Understanding our Body's Immune System and How it Impacts Health Transcript

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Introduction and Speaker Background

Hello, I'm Doctor Sanjeev Goyal, and I'll be interviewing Doctor Salahuddin al-Asad today. Doctor Hadassah is the founder of Chronic diseases prevention Management centers, Academy of Oxidative Disorders, and of Natural Medicine.

He has extensive clinical and research expertise in the field of immunotherapy, stem cell therapy, photodynamic therapy, water regenerative nanomedicine, natural redox, and pain management.

Doctor Laster earned his medical degree degree in Tripoli University in Tripoli, Libya in 1998 and passed the Usmle exams. Doctor Calasso was a researcher immunotherapy at Baylor University in Texas.

As the chief executive officer and founder of Chronic Disease Prevention Management Center's Academy of Near Oxidative Stress Disorders and Nature Medicine in Cambridge, Maryland, doctor alas has published and is a frequent guest speaker at renown venues such as A forum, American Academy of Anti-Aging medicine, Spa, and a a s Elms American Society for Laser Medicine Surgery.

Nitric Oxide Society at 4 p.m., Florida Academy of Pain Management, SLA and Alt Boston Bio Life and Photo Biology Society, Academy of Stem Cell Physicians, and the American Osteopathic Society of Movement Rheumatic Diseases.

His website is CDP mix.com and Nitro medicine.com. I hope you enjoyed today's talk with him. Hi everyone. I'm Doctor Sanjeev Goyal and you're listening to the advanced Anti-Aging and Technology Summit.

Today I have Doctor Saladin Galarza who's going to be talking about the immune system and its impact on aging. I welcome. Doctor Lassa, how are you today? Good, good.

How are you? Good. Thank you for taking the time today. Where are you? And you're in the US right now, right? I'm in Maryland. Yes. Maryland. Okay. Perfect.

So, I guess I want to first start. I loved your talk. You did a couple of maybe about a month ago with for the stem cell positions, where he gave this amazing overview of how the human immune system works, as most people just talk immune system but don't really, really go into the depths of it.

But I maybe before we even get into that, I want to maybe give us a background on how did you actually get involved in this aspect of of medicine. Like why why did you pick becoming like really focusing or your understanding on and expertise on immune system?

Can I just, like, close this phone here? So sorry for that. Yeah. Okay.

From Pain Management to Chronic Disease Care

Let me just, Okay. Doctor. Mike, I have, a meeting here. I'll talk to you later. All right. Here we go. Yes. Yeah. No worries. I well, we start when I was doing pain management in Delaware.

I was trying to really manage the root cause of the disease. Not just, injecting them with steroids and giving them narcotics. And I have the passion at for for finding why the patient has pain and and find out the root pathology, the root cause of it.

And, you know, most of the chronic inflammatory, inflammatory disease or chronic disease in general, they end up with pain conditions. So that's mean you will be involved in all different medical specialties.

So you can have pain from rheumatoid arthritis. You can have pain from, injuries. You can have pain from cancer. You can have pain from ulcer in the stomach.

Right. So and so instead of just numbing, and blocking the pain, I was looking for the root cause, and, we did a lot of, research. I worked with Doctor Michael Hamblin in Harvard Medical School.

I published articles with them, and, I was trying to, convert the idea of managing pain into managing chronic diseases, in a state of saying, managing pain. So.

And, and I did did publication with, with with with Michael Hamblin from Harvard Medical School. I have two publications in 2014 and 19, 16. And they talking about, treating chronic diseases or pain or manage pain by using stem cells and PRP and light therapy and hydroxide donors, antioxidants.

So it's it's a cocktail. It's a protocol that combined therapies that will unlock the codes of the immune unlock the codes of the metabolic unlock. The codes are free docs and also delivering those drugs and supplements, using nano medicine, because that's the best way of targeting the pathology.

And, I end up opening, a new company called Chronic Disease Prevention Management Centers. And, we have centers all over, the world. I have ten and United States covering ten states, and then I have one.

And, Bahamas. And, we're sharing the protocols. We are managing all kind of chronic diseases of all different medical specialties. And we welcome you to join us, in Canada to become the pioneer and, and the Chronic Disease Prevention Management Center and, and, California.

And we are addressing the root cause of the of the, of the diseases. And, we understand the pathophysiology, and then we, build a protocols that will tackle all those, pathological factors that involve in and, and the disease and, and so, we end up with, Covid 19, pandemic and we start, looking for the way to understand it.

So we understood that this Covid 19 is hijacking the renin angiotensin system, and that is causing the immune system to be shifted to at 17 immune response and to cause sex overproduction.

Neutrophils. Yeah. That's why those patients you see they have the trophy as high. And based on this part of the physiology we start putting together the protocol to manage it.

And we find yes maybe low those therapies will help to suppress the immune system and help to blocked, overactive 17 and overproduction of interleukin six.

Yes, we can say that. But also, if there's a way that we can modulate the immune system instead of suppressing it with steroids. Because when you do too much of steroids, you suppress the whole thing, including the one, and then you cannot fight the virus.

And so modulating it, which means shifting it from, t it's, 17 to 1, it's the best way of, of of managing it, and inhabiting t at 17 because that's the, that mediate the cytokine storm of, Covid 19.

So mass number two is a good drug, because it does and have it t at 17 immune response. And at does help also to block the virus. So it binds with the spike and preventing it to attach the Ace2 receptor.

And methylene blue also activates the T1.

COVID-19 Immune Response and Treatment Strategy

It helps also to prevent the tolerance, by inhabiting that PD1, signaling which is responsible for the immune tolerance. So that's the beauty of metallic blue.

And also when you have cytokine storm, you have too much of oxidation and, too much of free radicals that mean

your ions will be oxidized, whether it's in mitochondria or the hemoglobin, in turn, from, from, from ferrous to ferric, and when it turns into ferric, it will not carry the oxygen, for the hemoglobin aspect.

Also we have problem with electron transport chain and the mitochondria. So reducing it using methylene blue will reduce those iron to ferrous. And that helps to carry oxygen to the tissue more efficiently.

So I like Matlab flow to manage use it to manage Covid 19. But of course vitamin D is very important as well because it does block the T at 17 immune response.

And it does stimulated by a discrete interferon, alpha, which is a natural, cytokine that kills the virus, vitamin C, the same thing. It helps to, same thing.

It like Matlab, Matlab blue. It helps to, turn that ferric to ferrous and help to reduce it, and help to increase the carrying of the oxygen. But also vitamin C stimulate the secretion of interferon alpha from the immune system.

And so with the training, the same thing, zinc, all of them help to boost the immune system to fight the virus. But we find that Matlab blue does everything from antiviral and to, and boosting the immune system and to its anti-inflammatory effect into its, helping and managing the oxidative stress.

So we develop a cocktail for, for, managing Covid 19. We have great success. We have almost, 1000 scripts, so a compounding pharmacy and, we're doing great with managing Covid 19.

So Covid 19 is under control. And then we find out that patients are taking vaccine. Also, they have a problem because the vaccine produced the spikes or spikes because the, complication of the side effects.

So we recommend giving the patient another time because that would block the, inflammatory arm of the, of the rash, which is angiotensin to, type one receptor signaling.

And I think that, well, I think with, with losartan, we can definitely help to, manage those side effects of the, especially the clotting, because we know that spike to activate the platelets and losartan, it has an antiplatelet effect.

So, for the rest system. So I'm going to interrupt you because there's so much, so many nuggets you have. And I just want to go a little bit more in depth for the viewers.

So one thing is you mentioned TD 17 and and, and t 1 to 1. But do you mind just like quickly just saying what are the different categories of, of the t of the, of the T cell, just so people understand that we're in balance and and what are the different what are the different T cells do.

And then if you can just talk a little bit about I used so you mentioned methylene blue. I mean what are the dosage. Is there any toxicity. What do people what do you kind of recommend?

Right. Because this is not this is not normally a medication that's given by doctors. So I'm just so going to talk about. Sure, sure. Let's let's first understand the immune system, how they operate.

I'll make it so easy for the audience. Basically, if the, the macrophages encounter, cells that's infected with virus or cancer, those macrophage, when they eat them, they start secreting interferon gamma.

And when they attach into the naive T its cells, they polarize the T cells into one. So what the term, the fate of the immune system and the polarization of the immune system is what the macrophage eats, which is the antigen presenting cells.

So the eight virus, infected cells with virus or cancer, it polarize immune system into one. If the macrophages it's bacteria and fungus, it polarized the immune system into T at 17 because it's 17 will lead to neutrophils.

And the nature fields will eat the bacteria and the fungus. And if the macrophages it's allergens or parasite antigens then it polarized the immune system into T to where you start producing immunoglobulin E easy to feed the base of media, because that's the way you can get rid from the parasites, which is the worse.

So that's generally in a way that the immune system is handling all this different. You had one more autoimmune, you had one more T-cells, another one which is the T rex.

And that's when your your macrophage eats your own self cells or antigens. Then they start polarizing the immune system into T rex and T rex central. You can ten transforming growth factor.

And that leads to the immune tolerance. So that's the polarization of the immune system. Yes. What what does Covid 19 virus when it's being attacked or when we being attacked by this virus.

So when the macrophage eats those infected cells with a Covid 19 normally. And what didn't response that we need is polarization to one. Because the only way you can get red from infected cells is by cytotoxic T cells, which is throw the T one polarization right.

Well, the problem with this virus is different from all other viruses, normally influenza viruses. We will see this shifting in one. That's the normal response.

But this virus is fooling the immune system by the spikes. Is hijacking the really angiotensin, the Ras system, which is renin angiotensin system, and they are blocking the Ace two receptors, which will block that anti-inflammatory arm of the Rest system, allowing inflammatory, of the rest system to be overactive, which is angiotensin two type one receptor signaling that leads to activation of T at 17.

So polarized immune system to T at 17 and to neutrophil neutrophils. Yeah. Which we don't need it to fight the virus. You need one polarization not yet 17.

But the virus is hijacking. And it's exhausting the immune system. And it's pushing it to the wrong direction. And it's still inflammatory. It's still inflammation but in the wrong way.

Is that what you're saying is the wrong way, that that you cannot use it to fight the virus. So normally the virus, when we get infected, we polarize the immune system to each one.

But this virus is altering that by further our system hijacking. And it's turning the immune system as we are infected with bacteria and fungus. And the neutrophils cannot really fight the infected cells with viruses.

So the virus will flourish. So that's how the Covid 19. So understanding that then how we can manage it. You need first to definitely look at blocking the 217 signaling methylene blue does that.

Ivermectin does that low dose steroids does that antihistamine does that to it. Polarize the two one. So we can repurpose some drugs for that purpose.

But it does even more. It also block the spike itself, which is good. That's what you need. And preventing it from, from attaching to the Ace2 receptor and methylene blue.

Also, it helps to block the 217 signaling and also prevent the immune tolerance by blocking the PD1 signaling. And, it also help as a diplomat towards antioxidants.

So it definitely help to buffer daily dox. It helps improve the mitochondrial function. That's what you need to feel to kill the virus or infected cells.

It also help to reduce that ferric to ferrous. That's when you have oxidative stress and you have too much free radicals. And then you have problem with getting the oxygen, because all the spheres will tend to vary, and they would not be able to deliver the oxygen to the tissue and not hypoxia.

So it might do does have that now normal dose. The doses that we're talking about metal and blue. It's for prevention which we're giving it for all the patients.

And and there's lots of articles and publications, even companies that start using methylene blue to treat cognitive problems. And, you know, disease like Alzheimer and the way it works or the dose that we we are asking for, it's almost 10% of pharmaceutical dose.

So it's very safe. Pharmaceutical dose is point five milligram per kg to two milligram per kg. And yes, when you go up to two milligram, it gets it to the toxicity which is said to to the Taunton syndrome.

You don't want that. Right.

T Cells, Methylene Blue, and Dosing

So we are not recommending we are recommending ten milligram, which is almost 10% of the lowest, safe pharmaceutical dose, which is point five milligram per kg.

But when if the patient has cytokine storm, it can go up to 50 milligram. Which is still in the lower margin of that pharmaceutical dose. So we are away from that toxic limit.

When and our recommendation here. So, yes, methylene blue, I do recommend it because it does have antiviral, but also it has anti-cancer. And that's another topic we can talk about.

Yeah. Let's just talk let's switch over to like talk a little bit about, your how you are, how you're looking at aging and the immune system because, I mean, you kind of touched on it with Alzheimer's and, and the different, different T cells, like what exactly is happening as our immune system is aging is one of these branches becoming more active.

And then another is that like how would you how would you describe. So aging aging process. When we age, what will happen is the epigenetics, the change, the expression of the enzymes.

And we find out that with aging, epigenetics, that express antioxidants will be shut down with aging. While epigenetics that that express pro oxidants will stay active.

So with aging you will have more a pro accident enzyme versus antioxidant enzymes. So you would have the redox that's changing more become more oxidative.

So when we grow in age, we will be having more of oxidative enzymes versus antioxidant enzymes. So we don't have much way to neutralize those free radicals.

Interest free radicals. They start eating us and damaging us, oxidizing us and aging like rusting. That's what's happened with aging. We are rusting because we don't have that protective, paint line case.

When you have a car, you're painting it with some protective against oxidation. Same thing we do have antioxidant enzymes that consider that. Is there protection against those free radicals.

It decreases with age. Their expressions along with that nitric oxide also decrease with aging. And that's why you would have, as this corrosive with aging.

Because in the tube, cells are not producing enough nitric oxide. Why? Because the nice was nitric oxide sensation defeating expression decreases with age.

So the way that we can, slow the aging is by stimulating the expression of those antioxidant enzyme epigenetics. And fasting is the one way of doing it.

Now we fasting and Ramadan. Right. That's the Muslims. That's a good one. Polyphenols does that to flabby knights would help to express that the oxidant enzymes and that helps to slow the process of, of the aging metal.

Blue does have effect on the expressions of the epigenetics for the antioxidant. Does it like polyphenols, but also to improve the mitochondrial functions, the electron transport chain, by, reducing the iron, and having a functional mitochondria is very important as well, because you can produce enough of NAD in NAD, HP to reduce those antioxidants, those antioxidants like vitamin C, they don't buffer the redox or they don't really scavenge the free radicals by itself.

They have to be reduced by, your young reduced iron and it just go to the ions. It's come from where from NAD and it comes from they need which is coming from the mitochondria.

So you have to have this fuel. It's an active process to reduce those antioxidants, for those antioxidants to neutralize the free radicals. So if you want these things you need like you need vitamin C, you need glutathione, you need nad I, I need the mitochondria function.

If the mitochondria is not function and I give the patient antioxidants okay. Well antioxidants vitamin C there's oxidative for and there is reduced form.

You need to switch the oxidative form to reduced form in order to neutralize the free radicals. Who's going to do that? Well, the glutathione. Oh I was going to do the glutathione.

Reduced the good. That's young is there Nadab H who's going to produce energy b h h and who's going to produce energy. Yes, it's it's a it's the whole carbon cycle.

And, and extracting the energy and the hydrogens from the sugar.

Aging, Oxidative Stress, and Mitochondrial Health

So you need to have it's an active process. It's not passive process. It's an energy driven process. And those hydrogens, that contain the high electron potential, those are the ones eventually they will be initializing those free radicals and turning to water.

So it's an active process, not passive process. So if you have mitochondrial dysfunction, even if you give them vitamin C, it will not work. You cannot neutralize the free radicals because you need to reduce those.

How do you address mitochondrial dysfunction? I mean that is such a critical we hear so much about mitochondria. And how does one improve the efficiency, efficiency of this energy production through mitochondria.

How does that happen? You need to just to, to supply the body with all the nutrition that, increase the expression of the mitochondrial enzymes, polyphenols, flavonoids, accumulation.

Methylene blue. All of this helps to improve the mitochondrial functions. Light therapy does help that. So, basically optimizing the health. So the integrative approach that we are doing, it's part of it, it is improving the mitochondrial functions.

Can I get you a look closer to the screen, by the way? Just a little closer to the screen. Sorry. That's okay. Yeah. And what about nad like nad I've treatments or people are taking a nap man.

And what impact do you think that is having is the same concept then? Adi which is the precursor for an ADHD and nad H. So you're providing the kind of resources, the components, but you still need the functional mitochondria to reduce to an 80 to 88.

So functioning mitochondria is very important. And you can do that with light therapy with polyphenols, with seals, with CoQ10 there's many way of helping the mitochondria function to eat to diets also helps the mitochondria to be

functioning.

So so yes. And all this integrative approach that we're doing, vitamin D is like salmon following VA. All of this will definitely help to improve the mitochondrial function.

And improving the mitochondrial function means also slowing the process of the aging, because the mitochondria responsible for buffing redox and we find out, metron blue is the drug of choice to treat one of the hardest, aging disease, which is called progeria.

You know, the progeria, where they, you know, their kids age, look like they age quickly. One of the way to manage those people is giving them methylene blue, because it has the most powerful anti-aging drug up to now is methylene blue.

And that's the reason we we're giving it to those patients to slow the process, of aging process, which they have problems with their, antioxidant enzymes.

Some someone's being turned off fast and they have too much a pro oxidants and too much of free radicals. Wow. You mentioned before stem cells and AI, and PRP and all that.

And I guess you have a lot of experience in that. What is what do you believe is the impact of people doing like stem cell infusions and exosome infusions?

And does that have an impact on the immune system and aging? Yeah. So basically stem cells and PRP that they are, very rich with, antioxidant enzymes and anti-inflammatory cytokines and definitely they help to balance the redox enzymes.

Well, you have more of Jackson enzymes, and also they have anti-inflammatory cytokines, which will balance the inflammatory cytokines. So basically you are with, with with the factors those platelets and the stem cells have, they help to balance your immune system by producing anti-inflammatory cytokines and expressing, anti-inflammatory cytokines, which will balance the inflammatory cytokines and also producing, antioxidant enzymes, which will balanced approach oxidants.

So definitely help to slow the progression of that chronic disease. But it's when you're giving genetic material, you're expressing, the enzymes, you get more long effects than just giving antioxidant.

Right. So you are giving the enzymes, or the genetic material to produce enzymes of antioxidants, not just giving vitamin C, which is a chemical that you need to have, and active enzymes in order to reduce those vitamin C and for them to function.

So I, I'm a believer of stem cells. It's, it's, it definitely help to slow, the progression of, of chronic diseases, whether it is the aging or it is the, inflammatory diseases.

Stem Cells, PRP, and Regenerative Medicine

And through your clinics, I think you're pioneering a whole new form of medicine using nanomedicine through the it developed, I mean, I think treatment of other types of treatments, I believe, like platelet derived, medicines or the can you just explain me a little bit of what?

So, yeah. So one of the problem that we have, when we are managing chronic diseases, we're giving drugs and supplement that goes everywhere. We call it naked therapy.

And so let's say if I have a cancer and I get chemotherapy, it will go both to the cancer, enter the healthy tissue and cause damage to the healthy tissue, damage to the immune system.

So we are looking for the way to, to, to when we're giving drugs that we need this drug to go to the pathology and

not to the healthy tissue to lessen damage.

We're looking for a way that we can carry those drugs and supplement to the pathology. So how we can, find that way is knowing exactly the pathology versus healthy tissue.

What's the difference between them? And we find out the blood vessels of the pathology is more leaky than the healthy and leaky of what they are more leaky to the nano size particles versus the healthy ones.

So if I have nano sized particles and I have pathology versus healthy, we will see the nanoparticles will be seep into the into the blood. So the blood vessels of the pathology because they're wide open for them.

But the health tissues tight, they don't allow those nanoparticles to move. So here we understand okay. So if I can put the drug into the nano, then this taxi or this, vehicle will carry those drugs and supplements into the pathology and spare the healthy tissue doing that we call target therapy.

And so all this cancer therapy, now we are narrowing them all those, antibiotics. We can nano it because narrowing not just it gets into the pathology only, but also the nano helps to stick into the pathological surfaces.

And the best nanoparticle is the platelet derived exosomes. They already have natural receptors on them that will be targeting the pathology. Whether the it's inflammasome, senescent cells, bacteria, virus or cancer cells.

They have a tendency to attach to those pathology. And so the best nanoparticle is derived from the platelets is better than phospholipids ply. And all the synthetic nanos.

And now with our clinics we are really producing nanoparticles delivery carrying particles from the platelets, using sonication and infiltration as the clinical level.

And all our injectable is targeted into the pathology. So you don't need that much of drug. You just need 10% of it and you can get the focus even better than the naked one, because you are targeting those drugs into the pathology, helping any type of, can any type of medication be put into a platelet derived accessory, like even methylene blue, like, for example, methylene blue?

Of course methylene blue, ICG, steroids, cancer drugs, antibiotics. Not just that. Let's say you have infection and that bug has multi resistance to all the antibiotics.

Let's say it's resistant to receive feeding. If I put this recipe in a nanoparticle I break that resistance. You got you got my point. So it's not just that you can also break the resistance of the antibiotic.

You can also break the resistance for cancers as well. So those sounds like completely this sounds like super revolutionary. I'm just surprised that why is this not being done everywhere?

If it's like you're saying that this is a whole new way of delivery of medications targeted, this would this would change. This changes the whole game.

As far as I'm concerned. They are we are doing it. The big Pharma is moving doxorubicin into doxil and narrowing it. The problem with synthetic nanoparticle there's a problem with it.

So let's say you have a tumor in the brain and you give doxil doxil. There's phospholipid bilayer in Palghar possibly.

Nanomedicine and Targeted Drug Delivery

So what would happen is yes, this nano dioxin has a tendency to reach its pathology to the leaky blood vessels and seeps through and spare the healthy tissues.

But the problem is the macrophages in the liver recognize this, nano vesicle? Synthetic one is foreign, and they

start eating them. So if you are projecting into thinking to deliver to the pathology of the brain that cancer of the brain, the problem is the liver is going to filter them and, and kind of, hindering them from reaching into the target.

While if you do it with platelet derived exosomes, it's like a trojan. You know, macrophages will not recognize the platelets nano particles because coming from the, own patient's blood.

And you can get better targeting without being hindered by, the macrophages. So the big pharma moving to that direction. But as technicians, we can do a better job if we nano with using the autologous blood of the patient's platelets.

And there is a study where they made a study where you have doxorubicin versus doxil, which is a phospholipid synthetic nanoparticle versus platelet derived, exosome loaded with doxorubicin.

And they find the efficacy of their hybrid and nanoparticle loaded with not ups and exceed the legacy of the doxil and, doxorubicin. Wow. So one would let's say if one is getting the type of treatment they need to take their blood regularly and have it created, or is it that once you create this medication for them using their own platelets, then you have enough for some time?

How does that work? That's in clinical situation. You have to do it per procedure, per time. You cannot really even if you store it, you can only start for one month.

The reason because they are not stable, eventually they will precipitate. They they, stick together. So you need to sonication, manufacture it again when you're trying to reuse it.

But I would not recommend starting this thing because you need to use it instantly just because of the regulatory reasons. And, the stability is not there.

You can have it for one month, but after one month it may precipitate and all that stuff. So that's the difference between synthetic and big pharma. They are using PGI and and then wrap it with platelet nanoparticles.

And that gives some sort of stability. But in of clinicians we don't need that steps. We can make it even more easy. But it has to be used, the time you make it, which is a good thing.

That's what it is. And so for the, for this chronic disease centers, is this a part of the treatment, like it's just using this type of therapies part of.

Yeah. So we are considering nanomedicine and our treatments so we can get the target therapy there. We are. Considering all the protocols that we are recommending, whether it is redox immune modulation, metabolic codes and manage the metabolism of the body.

If there's any errors, we need to fix it, as a comprehensive, health optimization or, or managing chronic disease. So we still use all the mainstream medicine, but we use it in an efficient way, an effective way.

Clinic Model and Closing Remarks

And also we use integrative regenerative, along with that as a combination. So we're not integrative Vedanta savages where they deny everything in the mainstream medicine or we're not the mainstream medicine where they deny everything that integrative medicine is doing.

We're trying to take the best of both and come up with, a protocol that really, I have and have understanding of the, of the pathology and the root cause of the disease.

And, and it's showing all the mechanism, along with publications and researchers that support those protocols that we are, putting it together as a team of doctors.

Yeah. Well, that's really amazing. So for the viewers, if they want to know more about the, the work you're doing, where should they go? Like, if they want to, you know, learn about the clinics or go to, to become a patient, how should they do that?

So yeah, just a visit website cdf, pmc us dot com which is chronic disease prevention management centers ctp msk.com and definitely we have ten clinics now, in United States, one in Bahamas.

And we are growing and we're looking for more. We're looking for Canadian doctors to be joining us again. We are doing everything that is compliance. We we are trying our best to line up with the regulatory so that we are in a very peace of mind.

We don't do things that's not supported by researches and clinical trials. So everything we do, it does have best reports of research and and articles and critical studies.

And we're doing all the cutting edge in the frontier of medicine. Yes. So really exciting. Thank you so much, doctor. I last I really appreciate your time.

Thank you. Thank you.