The Future of Precision Medicine: Cartilax, Vesogen, and the Future of Tissue Repair Transcript

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Introduction to Hunter Williams

Ladies and gentlemen, welcome back to the Bioregulator and Peptides Summit. We have a very special guest here today. If and you know, all the guests are special.

I mean, let's face it, I say this all the time, but every one of them is special in their own way. And Hunter is one of those guys. If you've spent any time in the peptide and biohacking space, chances are you've already crossed paths with today's guest.

Hunter Williams is a creator, entrepreneur, and bio hacker who's made it his mission to take the science of peptides and bio regulators out of the fringe and into the mainstream, and to do it.

Most importantly, with rigor, transparency and as little hype as possible. Hunter is also the host of the Hunter Williams Podcast, where he goes deep on the science of peptides, hormone optimization, metabolic health, and biohacking, covering everything mainstream medicine tends to overlook.

One thing that sets Hunter apart is his insistence on the fundamentals third party lab testing, published results, and a clear eyed distinction between what a peptide actually is and does versus what a bio regulator actually is and does in a space full of noise.

That clarity really matters. Today he's bringing that same precision to our stage. Please help me. Welcome. Hunter Williams. Welcome, Hunter. It's a pleasure to have you here.

Thank you. Natalie, the pleasure is all mine. And well, before I was doing this, I was learning from peptides about you. So this is awesome for me to be here and anything I can do to contribute and help people out today, I'm really excited to do. Wow.

I'm stoked. I mean, you've done, you know, you kind of to me, you kind of came out of left field at some point. I became aware of you. I'm like, whoa, this guy knows.

What are you talking about? This is super interesting. So I'm excited to have you here. And, you know, there is a lot we could talk about, but because we're doing this in a summit and we want to keep it tight for people, and we want to make sure people walk away with some concrete information in a reasonable amount of time.

Just because there's the summit is kind of turned into a bit of a big monster thing. I, we decided that we would hone in on bio regulators. There's not a lot of people that speak to bio regulators.

And you wanted to really focus on the injectables, which are the synthetic forms of bio regulators. So why did you want to do that? Like, I'm curious because not everybody deals with that a lot.

I mean, a lot of people deal with the oral natural extracts, but maybe we can just start off there and just kind of talk about the synthetic versus the oral Barr regulator.

Yeah. Well, one, I think there's a general like lack of awareness and understanding that these are even tools that people have access to. When people hear by a regulator, a lot of them are like, oh, you mean like the captains and ones or the oral ones that you're taking capsules.

And those are great. I'm huge fans of those, but you see a lot of places all peptides will have some of these injectable ones. And even a few years ago, I didn't really know that much about them.

I knew more probably about the oral, just because there's more literature on the oral. And I was like, let me start looking into these and seeing what they do.

Why Injectable Bioregulators Matter

And when we look at the oral ones, what I think is really cool about those is we have enough data and enough really good doctors that are setting up like protocols of, hey, this is how you would use these in a longevity stack to do it.

And I think the injectables, you probably could get to a point where you could set stuff up like that. But what I think is cool about the injectable ones relative to oral ones, is you can use them in more acute scenarios, whereas oral ones are.

I kind of think of those as almost like background players that do a really good job of creating the environment in a body that's responsive to all the other things we're doing, whereas the injectable ones, I think you could probably do that, but I've seen them just in the people that I coach and everything have really good responses for acute issues where some of the other general injectable peptides might help, but they're not going to take someone all the way there.

So that's what I'm excited and just helping kind of get more broad exposure to these, because I think a lot of the the gaps that we might have in the traditional injectable peptides can be filled a lot by these injectable by a regulators for acute things, but just not enough people know about them.

So I'm excited to talk about them. Yeah. And you know, not a lot of places know how to make them there. You know, it's ironic that these are the tiniest little peptides.

These are like two, three, four, maybe five amino acids. I mean, none of the ones we're going to talk about today are five amino acids. But people would think, oh, well, there's only a couple of amino acids involved.

These must be really easy to make. And as it turns out, the smaller it is, the harder it is to me to produce. And and I think for the longest time, that part of the issue, and even to this day, there just aren't as many lives that are making these as there are making the longer signaling peptides.

Yeah, well, it's funny you say that because I've talked to people that own compounding pharmacies in the US. And when I bring this up, it's like, hey, do you know there's some of these injectable bio regulators that you could probably make their actually kind of at a loss and they start to look into it.

And it's not in their purview a lot of times because they're making LPs or, you know, BPC or whatever. And a lot of them are like, oh, wow, I didn't even realize that was a thing.

And then they start trying to source it and do it. And it's really common, which kind of sucks. I hope we can do a good job of educating the market so that more people demand it and ultimately, like more people have access to it.

But yeah, like you said, you would think it would be easier than making something that's 50 amino acids long, but just because they're a little bit more rare and also the process is a little bit different.

It's interesting that they're they're not as widely accessible as some of these other ones. So you brought up something earlier which I think is worth mentioning.

You talked about how for you, the synthetic bio regulator can be more can be helpful in a more acute situation than the orals. And that really is echoed in the, in the Russian research.

Right. In, in the work that we read about in Russia, they do talk about the synthetic bio regulator or the injectables, these injectable bio regulators.

And we can actually, in a little while, talk about the other injectable bio regulators you can't even find outside Russia, but that these are faster acting and in some ways, because they're simpler, they're just that most effective amino acid chain as an extract from the natural bio regulator, whereas the natural comes in with a whole bunch of other cofactors, small proteins, that kind of stuff.

And so I think we should just dive into how you're using these when you talk about acute situations, because, you know, typically with, you know, one of the ones that I think is, well, they're all interesting, but for example, which is the cartilage bio regulator, it's going to affect collagen elastin throughout the system.

Right. It may it'll definitely help in a joint.

Cartilage Bioregulator for Injury Recovery

But if we think about what it's really doing and where we might find collagen elastin in the body, it's going to be in every organ that has flex, which is all of them.

Yeah. Yeah. Right. I mean, I don't I can't think of a tissue in the body that isn't required to flex in some way, shape or form and from bone all the way to extracellular matrix or whatever the case may be.

So would you want to talk a little bit about Cardiacs, because you brought that up in our conversation before we started recording, and I do think it's one of the peptides, the bio regulators, that doesn't get nearly enough attention and is so foundational to human health.

Yeah, well, I'll tell a story. Just kind of my intro to Carl. So back a few years ago when I was just researching these and, you know, I'm obviously experimenting on myself all the time.

I played football for 17 years and played Division one college football and everything, and I was told I had arthritis in my wrist because I played linebacker.

So I was like hitting people, tackling people and whatever. And it went away, you know, because it's been a long time since I played football. But still to this day when I work out, sometimes I'll get like soreness in my wrist just where they were really weak, you know, and I had injured them a lot when I was playing football.

And one day I was like, really saw after a workout and I was about to walk my dogs and I was like, you know what? I got some likes. And I was like, let me mix it up and just do what I know from like the literature, which is in this case for an acute issue, was like a one milligram dose.

I was like, it's a really good sample because I've got both risks that hurt. I'm injected into one, see how it does and then leave the other. And I injected it alone. Yeah, exactly.

And I injected it. Went to walk my dogs. And like 30 minutes later I was walking my dogs and I was like, wait a second, my wrist doesn't hurt anymore.

I was like, okay, so something is definitely going on here because I felt the effects that I normally would get from like BPC or TB 500, but it was way faster.

And it also I did that one injection and like the next couple of days I didn't inject and it still like the pain stayed away. Whereas typically with like a BPC it's more of a cumulative thing of like you inject and after a few days you start to see results and then, you know, you have a cycle of 8 to 12 weeks where you start to notice results and hopefully those results last.

So I was like, okay, there's definitely something here. So started playing around with it more and then having people in my coaching groups playing with it more.

And when you read about them, what you realize is especially let's talk about cardio for an injury. We have the

peptides, we have BPC, TB, 500, GPC, even like CFPB.

And I love CFPB because a lot of times that's doing more direct as an anti-inflammatory than even BPC and TB 500 are doing. But what none of those are doing is actually working on DNA expression.

And what's really cool about LAX is, is this tiny little peptide sequence that's actually if you kind of the way the analogy I use and I know it's probably more complex than this is, those things are great, but what it's actually doing is going into the nucleus of the cell, looking at the DNA and kind of saying, hey, this and this and this is wrong with the DNA because of inflammation or injury or whatever it is, is actually.

Yeah, or, or exactly just old age to where you get like poor DNA transcription with old age and everything, and it's going in and fixing those, which is truly anti-aging in a way.

If you think about it, it's going in and saying, hey, this now is expressing older than we would like it to, and it's rewriting that expression. And on top of some of those typical interventions that we would use, none of those are actually doing that, especially for the example of access to cartilage tissue.

And so fast forward, having people that are in coaching groups that have used it for years, I've seen people. And again, this is just anecdote. It's not research data, but I've seen people that were like doomed to have a surgery from their doctor and BPC and CB 500 help, but it was still like on course to have a surgery.

Then they used for like 8 or 12 weeks and the doctor told them they no longer had to have surgery, which is crazy when you think about it, because with those other peptides, you can get the suppression of inflammation, you get the angiogenesis and the migration.

But with this, you're actually getting direct action at a cellular level to re like basically reverse age the tissue. And I think you could play that out with any of the other ones because they're doing a very similar thing across organ systems that those specific ones address.

But I love Cardiacs and I've seen it's kind of one of those things that I know you're like this too. It's like when you see the same thing over and over again, it becomes like, man, I wish more people knew about this because I know so many people that have come to me and they use the typical peptides, and it's still especially for things like, you know, spinal injuries or hip osteoarthritis.

You know, BPC and TB 500 can help, but it's not always going to like really actually make that person to where the tissue has been restored to where it was before.

And that's what I've seen Cardiacs do time and time again and people again. It's not going to help everyone like some people, if they have like degenerative disease or something like that.

I can't tell them that, you know, it's probably going to solve all of that. But for a lot of people that thought that they didn't have hope from some of those other peptides, I've seen Carmelites do it.

And it's pretty cool because when you look at it, it makes sense. But it's doing so much more above and beyond what some of those other ones have to. Well, as you said, I mean, these are I mean, I will refer to bio regulators as epigenetic switches.

Like ultimately they are affecting the expression of your genes, as you mentioned, and or the expression of your name. And that is wildly powerful. And it's still it still blows my mind a little bit how few physicians are on this.

And I mean, the good news is there's some very good physicians that are onto the bio regulators, but there are still legions that are completely ignorant, or there's still a few running around.

I heard one just the other day on a big podcast saying, oh yeah, there's those by regulators. It's all hype. There's nothing there's nothing there. And it just it used to make me mad and now it makes me laugh like I just yeah, I just

think it's funny because there's a lot of there's over three decades of research by Kevin and his and his team.

Like, it wasn't just him by himself. Mad scientists in a lab, like he had teams of people working with him. Like this guy did a huge amount of research.

And it's not like there aren't any institutions internationally that haven't looked at them as well. Like there's universities in the US, in Italy, like in all a bunch of different countries where they've actually studied different bio regulators.

And people might be sitting there going, well, okay, great.

Liver, Thymus, and Immune Support

Well then why aren't they mainstream or why aren't they available? And it's like, because we don't have we don't have a good answer, which we did. Yeah.

And it's almost like the incentives might not be that it's it's interesting you mentioned that about the countries because it brought to my mind, I know and living in are both specific to the liver.

I forget which one also has some some GI benefit as well. It might. I think it's over gen that has a little bit. I think it's over gen is interesting because I think it's liver and lungs and it's like kind of like I call it the innards by a regulator.

Yeah. Yeah. Exactly. Of like kind of those almost like your gut in a way. Like the whole area of the gut. What's great about that is I'm blanking on what country this was in.

And it could have might have been Russia. But I remember reading a paper a while back, they actually used that as an adjunct to chemotherapy to help with the toxicity of chemotherapy.

And guess what? It improves outcomes of chemotherapy, improves survival rate from chemo alone. That's like why are we not doing that here in the United States?

It's something that should be like relatively easy to get. And for someone that unfortunately, if they do have to go on chemotherapy, could use to like help express a healthy liver, or at least like keep the liver from being so overloaded with toxins from chemotherapy and radiation, whatever it is.

And again, that was probably like 30 or 40 years ago, if I'm remembering right, that that was done. And these were being used in some of the Eastern Bloc countries to enhance outcomes for people's health.

So yeah, it's crazy. It's I mean, you know, I mean, definitely the medical system here, if it doesn't have a slew of double blind, controlled placebo studies.

And I said all those words in the wrong order, but if if they don't have all those studies, they're just not going to get adopted. And, and, you know, the the oncological world is pretty leery of most of most things out of the that's just not in their space kind of thing.

And the other the other bio regulator, actually, and I don't know if you've used this one very much, that doesn't get nearly enough attention. Is villain.

Do you have you played with the villain at all, which your computer will automatically autocorrect a violin? Yeah, it's funny you say that because I'm actually using a cycle of that right now.

For me personally, on my last bloodwork I had, I think it was like my my face was a little high and I was like, you know what I mean? Thymus for one can work good for that.

But I actually anytime I use it and now that I know how to pronounce it correctly, because I always say like an

ignorant Southerner, either like villain or villain.

Yeah, well, I'm French, so I'm going to pronounce it that way. But there's no there's no saying that I'm writing. You're wrong. So let's just say that.

Well, I will say villain sounds a lot cooler and a lot more sophisticated, so. But anyway, I've actually been using that recently and could be anecdotal.

I actually got my blood work done today, so like it was a three month period that I was I was using it. And so I wouldn't say that there's like an enormous like, you know, it's not like drinking a cup of coffee.

We're going to wake up and just have like lightning come out of your fingertips. But the sleep is amazing. Like anytime I'm using a cycle of that, the sleep is amazing.

And there just overall feels like a general sense of lower inflammation anytime I've used that in a cycle. So again, I think for people that I always recommend that for people that have like suppressed immune systems or immune dysregulation, it seems to work really well.

And I know two and again, this is just going off of memory. There seems to be a lot of longevity data around that one kind of pairing with some of the others to enhance longevity expression and a lot of people.

Yeah. Well, Kevin Sun referred to it as one of the Gerard protective. There were only a few that he named as Gerard protective I think epitope on the pineal gland, one maybe vestige in villain.

And I forget there were maybe 1 or 2 others, but one of the and I don't know, I'm sure you came across this because you do so many deep dives on this stuff, you know, in certain countries is used post post radiation and chemotherapy to help to restore immune function.

And that makes it pretty pretty darn interesting as a compound. Yeah. And I think two if and this is again I'm just going off of memory. I think it's a component of maybe timeline.

So it's actually that sequence is in thymus. And I've seen papers where they had used them together. But again something that I don't think enough people we have all of this longevity stuff out there and there's you know, it's like a cottage industry now of longevity and doing all these crazy things and whatever.

But if you look at thymic function of like the actual thymus, we all know after the age of 25 or 30, most people's lives is going to shrink over time.

And again, you can correlate that with a decline in overall health, longevity, lifespan, you name it. And we look at some of those things. It's like, okay, we know directly that these are modulating and potentially even like regrowing thymic tissue to help the thymus function as it's intended.

And what I always love conceptually to like, talk about with people is so many people come to the peptide world and they're like, okay, I want to lose that.

I want to do this. I want to have like a jackhammer to create these results. And I don't think that that's a bad thing in some cases. What I love about that is you go so far upstream, it's like, hey, if I go address the thymus, which most people don't even think of, they don't even know what the thymus is like, goes to the far upstream to improve the function of that organ, which is then going to help my immune system, which is then going to help with so many other things downstream for longevity, but then also to just as a protective mechanism in the world that we live in today with exposure to toxins and EMF and blue light and stuff, it's like, yeah, you could you could live in a bubble to try to protect yourself from some of those things.

But if you're actually addressing these, I think on a regular basis, especially with like Villain and Final Million, in some of those ones that work on thymus function and immune function, you're going to protect yourself

downstream from some of the other things that people get exposed to that end up resulting in chronic disease.

Yeah, 100%. It's you know, the immune system is the thing that will take you out right at the end of the day, either it's going to be over function or under function.

It's that imbalance. So which there's a couple of themes I want to cover with you. One of them being the safety profile. So generally speaking the safety profile of bio regulators is considered to be very high.

Do you want to talk to people a little bit about why you think that is and what you've seen in practice? Yeah. So the good thing about them, we were kind of we were kind of talking about like errors in dosing, I will say relative to like the person that I get a message from.

It's just this is a real story of someone injecting 20mg of red, a true tide. It's like, sorry, there's nothing you can do. Like you're in, you're going to be really nauseous.

Yeah, like the next two weeks. Just kind of buckle down. You might want to lock yourself in your house and just kind of like, be near a bathroom somewhere.

But we look at the bio regulators, obviously, like you want to use like appropriate dosing parameters for what we know now, I kind of think of those as more of modulators of tissue.

Like you were just saying, where is some of these other peptides, albeit they they can have really good effects. There's chemical signals that are then just going to keep driving and keep driving regardless of what the body is going to respond.

So for instance, that person that does overdose on a GLP one, the body is not going to say, hey, I don't need any more of that. I'm going to use what I need and use it.

It's just going to get really sick and nauseous because there's so much chemical pressure, because of the nature of that molecule. Conversely, we have bio regulators that are more kind of like a homing molecule that's going into the tissue and saying, hey, does anything look out of place here or wrong?

Oh, it does. Okay, I'm going to reorder it.

Safety, Dosing, and Cycling

And like you said to the immune system, you either have like an overactive immune system or an underactive immune system. It actually helps them both of those directions to bring it back more to the middle.

Whereas some of these other peptides that we have, they don't really do that. They're just kind of like one chemical signal that as you go more and more, it's just more chemical pressure rather than kind of like a modulating effect.

So that's what's really cool about them. To to your point from a safety profile is sure, like it's probably not the best thing if you went and injected ten bottles of a bio regulator.

But we also know to the body is more likely to just do or take what it needs from it, do what it needs, and then the rest. And I think the best example of this, and again, this is from something I read a long time ago, but I think in Russia when they looked at epistle on or reptile on, and they looked at it and people that were in their 50s versus people in their 20s, the people their 20s actually didn't have any change like they secreted nothing.

Yeah. They said created the same amount of melatonin. There was no change. Whereas the people in their 50s, it was like a miracle, like they slept better and everything.

Because obviously, like as you age you have suppressed pineal gland function. It usually is not as good in your 50s as it is in your 20s. And so I think that kind of is like a testament.

I know, like each chemical might be a little bit different. It's kind of a testament to like, hey, with those, we know they're relatively safe because the body's going to do what it does.

Which makes sense, because if you go back to like them being the extract from animals, it's kind of mirroring the tissue. The body is going to say, oh, I kind of recognize what this is.

I'm going to use it for what I need, and then the rest I'm just going to excrete out and just, you know, put to the waste pipe and then say, I don't need any more.

So that's, that's what's cool about them is, you know, you're you're very unlikely, in my experience, to have really any bad side effect unless you're doing a dose that's way too high to where it causes any issues, whereas some other peptides you can you can definitely do that.

And I hear the horror stories every day of people doing too much of a peptide. And, you know, whether it's nausea or mast cell reactions or whatever, you definitely you definitely can can go the wrong way with some other peptides.

Yeah. I had a person in my membership community, not my current one. The Facebook group might now defunct the Facebook group, who mistook a vial of VIP for a vial of.

I think it was. It must have been tours because they injected 2.5mg of VIP and they passed out. So VIP vaso intestinal peptide will modulate blood pressure.

And this person would. It was crazy. She the scene that she described her husband must have aged 20 years in in this period of time where she would lose consciousness because of this drop in blood pressure, she'd come back and she would have just enough bandwidth to say, do not call 911.

And then she'd pass out again, and then she'd come back and it was almost like out of a bad comedy show. Do not recommend anybody do this. Like it can happen like this is a this is a very powerful compound signaling compound that literally affect your blood pressure.

It can be really helpful for people, but if you're using it at a too high a dose, it'll mess you up. And I think this person it was. It took the good news is it has a very short half life, so it only took an hour or so for her to kind of work her way out of it.

But very, very scary moment and note to everybody double, triple, quadruple. Check the vial. Just like your person with the 20mg of red a true tied for the love of God, that is just horrible.

I can't even imagine the irony of that one too, was that it was the sister of a doctor. So the doctor had called me to say like, hey, my sister did this.

So it wasn't she wasn't a doctor, but it was a doctor's sister. So yeah, even people that you would think are not susceptible. It happens. It happens.

All right. Let's talk a little bit more. I mean, we've done some some interesting discussion around, but let's give people an idea of the dosing, the cycling and the stacking.

These are three big themes in the bio regulator world. I mean stacking of course is part of the the signaling peptide world if you will. But the dosing and these the and the and the cycling and the stacking.

I'd love you to kind of share some of your kind of go to guidance on that. Yeah. Well before I, before I say that I will preface it in saying this is just from like personal and coaching experience.

And so when it comes to like clinically, there probably is something out there that maybe I haven't seen that is more of, I will say like gospel truth than what I have.

So this is just my own practice. I don't claim to have the end all be all by any means, and I'm still doing my best to figure this out. So when it comes to dosing, I kind of think about it as more of like a two tiered of for general purposes.

So like let's take for instance, let's just say someone is a little bit more sore. So they have like sore joints, but they don't have an acute injury like a torn torn ACL or torn shoulder or whatever.

Dosing wise, I kind of like the 100 to 300 microgram range dose for that. And that would be probably like in a 30 to 60 day cycle. If I had someone that was like, hey, my joints are sore.

Like I don't feel the best, but I don't have anything that is preventing me from exercising or whatever. So I like that lower dose over a 30 to 60 day timeline, just to kind of give them the broad exposure to it and work over time, get the body exposed to it, and kind of have a build up of a cumulative effect and then cycle off.

On the flip side, we have the second part, which would be the acute dosing. And I like the 1 to 2 milligram range for that. So for like for instance someone did have a torn knee torn shoulder I would do 1 to 2mg.

You know, with an injury I'm always kind of like back and forth of like cycling versus like doing it till it heals. And so sometimes someone might need like if it is a torn ACL might be beneficial for them to use it until that heals.

Maybe that's like eight weeks, maybe it's 12 weeks. But I always on the side of like shorter cycles if they can get away with it. And then maybe they just use that for, you know, 10 to 30 days.

And they're also using some other peptides like BPC or TP 500, then maybe they extend out a little bit longer. So that's kind of the general dosing. And I would apply that same situation to any of the other ones.

So for instance for like cross to max which would be the prostate one for men. Kind of the same thing is like for me right now, I don't necessarily have any prostate issues.

My PSA is very low. I don't have any issues with BPH or anything like that. So when I use that, I do like the 100 to 300 microgram dose range, just because I'm not trying to necessarily cure anything.

But fast forward to a guy that's maybe in a 70s that has pretty severe BPH, has to get up to the to go to the bathroom like 3 or 4 times a night. Those guys, I've had them use like 1 to 2mg per day for like a 10 to 30 day cycle.

In a lot of cases, they report back and they're like, hey, I went from getting up four times to pee to going only one time, which again, can be huge for a guy like that.

If that's what's causing them to get up to go to the bathroom. So that's kind of the logic I apply to it. Again, whether or not that's right, I don't claim to definitely not have the definitive answer on that, but that's what I've seen.

We're good in practice just from like a general optimization standpoint, all the way to like the acute side. Yeah, no. And I think that I think that there's plenty of literature and plenty of other practitioners that would line up with that as well.

I mean, the cycling is, is I think it's critical. I mean, if you think about the, the, the way of the working, if they really are addressing and correcting and restoring youthful expression of DNA, you don't have to keep hitting that over and over and over again, like you at least have to take a break.

And in someone who's older, it will revert. They'll go going to continue to age. So you'll have to come back to it, but you shouldn't need to be on it, hitting that button continuously all the time.

So I'm a huge fan of that. What about stacking multiple bio regulators together? Do you do you do that? Is that something that is in your practice or you more of A11 at a time kind of guy?

I do it kind of depends on the situation. So I mentioned Max and I'll kind of give you the ones that out of those ones that we have that I would think of stacking, I'm sure there's probably like permutations and combinations of ones that would, would even be better.

But for instance, like with a prostate one, typically what I would do is stack that with which is the bladder peptide. So for a guy that has, like I said, getting up to go to the bathroom, I really like pairing those together because they're kind of synergistic.

Obviously they're near each other in the body and they're functioning. The way that they carry out.

Stacking Bioregulators for Specific Goals

Function is usually synergistic in terms of creating the goal, which is to obviously modulate prostate inflammation and keep a guy from having to get up near the bathroom.

So I really like those together. I'm trying to think of what else would be good. Cardinal is more kind of on its own. I do like pairing that with some of the healing peptides.

I will say, for people with liver issues and work really well together, I like those for some of the immune issues. I really like Velan and Timeline together.

Those have have seemed to work. Now whether or not that's redundant, I don't know. Like is is it worth doing or you just waste your money if you're just repeating a signal?

What about Simon? Jen? Are you using that at all? Or is that these days? Because I know that, I mean, I it's a little less around than than it. I really like it.

So I think is even better than Thymus and Alpha one. I just can't get it. So if you find a place that knows because yeah, I've had people make it in the past, but right now the people that makes up for me, like the chemist that I've talked to, they can't get it to make.

Yeah. The problem with Simon, Jen is it has very low solubility. So the one lab that would make it consistently in the past, which is no longer operating in North America, would was selling it in one milligram vials because because it it was the only like you you would you could add now you're 1 or 2 mls of bacteria, static water and get your dose of 100 micrograms.

But it was a tougher one to use it, higher dose. I mean, you'd have to use literally a vial a day if you were going to that therapeutic one milligram dose.

And it was really because they just soluble. It was really difficult. But Simon and Velan together, I think. Are there components of the thymus bio regulator.

Right. It's remember we were talking earlier like the natural bio regulator is not just going to be one amino acid chain. It's going to have a few. And so the thymus, the thymus and the villain are are essentially components of it.

What about the blood vessel bar regulator. Where does that fit in for you? I love that. So that one would be the injectable one that mostly is called vessel.

And I love that for people. One of the biggest questions I always get and there's a lot of confusion around it. And again, I don't claim to know everything, but around like lipid profile, cardiovascular markers and everything.

I think when you look at vessels and what that one is specifically doing is helping heal endothelial function. And again, we look at someone that's maybe 50 or 60 years old.

They've had a lifetime of inflammation, poor dieting, poor lifestyle, whatever that results in. Usually the the I will say

like calcification of arteries which we know like leads to bad cholesterol and everything.

And what's cool, I don't I haven't found as much literature on vessel and specifically. But if you look at Ventforet, which would be like the oral counterpart to it, there's a lot of data around improvement in those markers.

And so I love using vessel in, especially for someone that's like, hey, I feel like at risk of heart disease. Or maybe I've had issues with heart disease in the past, maybe even a heart attack.

I love that what's cool about Vessel in Two is when I've used it. I actually notice a performance enhancement benefit from like training and everything.

And so it almost feels like for, yeah, for people that have used like low dose to fill as a pre-workout, I get a very similar effect when I've used vessel and, and you only have to do like 300 micrograms of it.

And for someone that's already pretty healthy, you can get like a performance benefit. But then I think too, when we look at the longevity aspect, obviously that's going to be huge for everyone.

Heart disease is the number one cause of death that we have. And if you look at restoring endothelial function, whether that's helping with heart disease or even helping like a guy with erectile dysfunction, because I've seen it help that as well.

It's huge. And one thing for specifically for cardio health and this one I, I don't honestly know if there's any papers around this, but I've had people use it is a cardio gen and that is the one regulator.

Yeah. The specific to the heart that one does wonders when you pair that one with vessel. And especially for people if they've had vascular issues or heart disease or something like that.

So I really like that, that pair to get to. Yeah I to me Vestron is the one. It goes with everything. It's like it's that little black dress that you wear to every occasion.

Yeah, yeah. Like I mean it's a girl thing, but you know, messaging is, you know, if you're trying to deal with liver, you pair with it because they'll, they'll work together.

You looking at heart, you throw in some vestige in you. You know, there's literally and and to your point, you know, for prostate issues even, you know, you want to make sure that people don't have an elevated PSA when before you start throwing these things in just to have an abundance of caution.

We again, I don't think we have too much literature on elevated say and stimulating in any way the prostate. But but throwing the blood vessel by a regulator in there with your with your prostate and or your bladder, I think would be nothing but helpful.

Yeah. Well, even to to your point, I agree. Like I think it amplifies every other bio regulator because if you're getting more oxygen delivery and nutrients to the area tissue, that's only going to make it better.

And another one that I've seen too, as we're talking about this, and I actually learned this from a doctor that reached out to me that was using it was quarter, and he said he was using Corden.

I think he was using vessel in with it as well, but he was actually seeing it help. And this is one that I have. I always tell people, if you have this, I don't know, but for tinnitus and so for people that have like really bad ringing in their ears, he was saying the quarter Jen quarter in combination when I think the Sarah Luton which is the oral version he said those worked really well together and he actually had a clinic that he was saying he was helping people.

Tonight is and it was like reducing symptoms of tinnitus with those. And again, makes sense because if you're if the tinnitus is a result of some sort of inflammation in the brain and John is working to help, you'll bring tissue.

I really like that. And potentially to I know less about this. But for neurodegenerative disease that could do really well, especially with something like an Italian or a penny alon to help just modulate brain inflammation as well.

Yeah. No. And again, like that blood flow factor is always going to be a real player here. So all right what else did is okay. So we talked about stacking. We talked about dosing.

What else. What else. Last one dose stacking wise I did forget for lung health issues. Yeah. Bronco and I think it's Khan Luton or Chon Luton however you pronounce it.

Those are both. Yeah those are both lung ones that work really well together. I will say for people I've worked with a lot of people that have COPD. Really bad weather is from like smoking or just toxin exposure whatever those two with TB 500.

Because TB 500 does help a lot with these anti fibrotic right. Yeah I've seen that. For instance my father in law he had a really bad episode with COPD.

Was like hospitalized for seven days. And he's very much like hey give me whatever and I'll take it. We got him out of the hospital thankfully, and I just gave him Bronco ten, Tron Luton and TB 500.

And within like ten days he was completely fine again. And ever since then, that's been years ago. Like he's never had any flare ups or anything with that is crazy.

So yeah, it's really weird too, because especially like, you know, like having work with TB 500 like it does good. But it's more like, okay, like you'll get this out of it and it does well.

But with those to the point of like reversing the tissue probably be beneficial for him to like run it, you know, like maybe once or twice a year, just if he had an issue with that.

But it kind of like the effects lasts. Well after you actually use the peptide, which like some of the other peptides, they don't really do that. You're kind of getting the exposure while you have it and then don't do anything when you don't have it.

So yeah. Well, I think, you know, if you look at the studies that Kevin Son did, there were a couple of studies. They're called the old People studies.

And one of them is he followed them for 12 years and showed that there was a 50% reduction in mortality rate in the test subjects that got the epithelium in versus the people who got the poly vitamin injections.

And then the next one was older people only studied them, only followed them for six years. The people, poor people who got the poly vitamins, 88% mortality rate.

The people who got the epithelium were down to 45% mortality rate. People who got epithelium and timeline were down to 33% mortality. What the a piece of the puzzle that a lot of people miss is that they only got two cycles of whatever bio regulator they were given for two years, and then they were followed after that.

And so that speaks a lot to your father in law's experience, where a somewhat singular application had very long lasting effect. Yeah, it's crazy to and even in my own life it's crazy.

Future Access and Where to Find Hunter

I feel spoiled almost sometimes with ax because someone like, I love fitness and training and stuff, and before I knew about Cardiacs, like I would use BPC and TP 500 and it would help.

But now it's like if I've pulled a muscle in my back before and just injected Cardiacs into it literally one time, and then the next day it's fine. And it it goes like it's gone, like the pain.

That's amazing. So we're like, expected it to work as, as acutely as that. That's really interesting. Yeah. Me neither. And that's what it's like. I almost feel spoiled.

I actually have a transdermal version of that I had a manufacturer send me, and this was like a week ago. I had like a cricket my neck, like I just slept on it wrong.

And I was like, let me try this because I had it. I didn't have like any acute issues. I put it on it and literally like the next day it was healed, which I think, you know, if we're talking about the future of speculative stuff, I think that's what's cool about a lot of these is if you look at the nature of the molecule versus some other peptides, there's probably an opportunity to put them in more novel delivery systems, like a transdermal to actually get effect.

Now, like for for your lungs. I don't know if you're going to get a transdermal broncho and apply it like it's probably better to inject, but for something like, you know, it works really well, and then you could apply it in areas that you probably would get, you know, you could inject it as well.

But you know, some areas where you're injecting like a knee or something be kind of tough and cumbersome. Yeah, I have a gel that will get pretty much any, any peptide across the skin.

And I've had a number of people in my membership community use it with the BPCL and thymus and beta fours, and they and the beauty of it is you can apply it right to whatever the area of injury is.

And it is remarkable the results they get. So I think maybe we'll have to get them to use it with two and we should swap. Like I'll get your cartilage, your lax transdermal and then I'll send you some gel and we can compare results.

Yours. Yours is more convenient than mine. But yeah yeah I would love that. And then see and then maybe there's, there's probably even a way you could combine them together to.

Yeah. You just need to do them in a lab for sure. Yeah. That would be awesome I think to, to, to that point, you know, what's interesting about some of these like from a regulatory environment is like PPC and TB 500.

They kind of have the name brand cachet. So they get the the scrutiny of the agencies or whatever was like, cartel is like, who knows what that is? No one really cares.

And then you look at it from a molecule standpoint, it's kind of hard to say, like, well, isn't it just a supplement, especially if you have it in a delivery system like that?

So yeah, somehow a petition made it onto the the FDA's and poop list. Yeah, not enough human data, even though there's more human data going back probably, than a lot of pharmaceutical drugs that are circulating in pharmacies today in the United States.

And less risk, right? Like far less risk. Anyway, we'll see what happens. You know, I mean, hopefully, but but you know, I think that they're testing it for, you know, this thing that's happened.

Well, by the time this airs, the July event will have happened. But I don't think that we're going to get a response. We're going to get answers in July.

I think July is when they're starting to collate the information from physicians. Right. Is that right? Do you have insight into that? Yeah, I've talked to people that know some of the physicians are going to be on the panel.

And so I guess basically what they're going to do, their big thing right now is safety data. So it's not so much like whether it works, whether it doesn't, but it's like, okay, if we like put this rum category two to category one, do we have enough safety data of people that are using it?

And so what they're trying to do is like, go forward and say like, hey, we have a lot of people that have been doing this. Look at the anecdotally evidence to show that, you know, maybe or maybe not like it should become FDA

approved, but the very least, like we know it's not going to harm people if it's circulating.

We know that it's not going to harm people. But to your point, they're actually meeting then but who knows how long before it gets decide to like where they're going to write the, you know, the ink on the paper and say, okay, now we've moved these.

And then also to I think there's seven that are on that one for July, but then there's another in February of next year with the other six or so that they're looking at two.

And so again, like how soon that happens I don't know. I know there's a lot of compounding pharmacies that are gearing up to like be able to make more peptides.

Yeah. People are literally it's like they're at the they're in the starting blocks right now. Like it's it's remarkable what's happening out there. So okay.

Well, Hunter, this has been a really great introductory conversation between us. I'm so thrilled that you were able to make this happen, and we were able to make it happen.

Maybe. Please let people know where they can find you, where they can connect with your work and get more of Hunter. Yeah. Best place is just Hunter Williams Health.

That's my website and it has links to all the social stuff I would give my socials, but you never know timing wise. You say it one day and then it's taken down the next day.

So that's my website. Both. We're both regular visitors to Instagram Jail. Yeah, we're targeted individuals, as they would say. So just Hunter Williams Health, that's got everything there.

It also has like I found out a way to like now the cool stuff about all this AI stuff. They found out a way to like back up all my videos. So if any of the socials do get taken down, they're all backed up there where you can like do them in a library and stuff.

So that's the best place. And then then you can check out the social stuff from there. Beautiful. And you have a podcast too, right? Yes, yes. You go to the podcast is just the Hunter Williams podcast.

I know, super original, but just search. Hunter doesn't need to be original, man. It just needs to be findable. Yeah, exactly. At this point, it's just like if there's a way for people to find you, that's the best we can hope for.

So yeah, Spotify, iTunes, that's I put everything up there in video on Spotify and then audio on the iTunes as well. So beautiful. Thank you so much. This has been a pleasure.

Thank you. All right. Thank you.