

**Aspect Medical Systems
Conference Call
March 17, 2008**

Operator: Good morning, ladies and gentlemen. Thank you so much for standing by. Welcome to the Aspect Medical Systems Conference Call. At this time, all participants are in a listen-only mode. Following today's presentation, instructions will be given for the question-and-answer session. In the meantime should anyone require an operator's assistance at any time during the call, please press the star, followed by the zero. As a reminder, this conference is being recorded today on Monday, the 17th of March, 2008.

I'll now turn the conference over to Ms. Kathy Waller with the Financial Relation Board. Please go ahead, ma'am.

Kathy Waller: Thank you, Michael. Good morning. I'd like to thank everyone for joining us today. On March 12, 2008, we sent out a press release commenting on the publication of a study on Anesthesia Awareness in the Bispectral Index in the *New England Journal of Medicine*. If anyone has not received that release, please call the Financial Relations Board at 312-266-7800 and my assistant, Karen Droba, will send you another copy.

Before we begin today's call, we'd like to remind participants that certain statements in this conference call may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act. These forward-looking statements include statements concerning the expected benefits of the BIS system, including its ability to reduce the incidence of awareness and the Company's belief that anesthesiologists and other members of the anesthesia community will not rely upon the conclusions of the Avidan study. These statements involve risks and uncertainties. Among the factors that could cause actual events to differ materially from those forward-looking statements in this conference call are those set forth under the heading "Risk Factors" in our annual report on Form 10K for the year ended December 31, 2006, and our quarterly reports on Form 10Q for the fiscal quarter ended September 29, 2007, each as filed with the Securities and Exchange Commission. In addition, any forward-looking statements represent our views only as of today and should not be relied upon as representing our views as of any other subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, even if our views change. Therefore, you should not rely on these forward-looking statements as representing our views as of any other date subsequent to today.

With that said, I'd like to introduce Aspect's President and Chief Executive Officer, Mr. Nassib Chamoun. Nassib will begin the call by summarizing the Company's views about the study, and the call will later be opened to your questions. Nassib, you may go ahead.

Nassib Chamoun: Thank you. Good morning and welcome. Joining me this morning are Dr. Scott Kelley, Aspect's Medical Director; Bill Floyd, our VP for Sales and Marketing; and Mike Falvey, our Chief Financial Officer. I will begin the call with some general comments about the study published in the *New England Journal of Medicine*. Dr. Kelley will provide the perspective of a practicing anesthesiologist and an expert in brain function monitoring. We will then open the call for your questions.

In our view, there are only two conclusions that can be reasonably drawn from the study by Dr. Avidan published in the *New England Journal of Medicine*. One, awareness is a serious problem; and two, BIS monitoring is a very effective tool to assist anesthesia professionals to reduce its incidence. Unfortunately, the authors of the paper chose to draw a variety of other conclusions from this study that we do not believe are substantiated by the published material. The good news is that now many more anesthesiologists have had the opportunity to actually read the study, and we have received numerous communications of support from a diverse group of anesthesiologists from around the world and from several of our largest customers. We have also heard from experts in brain function monitoring, experienced clinical investigators, and statisticians who have expressed serious questions about the design of the study, the quality of data that are presented, and the appropriateness of the authors' conclusion, given the limitation of the study.

In the Avidan study, the authors chose to study a high-risk population that was expected to have an incidence of awareness of 1% under standard clinical practice conditions. Expected incidence of 1% was based on prior published studies. The incidence of awareness observed in the BIS-monitored group in the Avidan study was 0.21%, or two per thousand, compared to the expected incidence in high-risk patients of 1%, or 10 per thousand. This 80% reduction in relative risk is consistent with the Myles B-aware study, as well as the Safe-2 study that demonstrated that BIS-guided anesthesia assisted physicians to reduce the incidence of awareness by approximately 80%.

The Avidan dosing protocol, tested for the first time in this study, specified the use of an anesthetic regimen employing at least 0.7 MAC of volatile gas, as well as audible alarms on the anesthetic agent analyzer used to alert clinicians if they stray from the predetermined dose range. For many years, proponents of volatile anesthetic have expressed the view that awareness could not occur or that the incidence of awareness would be vanishingly small if all patients were given this amount of anesthesia. In the Avidan study, that premise was proven incorrect. Patients in the Avidan protocol group fared no better than the BIS-monitored population, although the study clearly did not have sufficient statistical power to adequately compare the relative effectiveness of two active interventions.

The study, therefore, presents a stark choice for anesthesia professionals. Even if you were to accept the view that managing anesthesia would the Avidan dosing protocol was proven to be equally effective as BIS monitoring for purposes of reducing the incidence of awareness, which the reported data does not—and I repeat, does not have the statistical power to support—the question remains whether anesthesia professionals would be willing and able to utilize such a rigid protocol on a routine and consistent basis. Anesthesia professionals are accustomed to using a variety of tools, monitoring methods, and clinical judgment in an effort to customize anesthesia for the individual needs of each patient. We do not believe they will sacrifice the control and flexibility this provides for the constraint of a formulaic one-size-fits-all dosing protocol.

With that, I will ask Dr. Kelley to provide his perspective.

Dr. Scott Kelley: Thank you, Nassib. Based on my discussions with many other clinicians and scientists over the past few days, there are many elements of the study and its interpretation that concern me. Number one, the authors state that the study “did not reproduce the results of previous studies and do not support routine BIS monitoring as part of standard process.” These statements imply that this study attempted to reproduce those prior studies which compared BIS monitoring to standard practice. In our view, the study clearly failed to do so.

In the Avidan study, BIS monitoring was compared to an end-tidal gas dosing protocol, including the use of alarms, that does not represent standard practice. And our opinion suggests that this trial provides an accurate comparison between BIS and routine standard practice is simply false and misleading. In fact, considering that the anesthesia teams were instructed to continuously focus on awareness and to deliver the amount of volatile anesthesia indicated by the Avidan dosing protocol in an effort to minimize the risk of awareness, it is no surprise that this study found a relatively low incidence of awareness in the end-tidal gas protocol group.

From a scientific study design perspective, a statistically valid comparison of two different interventions to reduce anesthesia awareness would have required significantly more enrolled patients and a greater number of awareness case observation. The Avidan study was not sufficiently powered for the authors to draw any firm conclusions regarding the relative efficacy of two interventions, let alone their sweeping conclusions disparaging BIS monitoring that they have made in the article and in the press.

Number two. Unlike the Myles B-aware study, no postoperative recovery or outcome data was provided by the authors. It is not possible to determine the impact of Avidan’s gas dosing protocol on other important anesthetic endpoints. In contrast, numerous studies demonstrate the ability of BIS-guided anesthesia

care to improve patients' recovery profile, accelerate emergence from anesthesia, and reduce patients' anesthetic requirements.

Number three. Monitoring patient response with BIS is designed to allow clinicians to insure that patients are not exposed to more anesthesia than they need by measuring the effects of anesthesia, rather than just the concentration of one agent. My anesthesia colleagues can therefore customize anesthesia care for each patient based on their individual responses to anesthesia during the course of surgery. Avidan's gas dosing protocol does not offer the same flexibility, choice, or insight into patient responsiveness.

Number four. Based on BIS trends that have been published in several large studies, as well as my personal experience in thousands of cases using BIS, BIS traces that are presented in the Avidan study are very troubling. Based on data provided in the paper, those cases of awareness in the BIS group most likely occurred at times early in the case when BIS values were not being displayed to the clinician. Both patients three and four, randomized to the BIS-guided anesthesia care, are lacking BIS information which was supposed to be used to guide patient care for 30 to 45 minutes immediately prior to or overlapping the period of awareness. Patient number four is particularly concerning, as this episode of awareness in the absence of any clarifying information from the authors may reflect unintentional interruption of anesthetic delivery, resulting from inadequate vigilance and adherence to expected norms of clinical care. Thus, these two cases appear to me and to other experts with whom I have spoken to to be more likely due to a "failure to monitor" than a monitor failure.

Number five. The authors cite the cost of BIS monitoring if the technology was used routinely for all cases of general anesthesia but fail to mention the demonstrated cost savings associated with its use. A meta-analysis of the available scientific literature published in *Anesthesiology*, Liu reported that the use of BIS monitoring reduced anesthetic drug consumption by 19% and showed a residual cost of only \$5.50 per case, exclusive of the benefits derived from reducing the incidence of awareness.

Finally, in the conclusion of his paper, Avidan suggests that reliance on BIS technology "may provide patients and providers with a false sense of security about the reduction in the risk of anesthesia awareness." Unfortunately, no monitoring technology can totally eliminate the risk of awareness. However, we believe that a reduction of approximately 80% in the incidence of awareness in high-risk patients compared to routine standard clinical practice represents a significant improvement in patient care. Although it is no surprise to me that thousands of anesthesia professionals throughout the world have demonstrated their confidence in BIS monitoring with the use of our technology in more than 25 million cases to date, both to assist them to reduce the incidence of awareness and to improve patients' experience and recovery profiles following general anesthesia. The conversations that we have had since Thursday's publication

echo and amplify anesthesia professionals' confidence in both the efficacy of BIS monitoring and its broad impact on anesthetic management and patient care.

Regarding any "false sense of security" provided by BIS monitoring, the greater concern to me following the publication of this study is the higher likelihood that patients have been misled to believing that the Avidan gas monitoring protocol represents standard clinical practice and would be used if they needed to undergo general anesthesia tomorrow.

I will close by saying that we plan to communicate all of our concerns about the Avidan study to the *New England Journal of Medicine* in the next few days.

I will now turn the call back to Nassib.

Nassib Chamoun: Thank you, Scott. Before opening the call to your questions, I will make one final point. In the editorial accompanying the study, Dr. Orser notes that the widespread adoption of devices and other intervention must be based on ample peer-reviewed data. We fully agree. And the reality is that the growth in utilization of BIS monitoring has paralleled the appearance of extensive scientific support, including more than 20 prospective randomized clinical trials summarized in a *Cochrane Library Review* and more than 3,000 other publications and abstracts. We are not aware of any other device in anesthesia which has been so extensively studied.

We will now open the call to your questions.

Operator: Thank you, sir. Ladies and gentlemen, at this time we will begin our question-and-answer session. If you have a question at this time, please press the star, followed by the one, on your pushbutton phone. Once you make that choice if you decide that you would like to decline from the process, press in the star, followed by the two will remove your line from the queue. You will hear a three-tone prompt acknowledging your selection. Questions will be polled in the order they are received. Also as a reminder, if you are using speaker equipment to listen to the conference today, please note you do need to lift your handset before pressing those numbers. Just one moment, please, for our first question.

Our first question is coming from the line of Vivian Wohl with Federated Kaufman Fund. Please go ahead.

Vivian Wohl: Hi. Scott, this is Vivian. I was wondering if they used the same protocol that you used in the earlier study to define awareness with the three...the system of three interviews.

Dr. Scott Kelley: To the best of our knowledge and as described in the methods section, the postoperative interviews were done by a blinded structured

process. Those interview recordings were then assessed by an adjudication committee, so it does appear to be a very similar methodology to the Myles study.

Vivian Wohl: With three inter... You had three interviews in the Myles study, as well?

Dr. Scott Kelley: Yeah, there are a small number of patients that were not able to have all three interviews due to their clinical care, but in general, it was a three-interview strategy.

Vivian Wohl: Okay, and then I have a follow-up question. In the editorial, there is a comment here that the GABA receptor primarily expressed in the hippocampus is a potential target for memory blocking action, and they wonder whether the surface electrodes for cortical electrode measurements are, in fact, able to detect drug reactions at that level of the hippocampus. And I was wondering if you can comment on that.

Dr. Scott Kelley: Vivian, Dr. Worster (sp?) is a leading investigator in the area of mechanisms of anesthesia and has been active in pursuit of the anatomic location for things that change level of anesthesia. However, practicing clinicians are only able to access surface recordings which primarily focus on the cerebral cortex. The EEG is a very accurate indicator of depth of consciousness, and Aspect's technology focuses on that.

Vivian Wohl: So the... So you don't believe that the memory center is at the hippocampus, or that the EEG is, in fact, able to indirectly get there? Because they have a citation here, number 16, that I (inaudible), but the...from *The Working Memory Networks of the Human Brain*.

Dr. Scott Kelley: Yeah, she has great hypotheses, but you know the BIS data, or the BIS system, has been extensively validated to assessment of both sedation and memory formation in volunteers and patients. So again, mechanisms of anesthesia are a hot area, are very intense basic research, but the clinical validity of our technology has been well established.

Vivian Wohl: Okay, thank you.

Operator: Thank you. Our next question is coming from the line of Eli Kammerman with Cowen and Company. Please go ahead.

Eli Kammerman: Thank you. Can you hear me okay?

Nassib Chamoun: Sure. How are you, Eli?

Eli Kammerman: Very good, thanks. First question is you assert that the study was underpowered. In your view, what number of patients would have represented sufficient power?

Nassib Chamoun: The number of patients required would be substantially greater. And it's not just the number of patients, Eli, it's the number of awareness observations required to draw any conclusion. However, we'll refrain from providing the specifics until we have communicated that information to the *Journal*. But it's to several orders of magnitude compared to what's been presented in this study, both on the number of patients and the number of awareness cases that were shown.

Dr. Scott Kelley: And based on their own study design and what they've proposed to observe, the study was underpowered. We've heard this same comment from many investigators that have reviewed this paper, that it was woefully underpowered to draw conclusions about relative efficacy of BIS versus the Avidan gas dosing protocol.

Eli Kammerman: Okay. My other question is the paper stated there was no difference in the dose of anesthesia over time between the BIS group... drug-controlled group. Do you find that surprising? And if you didn't find it surprising, what does that mean...arguments that BIS generally results...

Dr. Scott Kelley: I apologize. There were several breakups of your question. If you could repeat that one more time?

Eli Kammerman: Okay. The Avidan paper said there was no practical difference in the average drug dose between the BIS group and the drug group. Do you find that surprising? And what does that mean for claims about generally lower doses with BIS?

Dr. Scott Kelley: Well, I think one thing in particular to note that the Avidan study intentionally enrolled patients at high risk for anesthesia awareness, either due to their surgical procedures or to their medical conditions, patients that we would expect to be much more sensitive to their anesthetic medication. In this study, everybody received much more anesthetic than that in the previous Myles study, suggesting that there was a relative excessive amount of anesthesia applied to these patients. In addition, it does not look like they fully titrated the anesthetic. Their average BIS value in both groups were at the low end of the spectrum where you would not expect to see much difference in drug dosing. All of the other studies demonstrating drug reduction have higher BIS average values during the course.

Eli Kammerman: Okay, thanks very much.

Operator: All right, thank you. Our next question is coming from the line of Jonathan Block with SunTrust Robinson Humphrey. Please go ahead with your question.

Jonathan Block: Thanks. Good morning, guys.

Nassib Chamoun: Hi, Jonathan.

Jonathan Block: Just a couple questions. I guess first, you know technically, I believe the Avidan data has been out there for some time. I think there was, you know, a couple of abstracts available back at the ASA as early as October of '07 that mentioned again, you know, maybe some subsets of the data. And so I was wondering, Nassib, have your customers brought up the Avidan data over the past six months?

Nassib Chamoun: I'm going to turn this question, actually, to Scott, who is very familiar with the abstracts and the data you're mentioning.

Dr. Scott Kelley: Actually, the first abstract was in October of 2006 and then a secondary report in October 2007, first released about May of 2007. So the overall results have been out there for a while. Most people have actually commented early on about the power of the study design, could it detect any difference between the two groups? What was really notable with the publication was for the first time in the public format have we seen the BIS trends in the BIS-guided group. And as I alluded to earlier in my comments, these gaps in monitoring information, which is absolutely critical if you're into a BIS-guided anesthetic, are readily apparent and right around the time or immediately before awareness is alleged to have occurred. So when we finally saw the anesthetic details in BIS-guided care, I would say many people are shocked that this was considered part of the study.

Jonathan Block: Okay, great. And then this really isn't a question as to guidance, but, you know, would love to just hear some general thoughts. I mean here you are, your equipment's in, I believe, roughly 55 to 60% of the ORs out there. I guess you can make a case that the remaining 40% are certainly the late adopters. Your thoughts on, you know, is this another barrier to entry into those accounts? Do you think some of these accounts might latch on to this Avidan data as a reason not to go ahead and purchase the BIS technology?

Nassib Chamoun: As you know, Jonathan, our strategy for the last couple of quarters has been to increasingly focus on the institutions that have deployed BIS monitoring and are using it in their clinical practice. And at this point in time, we don't believe that this represents a barrier for this process to continue. We also believe that the late adopters will ultimately come onboard as the evidence becomes more significant and as the adoption in the other institutions sets a new community standard for safety, for quality, and for really

how the large institutions in this country have integrated this technology into their practices. As you know, we're in over 70% of the largest hospitals. And the institutions that do almost 25% of all surgeries in the US, and that's about 600 of them, use it on over 50% of their cases. It's in 85% of teaching hospitals. So our goal is to really move the standard through the community and through the adopters that have integrated this technology into the practice, and ultimately that will pull through the remaining 40%.

Let me turn it over to Bill so he can tell you a little bit what we're doing with the existing customers.

Bill Floyd: Yeah, Jonathan. As you know, one of our major initiatives has been to do institutional trainings. We go in there and do education over a period of two to three days for virtually almost all the clinicians there. We have these scheduled out for the next several months, and I can tell you that we've heard, you know, consistent confirmation that those will continue. Interesting over the last few days, too, you know—other than Thursday being an interesting day—Friday our field was out and really had a chance to hear the customers. And you know it wasn't a surprise to think that we heard from our good customers saying hey, look; it doesn't make a difference to me. I use it for titration; you know awareness is just one of the benefits. What we heard from at some of our academic institutions where we were on Friday, we heard a lot of people who are not great supporters saying they were really disappointed and to see what had come out and that really, this was not going to change them whatsoever. So we're focused on these teaching institutions, we're focused on education, and our strategy is very strong.

Jonathan Block: Okay, great. Just one last one, if I may. I think, Dr. Kelley, this one would be for you. It seems, you know, according to the paper, that the compliance, if you would with the MAC protocol, was pretty poor. I think in only roughly 25% of the cases was the anesthesiologist able to keep the patient between 0.7 and 1.3 MAC. Just your thoughts there, and is that something that, you know, you would think would improve over time, or is it that difficult of a process to titrate someone according to the MAC protocol? Thanks, guys.

Dr. Scott Kelley: I think it likely reflects your latter hypothesis that it's that difficult to apply a rigid dosing protocol to high-risk patients. They can be extremely sensitive to anesthetic medication. They oftentimes will not tolerate that dose of anesthesia, and the clinician's natural response is to change the suggested dosing strategy either to give less drug or if they're responding to certain intraoperative events, perhaps to go higher than the recommended range.

So, you know, one of the things I've always drawn a parallel to is that different patients need different amounts of medications. Middle-aged patients need more anesthesia than younger patients, and elderly patients need quite a bit less

anesthesia. And I need to be able to have that flexibility, that able ability, to tailor the anesthetic both to the surgical conditions, the patient's underlying disease, as well as their age. So the continuous feedback of information from BIS monitoring really enhances the flexibility and my choices that I could make during the course of surgery. I think what we saw from that compliance data is that they simply could not adhere to a rigid protocol.

Jonathan Block: Great, thank you.

Operator: All right, thank you. Our next question is from the line of Isaac Ro with Leerink Swann & Company. Please go ahead.

Isaac Ro: Good morning, guys. Thanks for taking the question.

Dr. Scott Kelley: Hi, Isaac.

Isaac Ro: Hi. First question would be, you know, just regarding the differences between the Myles and the Avidan studies beyond just protocol, I believe that the Myles survey had emphasized high-risk patients, you know mainly those with substance abuse issues, difficult intubation, trauma or emergency-type surgery, things like that. And our survey work in the past has suggested that that's roughly...those categories constitute roughly 15% of total general anesthesia cases. And I'm wondering do you think that's the right area? I'm just trying to make sure we have the same...we're talking about the same kind of groupings of patients and differences between studies.

Dr. Scott Kelley: Well, you know there are some differences between the enrollment criteria in the B-unaware study from Avidan where besides using the similar categories from the Myles study they added in additional characteristics, what they considered minor inclusion characteristics; so it's certain body habitus, certain exercise tolerance. But again, these authors have considered them all to be at high-risk for intraoperative awareness, so compared to the Myles study, it's a bigger fraction of those patients that undergo general anesthesia.

Isaac Ro: So I guess what you're saying is—not to put words in your mouth, but is it suggesting that they took a slightly more liberal stance on what would be considered high-risk patients?

Dr. Scott Kelley: Well, they based their protocol of high-risk patients based on communications from JCAHO (sp?) and from the American Society of Anesthesiologists, so other people have considered these same patient characteristics to define a high-risk patient group.

Isaac Ro: Okay. And then just... You know I don't want to put you guys in a tough political spot, but I'm wondering... What have you guys

uncovered regarding the process through which this kind of a study goes through review at the *New England Journal* as it relates to kind of consultations with the anesthesiology community and what part...what (inaudible) part in the process may have the community had or ASA had in kind of determining the appropriateness of the protocols used here to kind of evaluate the technology?

Nassib Chamoun: I don't believe it's appropriate for us to comment on process. Our primary responsibility is to really bring the information to the *Journal* and let their process carry it through. And as we said earlier, that's what we intend to do.

Isaac Ro: Okay, if I could just maybe ask it a totally different way, do you know if as a matter of habit the head of one of these—like an ASA or something like that or a (inaudible) member would have the ability to review or have input? Is that historically something that's made available to them prior to submission or acceptance?

Nassib Chamoun: At this point it would be speculating as to what happened. And again, I don't believe it's appropriate, and we'll let the *Journal* act based on the information they will receive from all parties; not just us, but other scientists, statisticians, and clinicians from around the world.

Isaac Ro: Okay, thanks very much.

Operator: All right, thank you. Our next question is from Sabina Bhatia with Basso Capital Management. Please go ahead.

Sabina Bhatia: Hi there. Just going to your balance sheet for a couple of minutes, you have about a hundred million in cash. I'm trying to get a better sense of your uses of cash going forward. I know when you issued the convertible, you had mentioned that some of the proceeds would be used for buying back stock from Boston Scientific, and you also mentioned investments in complementary businesses in the neuroscience program. At this point, if you could be a little bit more specific, you know, on the timeline and what you're looking at? I mean should I consider this to be a 2008 event where you'll be looking for investments? 2009? I'm just trying to get a better sense of your cash burn and uses of cash going forward, please.

Mike Falvey: Sure. This is Mike. Right now we have a very strong balance sheet. If you look both at short- and long-term cash to marketable securities it's closer to 110 million in cash. We do have 125 million in convertible debt. When we raised that debt, we did list as one of the use of the proceeds that we wanted to buy back stock, which we did over the course of 2007, both as we raised the convertible and then subsequently we bought back more shares from Boston Scientific. As far as uses of cash, our operations have been slightly cash flow positive over the last couple of years, so we do not believe that we

need cash to fund operations. Primarily right now, we view that cash as a strategic asset. We are cognizant of the fact that we have a slight net debt with the convertible debt outstanding. But right now I think what we'll do is we'll sort of see how the situation develops over time. I don't think we want to do anything rash or overreact but continue to be very prudent about how we manage our financial resources, both from a balance sheet and from an operating perspective.

Sabina Bhatia: Okay, thank you.

Operator: All right, thank you. Our next question is coming from the line of Joshua Zable with Natexis. Please go ahead.

Joshua Zable: Hey. Good morning, guys. Thanks for taking the question. Thanks for doing this call for us. Just real quick—I know you answered most of my questions here, and I know, obviously, you always talk about the users you have are pretty loyal and it's sort of getting into the rest of the users. Obviously not too much time has passed, but can you just talk about feedback from the sales force, maybe—because I know you talked about feedback from customers—as far as if they, you know, had experienced anything or certain people that were on the fence and leaning towards buying sort of stepping back. Just some sort of color, maybe, what they're seeing out there.

Bill Floyd: I'll give you a little color and I'll let Scott also, because we actually had several clinicians in last week, and we'll give you some color on that. You know first and foremost is we have a very, very tenured selling organization, as you know. This organization has dealt with adversity before, and they've been...learned and managed to train very much on the clinical sales process. So what's actually nice about when something like this comes out is it gives us another reason to have a clinical discussion with the clinicians, and I will tell you that that's already started happening. Our selling organization last Friday clearly went through the *Journal* article. A lot of questions that they asked about they've now been trained on that. And actually coming up this week, we have several webcasts, not only with clinicians, but with our selling organization. I'll also tell you that on a global basis, you know, we also have the same tenure—actually a little higher tenure outside the United States. We've gotten a lot of responses already coming in from customers outside the United States, very similar to what we're seeing in the US, which is you know hey, I use it for titration; you know, awareness is just one benefit. And so I'm very optimistically excited about the responses we're hearing, and we'll give you more color on that in the next couple of weeks.

Dr Scott Kelley: You know one...

Joshua Zable: Okay. Great, guys. Thanks very much.

Bill Floyd: Hold on; I think Scott had one other comment, too.

Dr Scott Kelley: You know as an anesthesiologist, I can just say that I've been really happily surprised by the response from our tenured sales organization, because they recognize this gap in BIS monitoring in these two cases. As we've continued to emphasize training of our sales force and their ability to support our customers with clinical education, these are the types of trends that we want none of our customers to experience, that we're really focusing on how to help our customers get the best use out of the technology, to have continuous information from the start of the anesthetic 'til the end. So the types of gaps that we see in the Avidan study are those that we try to eliminate in our customers. It's unfortunate that based on their study design they refuse to have any interaction, including training and education with our organization.

Joshua Zable: Great. Thanks, guys.

Operator: Thank you. We have a follow-up from Vivian Wohl. Please go ahead.

Vivian Wohl: Question. It says... And just a follow-on on that. On page 1106 of the paper it says that there were sustained periods when BIS values were greater than 60 in 55% of patients. I mean if somebody is well trained in BIS, what might one expect that percentage to be in a high-risk group?

Dr Scott Kelley: Well again, you know, some of their methodology is a little hard to interpret. In order to be counted in that group, there had to be one 30-second period where BIS was over 60. And again, I'd really like to see more data to better describe that, but I think what we try to emphasize is to minimize any time over 60 if a clinician is trying to avoid intraoperative awareness in balance of all the other clinical information available at hand, including a complete assessment of the patient. So without seeing a complete profile, Vivian, I really can't comment on what's behind those 55% of cases.

Vivian Wohl: Okay. And then this is maybe more a question for Bill, but towards the end of their paper they talk about having to treat 175 patients with the BIS protocol in order to benefit one person. And if you take your figure of \$5 per patient, you know in round numbers, you're under \$1,000 to prevent that one case of awareness. I mean that in this day in age seems relatively inexpensive. So I'm wondering what... If you put that number in front of your customers, how do they respond to that? You know, if it costs \$1,000 to prevent one case of awareness, is that a high number? Is that a low number?

Nassib Chamoun: I think that, Vivian, you'd have to look at that in the context of a surgical procedure. You're right; \$5 is a trivial number. It seems to me that if the amount of anesthetic administered is 20 or 30% higher compared to other studies, that will be worth several hundred million dollars. So what we're

trying to do is give the clinician the flexibility to provide the best safety and best quality care by avoiding overdosing, under dosing, and managing their patients throughout the procedure based on the clinical conditions of the patient, the surgical requirements for that patient, and optimizing all outcomes for that patient throughout that procedure and postoperatively. It's a tool. It's only as good as the clinician who uses it. And the \$5.50 doesn't even take into consideration the risk of cost of awareness. I can tell you that a suture pack will cost several times more than that.

And I'll let Scott add an additional comment.

Dr Scott Kelley: You know Vivian, your calculation is almost identical to that in the Myles study where they estimated the cost to prevent an episode of awareness using a standard sensor cost. So again, for clinicians to start balancing, you know, is it worth protecting a larger number of patients to avoid one case of awareness? They may not appreciate that on an individual case basis, but the economic argument is there. In addition, that kind of net cost of \$5.50 provides an intangible clinical value, just another way to see how that patient is responding to the anesthetic medications and through the course of surgery; and particularly to fine-tune the older, sicker patients who are more frequently coming both through the Operating Room and then us being challenged with having those patients wake up and go home on that same day.

Bill Floyd: Vivian, the cost issue always obviously comes up, but I'll say Friday was a great day. Our largest...single largest customer just signed up for a five-year agreement. I won't give you who that individual is, but it's our single largest customer, and I will tell you that they look at all of the other benefits; it's not just about awareness for them. And we're doing institutional training for this group also. I just don't see it impacting those groups.

Nassib Chamoun: With over 60% of surgeries in this country, 65% of surgeries done on an outpatient basis, it's really incumbent on the anesthesiologist and the nurse-anesthetist, the clinician, to balance all outcomes and optimize the profile of care, rather than just, you know, singly focusing on one endpoint such as awareness. And the BIS technology provides them that flexibility. And, you know, for those who look at quality, that number is trivial.

Vivian Wohl: Thank you.

Operator: Thank you. Ladies and gentlemen, if there are any additional questions at this time, please press the star, followed by the one now. Again, if you're on speaker equipment, you do need to lift your handset before making that selection. Star, one, if you have a question.

Imron Zafar with Deutsche Bank, please go ahead with your question.

Imron Zafar: Good morning, and thanks for taking my question. Most of my questions have actually been answered. So I'm trying to understand the way you guys are looking at, you know, the future in terms of your calculus for internal planning and also for guidance that you're going to give in the second quarter. So what type of assumptions are you guys making? It sounds like you're very confident that your core customer base is going to be relatively unchanged in terms of utilization. Is that a fair statement?

Mike Falvey: That's right. This is Mike. As I mentioned, we're not going to overreact to, you know, in the short run to this. We think that this actually fits very well with the operating strategy that we've adopted over the last three or four quarters. We're very well positioned in the field. As Bill mentioned, a very tenured sales force and one that's used to dealing with negative studies such as this. Granted, this is a little bit more high profile, but it fits very well with the clinical education programs that we've developed. And so our plan is to continue to execute on that strategy.

As you know, we give guidance at the beginning of the quarter, and we don't feel the need to comment on it during the quarter. I think what we'll do a little bit differently going forward is we announce earnings for the first quarter half-way through April, and we'll try to give you a little bit more color as to what happened in the last couple of weeks in the quarter and how we started off the second quarter, because we always try to keep as much visibility as we can to our investors, and, you know, to the extent that it doesn't provide us competitive information. But we understand that people are watching a little bit more closely in light of the publishing of this study, and we'll try to be as forthcoming as we've always been.

Imron Zafar: Okay, and then as far as your operating expenses, do you foresee any need to hire more sales reps in order to—you know in light of the study—in order to drive utilization? Or do you think that that's unnecessary?

Nassib Chamoun: You know we've been... You know, we're always evaluating whether we have the optimal sales force. As we've had some success with the strategy that we've embarked on now as we've mentioned on our calls, it appears that center sales have firmed to maybe even accelerated a little bit if you look through our fourth quarter trend. And so we're always playing with that formula. It's something that we look at from time to time. I wouldn't say that anything we've seen in the last two days causes us to move one way or another with the sales force. You know as Bill mentioned, we've had an unexpectedly strong support from our customers and even folks who have been a little bit more in the middle commenting on this study and saying it really isn't changing very many minds out there. So I wouldn't say yet that there's anything that we've seen that causes us to try to take action one way or the other (unintelligible).

Imron Zafar: Okay, and then as far as clinical trial work goes, can you just maybe outline any other clinical studies that you're aware are going on, you know, as they relate to awareness or titration? You know, things that we can keep on our radar screen that may help drive or challenge utilization going forward, please?

Nassib Chamoun: I really... You know we've moved away into the next frontier. Frankly, the awareness work has been done and completed. Now we have broadened our scientific and research quest to really look at the fully-integrated outcomes that affect patients going through surgery, both short-term and long-term. As you know, we have a study looking at complications in the postoperative period and within 30 days after surgery. That study will also look at the awareness endpoint. But it's one of 10 other endpoints that we're looking at to understand how the care of the patient intraoperatively impacts their recovery, impacts their complications in the...during hospitalization and ultimately within 30 days, and mortality at one year.

We also have another study that's ongoing in cancer patients, because as you know, a lot of data has been coming out in the scientific literature about the risks of excessive exposure to anesthesia and some of the downstream consequences to that. But the cancer study is ongoing and will be a long-term study that we'll look at again in the next few years.

We also have another study looking at postoperative cognitive dysfunction that will be, again, a paper published in the next couple of weeks, I believe, showing that patients titrated to a lower BIS value don't do as well as patients titrated to a higher BIS value from a postoperative cognitive dysfunction standpoint. That's a very hot area, and clinicians are very carefully evaluating that.

And the third one is a large critical care study that's evaluating survival in the critical care setting. There's a full manuscript that's under review following the abstract that was presented last year showing that patients who are at lower sedation levels in the ICU do not fare as well from a survival standpoint as those who are at a lighter sedation level.

So there's a common theme here that's emerging in the scientific literature and as we have done in the past... We've done the work on awareness; it's done and over with. I think it's time to move on and look at the broader questions involving patient care and outcome in the perioperative setting, and I believe you'll see a fair amount of data coming out in this area in the next I would say six to 24 months. There are a couple of papers in the pipeline that you should see soon, as well.

Dr Scott Kelley: And I also believe that as we advance our own clinical research program to look at important patient outcomes above and beyond the issue of intraoperative awareness, we would hope and we would expect that

other large-scale anesthesia studies broaden their focus from just intraoperative awareness to give a complete and comprehensive look at patient outcomes. As we mentioned earlier in the call, the narrow focus of the Avidan study only on intraoperative awareness and with providing no details on clinical outcomes should not be tolerated in this day and age.

Imron Zafar: Great. Thank you so much.

Operator: All right, thank you. And our next question is coming from the line of Mordy Schnur with BNP Paribas. Please go ahead.

Mordy Schnur: Hi. Thank you for taking my call. I just wanted to find out, do you feel that the... Given the situation that your revenue stream could be at risk, and obviously I know you're keeping with guidance for now, that the current debt that was issued creates some sort of, you know, financial inflexibility going forward? I mean I know there was a question earlier about the debt raising and the cash flow and the use of cash, but I just want to get a sense of how comfortable you are with your...the liquidity with this debt outstanding and with the possible risk that the revenue stream to an extent can be at risk.

Mike Falvey: I think that's kind of a two-part question. First of all on the balance sheet side, particularly given the turmoil in the credit markets, I think we're very pleased with our position there. At \$110 million in cash, 125 million in debt; the debt is not due for another seven years, so it won't be due until 2014; that provides us with a lot of stability, and as I mentioned, the cash is a real strategic asset for us should we need to deploy that cash.

Turning to the operating side of the equation, as I've mentioned, we've been cash flow positive. We've been cash flow positive for a couple of years now to the point where we've been able to take on the full funding of the (inaudible) program and still remain cash flow positive. You know, we've had a lot of questions over the last couple of days as to potentially what does this do to our revenue stream, but as Bill and Nassib and Scott have all mentioned, there are a number of folks who really recognize the full set of benefits that BIS offers, not only for helping to prevent awareness, but to assist in titration in all cases. So there's a large piece of our customer base that we think is fairly immune to this.

And we're also very confident that we can work with the results of this study. It confirms a lot of what we've been telling our customers for a long time now, and I think as we start to report financial results for Q1 and we get to see the longer term impact, we can continue to update you on that. But we've always been a very prudent firm in terms of managing both our balance sheet and our operating statement, and we'll continue to adjust our strategies and our tactics as the environment changes.

Mordy Schnur: But you would agree that probably doing some sort of a large stock buyback or using your cash now before there's clarity on the revenue stream is probably not the best idea? I mean that we can agree on?

Mike Falvey: Yeah, I think you don't want to do any kind of short-term kneejerk reaction. It makes much more sense to see how the situation develops. As you know, we're in an earnings blackout to begin with, so there's nothing that we could do even if we wanted to in the short run. And when you're looking at the balance sheet particularly, it's always wise to manage that for the long term.

Mordy Schnur: Is there any sort of—I'm not an expert on, you know, your space—but is there any sort of a precedent to where a company like yourself, medical device company, where a study comes out and literally knocks more than 50% off the stock price and sort of threatens or questions the use of your device? I mean you see it a lot in sort of biotech companies, but it's rare to see it in a device company. I'm wondering if you've seen any similar situations, if you could give some sort of context to, you know how they handled this going forward. I know every case is different, but just...

Mike Falvey: Yeah, I think that part of the reaction that we're seeing here is the comment on the general market. And whenever there's what's perceived to be bad news like this in such a difficult market, you can see these kinds of severe downturns. From an operating perspective, you know, I don't think it changes much. What we're focused on is our customers and our potential customers, and the real impact is going to be, you know, not in the market news in the short term or in the press, it's how can we continue to educate, communicate, and help them make the right decision.

Mordy Schnur: One last question. How do you... I mean what type of protections or... Have you... Has anyone approached you? Given where the stock price is, what stops someone from taking advantage, a competitor or a strategic buyer, from taking advantage of trying to lowball bid and, you know, buy the company?

Mike Falvey: I think that that's always a potential, but I think what you're seeing right now is a very short-term reaction, and many of the things that would put off a potential (inaudible) is the same thing that we're seeing in the market right now. You know I think that we've taken all of the right corporate actions that we need to do to make sure that our shareholder interests are protected, but we also are cognizant of our fiduciary responsibilities and, you know, we'll deal with those situations when they occur.

Mordy Schnur: I just want to make sure on the cash... None of them are... None of the cash is in...was put in any of these auction-rate securities or

anything like that where, you know, your day...the cash ends up having to be placed in some sort of restricted or long-term investment account?

Mike Falvey: That is correct. We do not have any exposure to auction-rate securities. We've got a very conservative investment policy that we've been following, and we have complete access to all 110 million of those cash assets.

Mordy Schnur: Thank you.

Operator: Thank you again, ladies and gentlemen, if there are any additional questions at this time, please press the star, followed by the one, now. If you're on speaker equipment, please lift your handset prior to making that selection. Star, one, if you have a question at this time.

Management, there are no further questions. Please continue with any closing comments.

Nassib Chamoun: Thank you for your time this morning and your questions. The Avidan study published in the *New England Journal of Medicine* last week was designed to refute the results of prior studies that have shown that BIS monitoring assists anesthesia professionals to reduce the incidents of anesthesia awareness. In our view, this single-site study not only failed to do so, with the exception of awareness, patient recovery and postoperative outcome endpoints are not reported. There are substantial and troubling gaps in BIS trends, and the study lacks the statistical power for the authors to draw the conclusions they have.

As Scott mentioned earlier, we intend to bring the specifics of all of these issues, as well as what we believe are other inconsistencies, to the attention of the *New England Journal of Medicine*. Scott, Mike, and I will be in the office for the rest of the morning if you have any additional questions. Thank you again.

Operator: All right, thank you ladies and gentlemen. This concludes the Aspect Medical Systems Conference Call for today. If you would like to listen to a replay of today's conference in its entirety, you can do so by dialing 1-800-406-7325 or 303-590-3030, input the access code 3858322. Those numbers again, 1-800-406-7325 or 303-590-3030, input the access code 3858322.

Thank you for your participation. At this time, you may disconnect. Have a very pleasant rest of your day.