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Advanced Bionics

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>>CART Captioner: Standing by.

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>> Hello, everyone. Welcome to the next installment of our Get Connected Webinar Series!

Thank you for taking time out of your busy lives to join us this evening.

Today we will be sharing an update for our C1 pioneers who are entering into their third decade with Advanced Bionics.

We will discuss AB technology and compatibility and the wireless accessories that are currently available.

Over the years, AB has developed six generations of processors for C1 recipients including the CLARION 1.0, CLARION 1.2, S‑Series, Platinum Sound Processor, Platinum BTE, and the Harmony ear‑level processor and tonight we will take a look at what the future holds.

The C1 population is the foundation of our AB community.

In fact, AB has several C1 recipients in leadership roles at AB, including the Vice President of Research and Development, the Director of Business Strategy and Insurance Reimbursement, as well as field staff. AB remains dedicated to continued support of our C1 implant recipients implanted prior to April 2001. When you chose Advanced Bionics for your hearing or the hearing of your loved one, you made a commitment to us. We value that commitment and continue to work hard to develop products that improve your hearing experience.

Before we get started, there are a few housekeeping items to go over.

I would like to orient everyone to our chat box on the left side of your screen. Throughout the presentation this evening we will be asking you to participate in our discussion by using this chat box to both answer and ask questions!

Let's hear from the group right now and see where people are joining us from.

Take a moment to type into the box and share what city you are located in this evening.

I see someone from Oklahoma, Santa Monica, California, New York, Rockville, Maryland, and Iowa. So it looks like we have a great representation here. How about another question?

How many years have you had or your loved one had an AB cochlear implant? Great. We have people who have had their implant for 20, 21 years, 17 year, 13 years. Wow. That is great. Thank you all again for your ongoing support.

If you need technical support, please contact Audiology Online at 1‑800‑753‑2160.Any opinions of non‑AB employees are their own and not those of the company. This webinar will be recorded for later viewing. Now I would like to welcome Doug Lynch. Many of you may know Doug already.

He joined AB in 1996 and took a short break to work for Boston Scientific's neuromodulation group.

In his time here at AB he has served as the Director of Corporate Communications and Marketing, and now as the Cochlear Implant Consumer Specialist in the Mid‑Atlantic Region. Doug, like you, is a big fan of C1 technology and has his C1 cochlear implant for almost 23 years. I know he's excited to be with you here tonight and to share this update here with you. Doug?

>> Doug: Thank you so very much Michelle, and thank you to everyone on the line tonight. It was kind of like walking through a time capsule seeing so many names of people I have had the privilege of knowing for over 20 years. I welcome you to the webinar. I hope you find it to be both very informative and something that will possibly change your life. So that said, I would like to share a quote from Scott Hebl, who I had the pleasure of hiring at AB many, many years ago.

If you've ever had the chance to visit AB's headquarters, you probably met Scott.

Scott has a vested and personal interest in AB technology, because like you and like me, Scott is also a pioneer. Scott was implanted in 1999 with an AB's C1 technology.

What you may not know about Scott is that he happens to be the Vice

President of Research and Development for Advanced Bionics.

Scott's leadership of our Research and Development team is important- it demonstrates AB's commitment to all recipients. So I would like to share a quote from Scott. He wanted to share this with all of you are. It says "I'm excited about the technology that Advanced Bionics is developing for C1 recipients. Our goal is to create a product that will support our dynamic lifestyles without compromise. We also want to be able to improve your hearing in noisy environments and to be able to take advantage of the most advanced wireless connectivity solutions and having all of that in an easy to use streamlined package."

So I will start with a question that I know is on most of your minds, and is also hinted at in Scott's quote. The question is, is AB really working on a new Sound Processor for C1 recipients? Well, the short answer is an emphatic yes. We have been working on this for a very long time. And we made progress particularly in the last year. There is no time line when exactly it'll be released. There are very different regulatory guidelines today that will ultimately determine the exact release date.

 What I can tell you is that our engineers, under Scott's leadership, have been aggressively tackling the technical hurdles in designing something that meets the needs  that you have and I have but without compromising our hearing performance in any way. So when we ask the question, what do I hope a new processor will deliver for me, we most often hear things like, quote, you wanted to have improved battery life. You want all the latest wireless streaming capability, and something that we have never had is access to a water proof processor.

Most importantly, we want to hear better in noise. We want to hear all day, every day, in every environment, and that's something important to all of us recipients.

So AB's goal is to deliver upon all of these things.

So what we see right now is a drawing of the prototype C1 processor that is currently under development. Let me describe some of the design goals for the new Sound Processor.

First, it's an off‑the‑ear processor. This configuration allows us to deliver on all of the capabilities that are important for you to hear all day, every day, and in every environment. And not sacrificing at all your hearing performance.

We know that many of you chose AB for hearing performance in the first place and this is not something that we're willing to sacrifice just to make something smaller.

This was a critical requirement of our new processor development and something we are absolutely committed to delivering.

The processor will also include an integrated Roger receiver for significantly improved hearing in noise. If you are not familiar with what Roger is, stay tuned, for I will be going over this in a few minutes and explain why Roger is so great.

This new processor will also have waterproof accessories that will enable you to swim and bathe with your cochlear implant on.

It will include an audio port, for direct connection to other Devices, multiple programs, a volume control, and a sensitivity control that many of you are accustomed to using from your previous Sound Processors. And all of this comes with a compact design with battery life in line with other off‑the‑ear processors. This general information I am sharing with you regarding the C1 processor that’s under development is all we have to share at this time. Again, we do not have a specific timeline available today, but we do want you to know that we have a prototype processor which we are actively and currently evaluating. But what you may not know is that today you do have access to much of this technology. There's no need to wait for the new processor in order to gain many of the benefits that you are interested in.

Specifically, things like wireless connectivity, improved hearing in noise and better battery life. These benefits are here today for C1 recipients. We're going to go over that technology here this evening so that you understand all that is available to you today. Before I present those details, let's take a moment to review the history of innovation, for us, the C1 recipient community. So as many of you may know, AB was founded in 1993. At that time, we had the very first generation CLARION 1.0 processor. Many of you that I know probably fondly look back at that brick that we wore on the side of our belt but as I remember telling my audiologist at the time, that I would wear a refrigerator on my back in order to hear.

Then in 1996, gained FDA approval for the Clarian cochlear implant in adults. In that same year we introduced the CLARION 1.2 processor, which was the gray one, if you recall. Then in 1997, the FDA approval for the CLARION cochlear implant in children.

Also in 1997, we introduced the S‑Series Sound Processor, which had a pretty incredible reduction in size, and an increase in battery power. In 2000, the S‑Series shrunk and the Platinum Sound Processor was introduced. And in 2001, after a long wait, we had access to the first large sized ear‑level processor, the Platinum BTE.

In 2002, we took that Platinum BTE and provided additional tools for connectivity, such as the Direct Connect, the iConnect, and something that I am quite certain that all of you have grown to love, the T‑mic microphone. And then in 2007 Advanced Bionics really did something important, that was non‑product related. They developed the listening room, which is a rehabilitation online tool that allows children, teenager, and adults to learn how to get the very most out of their listening experience. That was quite groundbreaking at the time. And similarly, we also launched Hearing Journey.com, which mean many of you are a part of- which has 30,000 community members and a great place to share stories and get questions answered and just to catch up with friends.

In 2010, the C1 Harmony Sound Processor came out, and I know many of you are currently using it today.

Also in 2010, AB joined Phonak under the Sonova umbrella. Which means that Sonova owns both AB and Phonak which allows us to share technology like nothing else.

2013 we introduced what is called the AAA PowerPak for Harmony and today we'll go over that in greater detail.

In 2013, we introduced the Phonak Roger technology. Which also we'll be going over in detail today.

Then just last year, AB introduced the world's first hearing aid that's designed to work in concert with a cochlear implant. Called the Naida Link hearing aid.

So today I am going to specifically talk about a variety of technology options that have been released within the past few years and that you may not realize are so beneficial to you as a C1 recipient.

Or perhaps you haven't had the opportunity to learn about them. So we have wireless connectivity options. We have extended battery options, both of which are available to you today.

So let's talk about these options. The Harmony for C1 was made available in 2010. It brought forth many conveniences of newer technology. But this also means that now you have access to all of the very latest wireless technology through Phonak Roger system. You can do that using your current Harmony Processor.

So, who is Roger? Well, it's not this guy that I grew up watching. So let's take a moment to poll our audience. The question is, how many of you tonight have heard of Roger technology? It looks like many of you have. Yes. Okay. Good.

Now how many of you have actually tried Roger technology?

I have one yes and mostly nos.

A couple more yeses. And so a bit of a mix there. How many of you knew that your C1 Harmony Processor is compatible with Roger?

Okay. An overwhelming number of nos. C1 recipients have access to many existing new features of AB's latest technology, including the ability to stream Bluetooth signals from smart devices directly to the processor.

Now this allows for hands‑free phone use, Connectivity to tablets and TVs, among other technologies.

So what is Roger? Roger is a digital wireless standard from Phonak that enables you to hear and better understand more speech both in noise and over distance. Roger transmits crystal‑clear sound while reducing background noise, so you can hear more speech in all the noisy or the really challenging listening situations at which I know we all find ourselves in through the course of nearly every single day.

Roger is an incredibly smart product that offers you the ability to wirelessly connect to the voices you want to hear. It minimizes the impact of noise in distance. Ultimately, it's easier for you to hear using Roger.

So let's look at some situations when Roger can really help out, and I know each of you are going to see these and say, yes, I don't like those situations, or I would need help in those situations.

So we all know when speakers are at a greater and greater distance from us, it's harder and harder to hear? We know when noise becomes overwhelming, that's when we certainly need help. It's helpful when we want to connect to a television or music directly to the processor. Roger helps connect to Bluetooth for hands‑free phone calls that can be sent wirelessly straight to your processor.

Roger becomes an extension of the talker and the listener when an environment gets difficult.

So the Roger Microphone is worn by the talker and this information is then sent wirelessly and directly to the listener who is wearing what is called a Roger receiver. There are two options for the talker. A clip‑on mic and a Roger Pen. We'll talk about the differences between them in just a little bit. There are also two options for the listener. The Roger MyLink, which is a receiver worn as a neckloop and utilizes the Telecoils that are in the Harmony Processor. Other for the listener is the Roger X. This is worn directly plugged into your Harmony Processor.

Now let me walk through an example of a noisy environment to show how the benefit of Roger becomes a bit more evident.

If we look at the previous example of someone talking and someone listening but we separate the talker from the listener, this can create some challenges. Now if we add music to the background, it's going to be quite difficult for anyone to hear. I know everyone who is on this webinar knows exactly what this environment entails and the challenges it creates.

But with a Roger Microphone, and a Roger receiver, shown here is the Roger Pen on the left hand side. Worn by the talker. Say that's me. And the Roger Receiver on the right side is worn by the listener, you.

In this case, you are wearing the Harmony with an iConnect ear piece and the Roger X Receiver. We'll go over that in a little bit.

We can overcome the challenges presented by noise and by distance and return to a successful communications despite our surroundings.

So I want to let the data from an independent research study tell you the story about how much Roger can help you in a real complex listening environment. So a question for you, how many people have had their hearing tested in a sound booth where you listen to a bunch of words and sentences and you have to repeat them back? I suspect it'll be everyone.

And sometimes perhaps when you are in the sound booth, there's noise that's added to the background, but you still have to listen to the words and repeat those back. You've experienced that too, haven't you? A lot of yeses. And most of us have experienced that at some point.

A person by the name of Jace Wolf, an audiologist in Oklahoma City, does a lot of research with Roger technology and set out to recreate a very difficult listening environment, similar to a very, very loud restaurant or an extremely loud classroom. What she did is she put a bunch of sound in the booth coming from all around the listener. Then, while wearing the Harmony Processor, they were asked to repeat sentences in the noise. As the noise got louder, and louder. Then she added Roger to the equation and the scores of hearing in greater and greater noise were compared when user Roger and when not using Roger.

Now I'm going to share the data from that study. So what you will see on the bottom here, noise will get louder moving from the left to the right. Along the side represents the recipient's ability to understand and it's shown as a percentage of words that are answered correctly with a low percentage at the bottom and getting better as we move up the side of the graph.

Here are the results of listening in quiet, so when no noise was present in the room.

The gray bars are listening with Harmony alone, and the blue bar shows the score when Roger was added. So in quiet, in both cases, these listeners performed exceptionally well, nearly 100% of the words repeated back correctly.

Now, as just a little bit of noise is added, you can see that with the Harmony alone, the recipient started to slip a little bit, but overall they would likely tell you that they performed fairly well. You can see though, that with Roger worn as a remote microphone, their performance actually remains near 100%.

Now let's see what happens as we add more and more noise to this environment to make it extremely difficult. So the ability to understand when just listening with the Harmony, as shown by the gray bars, drops off tremendously. And I think that you will understand that- Imagine you are in an environment that gets increasingly loud, It becomes increasingly difficult to understand.

But you will notice with Roger that the listeners are able to maintain their performance close to what they could achieve in quiet. This 82% improvement in background noise is really the difference between enjoying your night out at a loud restaurant or struggling to participate. Also what's really interesting about this, there were three of study participants who were C1 recipients that are taking advantage of Roger technology.

So another area in which Roger can help you overcome listening at a distance is with the television. How many people have used some sort of assisted listening device with the TV? Whether they are headphones, cables, or otherwise?

I see a lot of those. I see one person saying they like a massive speaker. And some only closed caption. Okay. So both Roger Microphones have a base station that could be plugged into the back of your TV.

This allows you to aim the sound from your TV, is sent directly to your Roger Receiver that's attached to the processor.

Think of this that allows you to have your own personal volume setting at a level that's comfortable for you while others in the room will have the speakers set at a volume that's appropriate and comfortable for them. That can make, allow Roger to make TV watching enjoyable really for the whole family. In addition, we know that hands free calling offers not only convenience but safety. In fact, there are many states around the country that by law you can only use a phone hands‑free. The Roger Pen can be coupled to any Bluetooth enabled phone which then allows you to listen to phone calls right to your processor while also acting as the microphone sending your voice back to your phone. Think of this. You are driving in the car. Your phone may be in your pocket or in the glove box or in your purse. When it rings, the Roger system will beep in your processor.

So you will know that the phone rang. You can answer the phone from the Roger Pen directly to begin your call.

The Bluetooth connectivity. Now there are two Roger Microphone options as part of the Roger technology system. Remember, the microphone is used to send what you want to hear to the Roger receiver that you are wearing. The microphone will be worn by the person you want to hear or plugged into your phone or media player or TV.

Now the Roger Clip‑on mic which you see on the left hand side, has a single button interface designed to be worn by the talker, clipped on to the shirt or a pocket.

On the right side, we have the Roger Pen, which has additional smart technology built into it that allows it to be clipped on to a shirt. Or laid flat on a table. Or pointed towards someone to listen for directional listening. It also incorporates the Bluetooth connectivity for phone use, which we mentioned. Both options provide TV and media streaming using a base station as shown in this picture.

There are also two different options for Roger receivers. While both can provide similar Roger benefit, they're worn in two completely different ways. The Roger X on the left is plugged directly into what is called the iConnect earhook on the C1 Harmony. IConnect also has its own dedicated battery source. We don't expect that your using the Roger receiver will drain the battery any faster at all. So no impact on your battery.

The iConnect will use either a dedicated auxiliary program, perhaps similar to your T‑mic in which case you could hear only the information coming from the Roger signal.

Alternatively, you might use an auxiliary program or a mix program. You could hear some information coming from Roger and some information coming from the processor microphone, both at the same time.

On the right is the Roger MyLink. This is a neckloop that communicates with your processor via the Telecoil. The MyLink is particularly nice solution when you have two different technologies on each ear. Though, for example, you may have a C1 implant in one ear and a newer technology in the other ear. And as long as the processor has a Telecoil, you can switch it on and connect it to Roger. The same is true to MyLink. And it could be used dedicated Telecoil program or a program which uses some information from the Telecoil and some information from the processor microphone.

So since coming together in 2010, AB and Phonak partnership has allowed for the development of some great technology, including our abilities to now engineer Roger wireless technology for compatibility with the C1 Harmony Processor. So how many of you think that Roger might be able to help you navigate really noisy environments? Okay. Overwhelmingly, people are saying, yes, yes, yes, yes. And there's one maybe. Another maybe. Okay. Well, I agree. If you have not already, will you talk to your audiologist about Roger the next time you see him or her? Several yeses. Okay. Now in addition to the wireless technology and those connectivity options, we know that you have questions about battery life. I can always tell who the C1 recipients are in the room because we typically have a couple batteries in our pockets or in our purse. So we want to give you the power of peace of mind through what's called the AAA PowerPak.

AB launched the AAA PowerPak accessory that's compatible with the C1 Harmony and allows the use of standard disposable or rechargeable AAA batteries. This power option has been developed for more convenience and also more comfortable hearing experience by delivering much longer battery life and simultaneously having less weight on your ear. So the AAA PowerPak is an accessory that can be plugged into your processor for extended battery life. Rather than connecting the PowerCel battery as you do today, the AAA PowerPak will be connected to your Harmony processor to supply power.

This will allow for longer battery life from your Harmony processor ‑ and while it can vary from person to person ‑ some people report back about two to three times the length of battery use.

The AAA PowerPak uses a standard "over the counter" batteries that can be purchased at any drug store. It is also cost effective from the standpoint that you can use AAA rechargeable batteries as well.

We hope that this solution will give you the peace of mind that you need when on a prolonged family outing, or find yourself in situations where access to power is not feasible, whether that be if you are camping, hiking, at the beach. I myself use the PowerPak when I take very long flights. It gives me peace of mind that I don't have to worry about a thing.

In addition to the increased battery life, you may experience increased comfort when you’re on the go. When using the AAA PowerPak, it allows you to wear the batteries clipped on to a shirt or on to shorts which reduces the weight of the processor when worn on your ear. It can also give you the peace of mind that if your processor is always connected to you no matter what your activity is.

The other really great thing about the AAA PowerPak that it is also used for bilateral support. What does that mean?

It means that one PowerPak can supply power to two processors, even if they are not matched in terms of technology. What that means, if you were to use two different technologies or two different generations implants, the PowerPak can provide power to both of your processors. So with that said, I'm going to go ahead and pass it back over to Michelle. I want to reiterate how grateful I am that everyone has attended the webinar. We have ample time for questions. I would like to say hello to my friends for many, many years and thank you for joining tonight. Michelle?

>> Michelle: Thank you, Doug, for sharing this update with us.

I have some questions for you, as I am sure the audience will as well. But I will start with this question. As a C1 recipient, what do you find the best technology for you is the best for when making phone calls? [Think the audio dropped off for a moment].

>> Doug: Sorry, Michelle, I had a technical difficulty, if you can bear with me one moment.

>> Michelle: Certainly, let me know, and I will repeat the question.

>> Doug: Yes. It'll just take one moment.

>> Michelle: Okay.

>> Michelle: Thank you for your patience. We're waiting on Doug to respond to our question. He will be with us in just one minute.

>> Doug: I'm sorry Michelle, I have everything taken care of here. Could you please go ahead and repeat the question?

>> Michelle: Yes. Thank you. As a C1 recipient, what technology do you find to be the most beneficial for you to hear your best when making phone calls?

>> Doug: Making phone calls. Well, it's been very interesting over the ears how we really have adapted to using the phone. I find without question the use of the T‑mic to be probably the most advantageous way to use the phone. The T‑mic really provides a nice kind of coupling with the phone. I also find that using the Roger technology with the cellphone is also very, very useful for me.

>> Michelle: Here's another question. How do you manage the battery life challenges as a C1 recipient when using the Harmony Processor?

>> Doug: Well, I think, you know, all things are relative. For those of us who have been using the C1 Harmony, we've been accustomed to a certain amount of battery life. And to be honest, when I change a battery, it's really a simple part of my day. Where I actually don't even think about it. However, with the AAA PowerPak, I will turn to that when I know that I need to hear for a long duration of time and can't afford to be interrupted. So it, I think of it less as a challenge and more of a standard part of my daily life.

>> Michelle: Thank you, Doug. Have you tried the Roger Pen with your C1 Harmony speech processor, and if you have, what were your experiences with it?

>> Doug: Using the Roger Pen was really an enlightening experience for me. The very first time I tried it I wanted to really put it to the test. So I brought my wife and some friends, and we went to a very, very loud restaurant that had a band playing. And, surprisingly, I was able to navigate that extremely loud environment very well. In fact, my wife even commented that she thought I was understanding maybe even better than she and the other normally hearing people in the room.

>> Michelle: That's great. Doug, how do you feel as a C1 recipient, as Advanced Bionics introduces new technology? Do you feel you are being left out or overlooked?

>> Doug: That's a great question. Because to be honest, when I look at Advanced Bionics, what I want from a company that I am, and have been married to for almost 22 years, I want that company pushing the envelope of technology. For anyone and everyone. When I see some new technologies come out that I don't have access to, I am still confident, and I know that AB is still working on products for me. I think that what we discussed tonight really demonstrates that while we hear about a new processor, wireless capabilities, that, indeed, we're not left behind. That we do have access to the very latest of technologies. So I'd want Advanced Bionics, always, always drive technology to allow as many people to hear as best as we possibly can.

>> Michelle: What excites you, you, Doug, about the probability of a new speech processor for yourself as a C1 recipient?

>> Doug: What's exciting for me, I look at each generation of processor that have been delivered to me. Each one has offered me something that I didn't have before. So what excites me about this is I have never had access to wearing a processor when I'm at the pool with my kids, and I'd like that. A processor that's smaller and longer battery life. I am really excited about this. As the decades continue to roll on, I am excited to see many more exciting things come our way.

>> Michelle: Great. Thank you, Doug. At this time, we're going to stop the recording. We're going to take questions now from the audience.