

AETNA CORPORATE-LEVEL APPEAL COMMITTEE CONFERENCE CALL

Friday, November 13, 2009

10:15 a.m. EST

Regarding the case of Miranda and Hyperbaric Oxygen Treatment (HBOT) in the treatment of Static Encephalopathy

Present on call (approximately 16 people including):

MRS. JENNIFER , *parent*

MR. DAN , *parent*

DR. PAUL G. HARCH, *advocate for parent appeal*

DR. JIM CROSS, *Aetna National Medical Director/Policy Chief, Vice Chair of Committee*

DR. LONNIE REISMAN, *Aetna's Chief Medical Officer*

DR. ROBERT MCDONOUGH, *Aetna Medical Director of the Coverage Policy Unit*

MR. WILLIAM KRAMER, *Aetna attorney*

NINE SENIOR AETNA PHYSICIANS, *unidentified*

AETNA LEGAL REPRESENTATION, *names/quantity unidentified*

DR. CROSS: Good morning.

MRS. : Good morning. Hi. This is Jennifer . And here's my husband, Dan .

MR. : Hi.

DR. CROSS: Good morning. My name is Dr. Jim Cross. I'm the Vice Chair of the Corporate Appeals Committee.

MRS. : Hi.

DR. CROSS: All of the physicians are on and we're just waiting for Dr. Harch.

MRS. : Okay.

DR. HARCH: I'm on.

DR. CROSS: Hi, Dr. Harch.

DR. HARCH: Hi.

DR. CROSS: My name is Dr. Jim Cross. I'm the Vice Chair of this Corporate Appeals Committee. On the phone is Lonnie Riesman, the Chief Medical Officer as well as nine other senior physicians in the company who will be hearing this case.

We've had the case presented to us, but the way this works is: Dr. Harch if you want to present anything, that's fine. If the family wants to say anything, that's also fine. We'll have a dialogue with each other. You can ask us questions. We can ask you questions. After we've had the conversation then we'll ask you guys to hang up and then the rest of us will reconvene and decide the case today and let you know what the result is.

So, I don't know, Dr. Harch do you want to start?

DR. HARCH: Well, okay.

MR. : If I could— This is Mr. . I just want to take a minute or two to frame the debate.

Looking at the forms that were given to the consultants, really the only question that was asked is "Is HBOT experimental?" which has not been our question all along. It's been one of our frustrations that Aetna's been answering questions we're not asking.

The crux of our argument has been, quoting from Aetna's own Clinical Policy 172, and I quote, "Hyperbaric Oxygen Therapy can increase the production and function of mitochondria and improve neurotransmitter abnormalities." Again, quoting, "HBOT has been shown to mobilize stem cells from the bone marrow to the systemic circulation. Recent studies in humans have shown that stem cells can enter the brain and form new neurons, astrocytes and microglia." Now, that's Aetna talking, not us.

Aetna also says separately it will cover experimental or investigational treatment if, quote, "The treatment is effective for that disease or shows promise for being effective for that disease." Now that's separate from anything we've presented specific to Miranda.

Now when you take what we've submitted in regard to Miranda, which I would argue is substantial, obviously Aetna's position is that it's not enough. The question we've been asking is: What else does Aetna need to connect the dots? And that's why we've asked Dr. Harch to be here because he's an expert on Hyperbaric Oxygen. And we thought that any additional questions Aetna may have, Dr. Harch would

probably be able to answer better than us. So, Dr. Harch, I turn it over to you.

DR. HARCH: Well, thank you. I was actually going to make the same point. And to also start out by asking just a simple question. Two questions, actually. Number one: Is there a transcript of this hearing or will there be?

DR. CROSS: Uh, no.

DR. HARCH: No. Okay. Secondly, what is the level of proof that you rely on for making this decision? If we take— Or, I should say, beyond this experimental and investigational category, is it the legal definition of ‘more probable than not’?

DR. CROSS: No, our coverage and our contract language is really that we exclude investigational or experimental treatments. And that our definition and how we determine whether something is experimental or whether it’s proven or not is on the basis of peer-reviewed literature. And so you’ll see that outside consultants that we obtain for opinions reference the fact that— what the status of the peer-reviewed literature is in regards to Hyperbaric Oxygen for this type of condition. So—

DR. HARCH: I understand that. But that’s not what I was asking. I mean, the FDA— Your definitions and the specific points you list there are very clear. But there’s also this additional clause that Mr. [redacted] has stated which I was going to address. And I’m asking, what is the standard of proof that is going to be the basis for adjudicating this based on that separate category? Is it going to be ‘more probable than not,’ which is the legal standard?

DR. CROSS: Uh— Do you want to comment, Bill?

MR. KRAMER: Excuse me. This is Bill Kramer. I’m a lawyer for Aetna. You’re asking as it relates to the – the most – the ‘most promising’ line which— Is that your question, doctor?

DR. HARCH: Yes. Exactly.

MR. KRAMER: The ‘more probable than not’ is not necessarily the standard. We’re actually bound to interpret the language as written in the Summary Plan Description for the employer. So in this case, really, we’re looking at the plain language of the document not necessarily a legal standard.

DR. HARCH: Well, in every legal, medical interface I have had in the past 29 years of practicing medicine has been is it 'more probable than not' that there is medical proof in one direction or another. And that's all I'm asking is, if that is what we are going to go by?

MR. KRAMER: Well, I think— I mean— I'm not going to, sort of , get into the details of the standards but— Yes, in this circumstance we're going to take all the facts and circumstances to make a decision as to whether or not we think that this particular treatment is promising in the context of the overall SPD [Summary Plan Description] and the circumstances faced by the **[UNINTEL]**.

DR. HARCH: Okay. Well, then if we address your language in the appeal information that I was sent, and the opinions of your experts by the way you have defined experimental and investigational, I cannot argue with the "not approved by the U.S. Food and Drug Administration to be lawfully marketed for the proposed use." As far as the other statues in there, or the additional part of that statement, I don't have a copy of the American Hospital Formulary Service or the American Pharmaceutical peer dispensing information, so I can't discuss that. So, I mean, this indication is not an FDA-approved indication and so, in that regard, I cannot argue your point on investigational or experimental.

The actual statements and arguments that your expert reviewers have given, however, are subject to a lot of question, in fact. And we can go into that but I don't know if it's necessary at this point because what I'd like to more focus on is this second category that Mr. identified which is "showing promise" for this condition. And I have to start out by discussing what Hyperbaric Oxygen Therapy is.

I don't know if you have anybody on your committee who is expert in this, but if you review the applications that are traditionally reimbursed in the United States and all of the applications that are used internationally—for example, in Russia, China, Japan, the Far East, etcetera—Hyperbaric Oxygen is the use of greater than atmospheric pressure oxygen as a drug to treat basic disease processes and hence the disease that contain them. If you look at these lists, what Hyperbaric Oxygen has been shown to be is a 'generic drug' for treatment of acute and chronic wounding, among other pathological states.

And there is debate in all this material about what Miranda's true diagnosis is. But they are all experts there who have given her a variety of neurological diagnoses. And probably the most prominent one is static encephalopathy, which is a neurological condition which is—under the best circumstances—not expected to make any improvement over time. And, in fact, the signature diagnosis that falls in this category of static encephalopathy or the genre of static encephalopathies is cerebral palsy.

And if you look at the gross motor functional measures—studies that have been done out of Canada tracking children over ten, even fifteen years—it is shown that children proceed along a specific trajectory by their age. And it's a set trajectory, such that you can pick a child at any point in their lifetime, by age, look at their gross motor functional measures and put them on a track that is well, well-defined. Static encephalopathy, that Miranda has, is exactly consistent with that. And that's what the experts have also said, that she is not expected to improve.

And what we have here, in her case, is a class [UNINTEL] A-B-A case proof or design. Which is well known in scientific studies and design methodology—the A-B-A design. But in fact what's been done here was not just A-B-A it was A-B-A-B-A-B-A. She has had at least three—I believe it was three or four—excuse me, four sessions of Hyperbaric Oxygen Therapy during which she made substantial and remarkable neurological and cognitive improvements. And in between the therapy, i.e., withdrawal of it, she was static once again.

So the proof for the effectiveness of this therapy in Miranda's case is unquestionable, beyond doubt and she—if you look at the statements by pediatricians and others—she has actually gained developmental delay ground. From her first developmental assessment, I believe she was over 50% delayed with respect to her chronological age. And at the last assessment she was, I believe, 4-6 months delayed on a 32-month chronological time. Which is, what, one eighth or 12% to approximately 18% delayed. So she has made up ground. That does not happen in static encephalopathy.

And so what we have here is a case that is consistent with all of the medical literature on the application of Hyperbaric Oxygen in a chronic wounding state and is also consistent with all the

applications that have been shown in chronic brain injury. And, of course, interestingly, in the literature here, the one key study that's been left out and is the basis for the Undersea and Hyperbaric Medical Society decision-making on new indications—which one of your experts put in there—is animal literature consistent with human experience or as a foundation for it.

After doing this in both experimental studies and clinically for the past 19 years but approximately 15, in 2007—or 17 years, excuse me—in 2007 we published in *Brain Research*, which is a top medical journal, what is now the only proof of improvement of chronic brain injury in animals in the history science. And what it was, was the original [UNINTEL] protocol we used. And what we were able to show was that we could improve cognitive function and blood vessel density in rats with a chronic traumatic brain injury. This is entirely consistent with what is going on in Miranda ' case and in the countless other cases including the CP study and others that have now been documented.

So, to sum this up, she does not meet the standard—or I should say, she would have to be classified under your category of experimental and investigational the way you have defined it. However, I think she clearly exceeds any and all expectations and proof for this separate exclusion category showing promise in her treatment. And the final part of this is, we can ask if this has been cost-effective. This child, now, on a long-term basis is likely not going to incur any further charges from Aetna for continued rehabilitation beyond possibly some additional Hyperbaric Oxygen Therapy. Which, if we take on a lifetime of a child with static encephalopathy, is a huge, huge cost benefit. Not to mention to Medicaid and others as this child eventually goes through the school system. So that is my statement and I'm happy to respond to anything.

DR. CROSS: Does anybody on the panel have any questions for Dr. Harch or the ' ?

[LONG PAUSE]

Rob, you had a question?

DR. MCDONOUGH: Yeah, I'm just asking also: Can you comment on the randomized trials?

DR. HARCH: There are not a lot of randomized trials. Let me back up. There are no randomized trials in the category of static encephalopathy. There is a large, or a sizable randomized trial in cerebral palsy. And what that trial showed— Unfortunately, they made an error in the design of that in that they studied two different doses of Hyperbaric Medicine, one with a fifty percent increase in oxygenization which was errantly a control group misidentified as placebo. And [UNINTEL] corrected that in a final publication. And [UNINTEL] got 1.75 atmospheres of Hyperbaric Oxygen, which was a little more than the traditional dose used for this. And what they found was both groups had significant and durable improvements in gross motor function and cognition, which has never been shown or demonstrated for any therapy in cerebral palsy, except for dorsal rhizotomy.

DR. MCDONOUGH: Thank you.

DR. RIESEN: Sir, this is Dr. Riesen. I'm just wondering why there isn't more activity and more research being done in the field. It just seems as though, if in fact the progress exists, there'd be a lot more enthusiasm. I'm trying to understand why—my sense is that, that doesn't seem to exist.

DR. HARCH: Well, if you can give me a copy—er, your address—I'll mail you a copy of the book I wrote on this called *The Oxygen Revolution*.

First of all, there is an awful lot of research going on right now. A ton of basic science. And any review of the literature on PubMed will show the escalation and number of studies in just the last ten years.

But I have a randomized study that is funded and planned for this coming year. There's a large one based on my work that is going to be done by the Department of Defense. And there are others that are underway. There's one on cerebral palsy at Wright-Patterson Air Force Base and Dayton Children's Hospital in Ohio. And there's some others that are going on. Some internationally as well.

The problem with Hyperbaric Medicine has been one of misunderstanding and misrepresentation that goes back 360 years to its first use in 1662. But the point of it is, is I was told in medical school—and I went to Johns Hopkins Medical School—in my junior year, in no uncertain terms, that this was a fraudulent therapy, devoid of science, charlatanism, snake oil

salesman and had been thoroughly disproven scientifically. Until six years later when I found myself in a diving medicine group and reviewing the literature found that animal and human studies were showing you could grow new blood vessels with Hyperbaric Oxygen. Now that is a solid, scientific fact that has never been refuted.

And what happened—and it was partly with the literature on multiple sclerosis—but it's also due to the fact that we are reversing essentially a hundred years of neurology, which its foundation precept has taught us and what I learned in medical school is there is nothing you can do for a brain injury. [Time - ?] historical evolution, etcetera, has to take place. And so we have a therapy that has been discredited for a variety of different reasons, primarily the lack of knowledge of the science of it, and as a result it has not been funded.

In addition, it is not patentable or protectable, so the only place to get funding for this is traditionally through the National Institutes of Health. And with this foundation of misrepresentation as non-science, it has been exceedingly difficult. Just witness— I'm the one who has probably done the most work in this, and in 2004 the NIH scored our application for this very poorly despite the evidence we were putting in front of them. In 2007, I did the same thing with a congressionally-directed medical research program for treatment of traumatic brain injury in PTSD in our U.S.—our Iraq and Afghanistan war veterans. Identical thing happened.

But the following cycle, there it was: Hyperbaric Oxygen as one of the targeted therapies for study. And now there are a variety of them that are being funded. So, long story short, this had a history of misunderstanding, a fraudulent discrediting and lack of knowledge of the science.

And I'll end this with—my explanation—with what has now been shown. If you go back to what I said about generation of new blood vessel growth, the input of repetitive stimulation of intermittent hyperoxia and the output of tissue growth, no one has identified—or I should say, investigated—what the intervening steps are. To get a tropism, you have to go through the DNA. And now molecular biochemical techniques have caught up with the clinical science and in the last 15 years it—well, beginning in '95 but the real work was in '97/'98—there has been a series of articles—solid, solid scientific articles, probably over 20 now—demonstrating that the target in both

acute and chronic wounding, but the primary target is the DNA. And what is being shown is that mRNA and DNA gene product—primarily coding for growth and repair hormones and the receptors that receive those hormones—are the target of Hyperbaric Oxygen Therapy and now explain the tissue growth that has resulted.

So this field is burgeoning right now. And it's going to continue to do so.

DR. MCDONOUGH: Also, just one more question. This is Bob McDonough again. The HRQ report on Hyperbaric Oxygen Therapy.

DR. HARCH: Yes.

DR. MCDONOUGH: Just a comment on that.

DR. HARCH: Sure. I was a peer reviewer and consultant for that. In fact, I was the one who stimulated that. We went to the head of ARC, who at that time was John Eisenberg, and asked him what level of evidence we needed to achieve new indications that would be reimbursed by Medicare. And he said that we needed to start—particularly neurological applications—he said that we needed to start with a review of the literature. That was where the ARC study was commissioned.

The problem is, that study was not—what finally got funded was not what this was designed to do, which was a broad-based study of all the neurological literature and a discussion of the science of it, the underlying science. In fact, if you looked at the authors. The authors on that—the primary authors—are three bioinformatics individuals. And if you look at—I wrote a very long review and critique of their conclusions. They were also supposed to have reviewed SPECT brain imaging and its application in Hyperbaric Oxygen and chronic brain injury. That was not in there.

So the document did not service some of the objectives that it was designed for. But if you go and look at *Archives of Physical Medicine and Rehabilitation*, I believe it's April 2006, there's a letter to the editor by me that is titled "Medicine that Ignores the Evidence." And what I point out is that, what they ignored in this study was a solid body of scientific evidence now in multiple randomized prospective trials and a whole series of animal studies has been shown to be, and have, the greatest reduction on mortality in the history of science for acute

severe traumatic brain injury. And the reason it was not evaluated properly was they didn't look at the science. They scored the study by internal and external validity criteria. And the main randomized trial, the Woxberg one of 1992 was scored a fair on the good-fair-poor scale based on the fact that he did not—in 1992—explicitly explain their randomization procedure.

The fact of the matter is, in modern studies that I showed them in *The New England Journal*, *British Medical Journal* and *JAMA*, over 50% of the studies that are randomized and controlled did not state true randomization. And if we go to that just a little bit farther, just this month was published the latest Roxwell [SP ?] Study in *The Journal of Neurosurgery* again showing with elegant metabolic studies, the effect of Hyperbaric Oxygen Therapy and its benefits in acute severe traumatic brain injury. And increased benefit over comparison groups that were, number one, a control standard therapy and, number two, normobaric oxygen.

So the ARC study unfortunately fell short of the mark and there is evidence based on the mortality reduction of the effectiveness of Hyperbaric Oxygen Therapy in acute severe traumatic brain injury. And if you also look at the [UNINTEL] conclusions on cerebral palsy they noted the same thing. There was no true control group in the CP [UNINTEL] study of 2001 published in *Lancet* out of Montreal. And that, in fact, the best explanation for what happened was there was a biological effect in the control group of that pressurized air and the 50% increase in oxygen.

MR. MCDONOUGH: Thank you.

DR. HARCH: So I want to make one more comment. Again, if we look at the standard legal adjudication process for medical issues—certainly in the medical/legal setting—I think in Amanda, excuse me, Miranda's case we clearly have a 'more probable than not' satisfaction here. That this case, and this therapy, was shown to benefit her neurologically, cognitively and improved her developmental delays. Thank you.

DR. CROSS: This is Dr. Cross again. Any comments from the es or from the panel?

MR. : This is Mr. . I would just, you know, like to take an opportunity to thank everyone for being here and for offering us this opportunity.

[UNIDENT]: I was wondering if I could just ask one more question, if I may. And it's addressed to the doctor. Understanding that you said this is somewhat of a generic type of process where, you know, injuries—multiple different types of injuries can be treated this way. I'm just wondering if you could speak a little about other cases that have been referred to you or that you or you have been, sort of, asked about with this diagnosis for which Hyperbaric Oxygen was used. Do you— Can you give some sort of anecdotal comments on that?

DR. HARCH: Boy, I can give you so many. I'm going to first refer you to the web site: www.hyperbaricmedicalassociation.org. It's the web site of the International Hyperbaric Medical Association. On that web site, on the home page, left upper quadrant is a tab for congressional testimony. It will take you to the three times I've presented this before Congress. In there are eighteen cases and vignettes. There's an autism case, I believe a cerebral palsy case, a variety of traumatic brain injury cases—

But there is also a very dramatic case of shaken baby that I treated six months out: seizure disorder, blind, paraplegic, no interaction or response to parents or any stimulation basically, and trached—not on a ventilator any longer. In there you are going to see a very dramatic improvement in brain blood flow on high-resolution SPECT brain imaging over the course of this child's treatment. This child subsequently regained some motor ability in her lower extremities, developed vision, began to respond to her parents and had some increased movement in all four extremities. Unfortunately—and there was a book written about her, it's called *I'm Still Standing*, written by the grandmother and published—the child died three years later, though, of an accident with a tracheostomy at home by nursing. But it is a fairly noticeable case.

If you also go to the Hyperbaric Medicine textbook—it's titled *The Textbook of Hyperbaric Medicine* by K.K. Jain, volumes or editions two through five—in there are multiple chapters on global ischemia—I have multiple cases over the years that have been presented there. Over the course— What happened was I made a discovery treating our divers with cerebral decompression sickness in 1989. And I was asking why the results of our treatment, 90 miles upstream from the Gulf of

Mexico and essentially hours away from diving accidents that occur in the Gulf, were not the same as the U.S. Navy which claimed 90% cure on the first treatment. We were getting 40%.

As we found ourselves repetitively treating these patients, the obvious question was: What was going on in their brains? It turns out the bubbles had long passed through the brain. But Navy literature in direct carotid air embolism experiments published in the 70s and 80s—effectively, what we were treating were subacute micro strokes. And when we realized this, we started getting chronic referrals for residual brain decompression sickness.

In addition, we had a small project with Louisiana boxers with dementia pugilistica and suddenly I was getting referrals for cerebral palsy and autism. And the Collet study is founded on the cerebral palsy cases I began with in 1992.

So, since 1990, I've now treated approximately 600 cases, 300 of which are pediatric. And the problem has been—they are not published because they are indexed to the imaging, which we have— It has— There is a new methodology that needed to be used to capture the change in heterogeneity and improvements that we're seeing on this. And we finally have a mathematical version where some of this is going to be published shortly.

However, we put this under an experimental protocol beginning in 1994 through the year 2000. And during that time we evaluated approximately 200 patients with imaging and in methodical fashion looking at this. And I presented this at various meetings. It's in abstract form. It's also in a symposium article. But effectively what we were able to show was that this, in fact, was acting generically. And that autistic cases, the very first ones, were treated here in 1996. Cerebral palsy, static encephalopathy, global ischemia, and a variety of other neuropathologies responded to this identical therapy within a narrow pressure range.

[UNIDENT]: Thank you.

DR. HARCH: And that was the basis for going after and doing the animal experiments which I want to add just one more last comment to. I was completely blinded in that experiment. It was my experiment. We had it funded from outside gifts. It was my

design. And it was meant to try to duplicate the human experience and look for blood vessel growth. All of the assessments, the scanning of the brains, the behavioral assessments with the Morris water task—every bit of that was done by researches at a highly respected lab at the University of New Mexico.

And so, until the very end when we broke the code, I was completely blinded to all outcomes. I was the one who distributed the rats to the air control group, they kept some at **[cultitude ?]** for an altitude control group in Albuquerque at 5,600 feet and the oxygen group here in New Orleans. So we had an air control and an oxygen group in New Orleans. And nobody knew the identity of them on the other end until the very end when the code was broken.

[UNIDENT]: Okay. Thanks.

DR. HARCH: My pleasure.

MRS. : This is Mrs. . I just have one thing that I would like to add. And that is that—this committee that’s making this decision—I’m wondering what criteria is going to be used. Is it going to be whether the care or treatment was effective in our case, or shows promise in our case, as opposed to what was asked of the consultants, which was “Is it experimental?”

DR. CROSS: Uh, yeah. This is Doctor Cross. I think that— that our policy and our decisions are made off of scientific evidence and peer-reviewed literature and studies as opposed to the results of an individual patient. So if many things seem to work—or do work, in fact—in an individual case— But in order to prove it from a scientific basis, I think as even Dr. Harch is suggesting, you do need some controlled studies and you did need some published, peer-reviewed literature and it sounds like that’s progressing but it doesn’t necessarily exist today.

So I think, to answer your question, it’s not about whether it worked on an individual basis it’s about what is our policy around the evidence for this treatment.

MR. : So—This is Mr. —I would ask why does your clinical Policy 172 state that Hyperbaric Oxygen Therapy can increase the function and production of mitochondria and improve neurotransmitter abnormalities? It doesn’t say it might. It says it can.

DR. MCDONOUGH: Let me answer that. This is Bob McDonough from the Clinical Policy Unit. When we look at what—the context was looking at autism and the explanation that’s often given for the potential benefits. But when we’re looking at deciding on whether intervention is effective, what we’re really focusing on are clinical outcomes, improvement in function, reduction in disability as opposed to what was, you know, being reported in some studies that look at, say, changes in metabolism. It’s only to the extent that these changes can be related to clinically significant benefits and we then conclude that, in fact, the intervention is eff— that’s there’s reliable evidence of the effectiveness of the intervention.

MRS. : And what is reliable evidence. Because if you have statements from research in your own Clinical Policy Bulletin, which is something we actually read prior to pursuing Hyperbaric Oxygen Therapy. We read your own— what you state about the literature, which we felt is promising. So I was wondering, what amount of data do you need or what is your guideline for how much research that you need to see?

DR. MCDONOUGH: Well, I think Dr. Cross commented on that about the need for studies with some type of comparison group. And as I commented, we’re looking at clinical outcomes not— as the primary focus as opposed to intermediate outcomes about, you know, mechanisms or—etcetera. That we’re actually looking at outcomes that are— matter to patients.

MRS. : Okay. Because were also told by Aetna that, if we provided evidence that this helped Miranda specifically, that it would be considered as an exclusion clause. So— and which is what we have done.

DR. MCDONOUGH: Where did you hear that information?

MRS. : It was actually on the phone by an Aetna representative. And that’s why we compiled all these letters from her doctors and therapists. The letters that we sent in from doctors and therapists—is that weighed by the committee?

DR. MCDONOUGH: We consider everything that you sent to us—

MRS. : Okay.

DR. MCDONOUGH: —so it's not that it's not considered. But, again, I think we have to establish our policies based on peer-reviewed literature and evidence that is in the community. And it's, you know, it's important to take everything under consideration including processes that we've had in terms of interaction with you and so on. So we do take everything into consideration. But in terms of policy development and whether we cover something or not, or whether we consider something experimental, it's based on the scientific literature. It's not, necessarily, on an individual result.

MRS. : Okay. I just want to clarify that. Thank you.

DR. HARCH: Dr. Harch again. I'm going to go back to this "promise." This has shown— there is plenty of "promise" in the medical literature over this. There's studies in autism now. And there are CP studies— If you read the one that was included that in the material that I believe the es submitted to the committee. That's a very simple article. And all they did was pull the control trials where the gross motor functional measures standard was used for assessment in cerebral palsy therapies. And all of the therapies except for dorsal rhizotomy—cutting the dorsal spinal cord—Hyperbaric Oxygen Therapy was the only one that had permanent, durable improvements and had improvements that occurred— I believe it was four to six times as fast as any of the others.

So there is plenty of promise and promised based on all of the animal and human literature in acute and chronic wounding to support this. And, finally, you've got an experimental design here, inadvertently, in the clinical evolution of Miranda ' case, which is a single case A-B-A proved design.

I think this is irrefutable that this has had a beneficial effect on her. And it's been cost-effective for Aetna.

DR. MCDONOUGH: But nobody makes any clinical decisions for Aetna based on a single case. Whether it's a case study or an opinion of several case studies, that's almost the lowest level of scientific evidence short of medical opinion. So just a single case is not going to change a policy.

DR. HARCH: Well, again, it's not just a single case. It's according to what you have stated as your written language as to the exclusions or the exceptions you would make to, quote, "experimental or

investigational.” And I think this clearly exceeds “promise” in this case.

In addition, it is not a case where the patient had a therapy, got better, and they’re claiming “look what happened.” It was: Apply the therapy, withdraw the therapy, apply the therapy, withdraw it, apply, withdraw, apply, withdraw. That is a very solid scientific design regardless of whether it is a single case.

It is hard to refute that the improvement in this little girl was not due to Hyperbaric Oxygen. I think it meets your standard, in your language.

DR. CROSS: Any other comments or questions from either the guests or the panel?

[PAUSE]

If not, we thank you very much for your time today and we’ll get back with you today on the decision.

DR. HARCH: Thank you very much.

MR. : Thank you.

MRS. : Thank you very much.

MR. : Thank you very much.

DR. CROSS: My pleasure. Bye-bye.

MRS. : Bye.

MR. : Bye.

DURATION: 39 MINUTES

[NOTE: AETNA’S FINAL WRITTEN DECISION FOLLOWS THIS PAGE]