

This unedited transcript of a continued webinar is provided in order to facilitate communication accessibility for the viewer and may not be a totally verbatim record of the proceedings. This transcript may contain errors. Copying or distributing this transcript without the express written consent of continued is strictly prohibited. For any questions, please contact customerservice@continued.com

ReSound Enzo IA: More Sound. More Power.

Presenter: Tammy Stender, AuD

And thank you all for joining. I am so excited to talk to you today. My name is Tamara Stender, but I am going to be introducing a brand new superpower hearing instrument for you all, the Resound Enzo ia. I'd love to be able to share with you why it's more than just a superpower. It's giving you more power than meets the eye when it comes to a lot of things that matter most to people with severe to profound hearing loss, hearing losses.

So we have our FAQs here on the side and then some disclosures which you can go ahead and read.

And then there are, of course, limitations and risks to every study and to every presentation. So of course we won't be able to cover everything in this course. And you can go ahead and read these limitations and risks. They are the standard ones. But if you have any questions or comments or thoughts, please feel free to write them into the chat or to reach out to me after the talk.

Okay, so learning outcomes for today. For today, we're just going to talk about the new Resound ENSO ia. We're going to talk about the hardware and the design improvements that have taken the older Resound Enzo Q into the next generation. We're going to identify what kinds of technology improvements have been implemented in the new ENSO ia and then finally explain why this all matters to the patient in terms of benefits and rechargeability, connectivity, as well as hearing amelioration.

Before I put my hearing aid on, it's silent.

The sound is muted. The detail of your world goes. The world was the one that went silent, not me. Literally overnight, I lost my hearing. I became deaf around the age of four after a series of viral infections damaged my inner ear.

When I had my baby, I had to figure out how I could be a good mum to him in the middle of the night without hearing aids. I don't think I would.

I would have been considered coming a mum.

They just allowed me to be the best version of myself. Wearing the digital hearing aids wider in my auditory environment. In one word, it is life. I'm a superpower hearing aid where we need a lot more power, background noise, because that's the one thing that people with severe hearing loss struggle with.

I think the most important thing is how clear the sound is.

Right before I go to bed, I just put my hearing aids in the charging station and when I wake up, they're ready to go the same way I was like, plug in my phone before I go to sleep.

I use Bluetooth with my hearing aids. All the time, every day. That has been such a game changer for me.

It just makes such a difference to somebody on an everyday basis. You'll hear color. That's what I will say. You will hear color.

Okay, so of course we had to play the glittery marketing video. But I think what I take away from that is what you all probably already know as being providers. You, you know that this is a population that needs power, that they have wide ranges of ages, that they are living their daily lives and doing everything. But doing it with a severe to profound hearing loss really adds additional challenges, and not only for them, of course, but also for us in making sure we meet their needs. So we want to empower people with severe to profound hearing loss to do more than they were ever able to do before.

And that's basically what you can take away from the brand new implementation of our resound superpower hearing instrument.

11% of hearing loss cases are severe to profound. So basically 1 in 10 of the people on average that you may see would be a superpower user. And there is up to a 69% adoption rate for severe to profound hearing loss globally. So there is a pretty good adoption rate there. And of course this comes from reports like the WHO report and key facts on hearing loss.

No other hearing loss spans as many ages. So we definitely know that there's a lot of differences in what people need, but the one thing they all need is power to be able to hear succinctly and clearly in their daily lives. And if they don't get that kind of benefit, we see the lowest quality of life scores amongst these users. And the more severe the hearing loss, the greater the loss in quality of life is if these needs are not being met. So it's kind of like not only a superpower hearing instrument and what we call it for how much gain and output it can provide, but we have to be superpower heroes as well to make sure that we really define and meet their needs.

And they have a lot of things to say and they do tell us what they need, which is great because then we can start to better fit their needs. These are all quotes that we obtained in interviews with users of severe to profound hearing loss. It's not that the hearing aids I use help me better, it's that they help me here to be able to do everything because I have such a hearing loss. The tiniest improvement is a big thing for me. They want to say they know they're not going to hear the same sounds as other people.

They hear them differently, they acknowledge that, but they are willing to just move forward. And people say to me now that I'm not the person I was when I first lost my hearing. And this is why we need to really, of course, pay attention so well and make sure that when a new product comes out, it is well tested, well validated, and meets everything that they could want. And every upgrade makes a difference. It has been several years since we had an upgrade in our Superpower BTE hearing aids

from Resound, but that's because we want to make sure that we're making a real solid difference.

So when you look at Market Track 2022 and you see what matters amongst wearers of superpower hearing instruments, number one is sound quality, just like it is for mild to moderate as well. Two, reducing feedback. This is something that oftentimes comes up in superpower fittings, especially in the past, before there was such good ways to control feedback such as DFS Ultra 3. But because we're putting so much gain and output through these instruments, we have a better likelihood of getting feedback. And of course that would be a bad thing.

So our feedback control feature needs to be as robust as possible. The latest features are needed by this population just as they are from everyone else. Physical comfort absolutely goes without saying. And then connectivity. So when you see a superpower user, they often are all about the gain and the power and please turn it up.

It seems like every time it's like the opposite that I hear a lot of times from first fits where they're saying, oh, can you please turn it down a little bit? That sounds really different than what I'm used to. A lot of users of superpower hearing instruments have worn them for a long time, and some of the older ones may have even been wearing them with gain prescriptions that prescribed a ton of gain, maybe even linear gain from way back in the day. So we need to provide that for them. But beyond just gain and quiet hearing, speech and noise is the biggest challenge.

And it determines whether users stay engaged or withdraw. They need the powerful application and cannot accept any compromise on gain because if they compromise on gain, their likelihood to withdraw from social situations can increase. And users in the market track study also noted that feedback can still be a challenge with superpower hearing instruments in general, and they need that confidence to go where they felt they couldn't go or didn't enjoy going before. And that's what we planning to provide them.

But with that great gain comes great responsibility and needs from the battery. 91% of users rate their Hearing aids as easier to use with rechargeability. So when we came to the drawing table and thought, what would we need to implement for a super power instrument in 2025? We thought, okay, we've been using 675 batteries for a really long time and those are still good. But today, if 91% of users want to have a better ease of use with rechargeability, we have to implement it with rechargeability.

It's just something that people are so used to doing in their everyday lives that making the superpower hearing instruments rechargeable really is an easy adaption for people in their lives. It takes away the hassle of carrying batteries. You can plug your charger in and within minutes have more power in there. 90% of those with the rechargeable option were reported to be happy with it in the market track study. So it's not just our research, it's outside research telling us that rechargeability is something that is desirable.

And 35% increase in binaural rates with rechargeability has also been noted, meaning that people are more likely to integrate it into their lives when it is something that fits into the way that they live their lives. We all have a tendency to plug in our phones or charge our devices at the end of the day, and this is just something else that gets charged and means less trips to the store to buy or trips to online to buy more batteries. Physical comfort always counts. It doesn't matter who you are. It doesn't matter how severe your hearing loss is.

If it's not comfortable or doesn't make you feel comfortable about yourself, you're probably not going to want to wear it. So we need to make sure that they want to wear it because this population doesn't really have much choice. It's not like they can only wear it for meetings or only wear it when they go out socially, as some users tend to say they do with milder hearing losses. This population relies on their hearing aid every day to support their hearing, so it has to be comfortable. Size isn't everything, but wearing comfort is to this population.

They're willing to sacrifice sometimes on size, but not on comfort. And the top reason for not getting hearing aids is the comfort. If they feel like they're blocking up your ear, or if they just don't, they feel heavy. This is things that would be the number one reason to not get a hearing aid for some people. And finally, connectivity, that last pillar that we covered in the needs for people with severe to Profound hearing loss.

Everyone wants to feel included. And that doesn't mean you just get invited to the party. It means you are talking at the party. I heard a quote recently that I really love. Inclusion means that you are not only invited to the dance, but you are dancing along with everybody else.

And that's what we need. We need that kind of inclusivity. So that means that if our mild to moderate users are able to do things, then why shouldn't our Superpower users be able to do the same? That means streaming calls improvements to the stream sound quality to give them the best of what's out there today. The ability to take part in AuraCast broadcast streaming, which is actually well known in the severe to profound hearing community because this community also tends to use telecoils a lot too.

So telecoils are just another version of broadcast streaming. And whether it's telecoils or auracast, we can accommodate both in the hearing aids with Enzo I A. So they coexist. Telecoils may be more present at this point, but AuraCast is growing greatly and this population is aware of it and wants to have all the tools that they can to be able to connect wherever they are. And if it's something that we can't directly stream with Aura Cast, for example, then people with severe to profound hearing loss also report that they use their accessories on a daily basis, which I probably think is way more than what mild to moderates might use.

So things like a concert experience, things that really make memories happen for a person in their lives, are becoming more and more accessible with these kinds of advancements. Which means that we're

able to build hearing aids and you are able to fit hearing aids around what people actually need according to the latest market track. So connectivity more inclusive across more devices and venues. Physical comfort, paying attention. What's the size?

What's the weight? How does it feel on your ear? And also how does it make you feel about yourself when you look in the mirror? That's also part of physical comfort. Latest features, making it rechargeable.

This is a big leap forward for a lot of Superpower users and it helps them integrate it more into their daily lives. And reducing feedback instantly, reducing feedback without restricting gain so that you can hear your best in noise. Because let's face it, if there's feedback, the hearing aid might as well be off. The feedback has to be gone. And then on top of that foundation, you layer on the good things like beamforming directionality.

When it is appropriate, you have the brand new 360 All around program in this hearing aid, which is something that our older superpower did not have. So this is a big leap forward in terms of superpower BTE technology.

So if there's four things to remember about the Enzo ia because I know this is a lot of information, right? These are the four things that really you can pinpoint as why this is good for your patients. Number one, it's made for hearing in noise. You are able to enjoy real gain while spotlighting speech and eliminating distraction. And it does not cut you off from the world.

And that's everything that 360 all around does, which I'll be talking about in a little bit. World's best feedback management We've done some testing with superpower BTEs available on the market today. And we have determined to get the fastest elimination of feedback without compromising on gain, meaning without restricting gain, without meaning that you can't reach your targets, you can reach your

targets and you don't get feedback. This is the best of all worlds. The world's smallest rechargeable superpower with all day comfort and all day battery even when streaming.

And the world's first superpower with Bluetooth, low energy audio and AuraCast already working in the devices. So this really helps tie everything together with their hearing, no matter where they go. And if it's something that they want to use with TV Streamer plus and might see Mic plus as well, that also has the Bluetooth LE Audio and AuraCast technology built in. So let's start with hearing a noise. Of course the most important thing that we always talk about, it needs to sound natural.

This is our philosophy, organic hearing. How do we make it integrate into people's lives and give the human brain what it is thirsting for when it comes to speech and noise and other sound quality issues? Well, the first thing is, is that the brain likes what the brain likes, right? And things have to sound natural. And the best way to do that is to emulate the way that the natural hearing processes work in the brain.

And this is what makes people say, hey, okay, this sounds good. You can do anything with a machine. But making it sound good to a human, which is not a machine, is an extra layered challenge. You have to look at the biology, the physiology, how things are done by the human body, which no machine really truly can emulate, and try to get as close as possible to, to that human kind of hearing experience, to that sounding natural philosophy. We have now added intelligence augmented.

And what this is, is a human approach to AI, this means that we're not just blanket tossing AI onto a hearing aid without thinking about how it's perceived by the brain or what kind of benefits it brings to the user. So we're going to go over how we use AI across all our solutions, but we don't really think of it as artificial intelligence. We think that we are augmenting human intelligence. And that's why we say intelligence augmented and we had to call it IA instead of AI to distinguish it from the artificial intelligence version that we all hear about every day. This is something different.

Secondly, it needs to feel natural, it needs to adapt organically to the patient for best wearing, comfort all day long and ease of use. And then finally, of course, connectivity. We study how do people use and interact with their electronic devices in the real world. So we develop our technologies around that. And when we notice that things are changing in the world, such as AuraCast and Bluetooth Low energy audio, we strive to put that technology into our products as quickly as we can, ensuring though that they are validated and provide real benefits for the users.

Which means, of course, it helps you achieve your goals as a fitter as well. So I mentioned that we use intelligence augmented across all our solutions. So how is that done? Well, in the world of AI, there are different kinds of categories and certain things are categorized as machine learning and other kinds of AI are categorized as deep learning. So everything that we do that's AI related, we relate back to the human.

And that's what intelligence augmented is. We're augmenting or growing the powers of the brain with the support from our digital technology. So machine learning, how we use machine learning in all of our products is number one, the environmental classifier. It allows the hearing aid to make predictions or recommendations of how the features are set by learning data over time. So this is something that happens all the time and it is always running in the background whenever you have a resound hearing aid working.

And it's so important that this is accurate because if it's not accurate, then your features turn on when they're not supposed to, or they turn off when they should, should have, and then you end up not having the benefits that you were paying for with these hearing aids. Secondly, Feedback Manager, the autoDFS especially, is pretty cool and it was developed a while back, but it actually adapts over time to the way that sounds are entering the ear canal to be able to more appropriately handle and eliminate feedback as it occurs. Now this is the kind of feedback manager you get before, before you calibrate we

still recommend calibration of the DFS system because it will do the most precise job. But if there's some reason why you just can't calibrate or it gets sent back to the patient and they have to use it before they could come back in to see you, which could very well happen with the Superpower user, this will help them eliminate feedback even if they haven't been calibrated. But again, calibration is the gold standard.

But we've had it in our devices for a long, long time. Deep learning is another type of machine learning. And what that does is it analyzes large and complex amount of data in ways that are modeled after the way the human brain works. And that would include our Check My Fit feature, which is the one that's on the app. And it helps people who struggle with being able to properly insert their receiver in the ear receivers to ensure that they're getting it properly placed by moving their phone around.

And it is amazing that the phone can actually use its camera to identify the structures of the pinna to be able to tell the person, yes, this is within the tolerance of what we would call a good insertion versus maybe it's falling out of your ear. It doesn't quite seem like it's incorrectly. So really helpful.

So aside from all of the ways that AI is implemented in our product family, more specifically, let's look at basically what's all together as a summary for the Resound Enzo ia. It's the world's smallest rechargeable superpower hearing aid. It has fast rechargeable charging, it has an all day battery with 28 hours max of battery lifetime. 93% of people cited a preference for hearing a noise with our new directionality over what we had with ensoq. And we have new colors, we've tested the feedback manager, we still have the replaceable mic filters.

Hooray. Makes our lives so much easier in the clinic when some things need to be changed. And you can go ahead and handle it right there and then it's all weatherproof IP68 rated, it has Auracast and it is compatible with our Multimic plus and TV Streamer plus. So really it's got everything going for it.

Okay, let's deep dive into the hearing and noise part, giving access to the sounds that matter. So more sound has to be the right sound quality. And so as such, we need to make sure that things are accurate in terms of how the environment is being classified, which determines when to turn on directionality or not. If you're in our automatic program? Well, the environmental classifier is the most important base layer for that, and that is for clear and comfortable hearing to automatically adapt to changing environments.

So when you have environmental classifier, it runs in the background and you don't even have to adjust anything in the fitting software. It is doing its job on the chip all the time, 24, 7. But then on top of that, after it has classified, what do we do with the sound? And this is where we get 360 all around. This is a directional program, but it also is a very automatic program, meaning that when it is quiet or there's only speech in the environment, you're going to get omnidirectional on both sides.

And not just plain old omnidirectional, but because of the way that the hearing aids communicate with each other. In a binaural fit, you actually get the sum of both of the omnidirectional responses, meaning that your environment is widened out more than it would be if there was just omni on one side, omni on the other. So that's what happens in quiet. But when it gets a little bit noisier, it adapts the directional response to optimize your speech performance and noise. So if there's a speaker on one side, but a fan blowing on the other, you're going to optimize the directional response to get the best signal to noise ratio in that automatically without the patient having to do anything.

And finally, if there's a speaker in front and there's a lot of noise behind you, like at a very busy restaurant and you're talking to someone in front of you, that bilateral directional response is going to kick in. Now, we always talk about access to surrounding sounds in this context. What do we mean by that? It means that regardless of what setting you're in, bilateral omni, bilateral directional, what have you, you are going to always have omnidirectional for some of the low frequencies. This is huge.

Why is this huge? Well, studies have shown that omnidirectional in the low frequencies enhances sound quality, improves sound quality for your own voice, improves your localization abilities because it maintains more of the interaural level differences from sounds that move from one side to the other, for example, or that are located in one side or the other, and finally provide some natural protection from the amplification that usually gets emphasized when there is wind noise. When there is wind noise and a full band directional response, the directional patterns tend to amplify that Wind noise more with omnidirectional. In the low frequencies where most wind sound is centered, you actually avoid that contraindication or that side effect of directionality. And it gives you better sound quality in wind as well.

So plenty of reasons why 360 all around is an all in one automatic program. But once in a while, even when things are automatic, you might need to put on the afterburners, I like to say. So let's say you're in a really make or break situation where you have to listen in a really difficult situation. And I feel like I get in those situations all the time, although I believe I do have normal hearing. But there are times when I'm like, oh my gosh, can you say that again?

That was. It's so loud in here. I really want to hear what you're saying. I would love to be able to just be like, beamform right in front. Let me hear what you're saying.

And then after what you're saying is done and we're moving on to different areas or different topics, I can go right back to 360 all around. Well, when I have that make or break situation, that's when clear focus is so important. This is our premier directional response. It spotlights speech and eliminates distractions more than we've ever been able before. And it still doesn't cut you off from the rest of the world.

It still has things built into it to maintain localization cues. So this is huge when it comes to these kinds of make or break. You're getting the strongest directionality, and you're not sacrificing on other things that you also could want.

Environmental classifier. What does it do? It uses AI, as we talked about machine learning, to scan the environment in real time and classify sound into seven distinct categories. Then it activates appropriate features based on the amount of noise and the presence of speech. Finally, it helps users to hear their best automatically, meaning that you're not thinking the hearing aid is taking care of analyzing the environment and then being able to turn on those features.

We have recently retested the accuracy in our Environmental classifier. Every so often, we retest it because we really want to make sure that it is maintaining its accuracy. And in our newest products, we know that it's been 91% accurate in the past. But just to double check that nothing has been lost, as we progress through our products, we do these tests to make sure that we're still accurate. And why do we want to be accurate?

Because if it's not accurate, the features don't work as intended. So what we found is that 91% accuracy, meaning, let me go back one here. Meaning that if you are in an environment, you have a 91% chance of making sure that that is correct. That is actually industry leading. We tested some other manufacturers as well and found that we were leading in this area.

Why are we not 100%? Well, I would love to be able to tell you that we're 100%, but I want to be truthful and I want to tell you that there is no such thing as perfection in AI or in machines. You could argue maybe the human brain could be perfect in its imperfections, but basically 91% is industry leading in terms of accuracy and it is the foundation for what we do when it comes to having a preference. Did people like the things that we've done in Enzo I A vs Enzoq in terms of hearing in noise and providing access to surrounding sound. When we tested people, 90% of them preferred listening with the new Enzo IA in the 360 all around over what we had with Enzoq.

Enzoq used binaural directionality 3, so it was not able to perform the kinds of technology that 360 all around performs. So we're taking this several steps forward for superpower users and putting it to the test. What we found is we have the industry's most narrow beam former when you want to be in that clear focus program, and that would be when you choose to go to the second program, which is here in noise. So when you really want to make that choice, clear focus is what you're going to get with the 9 level and you get about 2.7 dB SNR improvement compared to what was before. And again, this is done with human testers, so testing can vary from other populations, but we got 2.7 dB, which is actually a huge difference.

And even More than that, 93% of them preferred the Enzo IA over the Enzo Q for hearing and noise. So they perceived is as a difference too, which of course is what makes the most different, makes the most importance when you're fitting people in the real world. And then of course, clear focus by itself provides an 8dB SNR improvement with this population of severe to profound hearing loss compared to omnidirectional. And this is one thing that I want to highlight. We did not just take the improvement data from our mild to moderate studies just because they have clear focus as well.

In the resound Vivia, we got 8.6 DB improvement over Omni there. We retested clear focus with severe to profound users because we are never really sure we want to trust what happens in one population versus another when it comes to efficacy and benefit. So this is a study done with severe to profound hearing loss, and we got 8.3. We got 8.6 with mild to moderate hearing losses. So this has been tested and verified with people with severe to profound hearing loss to give you the peace of mind in knowing that we have validated it with this population in mind.

Okay, now let's talk about size and comfort. Seems like a lot of people still want the smallest thing if they have the choice. And Resound enzoq was not beastly huge, but it is huger than Enzo ia. It's a little hard to tell, I think, in this picture, but Enzo I A is the smallest rechargeable superpower hearing aid.

In order to get gain, you have to not have feedback. So we did some testing on the Enzo IA about how much added stable gain we could get with the Enzo IA compared to the other Superpower instruments that are out there today. What we did is we tested, okay, let's really push the system. If we are at the limits of feedback, how much more added stable gain can we get when we turn on our feedback cancellation system, which is DFS Ultra 3? In that situation, turning on DFS Ultra 3 gives us 26 decibels of added stable gain, meaning that that is a powerful and robust system.

It's going to protect from feedback. The other brands also provide added stable gain, but as you can see, Resound was leading in this test.

When you look at the results, overall, we see about up to 6dB more added stable gain compared to the next leading superpower solution. This can be the difference between making a target and not making a target or making a consonant sound audible versus not audible. If you have to drive back the gain to control the feedback, it hurts these users. And so as an audiologist, we all know we want to give them everything they can. And also it's really annoying for us when we hear them whistling.

We're like, oh, my gosh, isn't there anything I can do? And this is going to give you a robust system to avoid those kinds of experiences.

So I'd like to share some graphics that were developed from this testing. And remember, I was talking about autodfs. This is what happens before you calibrate. We have like a baseline feedback control system already working before you calibrate, even though we recommend that for everyone you calibrate because it basically customizes the feedback system to their individual ear. Autodfs over time does get better.

But before calibration it's set to a certain level, which is a one size fits all and then it adapts over time. So we took this one size fits all auto DFS before it could adapt and we judged how well it responds,

how fast it responds and whether or not it reduces gain to eliminate feedback. What this turned out was that we got a 0.5 second response time. So it's very quick acting and it was giving you a little bit of feedback. That's what I'm looking up up here.

Anything that you see that looks like a red mountain peak is going to be feedback. So there was a little bit of feedback, even though it adapted really quickly. But it wasn't a lot. Once you calibrate, looking down at the bottom, we're checking to see if there's any reduced gain here too. After calibrating you can see the difference.

Calibration makes it more precise to the ear and in the same ear that had the little red mountain peaks, which meant that there was a little bit of whistling because it hadn't fully adapted to their ear. After calibrating, that whistling went away. And what's furthermore is that we didn't have to reduce gain to do it. Looking across the industry, we saw some varied responses. We checked without calibration if the to see what would happen if you just didn't calibrate versus what happens when you do.

All of these brands have calibration built into their system, so all very similar that way. And without calibration, there was one brand that whistled the whole time without calibration there was a little bit better responses for brand B and brand C than that. But looking, oops, sorry, but looking at what it did to the gain, there was sometimes some gain reduction that happened in order to control that even though they hadn't calibrated. After calibrating, if you look at the 3 right most bottom graphs, you see that they were able to get rid of the feedback overall, but sometimes at the cost of gain. Brand a reduced gain by 7dB, brand B by 4dB, brand C by 2dB.

And so while everyone can get rid of feedback, getting rid of feedback quickly and without sacrificing on gain is something that sets us apart with DFS Ultra 3.

So just as a little review, because I love these kinds of graphics, how does this whole system work?

Well, for resound you have a calibration and that's what is recommended. And when you calibrate, you introduce the static filter to enable safe fittings and stop feedback. So let's say this guy put the phone and it blocked up the ear and the feedback suppression took that feedback spike that you saw momentarily and reduced it down to what the baseline is without feedback, which is the gray line. The adaptive feedback cancellation filter is used for the more dynamic situations to avoid unwanted sounds, improve stable gain and sound quality.

So this means that when it's a very interesting kind of situation where let's say something happens and the phone kind of drops or it's moving really quickly, your adaptive system is able to adapt very quickly. And this allows for differences in the ways that people also might put their hearing aids in if maybe it wasn't exactly placed the same way in the ear canal as it was when you calibrated. It's okay, because even though receiver might not be as deep as what it was when you calibrated as a professional in the clinic, the adaptive feedback system is able to recognize that there's going to be deviations in the real world and that it can still control feedback regardless. We control feedback without reducing gain by doing inverted phase cancellation. So when you see a feedback spike, imagine an inverted phase of that feedback spike, and that is what is being digitally applied to the signal so that that feedback is taken away.

And this is nothing new, but it is something that is very important, of course, for people with severe to profound hearing losses that need a lot of gain.

So intelligence augmented, how do we use it? We use it to support the premier directionality and automated system that we have with 360 chip co processing. This classifies sounds, provides automatic hearing all around, and gives the user the ability to drive the situation to really spotlight speech in that second program. And all of it without feedback. But we can't do it alone.

The 360 chip does not work without the human brain. That is where we're focused. We're focused more on the user and the human brain. So if you want to think of it as the 360 chip is a helper. It's the co processor, the co pilot, and the human brain is the core processor.

That's the main pilot, really driving the decisions. What we strive to develop our technology for, and we all know the human brain makes the final decision on what to listen to and how to feel about your hearing aids and everything else that makes us human. So that's where we need to focus when it turns to intelligence augmented.

Okay, so let's do some nuts and bolts here. What do we mean by world's Smallest rechargeable superpower. We are very excited to have a rechargeable that doesn't sacrifice on size. We've also added things like tap control, LED indicators, replaceable mic filters to make our lives simpler in the clinic. It still has volume control because we know that having onboard volume is very important for some users in this population.

For sure. It has a built in telecoil, so you can go anywhere that you want. You don't have to choose Auracast or telecoil. You can have both. You can obviously not use them at the same time, but you go to a church and you go to a theater and no matter how it's set up, you've got the way to adapt to all of them.

And that's right inside your hearing aid. And then of course, let's not forget powerful output with an 84,140 spec, the default hook is the metal hook. And we firmly believe that that's the coolest hook because not just that it looks cool, but also because having metal instead of plastic actually improves the stability of the system. And so when you're talking about pushing a lot of gain through an itty bitty little hearing aid, you want to have the most robust structure of that machine. Metal is where it's at.

And we are launching in four different tech levels in terms of comfort. We're smaller than the ENSO cue. We have a more organic design developed for the human body. And we want to have just one point touch on the ear for increased comfort.

We have more premium colors than we did before. And of course, as we always have, we have IP68 ratings. When we say this, we're not just talking about how we quantify what the IP level is. Every manufacturer quantifies it. And currently IP68 is what everybody has.

So that doesn't really distinguish us too much. But what does distinguish us is that we have protective nano coating inside and out of the device. So all you see right here is the outside, of course. But if you were to crack open these shells, you would see that there's components and those have also been nano coated. What this does is that it provides insulation basically, or isolates these components like the chip, like the wiring, from moisture and debris.

That does happen because even though these are very sealed, rechargeable devices, they're not impervious to everything, especially over time. And so if you go into a human environment, we do not want moisture building up inside. So nano coating inside and out helps protect us from these kinds of moisture events, means that the hearing aids last longer. And it means that your patients are happier for longer because their hearing aids are still working years down the line. It's kind of amazing how long these hearing aids can actually work without a whole lot of care.

I mean, yes, we hope that they don't like get abused in the real world, but you don't have to treat them with kid gloves. You don't have to be afraid of them. They are nano coated, they are robust and they are going to last a long time. And talking about lasting a long time, we want the battery to last a long time too. So with the rechargeability and you see the charger here, it's a standard charger.

There is a max 28 hours of use. If you stream for two hours, you get 24 hours of use. Now that's 24 continuous hours. It's not just like, oh for a day. I mean, if you're wearing the hearing aids about 16 hours a day, that's like one and a half days of use without having to charge.

And then if you're streaming 50% of the time, and again, this is Bluetooth low energy audio streaming, you get 20 hours of use. So that means 10 of those hours you're streaming. And that's pretty cool. We also chose to put our charging as inductive, meaning that there's no contacts that are magnetic or metal that you'll see on the outside. And what inductive charging means that it's a smooth, sleek surface and that way there's no contacts to get clogged up or any kind of moisture buildup that could impinge on the way that it actually recharges in the future.

So again, it's very user friendly because it requires minimal maintenance and it charges from inside the device, not from external contacts.

So why would we want to use rechargeable? Well, I probably don't have to go through this because a lot of us already do in our daily lives so much, but it's reliable power. When you talk about the kinds of things you're asking the hearing aid to do, streaming with Bluetooth doing tap control, which means that there are motion sensors in these hearing aids. You need a reliable power source. And the truth of the matter is, is that if you notice, manufacturers generally only put motion sensors into devices that are rechargeable.

And this is because we have all found that with zinc air batteries, over time their power surging basically diminishes. And they do not, they do not provide the reliable power that's needed for Very power hungry features such as motion sensors, accelerometers. So it's not a surprise that you see motion detector. Hearing aids are always rechargeable in our industry today because rechargeability provides more reliable power than Zinc Air batteries.

Number two, it's easy to use. You don't see battery doors or batteries. It's great for people with limited dexterity, lower vision, where seeing the battery door can be hard. It's also safer if it's around pets or small children or people with developmental differences. You're not going to be able to swallow this battery because you can't get at this battery.

It is enclosed peace of mind. When you want to know the battery status, you can check it anytime in the Resound Smart 3D app. You can't do that with Zinc Air batteries and fast charging. It allows for, with this charger, a fast charge for a quick power boost.

Okay, so we want everybody to have a good time in their lives and to hear the best in every situation. So how do we make this more fun for people? How do we allow them to have as much fun as possible? And life's not all about having fun. But I am going to say that life is about memories that you make.

And oftentimes life is about memories that you make while you are interacting with others, being entertained, going someplace. And unfortunately, those tend to be the most difficult listening environments for people with hearing loss. So when it comes to making memories, being entertained, the TV Streamer plus is a great accessory. We have one touch pairing to make pairing to the hearing aids easier. We have auto streaming to make it more effortless.

All you have to do is turn on the TV Streamer plus to send sound directly to the hearing aids. You don't have to change to a program. You can adjust the TV volume and the surrounding sounds with the app. And it supports AuraCast, which means that if you've got a TV streamer plus and you have a friend who's got an earbud that has AuraCast in it, they can also take advantage of that streaming with your TV Streamer plus it is inclusive. And with Multi Mic plus, it just really gives you that extra boost that you would really, really want to have in a really difficult situation.

So whereas we talk about clear focus giving you that make or break kind of help in difficult situations, that's going to still be within the hearing aid. And that's great for things about up to six feet away. But if you want to hear a speaker up to 82ft away, the multi Mic if the speaker is wearing, the Multi Mic plus is going to really help. It streams their voice directly to your hearing aids.

And even if you're in like a group setting and you're having a meeting at work and it gets kind of noisy, clipping the Multi mic onto a conversation partner helps. Or in the, on the middle of the table, it helps for group conversations too, because when it's placed horizontally, it does not directionally pick up sound. It omnidirectionally picks up sound and this allows you to pick up more voices around you. Kind of the best of all worlds. What you can get out of the Multimic plus is astonishing.

Almost 10 decibels of SNR improvement compared to Omni. And this again, we studied with Superpower hearing aid users, not with mild to moderate, but specifically with users of the Enzo IA, you get 6dB additional SNR improvement. More than clear focus, again with this population. So if you've got a patient coming in at 2 o' clock this afternoon and they're a superpower user and they're like, give me the best of the best of the best. You give them the Enzo I A with the second program with clear focus and then the Multi Mic plus because, wow, you're talking about improvements over what you're getting in our noise program, the hearing noise program.

And this is astonishing. And they are going to hear very, very well with this.

So multiconnect. You might have heard a little bit about Multi Connect in other industries. What is it? Well, we have the ability to use Multi Connect as well. It means that you can switch between devices that are paired.

So if your hearing aid is paired with two smart devices simultaneously, you can have them sign. You can take a phone call while streaming music or movie audio from the laptop. You don't have to say,

hold on, get my app out and switch which one is going to be. It will prioritize the phone, but it allows you to stay connected to more than one. So when that phone call ends, you can go right back to watching your show.

Pretty cool. And oh, for us in the hearing industry, let's not forget that it's cool that we don't have to turn off the Bluetooth anymore. When doing the fitting, it connects to two smart devices and the fitting software simultaneously. Pretty nice thing that we don't have to worry about anymore when we're doing fittings and fine tunings. Let's just finish up with a couple minutes about Auracast and Bluetooth Low Energy audio.

So Bluetooth Low Energy Audio was developed by the same People who bring us Bluetooth Classic, but it is the next generation of Bluetooth. It has better power consumption and higher fidelity. Basically, it's the new and improved Bluetooth. It is being implemented in new devices all the time with the Resound Nexia. We're the world's first hearing aid with Bluetooth low energy audio and AuraCast.

AuraCast being the broadcast technology that you can use in public spaces that uses Bluetooth lower energy audio. But now we've extended that to the superpower with Enzo IA.

AuraCast brings you audibility in the places where you make memories and where you really want to enjoy yourself. Movie theaters, conference venues, televisions, airports, where you need to hear things. But it's a really bad situation. And in fact, people with normal hearing have a hard time in these two. So we're helping people with Superpower losses and with mild to moderate losses with our Nexia and Vivia products to be able to connect in these situations.

And it's not just about being able to connect, but having to figure out, how do I do this? Do I need a separate app? We've built the AuraCast assistant right into our Resound Smart 3D app, meaning that you don't have to have a bunch of apps running at the same time to use this. We have the AuraCast

assistant right built into our app, which means that you go to your app, you click on Find a broadcast, and that's in the bottom of the screen. As you can see here, you choose the AuraCast broadcast from the list because there may be more than one.

If you're, for example, in an airport and you enjoy the sound directly streamed to your hearing aids, it's very seamless. It's easy to use.

So what the Smart 3D app does with our Cast Assistant is it makes it available for all users. It makes. It doesn't matter if you have an iOS or an Android device, as long as it's compatible with your Resound Smart 3D app, which is compatible with nearly every kind of device. Right now, you have that available for all users. It's very inclusive.

That way you can look at all of the accessory streams in one list and choose what you want to listen to. And then you can also share it with your family and friends. If that friend comes over with their earbuds, for example, and they have auracast in there, just go ahead and share it with them and then they can enjoy it, too. Pretty cool. And in terms of where it's available today, we get this question a lot.

It is becoming more and more available. And some of the more notable and famous places you would have heard of are Lincoln center in New York, the London Theater, St Paul's Cathedral, the Copenhagen Opera House, and the Sydney Opera House. Just being a few of the places that most people have heard of, and we have been able to use this technology in these venues today. It is truly exciting to think how we are evolving to make the world so much easier for people with hearing losses. If you had to see me inside, as soon as it started, I was in tears.

It's the most incredible experience. And to actually be able to come in here and know that this is available, it's going to change people's lives.

I thought it was absolutely incredible. I didn't know quite what to expect because this is a first today. It was so clear and just sounded beautiful. To be able to sit in there and to be able to hear details in the instrument that I couldn't hear when I took the earbuds out halfway down the room was amazing. It was like having the best seat in the house.

It's almost like opening up new dimensions for people using this the first time. It's really all these heartwarming moments that we hope to achieve, of course, by rolling out this technology.

So those were some clips from some of the places that have already implemented AuraCast and with people with hearing loss. And you heard from people without hearing loss who were using earbuds that had this technology in it. It really changes the experience. Makes you feel like you're in the VIP section, even if you're not. Obviously, most of us are not.

This is so exciting. And this technology is available today, and that's what's so great. Your patients are going to love it. And it's not just the fancy concert halls. It's getting to be everywhere.

And when you add, when people ask you, well, how long will my hearing aids last? When do I have to buy more hearing aids? In five years, we're going to be talking about our cast everywhere. It's not going to even be maybe something we talk about because it's so ubiquitous. They have estimated 4 million devices or 4 million venues being fitted with AuraCast by the year 2027.

And that's only two years away. So for your patients who don't want to buy hearing aids every couple of years, they want to get the bang for their buck. They want to make sure that they have the best of the best. And who doesn't, right? Because you don't want to necessarily buy hearing aids every year.

This is the technology that takes them into the future. And when we're fitting it, we haven't forgotten about it, is a difficult job to fit hearing aids. That's why we have advanced degrees. We want to make

things easier for the fitting software, too, for all of us. So we're saving some time during the fitting sessions.

We have a more intuitive discovery screen with less. Less words to look at, more streamlining of what you are supposed to be doing, what you want to do without all of the extra stuff there. We've got faster firmware updates and we have a new test box measurement setting. And this is going to set the directionality presets for test box testing automatically so that you can save time having to go back and change things. And also in terms of saving time for you and your patients, replaceable mic filters, just like we have with Viviva, for example.

And this is going to allow you to be the magician in the clinic and fix these problems without having to send back in the hearing aids. Huge, huge help. So our new discovery screen, it's much more streamlined, easier to read, easier to figure out, okay, these are the hearing aids I want versus the ones that are being fitted just down the hall. Faster firmware updates so that you can keep up with the firmware without taking so much time out of your clinic. And a new test device.

And this is really exciting. If you're doing ANSI testing, it eliminates the need to have to set it for directionality tests because it allows you to do that within the test mode menu and you can also see the specs visible.

So when you tie this all back to how does Enzo AI fit into the Resound portfolio? It's because it hits on the three things that we want to focus on in organic hearing. We want to sound natural, we want to feel natural, and we want to connect naturally. This means intuitive technology that fits into people's lives and, and makes them feel like themselves and not like anything else, but the best version that they can be.

So we have four tech levels, the 9, 7, 5 and 4. And as expected, the 9 has all the bells and whistles with the best you can get in every situation. But we've brought this down to the lower price points as well, knowing that cost is always a consideration for some people. And yes, you're not going to get the 360 around in the lower price points, but you are going to get the other benefits of the Enzo ia. You're still getting the smallest rechargeable device that we don't defeature.

If you get A four. You're still getting the smallest rechargeable device. Granted, I would love for them to be fitted with the best of all technology, which would be the 9 level. But for those patients that you just know they can't. We've got four different options now of price point.

And they still get the connectivity, the size, the battery power, lifetime rechargeability that they would want. So what we want to do is make your job easier. Everybody's jobs are much harder every single day. And we all get it. We all know.

So ours are too. We want you to have options. And that's what we're trying to provide you with. A toolkit that you can use in your clinic for whoever needs this technology. And if they're wondering, is this much of a difference from Enzoq?

Absolutely. It's a huge difference from Enzoq. We did not have things like Tap Control 360 all around beamforming directionality in Enzoq. Now we have all of those things with the latest technology in Enzo IA, including AuraCast, Multi Connect, new streamers. It's just really great.

So I've kind of taken up all the time. Are there any questions here in the chat or. Here we go. I see one question. Okay, the question is excellent.

Thank you so much for asking it. It's about the specs of the hearing aid. It is 140, 84. So this is a very powerful hearing aid. It is definitely for those with severe to profound hearing losses.

It would go to. I mean, when you think about fitting ranges, it would go to the max 110 fitting range. Which of course gets into some areas where you start to wonder, is this a hearing aid or a bimodal candidate or a cochlear implant candidate. So it is a true verifiable superpower hearing instrument to what PTA is appropriate? It's also a really good question.

I'm not sure that I can give you the PTA because that's not something that we have as a spec. But speaking as an audiologist, this is me. Gosh, I would probably say pure tone averages greater than 60, 65, because if it was less than that, you could probably fit them with a Vivia. And the Vivia has the same kinds of features as the Enzo does. So you could give them perhaps even a smaller device with a Vivia.

That would just be what I would do. But the PTA question is just my personal opinion there. Good question though. Okay, another question. Please confirm this new hearing aid is still compatible with cochlear for bimodal fittings.

I have to say that no, it is not compatible at this time with bimodal fittings. So that is one thing that I'm sorry to say. The Entoia is currently not compatible for Bimodal. That would still be the predecessor. Good question though, because it is, it does bear mentioning.

Thank you for asking it another can you tell us more about the chip? Okay, so the chip is the 360 chip, which is the same chip that's in Vivia. So when you think about top of the line chips, that is what we're talking about. It is what drives everything in Vivia that makes those kinds of decisions for 360 all around. It is a very powerful chip.

It is the best that we can implement in hearing aids today. And the size of the chip means that we're able to make the smaller Superpower device. So that's why we chose that chip. I hope that answered what else you wanted to know about the chip. Chip technology is fascinating, by the way.

It takes a couple years for new chips to be implemented into a hearing aid, which is why across manufacturers you see that we make a big deal when we come out with a new chip because it's actually quite a big milestone, because new chip technology is evolving very quickly. But to get it small enough to fit into a hearing aid is a whole nother discussion. So when we can get a new chip small enough to implement with meaningful advancements from the old chip, we celebrate.

Okay? And with that, I don't see any more questions, but if you do have any more questions, please feel free to reach out. I'm@t stendern.com and I hope and wish for you the best fittings in your future. And thank you for joining me today.