiss. You have a chart of talking about  
15 percentage of YAG capsulotomy rate which range  
16 about 26 percent to 32 percent in the PH I core and  
17 PH II independent, and PH I at two years. But the  
18 PH II core was quite a bit smaller, at 6.4 percent.  
19 Do you have any explanation for why that occurred?

20 DR. LEPRI: No, I don't. If you look at  
21 the PMA, you will see that I was basically provided  
22 with raw data charts. There was no summary data  
23 provided nor any explanations for the clinical  
24 phenomena observed.

25 DR. WEISS: Thank you. Are there--Dr.

1 Matoba.

2 DR. MATOBA: Alice Matoba. I was going to  
3 ask this earlier, but now I'm going to ask you.  
4 I'm having trouble with the report that there are  
5 actually no complications or adverse effects in  
6 this device. And I wonder, for those rings that  
7 were explanted where they list things like  
8 procedural complications or zonular support not  
9 sufficient, do you have more details on any of  
10 those cases? And in any case, could the  
11 insertional process have contributed to the further  
12 loosening or weakening of the zonules?

13 DR. LEPRI: Well, that indeed is a  
14 possibility, that the surgical procedure could have  
15 contributed to weakening or damaging of the  
16 zonules, particularly in those patients who have  
17 pseudoexfoliation. I presented to you the only  
18 information that was made available to me in the  
19 PMA, and I presented many of these issues because I  
20 wanted to point out that there are still many areas  
21 lacking in clinical detail that would allow us to  
22 make a confident decision when final approval  
23 should come for safety and effectiveness. But  
24 those are indeed concerns of ours, Dr. Matoba.

25 DR. MATOBA: My second question is when

1 you ask us to comment on labeling, are you going to  
2 be referring to this version which is in Volume I  
3 of this?

4 DR. LEPRI: Yes.

5 DR. WEISS: Seeing no further questions  
6 from the panel, I'd like to thank the FDA for their  
7 presentation, and we will then proceed with  
8 additional comments from the sponsor.

9 **Additional Comments from the Sponsor**

10 DR. WEISS: If you have any, you can step  
11 up and make any additional comments. If not, then  
12 we will proceed to break for lunch.

13 DR. STEINERT: We'll waive further  
14 comments at this time.

15 DR. WEISS: Okay. So we will be breaking  
16 for lunch. I would ask everyone to be back  
17 promptly within an hour because we will be  
18 starting--at what time--we'll be starting at 20  
19 minutes to one. Thank you.

20 [Whereupon, at 11:45 a.m., the meeting  
21 recessed, to reconvene at 12:55 p.m., this same  
22 day.]

A F T E R N O O N      S E S S I O N

[12:55 p.m.]

DR. WEISS: We're going to be beginning the second session of the meeting in a few moments.

**COMMITTEE DELIBERATIONS**

DR. WEISS: We're going to proceed now with the committee deliberations and begin with the primary panel reviewers. First, I'm going to ask Dr. Joel Sugar to give his presentation.

**Primary Panel Reviewers**

DR. SUGAR: Thank you, Jayne. This is a review of PMA P010059 of the Morcher capsular tension ring. Available to me at the time I received it--the package--on December 20 was a November 8 clinical review by Dr. Lepri with the FDA's deficiency letter and draft questions, the original PMA submission, and Amendments No. 1 and No. 3.

While the review by Dr. Lepri was excellent, the materials submitted by the sponsor was exceptional in its poor data management, confusing presentation, and inconsistencies. I will review this here.

The capsular tension ring is indicated, as Dr. Steinert stated now, for the stabilization of

1 the crystalline lens capsule in the presence of  
2 weak or absent zonules.

3 This was evaluated by IOL centration and  
4 capsular contraction. The protocol for the study  
5 was not presented to me, but the summary by the  
6 sponsor stated that the inclusion criteria  
7 included, and I quote, "cataract diagnosis and  
8 planned cataract removal and IOL implantation;  
9 pseudoexfoliation syndrome diagnosis or Marfan  
10 syndrome or zonular dehiscence due to trauma;  
11 suspected zonular injuries; previous vitrectomy  
12 following retinal detachment; and informed  
13 consent."

14 The sponsor stated that quote: "There were  
15 no exclusion criteria." An amazing statement.

16 Data are presented from three groups. The  
17 numbers have floated around this morning, and I'm  
18 not going to review them.

19 Accountability at one year for Phase I  
20 core group appeared to be 88 percent, while at two  
21 years it was 74 percent.

22 For Phase II in the core group, at one  
23 year accountability was 87 percent, and for the  
24 Phase II independent group 73 percent.

25 In assessing safety, the executive

1 summary, Module 5, page seven of 15, reported no  
2 complications and no adverse reaction for the Type  
3 14 rings. It also stated that since 1991 with  
4 worldwide use of the device, there was not, quote,  
5 "a single reported instance of adverse reaction,  
6 rejection or complication."

7 For acuity at one year, Exhibit G-1  
8 revised, in Phase I, 87 percent saw 20/40 or  
9 better. In Phase II core, 83.3 percent, and in  
10 Phase II independent, 69.9 percent.

11 Exhibits N-1 through N-5, revised,  
12 however, give different outcomes. In Tables N-1  
13 and N-2, the totals at the end of the columns do  
14 not add up to the numbers given. Also, the  
15 acuities even in the best case group are  
16 substantially less than those in the G-1 revised  
17 table.

18 These discrepancies need to be much better  
19 explained. Also, while these high risk patients  
20 might be expected to have reduced acuity outcomes,  
21 more specific data line listings for outcomes in  
22 patients with acuities less than 20/40 would be  
23 extremely helpful.

24 Despite the summary statement that there  
25 were no adverse events, three adverse events

1 (retinal detachments) were reported. Now this  
2 morning it's up to seven. Two were in Phase I.  
3 Retinal detachments in trauma patients, Marfan  
4 patients and patients with subluxed lenses  
5 requiring vitrectomy are not unexpected, and the  
6 frequency of events reported is probably  
7 reasonable.

8           One detachment at least was probably  
9 present prior to the cataract surgery, and one  
10 detachment was apparently identified and repaired  
11 11 months after the initial surgery in which the  
12 CTR did not remain in the eye.

13           One detachment is discussed in Exhibit 9  
14 by Dr. Fine, dated November 27 of 2001, where a YAG  
15 capsulotomy is described as having been done on  
16 December 4, 2001, one week later. I mean it was  
17 signed November 27. It appears that neither Dr.  
18 Fine nor the sponsor proofread what they submitted.

19           Complications included two raised  
20 intraocular pressures--now those numbers have  
21 changed--requiring treatment in Phase I. Both  
22 patients were stated to have preexisting glaucoma.  
23 No details were present. In Phase II, revised  
24 Table H-2, 32 eyes had elevated intraocular  
25 pressure requiring treatment. 59 out of 297 eyes,

1 or about 20 percent, were reported as having quote  
2 "low tension glaucoma," which was quote  
3 "preexisting."

4           This information is very difficult to  
5 assess given the relative rarity of so-called low  
6 tension or normal tension glaucoma. While eyes  
7 with pseudoexfoliation, trauma and lens subluxation  
8 are at high risk of elevated intraocular pressure,  
9 it would be helpful to have more specific data on  
10 these patients.

11           Cystoid macular edema was reported in two  
12 patients in Phase I, six in Phase II. Given the  
13 nature of the patients involved, this does not seem  
14 unreasonable.

15           No surgical reinterventions were reported  
16 in Phase I. Phase II, Exhibit H-2 revised lists  
17 two surgical reinterventions. In the response to  
18 the deficiency letter, however, page 17 of 22, only  
19 one surgical reintervention is listed. This was  
20 removal of the capsular tension ring at the same  
21 time that the lens implant was exchanged. This  
22 inconsistency needs further explanation.

23           Six other rings were explanted, presumably  
24 at the time of primary surgery. One, because the  
25 ring was cracked, and now we're told that there

1 were three with the rings cracked today. Further  
2 details on all of these cases would be important.

3 Other events that are listed as  
4 complications but probably would be better listed  
5 as adverse events include the phthisis bulbi,  
6 branch vein occlusion, and vitreous hemorrhage,  
7 which Dr. Steinert dealt with this morning.

8 Concerning efficacy, efficacy was defined  
9 as stabilization of the capsular bag, demonstrated  
10 by intraocular lens centration and lack of capsular  
11 contraction.

12 The indication for use of the device  
13 included pseudoexfoliation, Marfan syndrome,  
14 zonular dehiscence, suspected zonular injury or  
15 previous vitrectomy following retinal detachment.

16 While pseudoexfoliation, zonular integrity  
17 and zonular dehiscence are the major indications in  
18 the patient studied, more than one indication  
19 appears to be listed per patient, and it is  
20 uncertain and still is uncertain how many patients  
21 had what diagnosis and how many patients would be  
22 expected to develop IOL decentration and/or  
23 capsular contraction.

24 In Phase I, five of 50 implants decentered  
25 and in Phase II, 19 or 297 decentered. In Phase I,

1 one capsular contraction was reported and in Phase  
2 II, ten were reported.

3 IOL dislocation, quote "out of PC," is  
4 listed and defined variably as quote "out of the  
5 posterior capsule" and out of the posterior  
6 chamber. It's uncertain which interpretation to  
7 use for out of the PC.

8 This appeared to occur in no patients in  
9 Phase I and one patient in Phase II, but an  
10 additional case had the ring in sulcus, and that  
11 isn't mentioned in the list. Capsular fibrosis and  
12 opacification and YAG capsulotomies were frequent,  
13 and that's been discussed earlier this morning.

14 Without controls, but given the entry  
15 criteria, the rings appear to be effective in  
16 reducing IOL decentration. They also probably  
17 reduce capsular contraction.

18 Additional issues included the requirement  
19 for patient consent, and I talked about that this  
20 morning, and I did not get an answer. In Phase II  
21 independent, 133 zonular dehiscences were listed as  
22 occurring intraoperatively. It is uncertain to  
23 this reviewer how consent was obtained from these  
24 patients.

25 In terms of labeling, the only labeling

1 provided was the quote "directions for use" package  
2 insert, Exhibit I-1. This suggested use to quote  
3 "stabilize the capsule at high myopia," for which  
4 no data were presented in the PMA, quote "to  
5 prevent capsular fibrosis," which is not proven and  
6 is probably not correct, and quote "to prevent  
7 unilateral shrinkage of the capsular bag," which  
8 should be stated as to possibly reduce the  
9 likelihood of shrinkage.

10           Specific data needs to be presented. That  
11 is presented in the labeling. Physician  
12 information must be provided on insertion and  
13 probably on removal techniques, outcomes and how to  
14 determine which of the three available sizes is  
15 most appropriate to use in a given circumstance,  
16 which has also been discussed earlier today.

17           This PMA is exceptional in its  
18 disorganization and inconsistencies.  
19 Unfortunately, this may be reflected by what I just  
20 went through in my review. Nonetheless, the device  
21 appears to be beneficial in specific infrequent  
22 circumstances. Not to set a precedent for the  
23 acceptance of abysmal data, acquisition, management  
24 and presentation--I'll repeat that--not to set a  
25 precedent for acceptance of abysmal data,

1 acquisition, management and presentation, I  
2 recommend approval with conditions for the  
3 stabilization of the crystalline lens capsule in  
4 the presence of weak or absent zonules.

5           Conditions would include review of data  
6 line data on patients with outcomes, with acuity  
7 outcomes less than 20/40, data line review on  
8 patients with postoperative elevation of  
9 intraocular pressure, and more extensive reporting  
10 on all adverse events and complications.

11           Also, data line data should be presented  
12 on all patients who have preoperative acuities at  
13 20/40 or better, which I found were either 44  
14 percent in one listing or 28 percent in another  
15 listing in Phase I and 47 percent in Phase II core.

16           More specific and comprehensible listing  
17 of the indications in the patients studied would  
18 also be very helpful.

19           In response to the initial FDA questions  
20 that I was presented with, I think biocompatibility  
21 is not a significant concern. That is it's a  
22 concern, but I think it's been adequately dealt  
23 with. And the safety and efficacy labeling, I've  
24 already presented.

25           I think we also need to deal with the

1 issue of age of recipients of this device and  
2 probably set a lower age limit, although I don't  
3 know what data to base that on.

4 Thank you.

5 DR. WEISS: Thank you, Dr. Sugar. We'll  
6 now proceed with the review by Dr. Woody Van Meter.

7 DR. VAN METER: Thank you. I will  
8 dispense with the introductory remarks which  
9 essentially summarize the data that's already been  
10 presented and say that I appreciate the diligent  
11 review of Bernie Lepri of data that was somewhat  
12 confusing and which initially lacked sufficient  
13 organization to draw meaningful conclusions.

14 I've addressed the specific issue from his  
15 review numerically and will recount those. Number  
16 one, accountability. A total of 483 eyes were  
17 enrolled for the study. There were nine adolescent  
18 patients segregated, but data was included in the  
19 totals for this study. Data was presented on 66  
20 percent of Phase I core patients at two years, 60  
21 percent of Phase II core eyes at one year, and 31  
22 percent of eyes at two years for the Phase II  
23 independent data.

24 I'm sorry. 31 percent of the Phase II  
25 core eyes was presented at two years. Phase II

1 independent data was available on 38 percent of  
2 eyes at one year and 18 percent of eyes at two  
3 years.

4           The FDA according to sponsor consented to  
5 accept one-year data from Phase II, and although  
6 some two-year data on Phase II is presented, it  
7 still can be meaningful.

8           Ten of 50 patients in Phase II core had  
9 missed their final visit, but did have a subsequent  
10 examination, and 52 of 70 patients in the Phase II  
11 independent group who missed their final visit have  
12 since been seen, although the data on these  
13 patients was not presented.

14           There is poor accountability past one year  
15 which may or may not be clinically relevant in  
16 identifying problems with capsular opacification  
17 and capsular contraction, but I believe that that  
18 data is relevant on lens decentration, especially  
19 after what we've seen today.

20           Number three, IOL decentration.  
21 Measurement of IOL decentration is subjective, and  
22 the form requested of surgeons notes that  
23 decentration is present or absent, requesting only  
24 a millimeter estimate of decentration.

25           Decentration of the crystalline lens

1 preoperatively, which clearly is a problem in  
2 patients lacking zonular stability, is not noted  
3 prior to surgery. So we don't know if this device  
4 helps or hurts relative to the preoperative  
5 findings. Decentration after the ring is implanted  
6 would have to be of sufficient magnitude to trigger  
7 a positive response to the surgeon, which would be  
8 even more difficult if the patient was not dilated.

9           The IOL centration data pre and post YAG  
10 laser suggests that YAG laser capsulotomy is  
11 probably safe and is not a contraindication to the  
12 device. However, of 13 YAGs done in the core  
13 group, only one was thought to have been decentered  
14 following the YAG laser.

15           In the Phase II core group, YAG laser was  
16 done in seven patients, and there was no reported  
17 evidence of increased decentration.

18           Since lens decentration is a serious  
19 problem in patients with zonular instability, even  
20 without the device, I believe that a ten percent  
21 decentration with the device is an acceptable  
22 figure.

23           Capsular fibrosis. The sponsor initially  
24 makes distinction between posterior capsular  
25 opacification, epithelial posterior capsular

1 opacification, and capsular fibrosis. However, the  
2 treatment and the ramifications of all three of  
3 these clinical entities is essentially the same.  
4 There is little evidence that this device restricts  
5 or retards posterior capsular opacification, and  
6 labeling should include no claim about the device  
7 minimizing capsular opacification or reducing YAG  
8 laser capsulotomy.

9           Capsular contraction. There is no  
10 evidence that the ring prevents capsular  
11 contraction. A starting point is not observed and  
12 an endpoint is not specified. Although the  
13 suspicion may be that a circumferential device like  
14 this one in the lens capsule may be reduce  
15 contraction, there is no evidence from the data  
16 presented that this device has an effect on  
17 contraction and any claims to that effect should be  
18 deleted from labeling.

19           Regarding glaucoma, most patients with  
20 elevated intraocular pressure had glaucoma  
21 preoperatively, and those few patients who  
22 developed elevated pressure after the ring was  
23 implanted likely did so as a result of the  
24 intraocular surgical procedure and not necessarily  
25 due to the device. Glaucoma does not appear to be

1 a problem related to the device.

2 Six, endothelial cell loss. Endothelial  
3 cell loss was not specifically addressed with the  
4 device. Observers were asked to note corneal  
5 edema, but little mention is made of corneal edema  
6 and endothelial cell loss was not suggested or  
7 counted.

8 I think that a claim for no endothelial  
9 cell loss is not justified from the data. It is  
10 unlikely that this device causes additional  
11 endothelial cell loss above and beyond that due to  
12 intraocular surgery.

13 The stratification of data by gender and  
14 age is acceptable and shows no potential threat  
15 related to gender or age. We will discuss in  
16 labeling, I believe, where the lower age limit  
17 should be, which is of concern.

18 Visual acuity. A number of patients with  
19 20/20 vision preoperatively were noted in the  
20 study. Presumably the indications for surgery  
21 using this device, other than a cataractous lens  
22 with lack of zonular support, could include high  
23 myopia for clear lens extraction, but there is no  
24 category in the data for high myopia patients.

25 Specific indications for surgery in these

1 patients are not noted, and I counted 15 patients  
2 that had 20/20 vision preoperatively and 26  
3 patients that had 20/25 vision preoperatively, and  
4 in the absence of clear lens extraction, I'm  
5 concerned about myopia as an indication for the  
6 ring.

7           There is no data to support high myopia as  
8 an indication for the ring, and I guess we're all  
9 concerned why so many patients with 20/20 vision  
10 preoperatively were included in a study of this  
11 device which is by and large confined to high risk  
12 patients.

13           Number ten. I do not believe the  
14 comparison with the FDA grid is a legitimate  
15 comparison because the capsular tension ring is  
16 used in patients who have other preexisting ocular  
17 conditions, and surgery is necessarily going to be  
18 more difficult if not impossible in these patients  
19 without the device.

20           Eyes with zonular instability, such as  
21 Marfan's, trauma, high myopia and vitrectomized  
22 eyes, are not normal eyes. There is no alternative  
23 device to use, although there are alternative  
24 procedures, including iris sutured and transcleral  
25 sutured posterior chamber lenses. I do not think

1 that the failure of this device to comply with the  
2 IOL grid is a problem.

3 Any help the device provides for  
4 stabilizing the capsular bag is better than no help  
5 at all, as long as the device does not result in  
6 additional zonular instability at a later date,  
7 which cannot be gleaned from this data.

8 I believe there is sufficient  
9 accountability to justify the safety of the device.  
10 I did not receive sponsor's revised Exhibit H-1 or  
11 H-2. It was not included in my pack. However,  
12 because this device is used for eyes that are not  
13 otherwise normal, it is reasonable to expect a  
14 higher level of complications and lower levels of  
15 post-operative visual acuity than might be  
16 indicated from the FDA IOL grid of normal cataract  
17 patients.

18 Patients with markedly dislocated lenses  
19 may have no other option than surgery with or  
20 without this device. And the use of this device to  
21 facilitate implantation of a posterior chamber lens  
22 in otherwise difficult cases is probably reasonable  
23 based on the low rate of complications where we do  
24 have data and an intracapsular cataract extraction  
25 is probably the only alternative.

1           15 and 16. YAG laser capsulotomy. The  
2 YAG laser capsulotomy rates do not appear to be  
3 reduced, and they are comparable or exceed that  
4 which is reported with other series.

5           I believe the best information on capsular  
6 opacification is from David Apple's group, and he  
7 has a figure of ten to 20 percent per year of  
8 capsular opacification. So even based on regular  
9 numbers, you would not expect two year follow-up  
10 data to give you a whole picture on capsular  
11 opacification rate.

12           The explanation for explantation, No. 17,  
13 is reasonable. Four devices were removed at the  
14 time of surgery. We now know it's more than that,  
15 which illustrates to me the difficulty of assessing  
16 the extent of zonular instability preoperatively.  
17 And this assessment is critical to the success of  
18 this device if preoperative consent and ordering  
19 the device should you not have them on hand is to  
20 be considered.

21           18. High myopia. The sponsor suggested  
22 that the ring is indicated for high myopia,  
23 although no data specifically addressed myopia as  
24 an indication for clear lens extraction. This  
25 device has not been shown safe and efficacious for

1 clear lens extraction by the data presented, and  
2 the sponsor should not include this indication in  
3 labeling.

4           19. Retinal detachment. Retinal  
5 detachment does not seem to be a problem with this  
6 device.

7           My conclusions: (1) PMMA has been known to  
8 be safe and well tolerated inside the eye. I  
9 believe there are no biocompatibility or toxicity  
10 issues with this device. And actually the location  
11 of this device in the lens equator places it in an  
12 area where lens epithelial cells are known to  
13 proliferate and where nests of bacteria have been  
14 reported to smolder for long periods of time. So  
15 it should be well tolerated in the eye.

16           The clinical data do not provide  
17 overwhelming support for the effectiveness of the  
18 device. There are no data to support the use of  
19 the device as a stabilizing agent for the capsular  
20 bag following clear lens extraction in myopia.

21           We don't understand why 20/20 vision is  
22 found in so many preoperative patients, and without  
23 evidence that the device slows down capsular  
24 opacification, reduces the incidence of YAG  
25 capsulotomy, or reduces capsular contraction, I

1 believe we should have more data presented on these  
2 issues or else they should all be dropped from  
3 labeling.

4           It would be helpful to see better data for  
5 IOL centration. The subjective data on  
6 decentration in this study in light of other  
7 technology available, for instance, for wave front  
8 analysis in refractive surgery, really limits the  
9 value of the decentration data that is presented.

10           It appears that this device has been used  
11 by experienced surgeons with minimal complications,  
12 but a number of patients had more zonular  
13 instability noted intraoperatively than expected  
14 preoperatively. And other surgeons might fall prey  
15 to this defect.

16           Without any comparison to cataract  
17 extraction in patients with three to four clock  
18 hours of zonular dehiscence when a ring is not  
19 used, it's difficult to say that the ring  
20 effectively improves visual acuity postoperatively  
21 in these patients.

22           More important, the incidence of further  
23 zonular instability after two years in the event  
24 the device should weaken the remaining zonules over  
25 time and result in IOL decentration or dislocation

1 at a later date is a potential worry.

2           Number four, it would be very helpful if  
3 the sponsor could provide stratified data based on  
4 indications for use. Those patients that had  
5 traumatic lens dislocation, patients with primary  
6 zonular dehiscence, patients having cataract  
7 surgery following vitrectomy, and patients with  
8 pseudoexfoliation probably have justifiable  
9 indication for the device in certain aspects, and  
10 this information would be helpful.

11           Should the sponsors feel the lens is  
12 indicated for high myopia or as a capsular  
13 stabilizing device following clear lens extraction,  
14 we would need additional data.

15           Finally, I observed that there are no  
16 comparable devices available to this, and there is  
17 little evidence that this ring is not safe or that  
18 it is not well tolerated in the eye.

19           The alternatives to surgery with this  
20 device are pars plana lensectomy with a primary or  
21 secondary sutured IOL, either transsclerally or  
22 through the iris or an anterior chamber lens.

23           I believe that the sponsors need to  
24 address specific indications for the use of this  
25 device and to provide labeling consistent with

1 conclusions that can be drawn from the data  
2 provided.

3           That concludes my report, and I would like  
4 to propose as a primary reviewer that I think there  
5 is some justification of this device, but that  
6 comes from my experience as a cataract surgeon, and  
7 the question is whether we're going to use data  
8 that is as poorly put together as this data is to  
9 make a conclusion like this? As Joel said, this  
10 sets a very poor precedent for our panel.

11           DR. WEISS: Thank you, Dr. Van Meter.

12                           **PANEL DISCUSSION OF P010059**

13           DR. WEISS: And we're going to move on  
14 then after these primary reviews to the panel  
15 discussion of P010059. What I would suggest is we  
16 are guided by having discussion of each of the FDA  
17 questions in their order.

18                           I was wondering would you be able to  
19 project each question as we go through it?

20           DR. McMAHON: Jane, can I ask a question?

21           DR. WEISS: Yes. This would be to Dr.  
22 Rosenthal and it gets along the line of Dr. Van  
23 Meter's question. That is in the instructions for  
24 premarket approval, the information says that the  
25 PMA must stand on its own, and in past reviews,

1 that's been clearly pointed out to us that we can't  
2 compare a device to another device and so forth.

3 The issue here is a little bit different  
4 in that there's worldwide experience; there is  
5 published literature. And can we consider that in  
6 our review or does it have to stand on its own  
7 material that has been presented here?

8 DR. ROSENTHAL: This is Dr. Rosenthal.  
9 The PMA has to stand on its own. The panel is  
10 certainly allowed to use its body of knowledge in  
11 making its determination. The data from the PMA  
12 should provide a reasonable assurance of safety and  
13 efficacy, and if it does not, the panel should  
14 recommend what would be required from that data in  
15 addition to what is already presented to give you a  
16 reasonable assurance of safety and efficacy with  
17 valid scientific evidence.

18 DR. McMAHON: Thank you.

19 DR. WEISS: Thank you. So we will begin  
20 with discussion of Question No. 1. The sponsor has  
21 not performed the standard battery of  
22 biocompatibility testing on the device and has  
23 proposed to use the clinical data to document the  
24 biocompatibility of the device. Do the adverse  
25 events and their rates reported in the PMA raise

1 any safety concerns from your clinical perspective?

2 Dr. Sugar?

3 DR. SUGAR: I don't believe that there are  
4 safety concerns based on biocompatibility and  
5 recommend that we let the agency continue their GMP  
6 and other evaluations of the manufacturing process,  
7 but that we accept the biocompatibility data.

8 DR. VAN METER: Second. I agree with Dr.  
9 Sugar's analysis. I don't think biocompatibility  
10 is worthy of discussion here.

11 DR. WEISS: Fine. Then we won't discuss  
12 it. We'll proceed to Question No. 2.

13 Patients with high myopia were not  
14 included in the U.S. clinical study. Do the data  
15 in the PMA support these proposed indications for  
16 use? Dr. Sugar?

17 DR. SUGAR: No.

18 DR. WEISS: No. Then I think we need some  
19 discussion on what the indications might be.

20 DR. SUGAR: This is Joel Sugar. The  
21 sponsor suggested that the indication be as I  
22 stated before, stabilization of the crystalline  
23 lens capsule in the presence of weak or absent  
24 zonules. I'd like to have that be the indication,  
25 without mentioning myopia.

1 DR. WEISS: Dr. Smith.

2 DR. SMITH: This is Janine Smith. One  
3 comment about that. That doesn't comment on the  
4 presence of an intraocular lens. That doesn't  
5 specify in the presence of an intraocular lens.

6 DR. SUGAR: That's correct.

7 DR. VAN METER: The initial--this is Van  
8 Meter--was that the capsular tension ring is  
9 proposed to stabilize the lens capsule of the eye  
10 when zonular fibers are missing, broken or the  
11 capsular bag is otherwise floppy. And this, of  
12 course, as Dr. Rosenthal will point out, you know,  
13 if this is a wording that we use in labeling, then  
14 it becomes a practice of medicine issue, and we're  
15 not nailing this down to specific indications, but  
16 I think that's probably the direction we should  
17 take is to let this be the indication for the  
18 device, and then physicians would themselves decide  
19 how they want to use it, if they want to use it.

20 DR. WEISS: Dr. Matoba.

21 DR. MATOBA: Does that mean that all these  
22 other indications that are proposed originally in  
23 labeling are to be delineated?

24 DR. SMITH: Yes.

25 DR. MATOBA: Okay.

1 DR. WEISS: Dr. Casey, do you have?

2 DR. CASEY: I completely agree. I mean I  
3 think that--

4 MS. THORNTON: Can you talk into the  
5 microphone, please?

6 DR. CASEY: Yes. The indications that  
7 Roger listed seem to be quite appropriate as long  
8 as it's for use in cataract surgery for  
9 stabilization where there is poor zonular support.  
10 It seems straightforward.

11 DR. WEISS: Okay.

12 DR. VAN METER: Van Meter. I guess the  
13 question that we have to have, are we going to  
14 specify pseudoexfoliation, previous vitrectomy,  
15 Marfan's, absence of weakened zonules, or do we  
16 just leave it the zonular fibers are missing,  
17 broken or the capsular bag is otherwise floppy?

18 Are we going to put these specific  
19 diagnoses names in? And my inclination would be  
20 that we do not do that.

21 DR. SUGAR: I agree.

22 DR. WEISS: Dr. Matoba?

23 DR. MATOBA: Are we going to specify the  
24 number of quadrants of intact zonules that can be  
25 left or not?

1 DR. VAN METER: That's really probably a  
2 practice of medicine issue, but I think that it  
3 wouldn't be helpful. The problem with specifying  
4 that is that it's really hard to know  
5 preoperatively, and you're specifying a  
6 determination that's extremely hard to make, that  
7 may or may not be made accurately, even in the  
8 surgical arena.

9 And this is why I think once you determine  
10 that the capsular bag is floppy or that you're  
11 missing some zonular support, it probably doesn't  
12 matter whether it's going to be two, four or six  
13 clock hours of zonules that are missing. I don't  
14 think we can determine that.

15 DR. MATOBA: But there is one description  
16 of a case. I think it was by Dr. Fine that they  
17 said preoperatively they felt there were 180  
18 degrees of intact zonules, and then  
19 intraoperatively they determined that only one  
20 quadrant was intact. Yet they proceeded to put a  
21 ring in, and that lead to subluxation of the lens,  
22 vitrectomy, 180 degree wound, and then removal of  
23 the capsule and the ring and the IOL. Altogether  
24 the patient ended up with procedure, and a planned  
25 intracap would have been better for that patient.

1           And so I think that there are some limits  
2 that could be settled, and I'd like some  
3 discussion.

4           DR. WEISS: Dr. Smith.

5           DR. SMITH: Janine Smith. There is a  
6 place on the data report form that asks for the  
7 percentage of zonular dehiscence intraoperatively.  
8 We did not see any data presented regarding this.  
9 That may be very helpful in determining whether it  
10 would be appropriate to have any recommendations  
11 regarding the percentage of zonular presence.

12           DR. WEISS: Dr. Van Meter.

13           DR. VAN METER: And this is directed at  
14 Alice. We don't have any data. I mean they didn't  
15 stratify the data by how many hours of zonular  
16 dehiscence exists. And so you're asking us to make  
17 a determination that we can't make.

18           DR. MATOBA: No, I want a discussion on  
19 it, because that is my point. They don't have  
20 data. They didn't stratify the severity of the  
21 zonular dehiscence.

22           DR. SMITH: Janine Smith. But presumably  
23 they did collect that data. It's on the case  
24 report form. Intraoperatively percent of zonular  
25 dehiscence is at the bottom of the case report

1 form.

2 DR. WEISS: Well, if this is of importance  
3 to the panel, it could always be put in as a  
4 condition that this be reported by the sponsor to  
5 the FDA.

6 DR. VAN METER: Van Meter again. I think  
7 it's very important to give surgeons, since this is  
8 a brand new device, and nothing like it exists, and  
9 we have to assume that surgeons outside the core  
10 and the independent investigator group have not  
11 used the device before, and I think certainly some  
12 guideline on the tolerance of zonular support  
13 that's necessary would be helpful.

14 And I would then propose that we ask the  
15 sponsor to come up with some stratified data on how  
16 many hours of zonular support are missing and what  
17 the tolerance of this device should be, whether  
18 it's three, four, five or six clock hours of  
19 zonular support, as a maximum.

20 DR. WEISS: Thank you. Any other  
21 discussion on Question No. 2? If not, we will move  
22 on to Question No. 3. Do the clinical data  
23 presented in the PMA provide sufficient evidence of  
24 safety and effectiveness of the device for the  
25 proposed indications for use, taking into account

1 the revisions in response to Question 2, if any?

2           Maybe one of the primary panel reviewers  
3 can start this question off.

4           DR. VAN METER: Van Meter again. This  
5 leaves us with the indications for use in patients  
6 that have zonular dehiscence or instability and  
7 carry diagnosis of pseudoexfoliation, Marfan's,  
8 trauma, or previously vitrectomized eyes.

9           And those patients with Marfan's would  
10 necessarily fall into, you know, homocysterneria and  
11 other patients that have absent or weakened zonules  
12 primarily. Primary absence of zonules you might  
13 call it.

14           Those are the only four indications that I  
15 see are reasonable to include in this, but again we  
16 need to have the subjective judgment of the surgeon  
17 to determine if the capsular bag is sufficiently  
18 floppy or unstable.

19           DR. WEISS: If Question 3 basically  
20 reflected on the proposed indication by the panel,  
21 what would your opinion on this be, as opposed to  
22 the specific indications that were originally  
23 presented by the sponsor?

24           DR. VAN METER: Well, you're backing into  
25 it then, but that would be fine.

1 DR. WEISS: I can back into it. So would  
2 you agree that there is sufficient evidence of  
3 safety and effectiveness in that case?

4 DR. VAN METER: If we're allowed to set  
5 the indications, yes. Joel, do you agree?

6 DR. SUGAR: With conditions that we'll  
7 state later of getting some more information, yes.  
8 Yes, probably, later.

9 DR. WEISS: Dr. Bradley.

10 DR. BRADLEY: As somebody completely  
11 outside of this field, I'm just a bit concerned  
12 about the efficacy question, and whether the  
13 sponsor has come close even to ascertaining  
14 efficacy. And a couple of things come to mind. I  
15 was listening this morning to Dr. Steinert's  
16 presentation, and he listed quite nicely what are  
17 those four metrics of efficacy.

18 One was stabilizes the capsular bag. And  
19 let me qualify this. Normally we are looking for  
20 some rather rigorous determination of efficacy, and  
21 in other panel meetings, we have scrutinized the  
22 efficacy data very, very closely. So that said,  
23 now we're looking at the efficacy criteria, and  
24 number one, stabilizes the capsular bag. I didn't  
25 see any data that I can even examine on that issue.

1           Item number two, reduces complications  
2 such as vitreous loss. Again it would be nice to  
3 have the data to examine to find out whether that  
4 is, in effect, an example of efficacy, reduces  
5 complications such as dislocation of the nucleus.  
6 Again it would be nice to have data to examine.

7           And finally, it essentially allows the  
8 surgeon to implant an IOL that perhaps otherwise  
9 would not be implantable. And again, if we had  
10 data on each of those criteria for efficacy, we  
11 could perhaps examine them and decide whether or  
12 not the device is efficacious. But I have trouble  
13 coming to that conclusion basically because of  
14 lacking the data.

15           DR. WEISS: Dr. McMahon.

16           DR. McMAHON: Tim McMahon. In a similar  
17 vein, I have beyond the concerns that have already  
18 been raised here with regard to the jumbled  
19 presentation of the data is that either the  
20 efficacy data is not presented or it is not  
21 measurable.

22           And so your primary outcomes here are not  
23 either definable or not presented to this panel.  
24 So I don't think that beyond the worldwide  
25 experience, wishful thinking and testimonial, we

1 have any rigorous measure or even semi-rigorous  
2 measure that this ring has shown to be efficacious.

3 DR. WEISS: Dr. Grimmett, did you want to  
4 comment? You're uncharacteristically quiet.

5 DR. GRIMMETT: I agree with the comments  
6 made by Dr. Bradley and Dr. McMahon. I had great  
7 difficulty with the science behind this study. I  
8 found this study scientifically unsound, and with  
9 all due respect to the sponsor, sponsor's agent,  
10 and Dr. Steinert, I believe the study was poorly  
11 designed, poorly executed and it was poorly  
12 written.

13 I would characterize it as garbage in and  
14 garbage out. I found there was a lack of  
15 reliability and validity for external variables.  
16 For example, there was no objective measurement  
17 protocol for lens centration, the most important  
18 primary endpoint for this study.

19 It looks like a best guess method was  
20 involved, and it was non-standardized and  
21 noncomparable from innumerable investigators.  
22 There was no objective measurement protocol for  
23 capsular opacification rates. No retro-  
24 illumination photographs read by an independent  
25 reading center, for example.

1           There were tabulation errors in multiple  
2 areas. There was lack of consistent definitions  
3 for exam findings. There was missing endpoint data  
4 such as endothelial cell loss. There were  
5 calculation errors riddled throughout the  
6 application.

7           There was lack of formal comparison to FDA  
8 outcome grids, both for best corrected visual  
9 acuity and adverse events. So basically the  
10 adverse events that were reported in the  
11 application was a potpourri of non-standardized  
12 diagnoses by multiple observers.

13           For example, in Exhibit H-2, the sponsor  
14 has line items for macular degeneration, macular  
15 druse and mild retinal epithelial pigment  
16 disturbance and ARMD all separated. Really those  
17 sound like the same thing to me.

18           There was no physician information  
19 booklet, no patient information booklet. There was  
20 widely varying numbers between tables, inaccurate  
21 statements, incomplete analysis.

22           Additionally, there were some clinical  
23 findings that were surprising. The high best  
24 corrected visual acuity loss worse than 20/40 in 40  
25 percent in Phase II groups. There was cataract

1 surgeries and YAGs performed on patients with total  
2 retinal detachments with LP vision.

3           There were cataract surgeries performed on  
4 patients pre-op 20/20. So I had a great deal of  
5 difficulty in summary with the science behind this  
6 particular PMA, and if you were to ask me as a  
7 clinician do I like the idea of a capsular  
8 stabilization ring, of course.

9           As a clinician, I've had difficulty with  
10 zonular dehiscence. I like the idea behind the  
11 ring. However, as a scientist on the panel  
12 evaluating in light of valid scientific evidence to  
13 support safety and efficacy, I can't do it on the  
14 basis of the data that's presented in the PMA.  
15 Thank you.

16           DR. WEISS: Dr. Coleman or Dr. Ho, do you  
17 have any opinions? Dr. Van Meter.

18           DR. VAN METER: I'd like to take right up  
19 where Mike left off and say that as a practicing  
20 cataract surgeon, I think the device has some  
21 merit. And I think that the bar is pretty darn low  
22 for getting this device into the hands of cataract  
23 surgeons.

24           The question that we have is is there  
25 enough information here to get over that very low

1 bar?

2 DR. WEISS: Well, I would bring that  
3 question back to you in terms of your original  
4 answer to this question that you felt the device  
5 was safe and efficacious. Putting aside the  
6 questions that we would have liked to have answered  
7 at the panel by the sponsor, are there particular  
8 things in the application which you feel do support  
9 the proposal that it is safe and efficacious?

10 DR. VAN METER: My support for this device  
11 is thinking that a PMMA ring in the capsule equator  
12 is pretty safe and assuming biocompatibility is  
13 okay, and assuming that you've got reasonably  
14 experienced surgeons who are not going to poke it  
15 through the capsular bag. And that appears to be a  
16 reasonable assumption that it can be safely  
17 implanted.

18 But I think that all of my support for  
19 this comes from being a cataract surgeon and very  
20 little of my support for this device comes from the  
21 data presented.

22 DR. WEISS: Dr. Sugar.

23 DR. SUGAR: I agree with everything that's  
24 been said. Yet, there is information in terms of  
25 safety, that the complications if we can believe

1 the data that's presented to us, and I have  
2 reservations about that, if we can believe the data  
3 that is presented to us, that show what to my mind,  
4 again with no control group, appears to be a  
5 reasonable incidence of complications. Thus, to my  
6 mind, the device appears to be within the bounds of  
7 the limited information we have and the limited  
8 reliability on certain validity of the information  
9 appears to be safe.

10 In terms of efficacy, this is like most  
11 PMAs, not a controlled trial with a group that did  
12 not receive the same intervention, but compared, as  
13 Dr. Lepri did, to historical data, the subluxation,  
14 or the term used is dislocation, and not defined,  
15 the dislocation frequency appears to be lower than  
16 that that would be expected absent the device.

17 Based on those two statements, I feel that  
18 if we can get the data that makes us feel more  
19 comfortable that the information that we want has  
20 been collected, I would say that this device meets  
21 this low bar for safety and efficacy.

22 DR. WEISS: And the data you're referring  
23 to are those that you had listed in your review?

24 DR. SUGAR: Yeah, we'll discuss that under  
25 conditions, but we need I think line item data on

1 practically, really on every patient in Phase I and  
2 perhaps every patient in IIC, that states the  
3 preoperative diagnosis, the preoperative visual  
4 acuity, and the outcome.

5 DR. WEISS: Dr. Van Meter.

6 DR. VAN METER: Mr. Chairman, before we  
7 get to the point of where we have to decide whether  
8 or not it's approval, I think everyone on the panel  
9 would be comfortable to get some pieces of  
10 information out there that we would like from the  
11 sponsor, and if we could start listing some of  
12 these line item pieces of information.

13 DR. WEISS: We can start listing that at  
14 this point. Would you like to start?

15 DR. SUGAR: Well, absent the global  
16 information that I just mentioned, I think that all  
17 patients--we need line item data on all patients  
18 with preoperative acuities 20/40 or better.

19 We need line item data on all patients  
20 with post-operative acuities worse than 20/40.

21 DR. McMAHON: Can we have the indication  
22 for surgery--

23 DR. SUGAR: We need data line listing of  
24 all core and IIC patients at least for preoperative  
25 primary diagnosis. We need specific data on all

1 patients with complications including iritis,  
2 cystoid macular edema, and I don't have listed the  
3 other adverse events that were presented.

4 We need line item data and specific  
5 discussion of all of the three patients that had  
6 broken eyelets, of all patients that had the lenses  
7 removed either at primary surgery or secondarily.

8 And I'm sure I've missed other things. I  
9 would also like to know what types of intraocular  
10 lenses were used in terms of we've talked about  
11 capsular opacification, and we don't know whether  
12 these patients had silicone, acrylic, solid PMMA or  
13 what kind of lenses.

14 DR. WEISS: Dr. Matoba.

15 DR. MATOBA: Also some intraoperative  
16 estimate of the number of quadrants of intact  
17 zonules in each patient.

18 DR. VAN METER: Van Meter. Also, I'd like  
19 some more information on whether or not the  
20 evaluation of lens dislocation was done dilated or  
21 not. I mean there's a question of whether or not  
22 it was dilated, and I think for most of these  
23 patients, if we could go back and get dilated exam  
24 and then have the physician, you know, do a dilated  
25 exam and say whether or not the lens is dislocated

1 or not, even if that's patients who are beyond in  
2 the study, if the lens is not dislocated at three  
3 years, I think that would be helpful information.

4 DR. WEISS: Well, that's not part of the  
5 what the--the approval the sponsor is looking for  
6 was out to two years.

7 DR. VAN METER: I understand, but we  
8 didn't have clear information whether or not the  
9 patients were dilated or not.

10 DR. WEISS: Yeah, but we can do it within  
11 the--

12 DR. VAN METER: Just were the patients  
13 dilated?

14 DR. WEISS: Okay. We can do it within  
15 what the sponsor is looking for and not beyond, I  
16 don't believe. Dr. Rosenthal.

17 DR. ROSENTHAL: Yeah. If the panel  
18 believes that an evaluation in the post-market  
19 arena at a certain period of time beyond which the  
20 study has been reported is of value and is needed,  
21 it's certainly up to the panel to make that  
22 decision, and recommend that, if I made that clear.

23 DR. VAN METER: If I still have the floor.

24 DR. WEISS: Yes.

25 DR. VAN METER: I also think that we would

1 eliminate those patients that had the device  
2 implanted for high myopia, and we limit the  
3 numbers. We cull the numbers so that it includes  
4 just those that had the device implanted for  
5 pseudoexfoliation, primary zonular weakness such as  
6 Marfan's or homocystinuria, traumatic dislocation  
7 of the lens or traumatic zonular dehiscence, and  
8 post-vitrectomy cataract surgery.

9 DR. WEISS: Dr. Sugar.

10 DR. SUGAR: Joel Sugar. I would disagree.  
11 I would like the data on all the patients because  
12 it helps us, I think, to assess the validity of the  
13 information we were just presented with, and we've  
14 been told that the patients, at least 70 percent of  
15 the patients who had acuities of 20/40 or better  
16 preoperatively, had it done because they had glare  
17 and capsular opacification.

18 If it turns out that a huge number of  
19 those patients actually were clear lenses done for  
20 myopia, then this whole submission is invalid and I  
21 think it probably needs to be totally redone.

22 DR. VAN METER: I assume that would come  
23 out if we have some line item stratification of the  
24 preoperative indications for surgery. I guess I  
25 was thinking let's separate the data from the

1 different indications.

2 DR. SUGAR: Okay. Stratifying it, but not  
3 eliminating any group is what I'm saying.

4 DR. VAN METER: Agree. Fair enough, yes.

5 DR. WEISS: Any other line items that  
6 anyone would like to include in this list?

7 DR. VAN METER: To elaborate on what Alice  
8 said, whether or not they're plate IOLs, silicone,  
9 acrylic, PMMA, and really whether or not they have  
10 the extensive C-loops or shorter modified C or J  
11 loops would be helpful.

12 DR. WEISS: Okay. If there is no further  
13 discussion on this question, we can move to  
14 Question No. 4.

15 Do you have any recommendations for  
16 revisions or additions to the labeling as proposed  
17 by this sponsor? Please consider the following  
18 issues in your deliberations, and I think what I'll  
19 do is just take this one by one. So we'll start  
20 out with (a) high myopia, lens extraction without  
21 IOL implantation. Any recommendations for  
22 revisions or additions in relation to this  
23 indication?

24 DR. SUGAR: I believe we eliminated that  
25 as an indication.

1 DR. WEISS: Okay.

2 DR. VAN METER: I second that.

3 DR. SUGAR: No, I think we already did.

4 I'm not moving that we--

5 DR. VAN METER: I'm seconding it anyway.

6 DR. WEISS: Dr. Bradley.

7 DR. BRADLEY: Perhaps Joel could clarify

8 for me exactly why we eliminated that as an

9 indication?

10 DR. SUGAR: In the absence of any evident  
11 data on that indication, it's hard to make a  
12 recommendation concerning it. It doesn't mean that  
13 in the practice of medicine it may not be used for  
14 that purpose. But we have no data at all for that.

15 DR. BRADLEY: But it seemed to me you were  
16 alluding to the fact that maybe it had been used in  
17 that particular type of patient, and why is that?

18 DR. SUGAR: It would be interesting to  
19 know.

20 DR. BRADLEY: Sorry?

21 DR. SUGAR: It would be interesting to  
22 know.

23 DR. BRADLEY: Yes, and you may find that  
24 when you have the data you've just asked for, so at  
25 that point we might find that it's quite successful

1 in that particular group of patients.

2 DR. SUGAR: The sponsor, as best I  
3 understand Dr. Steinert's presentation this  
4 morning, is no longer requesting that as an  
5 indication. Am I correct, Roger?

6 DR. WEISS: The next question would be  
7 progressiveness of syndrome such as  
8 pseudoexfoliation and Marfan's. Dr. Van Meter.

9 DR. VAN METER: Van Meter. I would like  
10 to see data longer than two years for a number of  
11 reasons. One of them is this. But another reason  
12 is for the capsular opacification incidence, but if  
13 we're not claiming capsular opacification as an  
14 indication, then I guess we don't need it for that.

15 But as far as dislocation of this device  
16 long term, it would really be nice to see what  
17 happens after more than two years, and I think at  
18 the very least, we should ask for continued follow-  
19 up and monitoring of the patients that have already  
20 had the device put in.

21 DR. WEISS: Just to follow-up on your  
22 suggestion, that would include post-market  
23 surveillance for any of the syndromes I assume,  
24 Marfan's, pseudoexfoliation, any time it's been  
25 implanted?

1 DR. VAN METER: Yes.

2 DR. WEISS: Yes, Dr. Matoba.

3 DR. MATOBA: In regard to labeling, I  
4 think that for these potentially progressive  
5 syndromes, the labeling should state that there is  
6 no evidence that the ring will prevent or slow  
7 progression.

8 DR. WEISS: How would you like to put that  
9 specifically? Could you just repeat the whole? Do  
10 you have any wordsmithing that you have in mind?

11 DR. VAN METER: If you--Van Meter--if you  
12 flip the page, Alice, on part c, it talks about  
13 delayed onset of dislocation, and I think that your  
14 point is well-taken, that if you just say there's  
15 no evidence to indicate that this ring alters the  
16 progression of zonular instability.

17 DR. WEISS: Okay. So it sounds like we've  
18 dealt with (b) and this point, and we'll just  
19 continue on to (c), late onset of dislocation of  
20 capsular bag containing IOL and ring in  
21 pseudoexfoliation syndrome.

22 For that, Dr. Van Meter is suggesting a  
23 post-market study and any other comments on that on  
24 (c)?

25 DR. SUGAR: Comment on post-market

1 surveillance. What would we do with the  
2 information and what will we compare it to?  
3 Because if ten percent, I believe was stated,  
4 dislocate, and then Dr. Lepri quoted an article  
5 from the European literature where they had eight  
6 of eight patients develop dislocation, in the range  
7 between those two things, there's a whole world of  
8 possibilities and we don't have a good control  
9 group.

10 DR. VAN METER: Well, even the ten percent  
11 dislocation doesn't specify whether or not it's  
12 progressive.

13 DR. SUGAR: My point is that these people  
14 have disorders of which there may be progressive  
15 dislocation of their lenses. If you put in a lens  
16 implant and it still dislocates or you put in a  
17 lens implant and a ring and it still dislocates,  
18 does that mean that you shouldn't do it?

19 I don't think it does. So I'm saying that  
20 that information is useful clinical information  
21 that I would like to know. Does it change my  
22 feeling about whether this device should or should  
23 not be available? It does not.

24 DR. VAN METER: Well, if it turns out that  
25 the device makes no difference between a regular

1 implant and the device, then I think that's useful  
2 information, and may alter the practice.

3 DR. SUGAR: Oh, I don't disagree with  
4 that, but we're not going to get that information  
5 out of our post-market surveillance.

6 DR. WEISS: Any other thoughts from the  
7 panel on post-market surveillance? Okay. Any  
8 other comments on (c)? Okay.

9 We'll move on to (d), the use of Type 14  
10 rings in pediatric patients, size issues, and  
11 potential radial tears in the capsular bag. Dr.  
12 Sugar.

13 DR. SUGAR: I assume this question is  
14 again based on a case report that Dr. Lepri  
15 reviewed where there was a ring in a single--I  
16 don't remember if it was a four month old or four  
17 year old--four year old--where the bag contracted  
18 and there was a radial tear, and I presume that the  
19 ring did not stay stable.

20 We don't have data on lens size. The  
21 sponsor told us, I think, that they don't have data  
22 on the lens size, and Dr. Steinert said he uses the  
23 middle one, and I don't remember which one that is.  
24 Is that the A or C?

25 DR. STEINERT: 14C.

1 DR. SUGAR: 14C--okay. I think that the  
2 labeling should state the different sizes and why  
3 they have the different sizes, and should state  
4 what data is available in the experience of the  
5 investigators to suggest the use of any given size.

6 I don't think that we have data to suggest  
7 that this be used at all in pediatric patients.  
8 And I use pediatric as 12 and under.

9 DR. WEISS: So would you want to then put  
10 in as one of the conditions that there is no  
11 information on the use of this device in patients  
12 of that age or less or how would you like to state  
13 it?

14 DR. SUGAR: Well, I think that the  
15 approval should be as I stated earlier, for a  
16 specific lower age limit.

17 DR. WEISS: Okay. Which will be  
18 discussed. Okay. Are there any other? Yes, Dr.  
19 Bradley?

20 DR. BRADLEY: We have the example of one  
21 four-year-old where the capsule actually ruptured  
22 because of implantation of the ring. Are there any  
23 data of successful implantations in these young  
24 children?

25 DR. LEPRI: Bernie Lepri. At this point,

1 we have no data submitted on the use in pediatric  
2 patients. The only thing that I have available was  
3 that literature article which proposed the various  
4 types of complications that were experienced in  
5 that one particular case.

6 DR. BRADLEY: So the reason I'm asking  
7 that is I'm wondering is it actually  
8 contraindicated for young eyes or is it just that  
9 you have no information?

10 DR. LEPRI: At this point, we have no  
11 information, but what the article suggests is that  
12 it should be contraindicated.

13 DR. WEISS: Dr. Rosenthal.

14 DR. ROSENTHAL: Well, sorry. Yeah, I  
15 think the panel should make a recommendation. I  
16 mean there are two ways to approach this. One  
17 there is no information, and hence you leave it to  
18 the practice of medicine.

19 Two, there may be a contraindication and  
20 you put that in the labeling, so that he or she who  
21 does use it uses it at their own risk.

22 DR. WEISS: Dr. Matoba.

23 DR. MATOBA: I just want to point out that  
24 in the labeling under contraindications, the first  
25 one is during the first year of life implantation,

1 and that implies somehow that after that it's okay.  
2 And I think we need to address that and decide  
3 whether we want to keep it that way or change it or  
4 increase the age.

5 DR. WEISS: Any further discussion on this  
6 issue? If not, I wanted to ask the panel in view  
7 of the fact there is a line by line list, wish list  
8 of additional data needed from the sponsor, does  
9 the panel feel that there would be any help from  
10 additional analysis on the existing cohort, the  
11 original 70 plus patients, regarding vitreous loss,  
12 dislocation of the nucleus, ability to implant a  
13 posterior chamber IOL, or the requirement for a  
14 dilated exam to evaluate centration at specific  
15 time after the implantation of the ring, namely one  
16 or two years down the line?

17 Dr. Grimmett.

18 DR. GRIMMETT: Mike Grimmett. Certainly I  
19 would endorse the fourth one regarding dilated exam  
20 to evaluate centration. And the other issues sound  
21 reasonable. I think additional data to help  
22 solidify the issues would be helpful.

23 DR. WEISS: Any other comments from the  
24 panel on this issue?

25 DR. VAN METER: Ms. Chairman, we don't

1 know if the dilated examination was not done. We  
2 just don't know, and if it were to be determined by  
3 the sponsor that all of these examinations were  
4 dilated examinations, then that would be helpful to  
5 know.

6 DR. WEISS: Any other comments from the  
7 panel? If not, I think we've dealt with the  
8 questions at this point, and we're going to proceed  
9 to the open hearing, then the FDA and the sponsor  
10 closing discussions, before the formal proposal and  
11 the vote.

12 **OPEN PUBLIC HEARING SESSION**

13 DR. WEISS: No comments I see for the open  
14 public hearing. So we'll then go on to the FDA.

15 DR. SUGAR: Can I interrupt?

16 DR. WEISS: Yes, Dr. Sugar.

17 DR. SUGAR: Is this where we deal with  
18 labeling or do we do it later?

19 DR. WEISS: We can talk about labeling now  
20 if you would like.

21 DR. SUGAR: I just--I don't think that  
22 we've adequately dealt with labeling. The labeling  
23 that they have in PM Module 5, Exhibit I-1 is  
24 certainly inadequate, and there is no evidence of a  
25 physician information booklet. I don't know if

1 there should be a patient information booklet.

2 But I think those things need to be  
3 discussed, and I'm happy to do it at your--

4 DR. WEISS: Why don't you begin the  
5 discussion?

6 DR. SUGAR: I just did.

7 DR. WEISS: Maybe you want to continue the  
8 discussion.

9 DR. VAN METER: We have a problem--Van  
10 Meter--we have a problem with the patient  
11 information booklet. If most of these are a  
12 decision--are implanted based on decisions made  
13 intraoperatively, and maybe it's feasible to get  
14 preoperative consent, you know, for a whole lot of  
15 patients, and maybe not use the device. But I  
16 think that seems kind of unwieldy.

17 DR. WEISS: What about giving them a card  
18 that you would get like for an IOL so that you know  
19 that this has been implanted?

20 DR. VAN METER: Historically has that been  
21 sufficient for the agency if the patient has  
22 received a card saying this device has been  
23 implanted?

24 DR. ROSENTHAL: Well, they've done that  
25 with IOLs for--

1 MS. THORNTON: Can you come to the podium,  
2 Donna?

3 DR. ROSENTHAL: I must have misunderstood  
4 what you--

5 MS. LOCHNER: I was just going to comment.  
6 This is Donna Lochner. I was going to comment that  
7 the patient implant card and patient labeling are  
8 really two different issues, and shouldn't--I don't  
9 think one should be seen as a replacement for the  
10 other, certainly not with IOLs. That was never the  
11 intention, and, in fact, for example, with multi-  
12 focal IOLs, the panel felt, FDA felt that patient  
13 labeling was important and was provided by that  
14 sponsor. An implant card also was provided. So I  
15 don't think the two are mutually exclusive.

16 DR. WEISS: Well, then maybe we can  
17 discuss whether or not there should be a patient  
18 labeling book to start out with. Why don't we  
19 start that discussion? Dr. Van Meter, do you have  
20 an opinion on that?

21 DR. VAN METER: I mean I don't really see  
22 the patient labeling as a critical issue here. I  
23 think a patient can be informed, but most patients  
24 will leave it up to their surgeon to do the  
25 procedure the best way they can.

1           And so physician information becomes far  
2 more important than patient information if a  
3 patient has had it put in, but I can't see a  
4 patient making a reasonable decision that, no, I  
5 don't want this device.

6           DR. WEISS: Okay. Dr. Sugar.

7           DR. SUGAR: I agree.

8           DR. WEISS: Okay. It looks like the panel  
9 mostly agrees with that. So we'll forgo discussion  
10 of patient information booklet. What about what  
11 should be placed in a physician information  
12 booklet?

13           DR. SUGAR: Is physician information  
14 booklet considered labeling? It is. Okay. I'd  
15 like to--I think that there needs to be specific  
16 data in the physician information booklet on  
17 outcomes. That is the data that we've been asking  
18 for and have gotten in a very mixed way needs to be  
19 solidified in a better way and presented in the  
20 physician information booklet.

21           We need specific information in the  
22 booklet on insertion techniques. I think there  
23 probably should be information on removal  
24 techniques. I think that there should be specific  
25 information on sizes available and recommendations

1 concerning size selection which I suspect there is  
2 no data for, but I think that if you make three  
3 different sizes there must be a reason.

4           And at least present substantiation for  
5 that. I think there should be data on the adverse  
6 events that occurred in the at least core I and  
7 core II.

8           DR. VAN METER: Joel, you left out  
9 specific indications for use which I presume was an  
10 oversight.

11           DR. SUGAR: We listed the specific  
12 indications for use, but we could sub-define that  
13 in the labeling. You know what I'm saying?  
14 Examples include pseudoexfoliation syndrome,  
15 Marfan's syndrome, traumatic, lens subluxation.

16           DR. VAN METER: Okay.

17           DR. WEISS: Dr. Grimmett.

18           DR. GRIMMETT: Mike Grimmett. In the  
19 outcome data, Dr. Sugar, I would be interested in  
20 seeing a better delineation of why 40 percent loss  
21 or worse than 20/40 best corrected visual acuity.  
22 That type of data you're intending to be included  
23 in there as well?

24           DR. WEISS: Dr. Sugar?

25           DR. SUGAR: I agree that there should be

1 data on visual acuity outcomes, and I presume that  
2 the sponsor will want to have an explanation for  
3 why that occurred.

4 DR. VAN METER: That would fall under  
5 complications. I think best corrected acuity worse  
6 than 20/40 might be listed in the complication  
7 section.

8 DR. GRIMMETT: Either way as long as--  
9 Michael Grimmett--either way as long as it makes it  
10 into the physician booklet, so they have a feel for  
11 why a significant percentage of these patients are  
12 below what we would routinely expect with cataract  
13 surgery.

14 DR. WEISS: Maybe we could have you list  
15 what you consider adverse events in terms of I  
16 don't think this sponsor defined vision worse than  
17 20/40 as an adverse event. So it wouldn't have  
18 been considered a complication.

19 So what would you--you mentioned  
20 previously, Joel, uveitis and--

21 DR. SUGAR: Uveitis, cystoid macular  
22 edema. There was one case of phthisis bulbi, and  
23 in previous, if I'm allowed to mention that, the  
24 previous approvals, we have asked--we've had the  
25 sponsor list that they had so many retinal

1 detachments, so many whatevers, and the explanation  
2 for it (not felt to be device related), but I think  
3 that like you see in the PDR where you list all the  
4 adverse events that occurred and the explanation  
5 for them, it makes sense.

6 DR. WEISS: So in this case, you'd be  
7 listing uveitis, CME, phthisis, retinal detachment.

8 DR. SUGAR: There was one BRVO and one  
9 vitreous hemorrhage, and then this means her  
10 specialty. So we should list the glaucoma  
11 outcomes.

12 DR. WEISS: And the aspect of patients who  
13 had worse than 20/40 vision, do you want to--where  
14 would you like to place that? Where would anyone  
15 like to place that?

16 DR. SUGAR: Oh, I think as long as it's in  
17 there, I don't care what section it's under, but--

18 DR. VAN METER: Van Meter. You'd also  
19 want a section on explantation numbers, and  
20 indications for explantation as well as why and how  
21 to do it.

22 DR. WEISS: Dr. Grimmett.

23 DR. GRIMMETT: Mike Grimmett. At least  
24 for refractive surgery lasers, I know that the FDA  
25 has a checklist/guidelines and they define what are

1 adverse events and complications with a  
2 comprehensive list, and I'm not sure. Probably  
3 such a thing exists for intraocular lens grid stuff  
4 as well. So there may be other adverse events that  
5 should be considered. I just don't have that list  
6 in front of me.

7 DR. WEISS: Dr. Sugar.

8 DR. SUGAR: Well, generally in studies, if  
9 a patient dies during the study, that's an adverse  
10 event. We have to tell our IRB. We have to tell  
11 the FDA. And I assume that all of that data should  
12 be compiled in a readily manageable way which we  
13 haven't seen.

14 DR. GRIMMETT: Right.

15 DR. WEISS: Anything else that anyone  
16 would want to propose for putting in physician  
17 booklet? As there is no recommendation for a  
18 patient information booklet, is there any feeling  
19 on whether the patient should receive a card such  
20 as with an IOL? Dr. Bradley?

21 DR. BRADLEY: Just coming back to your  
22 last question whether there's any other information  
23 we think should be included in the physician's  
24 booklet?

25 We have previously this afternoon made a

1 recommendation that the sponsor generate some  
2 additional information that was missing in the  
3 original submission, and there may be pertinent  
4 results that emerge from that analysis that would  
5 be important to include in the physician's  
6 information guide.

7 I just wonder how we deal with that.

8 DR. WEISS: I would be asking Dr.  
9 Rosenthal the same thing. If anything, any  
10 important trends are revealed after the submission  
11 of the additional data that we've requested, would  
12 there be a mechanism that that could be placed in  
13 the physician information book?

14 DR. ROSENTHAL: Absolutely. If additional  
15 analyses are requested and raise issues, they will  
16 be put in the physician information.

17 DR. WEISS: Any other?

18 DR. ROSENTHAL: Excuse me. Even if they  
19 don't raise issues, they will probably be put in  
20 the patient information--the physician information  
21 booklet.

22 DR. WEISS: Any other issues that anyone  
23 wants to raise at the present time on the panel  
24 regarding labeling?

25 DR. MATOBA: Alice Matoba. Again, under

1    contraindications, the first contraindication is  
2    insertion during the first year of life, and I  
3    think--do we go on to that?

4           DR. WEISS:   Yes.

5           DR. MATOBA:   You said labeling?

6           DR. WEISS:   Yeah, that's fine.

7           DR. MATOBA:   Okay.  So now it seems to me  
8    that that somehow implies that after the first year  
9    of life, there is no--that age is not a  
10   contraindication, and I would like some discussion.

11           DR. WEISS:   Do you have an age that you  
12   want to propose that after this it wouldn't be  
13   contraindicated?

14           DR. MATOBA:   I'd like to ask the primary  
15   reviewers what they think of pediatric--

16           DR. VAN METER:  I think that probably  
17   under two or three or four years would be better  
18   than one.  And I guess I can see in some children,  
19   under the right circumstances, if a child had one  
20   or two hours of zonular dehiscence from a  
21   traumatic, from blunt trauma, I can see a real  
22   indication for, you know, trying to put in a  
23   posterior chamber lens rather than an intracap with  
24   a sutured lens or an anterior chamber lens.

25           So I think I would like to leave this up

1 to the surgeon's discretion. Maybe saying it's  
2 contraindicated in the first, you know, seven or  
3 eight years of life, and then after that, surgeon's  
4 discretion.

5 We have no data for this mind you, but--

6 DR. SUGAR: There were nine quote  
7 "adolescents." Is that correct, Roger?

8 DR. VAN METER: Well, they were 12 to 19;  
9 weren't they?

10 MR. WELCH: More than that in the total.  
11 Those were the nine that received the Type--

12 MS. THORNTON: Mr. Welch, would you please  
13 come to the microphone?

14 MR. WELCH: Excuse me. Yes, my apologies.  
15 Hid Welch. There were only nine in the group that  
16 received Type 14 rings.

17 DR. SUGAR: What was their age?

18 MR. WELCH: Beg your pardon?

19 DR. SUGAR: What was their lower age  
20 limit?

21 MR. WELCH: The age?

22 DR. SUGAR: Uh-huh.

23 MR. WELCH: Ran from three years to 16,  
24 17. There was one 17 years old in that. I would  
25 like to add an additional piece of information that

1 is relevant to this subject because of what you  
2 brought up.

3 Morcher is well aware of the distinction  
4 between the child and the adult and has been  
5 working on the development of a ring for that  
6 particular purpose. It is not a part of this  
7 application. This study was specifically limited  
8 to the 18 and over and we tried to limit it to  
9 that.

10 These were special requests made by  
11 individual surgeons for the implantation and that's  
12 how we wound up with this number. So it's never  
13 been submitted as a part of the application.

14 DR. SUGAR: So you're requesting age 18 or  
15 over for this?

16 MR. WELCH: Beg your pardon?

17 DR. SUGAR: You're requesting age 18 and  
18 over for this approval? I didn't understand.

19 MR. WELCH: I still didn't understand.  
20 That would be a separate request.

21 DR. SUGAR: No, I'm aware of that. But in  
22 this proposal everyone was 18 or older except for  
23 this separate group of quote "adolescents." Thank  
24 goodness adolescence doesn't begin at age three.

25 So I don't understand. The data we've

1 reviewed has, I thought, segregated out nine  
2 patients that we didn't get specific listings on.

3 MR. WELCH: The nine patients are not  
4 included in any of the data that you received.

5 DR. SUGAR: Okay. So the data we received  
6 is all people 18 years of age or older?

7 MR. WELCH: Yes.

8 DR. SUGAR: Thank you.

9 DR. WEISS: Okay. Dr. Matoba and then Dr.  
10 Bradley.

11 DR. MATOBA: Then perhaps under  
12 indications, we should put 18 years old and then  
13 eliminate first year of life under  
14 contraindications.

15 DR. WEISS: Yeah. I think there is  
16 consensus on the panel for that. Dr. Bradley, any  
17 additions to that? No. In addition to any other  
18 labeling issues, any other issues on this PMA that  
19 the panel would like to bring up at this point?  
20 Yes, please.

21 MS. SUCH: Glenda Such. I just wanted to  
22 state that the addition of giving the patient a  
23 card--you had brought that up earlier and then we  
24 went back for a moment. I do think that's an  
25 important thing, especially given that we do not--I

1 don't think that a patient necessarily needs to  
2 know what device is being used at this point, with  
3 this type of device.

4           However, I do think, especially given that  
5 we don't have long-term study information on this,  
6 that the patient should be given a card to say what  
7 it is, because we just don't know what's down the  
8 line.

9           DR. WEISS: Okay. Thank you.

10           DR. SMITH: Janine Smith. There are three  
11 other things listed under contraindications that we  
12 haven't discussed. The second one was chronic  
13 uveitis, progressive eye disease, which is very  
14 vague, but then in parentheses (diabetic  
15 retinopathy), uncontrolled glaucoma, and operative  
16 complications.

17           Are there panel members that think that  
18 those contraindications should remain on the label?  
19 Specifically progressive eye disease is very vague.

20           DR. VAN METER: But most of the  
21 complications with this device will come from the  
22 intraocular surgery and the cataract extraction  
23 itself. Given the leeway between whether you put  
24 the device in, you know, other than deciding  
25 whether you're going to put the device in before

1 you do anything, right after the capsulotomy or  
2 right before the lens implant goes in, which is a  
3 pretty wide range of options, I don't see that  
4 those other things necessarily influence.

5 I think the diabetes has nothing to do  
6 with this device. And I think the glaucoma has  
7 nothing--I really don't think the device causes  
8 glaucoma.

9 MS. THORNTON: Dr. Van Meter, please speak  
10 into the microphone. I'm getting reports on you.

11 DR. VAN METER: The contraindications that  
12 are listed in the sponsor's directions for use  
13 specify diabetes, glaucoma, uveitis and progressive  
14 eye disease.

15 And I think the decision whether or not to  
16 use the device is really going to be is cataract  
17 surgery appropriate in light of these other things?  
18 I don't see that the device is necessarily  
19 contraindicated.

20 DR. SMITH: So then you're--Janine Smith--  
21 suggesting that those three statements are  
22 unnecessary in the contraindications, and we  
23 removed age from under contraindication to  
24 indication. So there would be no contraindications  
25 listed.

1 DR. VAN METER: Well, if the sponsor wants  
2 to make those contraindications, that's fine.

3 DR. SMITH: If the sponsor wants to.

4 DR. VAN METER: I'm not suggesting we get  
5 rid of these, but I guess I don't see any reason to  
6 be too concerned about the contraindications to the  
7 device, because I think we're more concerned about  
8 the contraindications to intraocular surgery with  
9 these diseases.

10 DR. SMITH: Right. My only concern--  
11 Janine Smith--would then be a physician who wants  
12 to use it, if this is on the label in the setting  
13 with diabetic retinopathy, which I agree I don't  
14 see any reason why you shouldn't be using it in the  
15 setting of diabetic retinopathy, then there is an  
16 information packet that says you shouldn't be. Do  
17 other people feel that it would be--

18 DR. WEISS: Dr. Ho.

19 DR. HO: Yeah. I think that, you know, I  
20 envision this device if it's approved as a tool for  
21 the cataract surgeons, at least in my practice, for  
22 those patients that have had prior vitrectomy, and  
23 I would like to see that excluded from  
24 contraindication because I think that could put a  
25 surgeon in a very uncomfortable position if he felt

1 that was in the best interest of the patient.

2 DR. SMITH: That's what I was saying.

3 DR. WEISS: So it sounds like there's  
4 consensus among the panel that the  
5 contraindications that were listed by the sponsor  
6 be removed and that the age be listed as originally  
7 proposed by the sponsor of 18 and older.

8 I would ask the panel if they would want  
9 to consider or if there was any consideration of  
10 putting a contraindication there not to be used for  
11 "x" hours or more of zonular dialysis or  
12 dehiscence. For example, if a patient has 11 clock  
13 hours of zonular dehiscence, one might not want to  
14 consider this, or would you prefer to have that put  
15 elsewhere?

16 DR. VAN METER: Van Meter. I'd like to  
17 have that read as sponsor's suggestion that it not  
18 be used for more than four clock hours of support.

19 MR. WELCH: That I'd have to check with  
20 the manufacturer. I'm not clinically qualified to  
21 answer that question.

22 DR. HO: Allen Ho.

23 MR. WELCH: I'm perfectly willing to ask.

24 DR. HO: And I think I should. And  
25 specifically I would ask that if there's any

1 information from those implantations that were  
2 aborted at the time of surgery, those are, you  
3 know, particularly instructive cases. And if  
4 there's data on that, that might be, you could just  
5 present what you have.

6 I don't think you have enough information  
7 to say. My sense is you will not find enough data  
8 to support clock hours, and I would question the  
9 reliability of counting clock hours of instability.  
10 But there needs to be something to the surgeons  
11 with the spirit that, you know, you don't want them  
12 to use this when they think there is a very  
13 unstable bag because it's not going to help you in  
14 that situation.

15 DR. WEISS: Well, Dr. Ho, in that  
16 situation, if a sponsor doesn't have the  
17 information here, then he can give it to us at a  
18 later time. We could put it in one of our  
19 conditions.

20 Mr. Welch, you can sit back again and  
21 thank you for helping us out with those questions.  
22 Are there any other comments from the panel or  
23 concerns, labeling or any other issues?

24 If not, we will then--yes, Dr. Bradley.

25 DR. BRADLEY: Just a general comment to

1 make. Given the amount of time and effort and  
2 undoubtedly money that has been invested in this  
3 product in the attempt to get it to market, it  
4 seems so disappointing that the quality of data  
5 acquisition and the type of data that are acquired  
6 and the presentation format fell so far short of  
7 the normal standards that we would require to  
8 evaluate a product.

9           And it makes me want to recommend to this  
10 sponsor and other sponsors, too, that they look  
11 very carefully at their experimental design, and  
12 also very carefully at the way they present their  
13 data, and I think they can expect a much better  
14 quality evaluation by this panel if those two  
15 things are taken care of.

16           DR. WEISS: We're going to move to the 30  
17 minute open public hearing session.

18           **30-MINUTE OPEN PUBLIC HEARING SESSION**

19           DR. WEISS: If there are any comments or  
20 anyone wants to approach the podium. Hearing no  
21 interest in that portion, we're going to proceed to  
22 the FDA closing comments for five minutes.

23           **FDA CLOSING COMMENTS**

24           DR. WEISS: Does the FDA have any comments  
25 to add at this point? No. Then, we will then

1 proceed to sponsor closing comments for five  
2 minutes before the voting options are read.

3 **SPONSOR CLOSING COMMENTS**

4 DR. WEISS: Dr. Steinert.

5 DR. STEINERT: Thank you very much. I  
6 will attempt to be very brief here. First of all,  
7 I'd like to start out by saying that I think FDA,  
8 the panel, the sponsor, and the investigators all  
9 agree that the study design was imperfect, and  
10 there are many interesting questions that we can't  
11 answer that we would like to have answers to.

12 On behalf of the sponsor, especially I'd  
13 like to extend our profound apologies for the data  
14 inconsistencies and the multiple revisions. You do  
15 deserve better, and that's been loud and clear.  
16 The sponsor has asked me to emphasize that these  
17 mistakes, although they are very frustrating, and I  
18 do apologize, they are unintended.

19 We'd ask you to look past the flaws and  
20 focus on the merits of this device which when all  
21 is said and done is a simple and straightforward  
22 ring of PMMA. And ask yourselves whether our  
23 patients are better served by ongoing lack of  
24 access to the corneal tension ring unlike the rest  
25 of the international ophthalmic community?

1           We do think that the clinical trials, as I  
2 said earlier, do reflect the overall worldwide  
3 positive experience with the ring. And however  
4 flawed, the investigation does provide reasonable  
5 support for conclusion that the capsular tension  
6 ring effectively stabilizes the capsular bag in  
7 cases of weak or partially absent zonules, reducing  
8 the rate of serious complications such as vitreous  
9 loss, dislocation of the nucleus, which to the best  
10 of my knowledge did not happen in one single case  
11 of these very impaired patients, or inability to  
12 implant a PC IOL.

13           Now, I absolutely agree with Dr. Bradley  
14 and Dr. Grimmett and everyone else that this is not  
15 the kind of a study that you feel proud of, this is  
16 not the kind of study that you think is going to,  
17 you know, fill you full of glory and you would be  
18 kicked around at ARVO presenting this kind of  
19 study.

20           There is no question about that. We all  
21 know that the only way to rigorously measure  
22 efficacy in this type of a surgical investigation  
23 in truth would be a controlled, randomized  
24 prospective study, but this is a high standard that  
25 is not typically required by FDA in IDE

1 investigations and not required in advance in this  
2 study.

3           So the best we have is historical data and  
4 clinical experience, and that's what you've been  
5 asked to bring to bear, and I think everyone is  
6 struggling to do that.

7           The centration issue I tried to address in  
8 the initial presentation. I'll just repeat that to  
9 the best of my knowledge, there is no practical  
10 technology to rigorously measure centration, and  
11 for better or worse, centration in IOL studies is  
12 regularly assessed subjectively.

13           I'm a little concerned about the emphasis  
14 on the dilated versus undilated exam, because I can  
15 tell you even if they're dilated, it's a poor  
16 subjective measurement. It isn't that good. It's  
17 the best we have practically speaking, and  
18 certainly the best we have--we can't go back five  
19 years on this. This is the way it was, and in the  
20 future perhaps we could set up some very exotic  
21 technical way of testing this, but in the real  
22 world, that's pretty tough.

23           I don't believe that we've seen any  
24 significant safety concerns that could be  
25 reasonably attributed to the ring. And that is in

1 part because we all know that these are patients  
2 with high risk pre-op pathology.

3 With specific response to this issue of  
4 best corrective visual acuity less than 20/40, I  
5 was distressed at the presentation that based on  
6 data submitted coming up with different numbers  
7 than I presented because, you know, although as I  
8 said, I picked this up very late in the game, I  
9 still feel responsibility for what I say.

10 And over lunch, we went back over that,  
11 and of course we don't have all of the data base  
12 here so I can't tell you for sure, but the sponsor  
13 and his agent--well, the sponsor's agent has  
14 assured me that the data that I presented did come  
15 from the raw tabulations and is accurate, and so I  
16 just summarized it again here.

17 Our numbers are 12 out of 66 of Phase I  
18 core, and 26 out of 157 Phase II core, and 32 out  
19 of 109 independent for 18, 17, 29 percent are the  
20 best correcteds under 20/40.

21 Now Joel Sugar and others pointed out some  
22 of the problems in the reporting. If you look at  
23 the tabulations and you look at the diagnoses,  
24 they're all over the place. There are two or three  
25 that I'll lump under posterior capsular opacity.

1 There are a couple that are all under macular  
2 degeneration.

3 That came about because the post-op data  
4 report forms didn't force people into categories.

5 It was a blank item and people just wrote  
6 down whatever word came into their head. So you  
7 know we had epiretinal membrane. We had macular  
8 hole. We had traumatic maculopathy. We had  
9 unspecified maculopathy, and this is unfortunately  
10 the way the data came in.

11 And so those have all been--in the data  
12 that I've presented to you was lumped into  
13 reasonable clinical categories as best I could make  
14 them out, and that's what I presented to you.

15 So I think these are the accurate numbers,  
16 but certainly this all should be resolved. But  
17 this certainly regardless of the exact number, I  
18 don't believe there's any indication that there was  
19 loss of best corrected visual acuity due to an  
20 effect of the capsule tension ring.

21 The other point that I think has to be  
22 kept in mind is that there is no approved alternate  
23 device or technique and the issue of scleral  
24 fixation come up, but you have to remember, there  
25 is no IOL approved for transcleral suture fixation.

1           That to the best of my knowledge is an off  
2 label use by surgeons. And what we're looking for  
3 here is an approved method of reducing the rate of  
4 complications. And that's who we've come up with  
5 this single indication and, you know, wordsmithing,  
6 I believe the sponsor is very open to any  
7 suggestions.

8           This is not--there's no resistance to  
9 positive suggestions at all, but to try to  
10 encapsulate it, so to speak. I think what we're  
11 talking about is stabilization of the lens capsule  
12 to assist cataract surgery in the presence of weak  
13 or absent zonules or relaxed capsule.

14           I think that's the beginning and the end  
15 of what we're asking for today. And we thank you  
16 very much for your forbearance and your  
17 consideration.

18           DR. WEISS: Thank you, Dr. Steinert. At  
19 this point, I would ask a motion to be made from  
20 the floor concerning this PMA. Dr. Sugar.

21           DR. SUGAR: I'd like to recommend that PMA  
22 No. P010059 be considered approvable with  
23 conditions for stabilization of the crystalline  
24 lens capsule in the presence of weak or partially  
25 absent zonules. The conditions we'll then discuss

1 afterwards.

2 DR. VAN METER: Second.

3 DR. WEISS: So we have a motion on the  
4 floor for conditional approval of PMA P010059. And  
5 Sallie will read the voting options.

6 **Voting Options Read**

7 MS. THORNTON: Just in case you're  
8 interested. The Medical Device Amendments of the  
9 Federal Food, Drug and Cosmetic Act, as amended by  
10 the Safe Medical Devices act of 1990, allows the  
11 Food and Drug Administration to obtain a  
12 recommendation from an expert advisory panel on  
13 designated medical device pre-market approval  
14 applications, or PMAs, that are filed with the  
15 agency.

16 The PMA must stand on its own merits and  
17 your recommendation must be supported by safety and  
18 effectiveness data in the application or by  
19 applicable publicly available information.

20 Safety is defined in the act as reasonable  
21 assurance, based on valid scientific evidence, that  
22 the probable benefits to health under conditions  
23 and on intended use outweigh any probable risks.

24 Effectiveness is defined as reasonable  
25 assurance that in a significant portion of the

1 population, the use of the device for its intended  
2 uses and conditions of use when labeled will  
3 provide clinically significant results.

4 Your recommendation options for the vote  
5 are as follows:

6 Approval if there are no conditions  
7 attached.

8 Approvable with conditions. The panel may  
9 recommend that the PMA be found approvable subject  
10 to specified conditions such as physician or  
11 patient education, labeling changes or a further  
12 analysis of existing data. Prior to voting, all of  
13 the conditions should be discussed by the panel.

14 Not approvable. The panel may recommend  
15 that the PMA is not approvable if the data do not  
16 provide a reasonable assurance that the device is  
17 safe or if a reasonable assurance has not been  
18 given that the device is effective under conditions  
19 of use prescribed, recommended or suggested in the  
20 proposed labeling.

21 Following the voting, the chair will ask  
22 each panel member to present a brief statement  
23 outlining the reasons for their vote.

24 Thank you, Jayne.

25 DR. WEISS: Thank you, Sallie. Dr. Sugar.

## 1 PANEL RECOMMENDATIONS TAKEN BY VOTE

2 DR. SUGAR: Can I restate my motion? I'm  
3 changing. I'd like to recommend that the PMA, the  
4 number we've already stated, be considered  
5 approvable with conditions for stabilization of the  
6 crystalline lens capsule in the presence of weak or  
7 partially absent zonules in patients age 18 years  
8 or older.

9 DR. WEISS: Do we have a second?

10 DR. VAN METER: Second.

11 DR. WEISS: At this point, I would suggest  
12 that we now make a motion to introduce each  
13 separate condition, go on to second that, and  
14 discuss those motions one by one, and vote on them.

15 DR. VAN METER: Do we have a list of those  
16 already?

17 DR. WEISS: We do have a list. The first  
18 thing that perhaps we can bring up is the physician  
19 information book unless there's--Joel--labeling  
20 issues.

21 DR. SUGAR: Okay. We also need data  
22 presented to--what I would like to see as a  
23 condition that data be presented to physician  
24 members of the panel, not just the agency, with  
25 listing of line item data on patients, all patients

1 in Core I and Core II, including patients with  
2 glaucoma, uveitis, whatever other complications we  
3 listed, also specifically all patients who have had  
4 acuities 20/40 or better preoperatively, and all  
5 patients who had worse than 20/40 vision post-  
6 operatively.

7 DR. WEISS: Is there any second of that?

8 DR. SMITH: Second.

9 DR. WEISS: Any discussion, vote? Does  
10 everyone agree? If you agree, raise your hand.

11 [Show of hands.]

12 DR. WEISS: Okay.

13 DR. ROSENTHAL: This is Rosenthal. Could  
14 I just ask you to read the first part of that  
15 motion?

16 DR. SUGAR: Sure. I can't read it because  
17 I didn't write it.

18 DR. WEISS: Dr. Grimmatt is scribing for  
19 us.

20 DR. GRIMMETT: As I scribed, Mike  
21 Grimmatt. Dr. Sugar asked for data presented to  
22 some physician panel members, perhaps as a homework  
23 assignment--is that what you intended?

24 DR. SUGAR: That was my intent, yes.

25 DR. ROSENTHAL: Thank you very much.

1 That's satisfactory.

2 DR. SUGAR: Okay.

3 DR. WEISS: So that motion passes.

4 MS. THORNTON: I'm sorry. I've been  
5 informed that you need to say your vote for this  
6 rather than a show of hands. Is that correct,  
7 Nancy? Okay.

8 DR. WEISS: So then I'll start with--we're  
9 referring to the motion--

10 DR. ROSENTHAL: Wait.

11 DR. SUGAR: For each labeling condition,  
12 we have to--

13 DR. ROSENTHAL: This is Rosenthal. I  
14 don't think we have to do it for each condition; do  
15 we? We generally just have a show of hands, but--  
16 otherwise, it could take us three hours to go  
17 through this.

18 MS. THORNTON: May we use a show of hands  
19 for each condition, and we'll poll the panel with  
20 the final vote.

21 DR. ROSENTHAL: Final recommendation.

22 MS. THORNTON: Okay.

23 DR. WEISS: Condition number one has been  
24 agreed to by the panel. Are there any other  
25 conditions that any members want to propose? Dr.

1 Sugar?

2 DR. SUGAR: I'd like to ask Dr. Grimmett  
3 to review what we've already listed as physician  
4 information booklet and labeling.

5 DR. GRIMMETT: This is Mike Grimmett.  
6 Jayne Weiss was scribing a lot of the things we  
7 discussed.

8 DR. WEISS: The other things that you had  
9 listed previously, Joel, were in addition to line  
10 item on pre and post-op acuity, better and worse  
11 than 20/40, also all complications including  
12 iritis, CME, retinal detachment, branch vein  
13 occlusion, phthisis, all patients who had broken  
14 eyelets, all lenses removed or all of these devices  
15 that were removed, what types of lenses that were  
16 placed--plate, IOL, acrylic or other types--an  
17 intraoperative estimation of the zonular integrity,  
18 an evaluation of a lens dislocation done post-  
19 operative in a dilated exam, the number of patients  
20 who were high myops and whether dilated exams were  
21 performed, and also information about the different  
22 sizes of the rings used and data to suggest to the  
23 physician the use of the sizes.

24 DR. SUGAR: That was the labeling stuff.  
25 The other was data acquisition.

1 DR. WEISS: Those were what I had listed  
2 when you were making your review of the line item  
3 information that you wanted.

4 DR. SUGAR: So we're talking about that  
5 for physician information now?

6 DR. WEISS: No, we haven't moved on to  
7 physician information. This was just the line  
8 item.

9 DR. SUGAR: Okay. This is specifics.  
10 Okay. So it should be complications and adverse  
11 events.

12 DR. WEISS: Okay. Dr. Matoba and then Dr.  
13 Bradley.

14 DR. MATOBA: Are we still on the line item  
15 because I wanted to add the intraoperative estimate  
16 of the number of intact zonules.

17 DR. WEISS: Yes, we're still on the line  
18 item.

19 DR. SUGAR: That's already on the list.

20 DR. WEISS: I think we should be doing  
21 this item by item because this is getting a bit  
22 confusing and unwieldy here. So why don't we have  
23 a motion for each item you want to have included,  
24 and we'll have that motion seconded and voted on,  
25 and we'll move on.

1           So from what I understand, Dr. Matoba, can  
2 you introduce the item about the lens zonular  
3 integrity that you would like?

4           DR. MATOBA: Information for each patient  
5 in the intraoperative estimate by the surgeon of  
6 the number of quadrants intact on zonules.

7           DR. McMAHON: Second.

8           DR. WEISS: Can I have a vote on this  
9 item? All in favor raise their hands?

10           [Show of hands.]

11           DR. WEISS: So this item passes. I would  
12 suggest that of the items that you ask me to  
13 repeat, Joel, any of those items that any of the  
14 panel members want included, they should make a  
15 separate motion to include those items before we  
16 get on to the physician information booklet.

17           DR. BRADLEY: Jayne, you have the list  
18 there. Can you just go through them one at a time?

19           DR. WEISS: We had information, further  
20 information--this was also as a suggestion for the  
21 physician information booklet--as far as the  
22 specific complications. A number of those  
23 complications, including uveitis, CME, phthisis,  
24 retinal detachment, branch retinal vein occlusion,  
25 vitreous hemorrhage and glaucoma.

1           That's already--Dr. Grimmett informs me  
2 that that's already in the motion that Dr. Sugar  
3 has already made and passed. Okay.

4           Information about number of broken  
5 eyelets.

6           DR. GRIMMETT: Mike Grimmett. That's in  
7 Joel Sugar's under adverse events. Wants to know  
8 all adverse events related to each patient. That's  
9 in there.

10          DR. WEISS: Okay. Information--Jayne  
11 Weiss again--information about the types of  
12 intraocular lenses used.

13          DR. GRIMMETT: That's not in there yet.  
14 That's new.

15          DR. VAN METER: I would move that we  
16 include information on the types of intraocular  
17 lenses implanted with the ring in our data  
18 acquisition.

19          DR. SUGAR: Second.

20          DR. WEISS: And that is seconded by Dr.  
21 Sugar. Can we have a vote? Signify by raising  
22 your hands.

23                 [Show of hands.]

24          DR. WEISS: This motion passes. The  
25 intraoperative estimation of zonular integrity was

1 already voted on and passed.

2 Evaluation of lens position or dislocation  
3 done on postoperative dilated exam. That was  
4 another suggestion by Dr. Sugar. If someone would  
5 like to include that, a motion can be made.

6 DR. VAN METER: I move that we gather data  
7 on postoperative dilated lens decentration.

8 DR. WEISS: Is it seconded?

9 DR. MATOBA: Second.

10 DR. WEISS: Seconded by Dr. Matoba. Can  
11 we have a hands vote? Dr. Bradley. We have a  
12 discussion before we have a vote.

13 DR. BRADLEY: There seem to be two things  
14 there. One is to report how many of the  
15 evaluations that already have been collected with  
16 dilation, and Dr. Van Meter is suggesting that I  
17 think an additional dilated--

18 DR. VAN METER: Well, no, we want  
19 information on lens decentration based on a dilated  
20 exam. We don't know if that information exists or  
21 not. If it does not exist, then we would request  
22 the sponsor try to get that information on those  
23 patients that have already had the device  
24 implanted.

25 DR. WEISS: Any further discussion as to

1 whether if this information is not in the present  
2 data collection whether it should now be required  
3 by any of the panel members? Dr. Bradley.

4 DR. BRADLEY: Again, discussion on this  
5 particular topic. Let's imagine we collect all  
6 those data and it turns out, you know, in 75  
7 percent of the eyes, the lens was decentered by 1-  
8 1/2 millimeters. What do we do at that point? I'm  
9 not quite sure what we're going to do with these  
10 data. I mean we're concerned about centration, of  
11 course, but then what?

12 DR. VAN METER: The truth of the matter is  
13 that data collection and analysis is really pretty  
14 separate from our approving this device anyway,  
15 because it's not being approved very much on the  
16 data that's presented.

17 What data we have is helpful. So if  
18 you're saying is that going to adversely, you know,  
19 affect our judgment of this, probably not.

20 DR. BRADLEY: Yeah. I'm thinking of the  
21 burden on the sponsor in this case. I think if  
22 they look at the data they have already collected  
23 and find out what dilations are there, but for them  
24 to go out and collect more data when I'm not quite  
25 sure what we're going to do with that data--

1 DR. VAN METER: Okay. Well, this is Van  
2 Meter speaking. I am very concerned about the long  
3 term stability of this device in an eye that has  
4 zonular instability because I think there's a good  
5 chance that this device if put in an eye with four  
6 clock hours of zonular absence isn't going to  
7 eventually dislocate.

8 Now, it might be six years. It might be  
9 eight years. It might not dislocate. We don't  
10 know.

11 DR. WEISS: Jayne Weiss here. Therein  
12 lies the problem. What's going to be your final  
13 endpoint? How many years are you going to require?

14 DR. VAN METER: Well, do you have any  
15 other idea on how we can answer this question? Or  
16 do we just ignore the question?

17 DR. WEISS: Dr. Bradley.

18 DR. BRADLEY: It just seems to me that if  
19 they already have data on this, and if we can look  
20 at their data, and if there is some indication of a  
21 potentially deleterious lens decentration  
22 phenomenon that's happening with this device, then  
23 we should be able to see that in the data perhaps  
24 they've already collected.

25 DR. VAN METER: I don't think you'd see it

1 in two years.

2 DR. WEISS: Well, the question is how  
3 long would you--you're basically I think talking  
4 about post-market surveillance.

5 DR. VAN METER: Well, there's two things.  
6 One issue is post-market surveillance. At least  
7 the initial 75 patients.

8 Another question is, you know, a dilated  
9 examination on everybody that's had the device  
10 implanted, and I think that if it looks like  
11 there's progressive decentration in everyone that's  
12 had the device implanted or if the percentage of  
13 patients that have a decentered lens appears to go  
14 up, then I think we have more justification for  
15 post-market surveillance than we already have.

16 DR. WEISS: Well, I think the post-market  
17 surveillance, as you mentioned, would be a separate  
18 issue and a separate motion. But the motion as it  
19 stands--would you be able to repeat that motion for  
20 us, Dr. Grimmett, the motion that we're about to  
21 vote on and then it went into discussion?

22 DR. GRIMMETT: Sure. Excluding post-  
23 market surveillance issues, the motion is line item  
24 data evaluating lens centration for postoperative  
25 dilated exams in patients that already exist, not

1 mandating post-market surveillance.

2 DR. WEISS: I think we probably could vote  
3 on that as it stands and then go on to decisions  
4 whether you need any other or you want any other  
5 further information required from the sponsor.

6 DR. VAN METER: Yeah, again, I would like  
7 to ask Ralph if you think this is reasonable  
8 because if it's really not going to make any  
9 difference--we're really working on this device  
10 with anecdotal bits of data anyway, and one of the  
11 few places where we think this device is  
12 efficacious is being able to implant a posterior  
13 chamber lens and help maintain the centration of  
14 that lens that's implanted.

15 But we don't have data that the device  
16 maintains lens centration. Because I personally  
17 don't think an undilated examination is  
18 particularly meaningful if you're trying to look at  
19 lens decentration. I mean anybody who has done  
20 cataract surgery can look at a three millimeter  
21 pupil and you don't know where the lens is.

22 DR. ROSENTHAL: Well, if you don't think  
23 it's of value, why do you propose that it be done?

24 DR. VAN METER: I think you need to dilate  
25 the patients to look at them.

1 DR. ROSENTHAL: But if the assessment--

2 DR. VAN METER: We don't know if these  
3 patients have been dilated.

4 DR. ROSENTHAL: I don't know why I'm  
5 playing devil's advocate. I mean the panelists  
6 should make the decision what they feel will give  
7 them the information they require.

8 DR. WEISS: Dr. Bradley.

9 DR. BRADLEY: Yeah, again, I'm struck  
10 really with Dr. Steinert's comments earlier, we  
11 have no quantitative way to evaluate lens  
12 centration in any rigorous way. And I'm left  
13 wondering again about so we find that the lens  
14 decenters by a millimeter and a half, what does  
15 that mean? And from my perspective, it means  
16 probably there will be some off axis, off  
17 aberrations with resulting minor loss of visual  
18 function.

19 So the manifestation of this problem would  
20 appear in the visual function test, and I think in  
21 this study, high contrast visual acuity, but the  
22 actual noting lens decentration per se, I'm not  
23 really sure what--would that change any evaluation  
24 we had? Would we say yea or nay dependent upon the  
25 magnitude of lens decentration? That's what I'm

1 missing.

2 DR. VAN METER: Well, I guess my personal  
3 opinion is that lens decentration data in an  
4 undilated pupil is not reliable.

5 DR. BRADLEY: And I concur. That's true.  
6 So you go ahead and collect the--

7 DR. VAN METER: All we're asking for is a  
8 dilated exam.

9 DR. BRADLEY: If it is reliable, what does  
10 it mean?

11 DR. VAN METER: This whole issue would not  
12 come up if we knew whether or not these patients  
13 were dilated, Mr. Welch. If we knew whether or not  
14 these patients were dilated for their examination,  
15 this issue would not come up.

16 But it's been proposed that we don't know  
17 --

18 DR. WEISS: And Mr. Welch, there's no  
19 dialogue that actually goes on at this stage of the  
20 proceedings.

21 DR. VAN METER: We don't know whether  
22 these patients are dilated or not, and I'm just  
23 saying that a post-operative evaluation of lens  
24 decentration in an undilated pupil is worthless.

25 DR. WEISS: Dr. McMahon.

1 DR. McMAHON: Yes. Tim McMahon. Before  
2 carrying it further forward, and even the sponsor  
3 has indicated that the ability of the clinicians to  
4 measure this to any degree of certainty under any  
5 conditions is not very good, and my problem has  
6 been from the very beginning is that we have a  
7 primary efficacy outcome that is not measurable,  
8 and so I would actually like to propose that they  
9 come back with something that measures efficacy.

10 DR. WEISS: Well, we need to stay on this  
11 present motion, and we can vote on this present  
12 motion, and we can have different opinions on this  
13 present motion. That's allowable under the format.

14 So I would suggest that we vote on the  
15 present motion since there seems to be a bit of a  
16 difference of opinion and then go on from there,  
17 and I would ask Dr. Grimmatt again to repeat the  
18 motion and then we can proceed.

19 DR. GRIMMETT: The current motion is to  
20 evaluate--we need line item data to evaluate lens  
21 centration on existing patients with postoperative  
22 dilated exams.

23 DR. WEISS: Everyone--Dr. Van Meter.

24 DR. VAN METER: One postoperative dilated  
25 exam in a patient would be better than nothing. It

1 would be nice to have serial postoperative exams,  
2 but if it is determined that a patient has had no  
3 postoperative dilated exams, which would seem  
4 unlikely in most cataract practices, since the  
5 Academy states that one of the guidelines is a  
6 postoperative dilated exam, but that information  
7 does not appear to be here.

8           And all we want is the sponsor does not  
9 have information on a postoperative dilated exam,  
10 it would be nice to have one, even if it's three  
11 years out.

12           DR. WEISS: So you would like to amend the  
13 motion and say that if the data is not present,  
14 then that should be incumbent upon the sponsor to  
15 get the data?

16           DR. VAN METER: Yes.

17           DR. WEISS: The motion was originally  
18 presented by--

19           DR. VAN METER: Well, would you read the  
20 motion again, Mike?

21           DR. GRIMMETT: So we're not going to  
22 separate it? We're going to--

23           DR. WEISS: Well, I would like to ask the  
24 mover of the initial motion if they agree with that  
25 amendment? And I want to determine who the mover

1 of this initial motion is. Is anyone taking credit  
2 for this initial motion?

3 DR. BRADLEY: I think it should be  
4 separate votes.

5 DR. SMITH: Janine Smith. This was a  
6 condition under the original motion.

7 DR. WEISS: For this, each of these is a  
8 separate motion. There's a main motion. These are  
9 separate motions, and we can amend the separate  
10 motion if the mover of the separate motion agrees  
11 to it, and who proposed this separate motion?

12 DR. GRIMMETT: I'll take credit. Mike  
13 Grimmatt. I made the initial motion.

14 DR. WEISS: Thank you, Mike.

15 DR. GRIMMETT: To obtain dilated exam  
16 information regarding lens centration. I do not  
17 accept the post-market surveillance issue on this  
18 original motion.

19 DR. WEISS: Fine. So then in that case,  
20 what I would propose is that we vote on the motion  
21 as it stands before the committee, which is  
22 basically the data on those patients who have  
23 already had dilated exams as far as their  
24 centration goes, and perhaps why don't you just  
25 restate the motion again, and then we can vote on

1 it.

2 DR. GRIMMETT: Have the sponsor submit  
3 data regarding lens centration line item data  
4 regarding postoperative dilated exams.

5 DR. WEISS: Fine.

6 DR. GRIMMETT: If it exists.

7 DR. WEISS: And everyone in favor of this  
8 motion raise their hand, please.

9 [Show of hands.]

10 DR. WEISS: It's a tie. So in that case,  
11 I vote, and I vote for it. So it's not a tie  
12 anymore. So that motion is passed.

13 Any other? We'll move on from that. We  
14 can go on to an additional motion if you want,  
15 Woody, concerning the dilated exams, or we can just  
16 proceed through the couple of other items. Why  
17 don't we just proceed through the couple of other  
18 items on the list and then we can go back to the  
19 issue of post-market surveillance.

20 Another issue that was introduced by Dr.  
21 Sugar was information on lenses removed primarily  
22 or secondarily. Do I have that stated correctly,  
23 Allen? I don't know if you meant--I'm sorry--Joel,  
24 sorry. I'm in Detroit obviously. My brain is in  
25 Ann Arbor.

1 DR. SUGAR: It was devices, not lenses.

2 DR. WEISS: Okay.

3 DR. GRIMMETT: Explants. We have  
4 explants. We already have explants in the original  
5 motion regarding adverse events.

6 DR. WEISS: Okay. So then we don't need  
7 that. Post-market arena surveillance. That was  
8 another issue. Did anyone want to make a motion  
9 concerning?

10 DR. VAN METER: I would like to move that  
11 we request post-market surveillance on patients in  
12 all three cohorts that have had the device  
13 implanted for five years.

14 DR. WEISS: Does anyone second that  
15 motion?

16 DR. CASEY: I second.

17 DR. WEISS: Dr. Casey seconds that motion.  
18 Any discussion on that motion?

19 DR. VAN METER: My reason for making the  
20 motion is my fear that the device even while  
21 stabilizing the lens capsule or diaphragm may  
22 ultimately lead to--does not alter progression of  
23 zonular instability, and conceivably in cases of  
24 three to four clock hours of zonular absence might  
25 exacerbate or speed up additional zonular

1 dehiscence.

2 DR. WEISS: Dr. Bradley.

3 DR. BRADLEY: Just to clarify, I think if  
4 the device doesn't impede the development of  
5 zonular breakdown, whatever the mechanism is, that  
6 seems acceptable, because they're not suggesting  
7 that this is sort of a cure for zonular disease.  
8 This is just a tool by which one can implant the  
9 IOL.

10 DR. VAN METER: Well, here's the reason  
11 because if you don't use this device, then you're  
12 conceivably doing a pars plana lensectomy or an  
13 intracaps and putting in another lens which would be  
14 sutured or implanted in the anterior chamber, and  
15 would not have the risk of, you know, dislocation  
16 of this lens into the back of the eye. So the  
17 alternative surgery obviates the complication.

18 DR. WEISS: Dr. Rosenthal.

19 DR. ROSENTHAL: The issue of post-market  
20 surveillance on the entire group might be  
21 considered overburdensome on the sponsor  
22 particularly when the original core group, the core  
23 I group, was the group that was really the core  
24 group, and that the additional groups were added on  
25 because of the enormous demand for the lens by the