

1 I think the answer to that would be not necessarily,
2 no. I mean these just could be something that make
3 people look better, and you can speak to that in a
4 minute, Rebecca, but if someone does claim an
5 improved health outcome, I think that has to be
6 substantiated because we do hear a lot of this, as
7 you know, batted around about improvement in diabetes
8 or whatever, as a result of decrease, and that
9 information, if people are going to make any kind of
10 a claim or if those claims are going to be out there,
11 then those really have to be substantiated. So when
12 you ask specifically what specific measures of
13 clinical improvement, well it will depend on what the
14 patient is claiming? Does it lessen back pain or is
15 it improving their blood glucose level, whatever that
16 clinical outcome that seems to be improved might be,
17 and there are some and then I think it has to be
18 substantiated rigorously.

19 DR. ANDERSON: Well, I would agree with
20 that with regard to making a claim for improved
21 health for just a little bit of body fat. However, I
22 do know that a lot of times when people have
23 liposuction or they have some body contouring
24 procedure and they feel like they look a little
25 better, that jump starts their dietary changes and

1 some exercise changes. So I would agree that it is a
2 possibility that that might happen but I also agree
3 with you. If somebody's going to make those claims,
4 they need to be substantiated. They need to be
5 measured and substantiated. And then we come up with
6 the problem of how we're going to do that. The SF-12
7 and the SF-36, they're possible. They're outcome
8 measures that are widely used by NIH and I think also
9 from FDA but then again that becomes a very
10 cumbersome process for both FDA to review and for the
11 sponsor to deal with and for the patient to take. So
12 I would take that claim off the table I think. I
13 think it makes it easier if you just take that claim
14 away. But perhaps that's not my decision.

15 But with respect to satisfaction as an
16 outcome point only, I think that there needs to be
17 some measure of effectiveness from an actual change
18 in contour, and I don't think we can use satisfaction
19 alone. However, if we decide to use satisfaction
20 alone, I think that we have to validate an instrument
21 to do it.

22 DR. LoCICERO: Other comments? Dr. Burke.

23 DR. BURKE: I just think that every
24 instrument that makes a claim should substantiate the
25 claim with quantitative, scientific data and not

1 totally subjective, and should obviously state the
2 safety limits but I think within that, so I think
3 that it is important to substantiate the claim just
4 to prevent consumer fraud.

5 DR. LoCICERO: So just to be clear, when
6 you say instrument, you mean a device --

7 DR. BURKE: A device, yes.

8 DR. LoCICERO: -- not the instrument as an
9 instrument of measurement.

10 DR. BURKE: Exactly, a device that is used
11 clinically. And I think I agree with Dr. McGrath
12 that we don't have to -- I mean I don't think that
13 they should make claims as to clinical improvement
14 unless it's absolutely certain and proven, and then
15 this device is a kind of different category of
16 device. It may then become a medical device rather
17 than something just used for aestheticians and non-
18 medical professionals.

19 DR. LoCICERO: So let me just be clear.
20 It's the consensus of the Panel or the thought that
21 these should not be forced to prove that it improves
22 health, but that if they make that claim, they better
23 prove it. Is that the sense?

24 DR. BURKE: Yes.

25 DR. LoCICERO: Okay. So I think we can

1 answer this question now. We have really talked a
2 lot, Mr. Melkerson, about the idea of validated
3 evaluation scales and that this may be something that
4 needs to something that needs to be developed with
5 the sponsor and the FDA using what tools are
6 currently available but being specific for the area
7 and that if there is going to be a clinical benefit,
8 improved health outcome, that that would be a claim
9 that the sponsor would bring forward and that they
10 would have to prove that claim in order to achieve
11 that as an indication. Does this satisfy the FDA?

12 MR. MELKERSON: Yes, with a little
13 clarification, to make sure when we're saying health
14 benefit, it could also be a functional benefit.
15 Potentially that would also fall under that category
16 of meeting evidence.

17 DR. LoCICERO: Yes. And Dr. McGrath
18 mentioned that specifically, like improvement in back
19 pain as an example, and that would have to be
20 something proven.

21 MR. FELTEN: The third question, again for
22 device that are intended for aesthetic, temporary
23 change in appearance, should the treatment be so well
24 understood that the user can preset the amount of
25 change that will occur? For example, if the device

1 is intended for eyebrow lift, should the amount of
2 lift to be achieved be controlled and predictable
3 before initiation of the treatment?

4 DR. LoCICERO: We're going to start with
5 Dr. Li because he's been going around this issue for
6 a while now.

7 DR. LI: The way this is worded is a little
8 tricky for me. It seems like there should be some
9 control over what it is that you're trying to do, and
10 if it's something quantifiable, like the amount of an
11 eyebrow lift, there should be some. I guess the
12 patient satisfaction -- I guess why I'm going around
13 in a circle is if the patient is unsatisfied after
14 the treatment, for effectiveness, that really is kind
15 of an endpoint to me. So it certainly seems that if
16 it's going to be a viable, commercial procedure, that
17 there should be some verifiable, noticeable change to
18 the patient. So I'm struggling really with how this
19 question is worded.

20 DR. LoCICERO: Let's be ridiculous. If
21 Deforest Kelley, a/k/a Bones in Star Trek, were able
22 to show a picture of the after and press a button and
23 get the result, maybe that would be the most
24 ludicrous at this point.

25 DR. LI: And your question is would that be

1 required of a device?

2 DR. LoCICERO: Right.

3 DR. LI: Well, I think that would be an
4 excellent device. I think that would be a great
5 model for a device. Now, whether or not it would be
6 required I guess would be a secondary question.

7 DR. LoCICERO: Why don't you think about
8 that.

9 DR. LI: Yeah, let me think about that.
10 I'm not quite exactly sure how Bones would answer
11 that question.

12 DR. LoCICERO: Mr. Melkerson.

13 MR. MELKERSON: Maybe to help with this
14 question, I think the intent was, should there be
15 some quantifiable and I think we've heard the Panel
16 mention that there should not only be patient
17 satisfaction but something that's quantifiable. The
18 ability to predict I think is the fantasy, yes, if
19 you could do that, that would probably put everybody
20 else out of business but the issue that we were after
21 is should there be some kind of quantifiable
22 measurement associated with these types of devices,
23 not just a patient satisfaction or whatever.

24 DR. LoCICERO: So these devices are going
25 to be -- they're incremental in terms of how they're

1 applied. So are you also asking about if you just
2 press the button, you're get a predictable effect for
3 each time it's fired or used?

4 MR. MELKERSON: That is also one of the
5 embedded questions. I'll defer to Richard on that
6 one.

7 MR. FELTEN: Yeah, I think what we're
8 trying to get through here is, an example I was
9 thinking about is more the lasers that are approved
10 for LASIK where you preset the amount of cornea
11 removal and you get what is there, whereas with these
12 devices in many cases, you know you can predict
13 pretty much histologically how much of the tissue
14 you'll get a lesion in but that doesn't necessarily
15 always come out to the same amount of tightening
16 let's say if you're doing let's say wrinkles or
17 something. And the question we're having for these
18 devices which are now into this body contouring or
19 eyebrow lift, you know, are we saying the physician
20 should be able to tell the patient before they even
21 begin the treatment, how much change they're going to
22 get from this particular amount of treatment or again
23 should this be, you know, this biology, and it's
24 going to vary between patients but there is a minimum
25 amount that we would require to allow the device to

1 go to market, let's say, but should they also be able
2 to tell the patient how much they're going to see
3 which is sort of a different question I think.

4 DR. LoCICERO: So LASIK is really sort of
5 set it and forget it, and they sort of said that this
6 may not be possible here. Mr. Halpin.

7 MR. HALPIN: Yeah, I think this is a very
8 different situation on LASIK where you actually
9 couldn't do it from a technique point of view. You
10 have to have a computer help you do it. This is the
11 opposite where you're using the expertise of the user
12 to actually achieve some sort of cosmetic change
13 which is individualized for a particular patient and
14 can't be standardized across the board. So I would
15 actually say you don't want to do this because you
16 would almost defeat the purpose of having a tool that
17 physicians can use to help patients get whatever it
18 is their cosmetic appearance would want to be.

19 DR. LoCICERO: Dr. Newburger.

20 DR. NEWBURGER: There are an awful lot of
21 variables in the patient's health that are going to
22 impact what the outcome of the treatment is, what
23 their tissue response is, whether there are
24 underlying diseases and what their medications are.
25 With that said, I think that there should be a

1 guideline where the physician could say 50 percent of
2 individuals who have this treatment can achieve a 2
3 millimeter brow lift. There should be something
4 quantifiable that is clinically significant and
5 relevant. A 1 millimeter change is not going to be
6 clinically significant, and the exposure to risk
7 certainly, you know, wouldn't be warranted in that
8 situation. So there should be some guideline that
9 shows that in a definite proportion of individuals,
10 you will achieve an outcome which will be at least
11 equal to the following.

12 DR. LoCICERO: Dr. Anderson, did you want
13 to make a comment?

14 DR. ANDERSON: Well, I think this
15 instrument is going to be in the hands of non-
16 physicians, and what they're going to depend on is
17 the programming of the device. I think that perhaps
18 what you said about meeting minimal FDA standards for
19 change is about all we can really hope to get without
20 some extensive measurement that may not be worth it
21 for these devices.

22 DR. LoCICERO: Dr. Burke.

23 DR. BURKE: I was going to echo what
24 Dr. Newburger said, that I think that if every
25 patient could be told the percentage of chance that

1 it works, in other words, is it a 50 percent chance
2 or a 90 percent chance of some quantifiable data, but
3 I think also part of the predictability and control
4 is that it not overreact so that you don't have some
5 patients per chance come out with a startled look for
6 days or weeks. So I think that within this control
7 and predictability is the safety issue of not over
8 exaggeration or whatever the device does.

9 DR. LoCICERO: Additional comments?

10 (No response.)

11 MR. FELTEN: Can I just ask Dr. Newburger,
12 for clarification, would you then be saying that we
13 should be considering the idea that the operators
14 manual information sheet should maybe contain
15 something like a summary of the data from the
16 clinical studies, that the user would actually have
17 an idea of what was actually generated in the
18 clinical study as a way of giving them that option of
19 saying we know this many people got this amount of
20 effect. Would that be --

21 DR. NEWBURGER: I think that's fine at
22 least for those operators who read the instruction
23 manuals.

24 DR. BURKE: May I just make one other
25 comment, that I think that the operators may or may

1 not -- they certainly will read the manual but they
2 may not assimilate everything but also I think that
3 maybe with these devices, there should be a kind of
4 mandatory handout to every patient so that at least
5 the patient has the opportunity to read the
6 qualifications that we're discussing now.

7 DR. LoCICERO: So we're dancing around one
8 issue here that I think we need to get out, and that
9 is -- well, two issues, and that is training and
10 qualifications. And we need to kind of have a broad
11 discussion about the operators of these devices and
12 what we feel would be appropriate in terms of
13 guidance for the FDA when they are talking with
14 sponsors, and training again as a general issue in
15 terms of these devices. Comments? Mr. Halpin.

16 MR. HALPIN: I think from an industry
17 perspective, it's in the best interest of
18 manufacturers to have operators who are actually
19 appropriately trained and qualified to use the
20 product to get correct results. So I think that's
21 probably a very good idea and probably would help
22 manufacturers meet their design control requirements.

23 DR. LoCICERO: Other comments? Yes,
24 Dr. Anderson.

25 DR. ANDERSON: Yes, I feel very strongly

1 about training, and I agree with you. I think it's
2 in the sponsor's best interest to avoid problems down
3 the road by having these procedures done by people
4 who are inadequately trained. And I think, you know,
5 someone who knows how to operate a machine may not
6 know how the skin works or how anatomy works, and I
7 think it's very important that they have the
8 necessary training.

9 DR. LoCICERO: Mr. Rue, what would a
10 consumer feel comfortable with in terms of a woman
11 walks in for a procedure and asks, are you qualified
12 to do this? What information would be appropriate to
13 provide to that consumer?

14 MS. RUE: Well, first of all, I think
15 initially consumers need to have available to know
16 what questions to ask, and then when they go to the
17 facility, they should be able to ask for appropriate
18 documentation as provided by the device manufacturers
19 as well as their training people, to show that they
20 have completed and recently, not something that they
21 have done 10 years ago and may not have any update
22 on. But the first part of it is getting them
23 educated in what they need to ask.

24 DR. LoCICERO: Okay. Dr. McGrath.

25 DR. McGRATH: I think one thing that's

1 becoming clearer certainly to the professional
2 organizations is that the question of training, not
3 for people in training, but for people who are in
4 practice, is a complex issue because there's the
5 piece of imparting information about the device but
6 then there's also training that involves hands-on
7 experience with it but then probably equally
8 important is if there's some process of verification,
9 that the person has as you said, assimilated some of
10 this information. So I guess this question is for
11 Mr. Halpin. What's going on with industry now
12 because we know that many devices have the attachment
13 that there has to be training of an individual, and
14 what's happening in industry in terms of their
15 recognition that there are these pieces to education
16 or training and where is that moving and what's going
17 to happen when this goes way from training and
18 education the physician to someone who is not a
19 health professional?

20 MR. HALPIN: I think that the requirements
21 are going to vary dramatically depending on what the
22 product is. So it's hard for me to, you know, be
23 very specific because if you have something which
24 simply removes hair from your arm versus something
25 which is lifting eyebrows, those are very different

1 things I would imagine in terms of your training and
2 qualifications.

3 So I would think that this has to be done
4 on a product-by-product basis or product category by
5 product category basis and should be part of the
6 approval process for the product and essentially part
7 of the labeling if you will that, you know, a certain
8 qualification is required to use this product and
9 some of these may be over-the-counter products, some
10 of them may require healthcare professional use and
11 those are probably going to be very different
12 products I think if you're talking about an over-the-
13 counter product, that the requirements are going to
14 be very different for that in terms of their
15 investments in the product and the ability for people
16 to use it on themselves or use it in a setting where
17 they're not a healthcare professional.

18 But I think it's going to be very product
19 specific, and I'm not sure if I answered your
20 question or not.

21 DR. McGRATH: I think you addressed the
22 part about the qualifications but not so much about
23 the training.

24 MR. HALPIN: So I think if you -- each
25 manufacturer may have a different opinion about this,

1 and it may be that we might have some manufacturers
2 who would volunteer to talk about some of their
3 training programs that they currently have in place,
4 but I know that different manufacturers will have
5 training programs for new customers, particularly if
6 there's a piece of capital equipment where they're
7 actually bringing equipment in, installing it and
8 then training people on how to use it. So I don't
9 know if that answers your question or not.

10 DR. McGRATH: Well, I guess for the FDA
11 then the question is are you starting to draw, what's
12 the word, kind of limits or levels on training for
13 different devices or is the word training just
14 remaining kind of generic term left up to the
15 manufacturers. I mean where are we with this
16 understanding of verifying if people have actually
17 acquired the ostensible skill to use these things?

18 MR. MELKERSON: In general, the issue of
19 training is not something that -- we can ask that
20 they be properly trained or properly credentialed,
21 but in terms of requiring a particular training, we
22 usually ask the manufacturers to commit to a training
23 and then identify what that training should be. So
24 it's not currently a regulatory enforcement tool
25 especially under the 510(k) process.

1 DR. LoCICERO: So another way to look at
2 this question is that we know that there's going to
3 be some predictable amount of change but it's sort of
4 like getting into your car and stepping on the
5 accelerator. The car moves but you don't have to
6 know anything about the engine under the hood.

7 So in this case, though, should the
8 operator of the device know what's under the hood and
9 know the predictable change when they press the
10 pedal?

11 DR. BURKE: They should certainly know the
12 change when they press the pedal.

13 DR. LoCICERO: Okay.

14 DR. OLDING: I think it depends upon the
15 variability and predictability of the result and also
16 the possibility for complication rate as to how you
17 answer that. So the more predictable, then the less
18 they have to know.

19 DR. LoCICERO: Dr. Anderson.

20 DR. ANDERSON: I would agree with that
21 because I've come out already as a proponent of
22 training but I think it's a device by device. I
23 would agree with Mr. Halpin. It's a device-by-device
24 issue probably.

25 DR. LoCICERO: Okay. I'm getting the sense

1 that we feel that there should be some predictable
2 amount. It should be something that the sponsor
3 should be able to impart to the user and that the
4 user needs to understand the device before stepping
5 on the pedal. Does that answer your questions,
6 Mr. Melkerson?

7 MR. MELKERSON: I believe you have
8 addressed it, thank you.

9 MR. FELTEN: What recommendations would you
10 make regarding the Agency's review of those aesthetic
11 devices that present minimal risk and appear to have
12 little or minimal tissue effect for indications such
13 as body contouring or reduction in tank thickness or
14 improvement in skin appearance? And I think we've
15 already been talking about this.

16 DR. LoCICERO: We've been talking about it
17 but before we go any further, do you mean something
18 -- would snake oil fit in this?

19 MR. FELTEN: I guess maybe what we're
20 talking about, snake oil or it's not a device. Well,
21 if you make a claim, it might be.

22 DR. LoCICERO: You could.

23 MR. FELTEN: I think what we're trying,
24 maybe try to distinguish between our things that we
25 know definitely are causing tissue effects. Back to

1 the discussion of what it means by low -- I guess, to
2 some of the LED type devices that are at least being
3 sold in Nordstrom and places like that right now that
4 are apparently not doing any direct tissue effect
5 that we see that is obvious, like, you know, creating
6 lesions from the ultrasound damage to cells and so
7 on. But those devices also are making medical claims
8 and if we have to review them, how do we go about
9 doing that I guess is what we're asking for. So we
10 are trying to make that distinction between those
11 devices that very clearly we can see a tissue effect,
12 we can see histological change versus the LED type,
13 light sources, that are being promoted for improving
14 the appearance of the face or clearer skin or
15 changing pore size and things like that.

16 DR. LoCICERO: So our dermatologist on the
17 Panel, I'm sure, have a lot of experience with
18 phototherapy, and so I'd like to ask them each to
19 make some comments. Dr. Newburger, why don't we
20 start with you.

21 DR. NEWBURGER: Oh, no, don't start with
22 me.

23 DR. LoCICERO: All right. We'll save you
24 for last. Dr. Walker.

25 DR. WALKER: Actually the use of the low

1 level light sources even when they were first
2 introduced were in my opinion, it wasn't clear what
3 the histology was, what the endpoint was in terms of
4 really reproducible effects, and I think that's
5 probably still true for these over-the-counter. It's
6 kind of the truth is in the eye of the beholder, and
7 I am not certain that there was enough science at
8 least initially, or available now, to actually
9 support the claim of more youthful appearance.
10 However, in the person's own view of their, you know,
11 global, aesthetic improvement, if they feel that is
12 true, it's somewhat of a snake oil effect but it's
13 hard to disprove --

14 DR. LoCICERO: Dr. Burke.

15 DR. WALKER: -- or approve.

16 DR. BURKE: Well, I mean if we think of you
17 UV salons, they're absolutely dangerous, and there
18 are deaths because people don't ask what medications
19 the patient's on that might make them photosensitive,
20 and they can get total body burns that are lethal.
21 The settings may not be as carefully regulated.
22 Sometimes these are the things that we as
23 dermatologist see and eye protection and again
24 medications can very much affect this.

25 So let alone the fact that the UV itself is

1 dangerous and hurts the immune system of the skin and
2 the appearance of the skin in the long run. So in
3 that sense, these devices are incredibly dangerous.
4 So we just have to have precautions so other future
5 devices don't reproduce those dangers. So I think
6 that every device should have some quantifiable proof
7 that it works and definite safety limitations, and
8 the device should have built into it, we should be
9 assured that it cannot be used unsafely. I mean the
10 woman that dried her cat in the microwave clearly.
11 So the precautions that must be very clearly stated
12 and I would think that the FDA should recommend that
13 everything should define temporary with real time and
14 define some percentage of possible efficacy that 20
15 percent of people this works on or 80 percent,
16 whatever. And I think they should be kind of
17 recommending those requirements.

18 DR. LoCICERO: Okay. So in this case,
19 we're talking about the 20 percent and below group.
20 Dr. Newburger.

21 DR. NEWBURGER: My experience is I've never
22 seen anyone achieve benefit from these low level
23 light sources whatsoever except psychologically, and
24 I think them with one major exception basically as
25 fulfilling one of the claims that are used in

1 cosmetics. In other words, the mind claim which is
2 it makes me feel better, and that certainly is
3 acceptable by CFSAN, but I don't think that that
4 fulfills our criteria here. The so-called data that
5 I've seen on several of these devices is -- it's
6 certainly challenging for me to see any difference.
7 If I can't see the difference between the before and
8 answer, I don't think there is a difference.

9 My concern is I've not seen any evidence
10 truly how these devices work on the cellular level,
11 and it took us many years to see the impact of
12 ultraviolet light treatments on the skin, and that's
13 when they were controlled, that is to say
14 administered by a physician. It certainly was the
15 standard of care when I was a blemished teenager. So
16 I'm concerned that many years later, we're going to
17 find that there is some type of long-term impact, and
18 that concerns me greatly. And as far as I'm
19 concerned, unless some meaningful benefit is shown, I
20 don't think they should be on the market.

21 DR. LoCICERO: Dr. Li.

22 DR. LI: One thing that kind of strikes me
23 here, I think it really does a disservice to the
24 public to call, I mean we kind of make fun of these
25 things where you pass blinking lights over the people

1 hoping that it will cause some change, and those are
2 probably, you know, costly but don't harm the
3 patient. But there's a whole host of these things
4 that cause cellular damage to some level, and I
5 think, you know, either like a tanning bed for
6 instance, I mean there's cellular effects going on
7 there, and under a certain set of conditions, you
8 know, you could really do the patient some harm.

9 So I think the mindset that these are
10 essentially harmless devices that, you know, that
11 really don't require a lot of attention or care I
12 think is a serious mistake because I think really the
13 dividing line should be is there a cellular effect by
14 the device or not, you know, and if the answer is no,
15 there's absolutely no cellular effect, then it falls
16 into the category of perhaps that Dr. Newburger
17 mentioned of a more psychological advantage because
18 there's nothing going on cellularly. So I don't
19 actually know what else could possibly go on there,
20 but then in the other category where there are
21 cellular effects, I actually don't think you could
22 ever really drop your guard on this and, you know, I
23 think to do so, I mean we've got example after
24 example where we end up in trouble on that.

25 DR. LoCICERO: I think we're pretty uniform

1 at this point, Mr. Melkerson, that if it's a device
2 that makes a change, that it needs to be proven, it
3 needs to be shown and there needs to be some science
4 in evaluating it and that regardless of how minimal
5 we think it is, there may be issues and safety
6 remains a concern. Does this answer the FDA's
7 question?

8 MR. MELKERSON: Thank you for your input.

9 MR. FELTEN: And the last question is do
10 you have any recommendations regarding the Agency's
11 review of durability of effect for these devices
12 intended for aesthetic indications?

13 DR. LOCICERO: Can we begin again with
14 Dr. Li? You actually made some interesting
15 statements in our discussion yesterday concerning
16 timing and evaluation of effect.

17 DR. LI: Well, especially in this
18 particular context I think where we start off the
19 session with kind of a long laundry list of different
20 devices with different mechanisms of action, and then
21 we also heard by the presenting physicians that there
22 were different time periods at which a maximum effect
23 was observed. So clearly there's a time constant
24 that's in these treatments that as far as I would
25 guess is completely different for each treatment,

1 both in terms of the initial efficacy and then the
2 way of remodeling that goes on and the type of
3 remodeling that goes on.

4 So it's a little tough to figure out what
5 the durability recommendations would be for me anyway
6 given the lack of information in all these
7 categories. So I don't really know how to come up
8 with a global suggestion here given all the different
9 mechanisms and devices and the amount of tissue that
10 you're going to use it on. I'm kind of at a loss of
11 how you could come up with a universal guideline on
12 this.

13 DR. LoCICERO: Dr. Burke.

14 DR. BURKE: Well, again I just think every
15 individual device should define the time they expect
16 the treatment to be efficacious. So if it's a device
17 that gives a temporary improvement, define the term
18 temporary very specifically.

19 DR. LoCICERO: Dr. Olding.

20 DR. OLDING: I agree with that for those
21 products that are indicating that they have a
22 temporary. Absolutely, it has to be precisely
23 defined. For those permanent ones like the ones that
24 were presented today, where there's a histologic
25 change, then I think that the duration of action at

1 the histological level has to be defined.

2 Now, I can't determine how long those
3 changes will occur, but I think they have to be
4 documented until they return to a stable -- whatever
5 that is. If it's scar tissue, then that scar tissue
6 was stable and not changing. For clinicians, we
7 often say we will not reoperate on someone for nine
8 months or a year because there's obviously collagen
9 reformation occurring during that year.

10 So I would strongly encourage following
11 again those changes either out to two a year or until
12 there's demonstrable stability in the change that has
13 occurred.

14 DR. LoCICERO: Part of this embedded in
15 here is the evaluation. So histology is certainly
16 one solid way to do that. We've talked about
17 cellular issues, and one that has come up before and
18 I'd like some additional discussion about is MR.
19 Magnetic resonance can spin the molecules and we can
20 choose the molecules to spin. And that gives us a
21 deeper look and, in fact, we can focus this with
22 appropriate coils to look at a variety of structures,
23 maybe even small parts. In some interesting detail,
24 in my own field, MR now can spin oxygen. They can
25 spin helium. Now, they can spin xenon, and we can

1 actually now look at lung structure. We can talk
2 about transfer of oxygen across membranes. We can
3 see a lot of detail that was unavailable to us
4 before. We can look at regional perfusion issues
5 that we've not been able to see. So the technology
6 is advancing pretty rapidly to do some of this. So
7 is this the kind of thing, non-invasive approach to
8 evaluation of cellular and molecular biology that
9 might be useful particularly in terms of durability.

10 DR. LoCICERO: Dr. McGrath.

11 DR. McGRATH: Well, I would certainly, you
12 know, respond in the affirmative that I think this
13 is, it may be more expensive, but one thing I wanted
14 to go back to is we kind of dismissed biopsies as
15 problematic in, you know, for aesthetic applications
16 but, you know, I think we're forgetting that the
17 technology of biopsy like all, you know,
18 transcutaneous things has come a long way and you
19 don't need to excise a piece of tissue. There are
20 all kinds of instruments for fine needle aspiration,
21 for core biopsies from a distance and so forth, that
22 if people can go in and take a core biopsy of the
23 lungs safely, we certainly should be able to get
24 under the skin without leaving a scar and take out
25 some fat or whatever to look at that tissue.

1 So I think it's become in this day and age
2 kind of spurious to say that you can't do biopsies in
3 the aesthetic setting. I think we're past that.

4 DR. LoCICERO: Additional comments? Maybe
5 Mr. Halpin.

6 MR. HALPIN: I think that there may be many
7 ways for manufacturers to demonstrate the mechanism
8 of action from a histological point of view. Biopsy
9 certainly is one option. MRI is another option. I
10 think some of these products maybe used in other
11 areas and may have no mechanisms of action. So I
12 think rather than unilaterally deciding one method is
13 the preferred method. I think allowing manufacturers
14 the opportunity to demonstrate that to the FDA from
15 whatever scientific information they have may be a
16 good approach.

17 DR. LoCICERO: Dr. Walker, you had
18 mentioned in an earlier discussion about the real
19 world and evaluating some of these patients. In the
20 real world, do you feel that biopsy or MR would be
21 other technologies that require return of patient
22 either for some period of time or pain. Is it
23 something that the real world will allow?

24 DR. WALKER: Actually, I was only focusing
25 that as an idea towards any kind of clinical study of

1 the device prior to its FDA approval. Not after the
2 fact. I mean there is a possibility in a postmarket
3 study perhaps. I too agree that doing biopsies is
4 not completely unwarranted. However, it seems in the
5 situation where you're looking at fat reduction, that
6 would be difficult where a MRI might be more feasible
7 at least in a clinical study setting.

8 In the real world, that's difficulty I
9 think. I really think the additional cost, at least
10 for the MRI or the concern about end result scarring
11 in an aesthetic patient would be somewhat of a
12 distraction. Not to say that it's impossible.
13 Yesterday we were discussing fillers and I think
14 there are places that some of these products could be
15 placed that at least in a clinical study they could
16 be biopsied at a reasonable timeframe after the fact,
17 in a setting that can be randomized to look at the
18 tissue or histology at 3 months, 6 months, 12 months,
19 but perhaps off the face if that was the case.

20 With these devices that we're discussing
21 today, I do think the practical matter is that it's
22 far more difficult. I'm not exactly sure I would
23 resolve that in the real world. So that's why I
24 mentioned it.

25 DR. LoCICERO: Good. Ms. Rue, in terms of

1 the consumer, if the consumer was told you can get
2 this new treatment but you're going to have to come
3 back in six months and have a biopsy or some other
4 thing, the only way you're going to get the treatment
5 is to commit to this additional evaluation.

6 MS. RUE: Well, I think if you're talking
7 about in clinical studies and premarket evaluation,
8 that's one thing, but not once it's approved, out on
9 the market and is given by a variety of providers,
10 no, they're not going to come back because they're
11 done with it, they're on with their life. The
12 clinical studies is a different thing.

13 DR. LoCICERO: Dr. Anderson.

14 DR. ANDERSON: I would just like to say one
15 thing about the temporary products. As a
16 satisfaction outcome, if we're going to ask them how
17 satisfied they are and we expect the product to last
18 for six months, in the clinical studies we need to
19 take that into consideration because we're going to
20 see a bell-shaped curve in their response. So I
21 would suggest adding a question such as would you
22 have this procedure done again because that's more of
23 a constant question.

24 DR. LoCICERO: Other comments?
25 Dr. Newburger.

1 DR. NEWBURGER: And with the temporary
2 treatment, if there is the opportunity to have the
3 treatment again, the pre-clearance data should show
4 the effect of multiple treatments, and I think that
5 there may be a need to separate the duration of
6 observation for durability and effect versus the
7 safety issues. It may be that the safety has to be
8 looked at for a long period than efficacy.

9 DR. LoCICERO: Mr. Halpin.

10 MR. HALPIN: The only thing I wanted to add
11 was that from a mechanism of action point of view, it
12 may be possible in a preclinical or feasibility
13 setting actually demonstrate robustly what the
14 mechanism of the action is rather than trying to put
15 that off to a pivotal clinical trial scenario where
16 you're exposing larger numbers of patients to that
17 activity.

18 DR. LoCICERO: Mr. Melkerson, I think we've
19 provided a fair amount of discussion concerning this
20 issue particularly for the temporary effect devices,
21 and that there should be some evaluation for the FDA
22 to see from the sponsor.

23 We struggle with the issue of the permanent
24 devices and when the evaluation should take place.
25 It's going to be least burdensome to sponsor and the

1 consumer and really can't come to a great conclusion
2 about that. There may be some endpoint that's close
3 in surveillance beyond that point.

4 Does this satisfy the FDA on this question?

5 MR. MELKERSON: Yes, thank you very much.

6 DR. LoCICERO: At this time, I'd like to
7 thank all the members of the Panel, including
8 Dr. Bigby who was here yesterday, for their time and
9 effort and their participation. It's always
10 encouraging to me and a lot of fun and satisfaction
11 to come here for, you know.

12 MR. MELKERSON: I would also like to thank
13 the Panel for their efforts, also the staffs for
14 putting the presentations together, but as you've
15 gone through your deliberations yesterday and today,
16 you now have exercised the issues that we wrestle
17 with every day. So thanks for sharing your
18 expertise.

19 DR. LoCICERO: Thank you, Mr. Melkerson.
20 We also want to thank the public speakers and those
21 who provided written commentary to us. It was very
22 helpful in focusing our discussion today.

23 Again, thank all of you for being here.
24 This concludes the General and Plastic Surgical
25 Devices meeting, and as we adjourn, there is going to

1 be another session in this room shortly. So please
2 gather your stuff and clear the room and have your
3 discussions outside. Thank you very much.

4 (Whereupon, at 11:28 a.m., the meeting was
5 concluded.)

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C E R T I F I C A T E

This is to certify that the attached proceedings
in the matter of:

GENERAL AND PLASTIC SURGERY DEVICES PANEL

November 19, 2008

Gaithersburg, Maryland

were held as herein appears, and that this is the
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