



## **MSAA Podcast: Choosing the Right MS Therapy – Episode 8**

Host: Kyle Pinion

With special guest: Dr. Barry Singer

### **Kyle Pinion:**

Hello and welcome to the Multiple Sclerosis Association of America's podcast, Choosing the Right MS Therapy. I'm Kyle Pinion, Vice President of Mission Delivery for MSAA and your host for today's program. Today's program is part of MSAA's MS Awareness Month campaign entitled Shaping the MS Experience, focusing on a number of different aspects of care and shared management in MS.

I am honored to welcome our guest presenter, Dr. Barry Singer. Dr. Singer is the director and founder of the MS Center for Innovations and Care and an associate professor of clinical neurology at Washington University in Saint Louis. He has been an investigator in greater than 35 multiple sclerosis trials focused on new therapeutic options, including remyelination. He has served on the board of directors of the Multiple Sclerosis Association of America since February 2016 and has a position on its executive committee.

Dr. Singer has received a congressional proclamation for MS research in 2008 and his award-winning MS patient education website, [mslivingwell.org](http://mslivingwell.org), started in 2007, has been a valuable resource in 200 countries. Dr. Singer is also the host of the MS Living Well podcast, which you can check out on a number of different platforms, including Spotify, and you really should, it's super informative. Dr. Singer, thank you so much for being here and sharing your expertise with us today.

### **Dr. Barry Singer:**

Thanks, Kyle, for inviting me onto the show. It's great to be here.

### **Kyle Pinion:**

Well, we're so happy to have you. So let's get things started with a really easy question. With so many disease modifying therapies available, with a list that wonderfully keeps growing, how does one even begin to tackle this topic of the right therapy for their individual case with their physician?

### **Dr. Barry Singer:**

Excellent question. And not a simple answer. In fact, I just had some newly diagnosed patients this weekend, sitting down and talking about over 20 options. It is kind of a little bit staggering in

terms of the array of options that we have out there. The good news is I think we can find the right treatment for the right patient.

And that, we have to kind of look at a number of different factors. I think one of the most important factors is the amount of disease. You know, some people have a few spots on the brain. Some people have 20, 30 spots in the brain. Some people have a number of lesions on their spinal cord. So we look at the scan to give us some sense of how much disease activity there is going on, how much is active.

And then we have to look at not only the disease activity, but how, you know, how many relapses are you having early on in your disease course? If you don't recover well from your first attack, these are signs that your disease may be more aggressive and have a worse prognosis. So we may want to be more aggressive in the treatment.

We also look at who the patient is. Are you 30 years old and you want to start having a family? So we have to start thinking about pregnancy issues. Are you 55 years old? Are you 70 years old? So everyone's a little different in terms of how aggressive their immune system is. Or what those risks are for that individual patient.

So we have to really look at who we're dealing with. And then a very important factor is the medications. So some of the medications have more risk, some have less risk, some are more effective, some are less effective. And unfortunately, frequently, when you go up with power, you sometimes go up with risks. We have to balance that out. Some people don't need a highly risky drug that suppresses the immune system a lot if they have very mild disease. So we kind of have to match it up. So I think that all goes into play. And then most importantly, we have to have this shared decision process with people living with MS and their healthcare provider and be on the same page in terms of where we are with how much risk we want to take, what are our goals of therapy to control the disease? So all these factors go into play.

### **Kyle Pinion:**

This is terrific insight, Dr. Singer, but I'd love to dive into some specific scenarios that are commonly faced by patients, if we can. For example, what are the risks for people who are pregnant or hoping to be and going on DMTs?

### **Dr. Barry Singer:**

So generally, when people try to conceive, we generally stop the medications. So most of our patients that are trying to conceive and once they get pregnant are off a disease modifying therapy. Now, that's starting to change. So there's some evidence that glatiramer acetate, or Copaxone, is relatively safe during pregnancy. There's been some upgrades for interferons. So the interferon medications, there's been some recent prescribing information updates that allow that. You could use these medications relatively safely during pregnancy. And so, many of our other medications, there is a potential risk of fetal harm, so we have to come up with a strategy. Some of our medications are given infrequently, so if you dose prior to becoming pregnant, you may have control of your disease long term.

But these would have to be taken well in advance. For example, a medication, MAVENCLAD, or a drug called LEMTRADA. So these drugs would be given and then there's a period of time where you can't try to conceive, but then once it's cleared out of your body, you can conceive and may have longer term disease control. So a lot of different strategies for pregnancy.

**Kyle Pinion:**

Are there additional considerations or questions that someone should ask when, say, selecting a therapy if they are living with a comorbidity, such as a history of cancer, heart disease or diabetes?

**Dr. Barry Singer:**

Yeah, definitely. So many of our medications seem to match up - one drug may be better than another for an individual patient. And so we definitely look at other medical problems. Sometimes our MS drugs actually kill two birds with one stone. For example, there's a class of medications called fumarates. And this class has been used in psoriasis before.

So drugs in this class would be like TECFIDERA and VUMERITY, although they're not indicated for psoriasis, they can sometimes kill two birds with one stone. A drug, for example, ZEPOSIA is now indicated for ulcerative colitis. So someone that has inflammatory bowel disease and MS, that medication may control both. TYSABRI was also indicated for Crohn's disease. So sometimes there's another autoimmune disease that we can find a treatment that works for both.

On the other side, if you do have some medical problems, for example, hypertension, certain medications might make that worse. For example, someone on the S1P medications, for example, like GILENYA or AUBAGIO, can sometimes cause an increase in blood pressure. Some drugs can cause a risk of swelling in back of the eye if you're diabetic. So we definitely have to look at this.

Cancer, you brought up, is also important. A lot of patients have a personal history of cancer. Often, you know, breast cancer is very common in women, skin cancer. So we have to definitely look at that because the immune system is important to clearing up cancer cells. So if you suppress the immune system a lot, there could be a risk of cancer recurrence. And so some of these medications are definitely safer than others with the history, personal history, of malignancy.

**Kyle Pinion:**

Well, and then there's the all important insurance question, right? What about insurance barriers? I mean, despite the science being relatively clear on the effectiveness of these therapies, do you find patients still running into coverage difficulties for the intended DMT? And if so, what's the best advice you might be able to provide for those in that situation?

**Dr. Barry Singer:**

Yes, so I totally agree, Kyle. It's a very scary thing. First of all, getting diagnosed with MS, and then you're like, oh, I hear these drugs are very expensive. How am I going to pay for them? You know, in the United States, most people can get full coverage of the medications. So if you're uninsured, if you are underinsured, or if you have private insurance, generally, our MS drugs have \$0 co-pays.

So there's assistance from the pharma company to help pay for the drug. Sometimes it gets a little trickier with some of the generic medications so that you may have out-of-pocket costs, but usually relatively low. We have for patients that have Medicare, for example, government assistance. So government insurance doesn't allow the pharmaceutical companies to pay the co-pay. So in that case, there's third party patient assistance programs that can help with

reducing that cost. Frankly, the only people that tend to get stuck with significant out-of-pocket costs tend to be retired people that have significant income in retirement.

**Kyle Pinion:**

Okay. Let's talk about the golden question here, which is changing therapies. How do we typically begin that discussion? And is it often patient driven at first.

**Dr. Barry Singer:**

Yeah, it can be, definitely. You know, if you're living with MS, you may prompt that question. What about a new option? And generally, there's a couple of different reasons why someone might want to switch. I think clearly the one that's very important is if your disease is not controlled. You've got new relapses, you've got new MRI activity going on, your disability level is worsening, so you're progressing on your current treatment. Then we really have to think, okay, what are the other options out there and what makes sense? What's been proven in clinical trial to be better than what you're on? And so I think all these issues go into play. And then you have to have a sit down with your neurologist or other healthcare providers and sit down and talk about what makes sense. Where do we go next?

The other category is if you're having specific side effects of a medication. So if you're having intolerable diarrhea, you're running into safety issues, your liver blood tests are elevated, you're running into... you're on TYSABRI now you're JC virus positive, and your index is high. So there's safety issues. Sometimes there's issues with side effects of medication. So if that's going on, then we definitely want to look at other options.

**Kyle Pinion:**

How long should a person try a therapy before exploring alternative therapy options? And what are some of the experiences that might encourage someone to want to try to move on to a different therapy, let's just say, such as physical or emotional side effects?

**Dr. Barry Singer:**

Yeah. So, generally if you're having trouble tolerating a medication, we may get you off quickly. So if you're on a medication and you're having lots of day to day side effects and you're really not tolerating it well, you're not even taking it regularly because every time you take it, you start to have the same problem. Then we're going to pull you off probably very soon.

So it is important to be candid, if you can't tolerate the medication, let us know so we can explore other options. If we can, we may be able to reduce those symptoms and side effects with some tricks that we've learned over the years. But if not, then it's time to move on to something else. And so tolerability, you might move on very quickly. if you are having breakthrough attacks, you know, you had a relapse or two within a year. You got new memory lesions at a scan at one year, then we would definitely be starting to think about switching. So you don't want to ride it out. Back in the day, when I first was in practice, we had a very limited amount of options, but we have so many options now, we can find something that you'll tolerate well and that you feel comfortable with.

**Kyle Pinion:**

This is a conversation that has occurred with a number of different healthcare providers that I speak with, but I'm very curious about your own take on this. And obviously, every neurologist

has a different perspective on this debate, for lack of a better term. But where do you stand on the escalation versus early aggressive therapy debate?

**Dr. Barry Singer:**

Yeah, so we talk about high efficacy therapies. So some of our medications are extremely effective. Some of them, we have head-to-head data that they cut the relapses in half compared to some older medications. And so we have very effective drugs. And I think it's very important to get on top of it early. Much of the damage in MS happens when people are young, and they carry those lesions forward with them for the rest of their life.

My job is to protect the brain and spinal cord so people can live their best lives with this disease. So I kind of look at myself as the brain protector. And so I like to take... I tend to take a little more of an aggressive approach in terms of protecting the central nervous system.

Now, we had a curveball thrown at us the past couple of years with a little COVID-19, which, you know, creates new risks. So we have to balance that out. So now, if your immune system suppressed, your vaccinations may not work as well. You may be higher risk for having complications, and then there's some lifestyle modification that has to come with high efficacy therapies, at least some of them, that you may be in increased risk for complications if you get COVID-19. So we have to balance that out.

I think most people would rather have a lifestyle modification, kind of maybe wearing a mask more and social distancing a little bit more, in order to protect their nervous system so they have less disability. But other people, that's a big issue, or they can't because of their jobs. So all that goes into play in terms of balancing that out. But I think in general, the data supports using high efficacy treatment early. We've definitely seen long term data that shows less disability years later by starting high early, as opposed to what we call escalation, which means you start with the safe old drug and then if it doesn't work, then you move up to something a little more moderate and then finally to a higher drug in terms of higher power.

**Kyle Pinion:**

So as a follow up to the high efficacy/escalation question, has it changed your approach to treatment during the COVID 19 pandemic?

**Dr. Barry Singer:**

Yeah, it has, Kyle. So, you know, during this pandemic, initially I think our strategy was let's get people through it, you know, so we thought the pandemic was, you know, maybe a year, year and a half, maybe two years. But here we are at a time where we really think that this virus is going to linger around and be endemic. And so we really think about the patient. We want them to be protected as much as possible. So the high efficacy therapy is a great strategy. But we also want to not have our patients get sick with COVID 19 and have serious complications. So vaccination is really important. So we make sure our patients get their two vaccines and their booster. I'd say 95% of my patients have been vaccinated. So we make sure that's all done. And then, in addition, we're also talking about strategies if they do get COVID 19. We actually have an oral antiviral medication that can be started within five days. So if you get it within five days of your first symptom, it reduces the risk of death and hospitalization by 88%.

And then there's even a monoclonal antibody treatment that can be given to prevent you from getting COVID 19. But it's got a slight increased risk of cardiovascular events, so that... you have to kind of debate that one out. But I think it's important because I think our strategies are

going to have ways to minimize the impact of COVID 19 on the lives of people on significantly immunosuppressive medications.

But in general, my patients who have been totally vaccinated, boosted have done very well despite getting COVID 19. And as we're taping this, we're in the middle of an Omicron wave, at the end of the wave. So in general our patients have been weathering the storm fairly well and still protecting their nervous system.

**Kyle Pinion:**

I'm so happy to have your perspective on that. So thank you. And for my last question, is there an age when someone should discontinue treatment, or a point where someone might age out of trying a new treatment? This is asked at every in-person patient program I've ever hosted.

**Dr. Barry Singer:**

Yeah. So this is a very important question that doesn't have an answer yet. So, we'll have an answer shortly. We could have that answer somewhere around March or April. There was a clinical trial with less than 300 patients, but it was called the DISCO MS Trial - Discontinuing MS Therapy. And so one group of patients had their disease modifying therapy stopped, and then the other kept on. And the patients were... the people enrolled in the trial, had MS and were age over 55. Now, they couldn't have any active disease recently, so no relapses. Most of these patients were on injectable disease modifying therapies. So we're going to get to see how they did. And I think it's really important when we think about aging with MS, and as you age, your immune system is less revved up. So, and to some degree, the disease tends to be less active.

Now, unfortunately, some patients as they age, also become more progressive. And so we don't really have great data on how these disease modifying therapies work in this population. There was one trial with MAYZENT (siponimod) that was studied in progressive older patients. But most of these, up to age 60 in that trial, but most of our most clinical trials were done up to age 55. So we don't really have data and how these drugs work after age 55.

One of the things as we age and not only in our immune system not as robust and we're more vulnerable to infections, less likely to respond to vaccines, but there's also increased malignancy rates. So overly suppressing your immune system as you age may or may not be a good idea. And so we need some more data so we know which way we should proceed.

**Kyle Pinion:**

Well, I feel like I learned quite a bit today. And listeners I know you did, too. Thank you so much, Dr. Singer. We really appreciate your time and expertise here today.

**Dr. Barry Singer:**

Appreciate it, Kyle. And for all those listeners out there, it's really important to reach out to your healthcare providers so you can help create that plan together with your healthcare provider on the best treatment plan for your MS.

**Kyle Pinion:**

So this concludes our podcast, Choosing the Right MS Therapy. On behalf of MSAA, I would like to once again thank Dr. Barry Singer for his helpful knowledge and insights on this topic and thank Gradwell House Recording for hosting us today and producing the program. Please know

this podcast, along with additional information on multiple sclerosis can be found on our website at [mysaa.org](http://mysaa.org).

Once again, thank you for listening.