LEUKEMIA & LYMPHOMA SOCIETY® is now

Blood Cancer United

The Bloodline with Blood Cancer United Podcast

A Podcast for Patients and Caregivers

Episode: 'The Big Picture on Non-Hodgkin Lymphoma: Treatments, Trends, and Tomorrow'

Description:

Non-Hodgkin lymphoma (NHL) can sound overwhelming, but what does it really mean for patients and families? In this episode, we speak to Dr. Jean Koff of Winship Cancer Institute of Emory University, who breaks down the big picture of NHL: what it is, how it's an umbrella term for multiple subtypes, and what today's treatments and tomorrow's innovations could mean for you. From understanding subtypes and staging to exploring options like watchful waiting, chemotherapy, and cutting-edge immunotherapies, we cover what matters most: knowledge, clarity, and hope.

Transcript:

Elissa: Welcome to *The Bloodline with Blood Cancer United*. I'm Elissa.

Lizette: And I'm Lizette. Thank you so much for joining us on this episode.

Elissa: Today, we are speaking to Dr. Jean Koff, an Associate Professor in the Department of Hematology and Medical Oncology and Director of the Lymphoma Program's Translational Research Team at Winship Cancer Institute of Emory University in Atlanta, Georgia. Her clinical expertise in B-cell lymphoma is complemented by her research characterizing the immunologic and genetic factors that contribute to poor outcomes in patient populations underrepresented in most lymphoma studies, such as African Americans and organ transplant recipients. Dr. Koff also leads a multi-institutional specialized center of research program in lymphoma disparities funded by Blood Cancer United. Welcome, Dr. Koff.

Jean Koff, MD, MSc: Thank you so much for having me.

Elissa: Thank you for being here. So, our episode today is on non-Hodgkin lymphoma, or NHL. Could you tell our listeners what that is?

Dr. Koff: So, non-Hodgkin lymphoma is a large group of different diseases. They are all blood cancers. They are all lymphomas. And what that means is, is that they originally come from a certain type of blood cell called a lymphocyte. It's a type of white blood cell. The reason we call it non-Hodgkin lymphoma is because we have a different type of disease called Hodgkin lymphoma, which looks very different under the microscope and behaves very differently, responds to different types of treatments compared to the group of diseases that are all called non-Hodgkin lymphoma.

Lizette: So, non-Hodgkin lymphoma is more of like an umbrella term, right? There's different subtypes of NHL, non-Hodgkin lymphoma. How are they different from each other, or can you just explain that there's different subtypes?

Dr. Koff: Yeah, absolutely. You're exactly right that it's an umbrella term. It includes over 70 or 80 different types of diseases, and they're all a little bit different in terms of what they look like under the microscope, what sorts of genes or proteins are abnormal, how they behave clinically, and what sort of treatments we use in each one. But there are some bigger groupings that we can use to help break it down because 70 or 80 diseases is too many for my brain to think through all at once.

Lizette: Sure.

Dr. Koff: So, the first big breakdown that we make is between B-cell lymphomas and T-cell lymphomas. And what this refers to is the type of lymphocyte that grew out of control and became a cancer. You normally have B cells and T cells that are part of

your immune system and help you fight infections or fight tumors; and B-cell lymphomas are a lot more common, but there are some patients who have lymphomas from T cells.

So, the next big breakdown that we make between B cells and T-cell lymphomas, we break down the B-cell lymphomas especially into indolent lymphomas and aggressive lymphomas. And indolent is another word for slow growing, so those tend to be more slow-growing lymphomas. It's not always the case. And then aggressive lymphomas are how they sound. They tend to grow faster, and patients usually are more likely to have symptoms if they have an aggressive lymphoma.

Elissa: Now, you mentioned that slow-growing lymphomas, it's not always the case that they are slow growing. Can they start off as slow growing then and maybe potentially become more aggressive?

Dr. Koff: Yes, that is something that can happen. Sometimes that's because it's still an indolent lymphoma, but it's just growing more quickly than is typical for that group of lymphomas. But sometimes, indolent lymphomas can actually change into an aggressive lymphoma, and then they really grow quickly and can make patients have a lot of symptoms. When that happens, when an indolent lymphoma actually changes into an aggressive lymphoma, we call that process transformation.

Lizette: And is there different staging with the various subtypes of lymphoma like there is in other types of cancer?

Dr. Koff: Yes. So, most lymphomas are staged with something called the Lugano staging system. So, that's true for most NHLs; and this has four stages, but these different stages are not the same as a staging system that you might see for a solid tumor like breast cancer or lung cancer.

So, the Stage I disease is when you only have lymphoma in one place, either in one group of lymph nodes or in one non-lymph node site; or sometimes we call that extranodal. Stage II is when you have lymphoma in two different places; but in the body, they're on the same side of the diaphragm, which is, the muscle that sits right under your lungs and helps you breathe. Stage III lymphoma, via the Lugano system, is when you have more than one place that's involved by your lymphoma, but it's on different sides of the diaphragm, and it's usually only lymph nodes that we're talking about with that stage. And then, patients with Stage IV disease have lymph nodes or other extranodal sites on both sides of the diaphragm, and you usually have more than one site that is not a lymph node, like the bone marrow or the liver or any other organ.

And something that I always like to tell my patients about the staging system I through IV is that we have patients who do very, very well, even if they have Stage IV disease. So, depending on what your subtype of lymphoma is, you can still have a cure, get rid of your lymphoma completely, even if you have Stage IV disease. And for lymphomas that we typically don't think of as curable, even if you have Stage IV disease, you can still have a very good treatment response; and you may not even need treatment right away with Stage IV. So, it's very different compared to what we think of for most solid tumors with Stage IV disease.

Elissa: I would imagine a lot of patients, when you're telling them that they have Stage IV non-Hodgkin lymphoma, that it's scary for patients. So, is that pretty common for you to kind of have to walk patients back a little bit?

Dr. Koff: Yeah, and I'm very sensitive to that; and I try to preempt it because it's anxiety producing enough to have a new cancer diagnosis. And then it's very common for lymphoma patients to have Stage IV disease. Depending on the subtype, that may be pretty common.

But I encourage them to think about it in a different way, and I always focus on the fact that lymphoma tends to be very treatable, even with Stage IV disease. And that it also makes sense that you might have lymphoma in a lot of different places because unlike a solid tumor which is coming from a specific site or a specific organ, you know, with lung cancer it starts in the lungs. With breast cancer, it starts in the breast. With lymphoma, it's coming from a white blood cell; and white blood cells can travel throughout the body. So, if your cell that your cancer is coming from can travel throughout the body, then it makes sense that it would be regularly involving multiple places within the body.

Lizette: And I know that you alluded to some can be cured and some can be managed. Is that because of the subtype that you have?

Dr. Koff: Yes. So, it's very dependent on the subtype that you have. In most cases, the indolent lymphomas, we don't think of them as being curable per se. But many patients do not need to start treatment right away. They can be managed with watchful waiting. And other patients, they may get treated and then have a long time of not needing other treatment where they can be managed with what we call active surveillance. And so, even if we don't think of your lymphoma as being curable, in many cases, depending on the subtype, the overall survival is actually quite long.

Elissa: And are there more common subtypes of non-Hodgkin lymphoma?

Dr. Koff: Yes. So, the most common subtype is an aggressive subtype called diffuse large B-cell lymphoma. The other common subtypes are follicular lymphoma, which is the most common type of indolent B-cell lymphoma; and then CLL or chronic lymphocytic leukemia or small lymphocytic lymphoma, which are two different names for the same type of disease, is also very common.

Elissa: Okay. So, what are the common signs and symptoms that might bring someone to the doctor to then be diagnosed with non-Hodgkin lymphoma? I think we've heard a lot of patients say that they felt a mass somewhere – maybe in their neck, in their arm, on their chest. Is there always a palpable or visible mass; or are there other symptoms that might bring someone in?

Dr. Koff: Yes, so this is another thing that makes lymphoma diagnosis kind of tricky because not all patients will have the same symptoms that lead to their diagnosis. But you mentioned one common one, which is a mass or a lymph node that you can feel. And the places in the body where you can feel a lymph node are, like you mentioned, neck, near the clavicles, under your arms, and in the groin. But not every patient will feel a lymph node before they get diagnosed with lymphoma.

The other common symptoms that people have are called B symptoms. So, these are fevers that you can't explain; night sweats, especially ones that are really what we call drenching, where you're needing to change the sheets or change your bed clothes; and then weight loss that you're not trying to lose. Those are kind of your body's systemic response to having the lymphoma in your body.

But what I also tell patients is that some people don't have any symptoms at all, especially when they have those indolent, slow-growing lymphomas. They may get a scan for something else or get a set of routine blood tests, and somebody who's reading the scan may see some lymph nodes that you can't feel that are larger than normal or see some abnormalities in their blood counts. And that actually may lead to a lymphoma diagnosis.

The other thing that I tell patients is that because lymphoma can be in different places in the body, that can lead to different symptoms, depending on where in the body your

lymphoma is. And so, I don't put a limit on what symptoms you may have when you're diagnosed with lymphoma, but those are kind of the most common scenarios.

Lizette: Now, I want to go into the current treatments for non-Hodgkin lymphoma. From what you're saying, there's different treatments for the indolent or slow-growing types than there are for the aggressive types, as well as different treatments for the different subtypes. What usually do people start with? What kind of treatment do people start off with for lymphoma?

Dr. Koff: Yeah, so there's really no one size fits all. It's very different based on whether you're indolent or aggressive, whether your lymphoma is B cell or T cell, what subtype is within those groupings. We have very different treatment approaches for different subtypes and different scenarios.

Like I mentioned, some patients don't even need treatment right away. If they have an indolent lymphoma that is growing slowly and not causing any symptoms, not causing any blood abnormalities or lab abnormalities, then they may not even need to start treatment. That's one major difference.

Other patients may need treatment as soon as they're diagnosed, either because they have an aggressive lymphoma that needs to be treated immediately, or they have a lymphoma that's growing quickly or causing problems. They may be technically an indolent lymphoma.

So, I think, it's more helpful to think about what types of therapies are out there because they may be used for different lymphoma subtypes or even different situations, whether it's somebody's first treatment or their second treatment or third treatment.

So, one big treatment category is chemotherapy; and there are several different types of what we call conventional chemotherapy agents. Sometimes, they're given as just one type of chemotherapy. Sometimes, they are given in combination. But usually, what they have in common is that they act on cells in the body that are growing rapidly, which includes your lymphoma cells. It can also include some normal cells that are growing rapidly, like your hair cells or the cells that are in your GI tract. But that's what they have in common. And compared to other types of cancer, lymphomas, as a group, are actually very responsive to chemotherapy; and, so, it's common for us to use chemotherapy or combinations of chemotherapy drugs in lymphoma.

Lizette: So, some patients don't start with chemotherapy, they start with maybe watchful waiting, or active surveillance, what kind of discussion do you have about active surveillance or watch and wait for a patient that you just told has this diagnosis?

Dr. Koff: Yeah, so that can be another source of anxiety for patients who are dealing with a new diagnosis where they get this diagnosis of a blood cancer, but we're not starting treatment right away; and sometimes that can be frustrating or anxiety producing. But what I try to reassure them about is that, first of all, we have a lot of years of data showing us that this sort of approach is safe for patients with indolent lymphoma who don't meet those indications to start treatment, whose disease is not causing symptoms, whose disease is not growing quickly, whose disease is not causing problems in terms of lab abnormalities, and that this is a way that they can continue to follow up and be monitored closely. But they don't have to have the side effects that are associated with lymphoma treatments and that we have that data that shows us that patients who wait to start treatment until their lymphoma is causing problems do just as well, if not better, than patients who start treatment right away, even if their lymphoma isn't causing issues.

Lizette: And you mentioned chemotherapy. So, is it the same chemotherapy regimens utilized in both the aggressive and the indolent, slow-growing types?

Dr. Koff: So, there is some overlap. There are several different lymphoma chemotherapy regimens that we commonly use. And again, different scenarios call for different regimens. But there is some overlap between the aggressive regimens and the indolent regimens. Many of the regimens that we use for aggressive B-cell lymphomas or T-cell lymphomas will also work in patients who have indolent lymphomas.

Lizette: Okay. And I know that we've been hearing about more of the emerging therapies for non-Hodgkin lymphoma, like bispecifics, BiTE (bispecific T-cell engager). I don't know if BiTE is bispecifics. CAR T-cell therapy, stem cell transplants, can you talk a little bit about those and which types of non-Hodgkin lymphoma they treat?

Dr. Koff: Sure. Those are some of the newer therapies, but they are becoming more and more established the more we use them over the last few years. So, you're talking about immunotherapies that work with the body's immune system to help kill the lymphoma cells.

One immunotherapy that we've been using for a very long time in B-cell lymphoma is called rituximab; and that's a monoclonal antibody that, basically, targets a marker that's on your B cells, that's on your B-cell lymphoma and tells your immune system, "Here's the bad cell. Go ahead and take care of it. Go ahead and kill it." And we've been using that for now about 25 years.

Elissa: Wow.

Dr. Koff: But then there are newer therapies that have been developed in the last few years that work slightly different. One of them is what you mentioned, a bispecific antibody. So, rather than just recognizing one marker on your lymphoma cell, it does that. But then on the other side of it, it has a recognition entity that can bind to your immune cells. They combine to your T cells.

And so what it does, it binds to the T cell on one side and binds to your B-cell lymphoma on the other side and brings them together. And the idea is that if you bring your immune cell to the lymphoma cell, then the immune cell can kill that lymphoma cell. And so, those are a little bit newer; but those are being used pretty frequently in DLBCL and follicular lymphoma as well as some other B-cell lymphomas.

And then a couple of the other therapies that you mentioned are cellular therapies. CAR T therapy works similarly to the bispecifics in that you link your B-cell lymphoma with an immune cell. But instead of that link happening via a drug, it actually happens by making the cell itself, your therapy. And so, this is kind of a complex type of therapy where you use the patient's own immune system, their own T-cells to manufacture that specialized immune cell that can then attack the lymphoma. But the idea is the same, that you have something that is targeting a marker on the B cell; but in this case, you're using a cell product rather than a drug to do that targeting.

Lizette: And I know that there's different, like, bispecifics coming out. Does that mean that people can use it in first-line therapy, second-line therapy, meaning do they use it once they're diagnosed, or is it something that they have to wait to utilize?

Dr. Koff: Great question. So, for right now, today, none of the bispecifics are being used as frontline therapy outside of a clinical trial. There are, however, several clinical trials that are looking to see whether these types of therapies actually improve on what we currently use for frontline therapy in certain B-cell lymphomas.

Elissa: Now, since we're talking about these trials for frontline therapy, so a very first treatment that you get, correct, in your treatment? Who would be the patients that might go for this trial? Is this something that doctors are having a conversation with the patients right in the beginning? Say, "Hey, I think you might be eligible for this trial that is a frontline therapy?"

Dr. Koff: So, I always recommend consideration of clinical trials, no matter where you are in your lymphoma journey because they represent an opportunity to participate in a treatment regimen that may not be available just yet, but is aimed at improving on what is currently available. Clinical trials are actually how we have been able to get all of these therapies that we now use routinely. They're all approved, based on the results of clinical trials, and that is all from lymphoma patients being willing to participate on these trials and give us the data that we need to show that these lymphoma therapies work better than the current standard of care.

So, when I'm talking with a patient in my clinic, especially if we're having a discussion about starting a new therapy, whether that's in the frontline or whether that's their second line, third line, fourth line, I always talk with them about what trials may be available at my institution. And many patients are also interested in exploring what other trials might be available outside of my institution if they're able to travel or get another opinion, because the same trials aren't available in every single institution. One institution has a selection of trials that may be very different from what's available somewhere else.

Elissa: That's good to know. I think a lot of patients automatically assume that clinical trials are for the end of the line, right? They've tried all these options, and they're maybe out of options. And I think it's a last resort versus it could be a first resort. And that could be something they could try right away and potentially get on a really good medication.

Dr. Koff: That's absolutely true, and the way that clinical trials are designed is they're always designed to benefit the patient if at all possible. And so, for a frontline trial, usually the way it's designed is that you're not getting something that's completely different from the standard of care. You're usually getting a standard of care regimen that's been modified only slightly, maybe just standard of care plus an additional agent or switching out one agent for something that's already in the combination regimen for frontline. So, they're designed to give the patient the best chance of that new regimen actually improving upon what's already available.

Elissa: And just to clarify, they're also not being placed in a group where they would not get any treatment, aside from, you know, maybe something where the standard of treatment is active surveillance where they're doing a watch and wait. So, it's either the standard treatment or the standard plus, additional drug or the standard versus a new treatment, correct?

Dr. Koff: That's exactly right. You actually can't design a trial where you're giving a cancer patient no therapy if the standard is to give therapy.

Lizette: That's definitely good to know.

I know that a lot of patients have been asking if a stem cell transplant is something that is still going to be done with things like bispecifics and CAR T-cell therapy as new treatment options. And as all of the new treatment options are coming, is stem cell transplant something that we will continue to do in the future, or is it something that we are definitely still doing now for patients?

Dr. Koff: So, I want to take a step back and just explain for our listeners what a stem cell transplant is; and then we can talk about why we might be thinking of trying to replace it with other newer therapies.

So, a stem cell transplant, in general, takes advantage of the fact that lymphomas tend to be sensitive to chemotherapy. The idea behind a stem cell transplant is if we could give really, really high-dose chemotherapy, wouldn't that be better for killing all the lymphoma cells? And the idea is if you gave that sort of very high-dose chemotherapy, much higher than what we give in the outpatient setting for most frontline regimens, if you gave that alone, you may kill all the lymphoma cells, but you would also kill all the cells in your bone marrow that make your normal blood cells – your normal red blood cells, your normal white blood cells, your normal platelets. But if you had blood stem cells that were collected before you get that high-dose chemotherapy, either your own blood stem cells that you collect before you get the chemo or blood stem cells from a donor, which we don't use very often in lymphoma, but sometimes we do, that you could give that very high-dose chemotherapy while those blood stem cells are waiting in the freezer for a rainy day. And then, after your body has cleared that high-dose chemotherapy, you get your blood stem cells back; and they make their way to your bone marrow, and they start producing your new normal blood cells because they haven't seen the chemotherapy. So, that's the idea is that you have a very high-dose chemotherapy regimen and then a stem cell rescue.

But as you can imagine, if you get that really high-dose chemotherapy, even if you get the blood stem cells back that are going to help you make new blood cells, there's still a lot of toxicity or side effects associated with that high-dose chemo. And most patients either stay in the hospital for several weeks or have very close outpatient monitoring after their stem cell transplant because they need a lot of support through those side effects.

So, as we get more advanced therapies, more targeted therapies, there's been a lot of work to see if those targeted therapies, including immunotherapies like the one we've mentioned, and cellular therapies like CAR T, whether those actually may work better to keep the lymphoma away or get rid of it completely in some cases, than high-dose

chemo and transplant, and whether they have less toxicity, less side effects than transplant.

And I would say the most important advancement that's been made in that area is data, again, from large clinical trials with lots of lymphoma patients participating that showed that CAR T in patients with aggressive lymphoma that comes back quickly after their frontline chemotherapy, CAR T-cell therapy is actually better for those patients in terms of how well it keeps lymphoma away and also in terms of side effects than stem cell transplant.

And so, we are using transplant less and less in lymphoma in general as we get more of these targeted agents and more trials comparing these agents to transplant in certain settings. The types of scenarios that we would use transplant in are decreasing. But we still do use it in some cases.

Lizette: So, it's your subtype that dictates whether it's curable with therapies or if it's something that you have to manage, right?

Dr. Koff: Right. So, the indolent lymphomas, we typically don't think of as being curable. The aggressive lymphomas, many of them we think of being curable.

Elissa: So then really, you're focusing on slow-growing lymphomas, more on not only managing the disease but also quality of life for the patient?

Dr. Koff: Yeah, that's a really important consideration because if you are not going for cure, if you're not going to get rid of the lymphoma completely and have it never come back, then you don't want to expose the patient to life-threatening side effects; and you don't want to impact their quality of life really negatively with your treatment.

The other factor that goes into that decision is that we actually have a lot of options for a lot of indolent lymphomas, especially follicular lymphoma, where we have several

different options that we can choose from. And so, you can weigh in shared decision-making between the patient and the hematologist/oncologist what regimen or what sort of therapy may be best for that particular patient at that time.

Elissa: Okay, now you've mentioned a few times about side effects that patients can get; and you've talked about a lot of treatments here. So, could you tell us about some of the common side effects a patient might have due to treatment and then if those can be managed?

Dr. Koff: Absolutely. So, I'll start it off by saying that side effects can be managed. There are lots of things that we can do to prevent side effects if we know they're associated with a certain drug. That's a good question to ask your doctor about what you can do to help decrease the likelihood that you'll have side effects or what you can do if you experience one. That's an important part of the conversation.

In terms of side effects, there's so many different regimens that we use; but I'll go over the big ones that we have in treatment. So, one is chemotherapy. Like I mentioned, chemotherapy kills rapidly dividing cells, which is good because it can get rid of lymphoma cells; but it can also impact your other rapidly growing normal cells, especially in your GI tract and your hair, your skin.

So, common side effects that we see with conventional chemotherapy are things like nausea, vomiting, low cell counts. So, low blood cell counts like low platelets, low red blood cells, to the point that you might need a transfusion. Low white blood cells, part of your immune system. So, when your white blood cells get low, you're more at risk for getting infections than you would be normally, and so that ends up being a major side effect.

Certain types of chemotherapy have organ-specific side effects. Some can make you be more likely to have nerve problems, what we call peripheral neuropathy; and some

can make it more likely that you'll have heart function problems, but that's actually a lot less common. And then certain aggressive chemotherapy regimens are very likely to make patients lose their hair, but that is temporary. The hair does grow back once you're done with chemotherapy.

The bispecifics and CAR T therapy have a special group of side effects because of their mechanism, how they work to kill the lymphoma. Because they involve your immune system fighting the lymphoma, they have immune-specific effects. So, one of those common effects, especially with CAR T cells, is something called cytokine release syndrome or CRS; and this is an inflammatory syndrome where basically your immune system and the system that manages your inflammatory response gets a little bit too revved up as part of the CAR T's action. And so, this looks like fever, low blood pressure, low oxygen. Sometimes if it progresses, it can affect other organs. And clinically, it looks like the patient is having an infection. They get fever or sweats or body aches; but it's actually just your immune system responding to the CAR T or the bispecific. And this can be managed with certain medications but needs to be monitored carefully because, as I mentioned, if it gets more severe, it can cause problems with your other organs.

Another side effect that we watch out for with bispecifics and CAR T is something called neurotoxicity; and this, again, has to do with changes related to inflammation due to the CAR T. But basically, what can happen is you can have problems with your cognition, which can look like confusion or maybe a little bit of word-finding difficulty. But if those set of symptoms progress, patients can get very sleepy, or they can even get more severe where they can not be responsive or even have things like seizures.

In the modern era where we're more used to dealing with these types of side effects due to these therapies, we're able to prevent a lot of those severe cases. And so, if we start to see that somebody's having word-finding difficulty or maybe some confusion,

a little bit of sleepiness, then we can start some steroids and hopefully head off those more severe manifestations.

Elissa: That's great.

Lizette: Yeah, and that's good to know that you can anticipate some of these effects and actually be proactive in managing them. I want to talk about the future. What are you excited about? Any emerging therapies that are coming out at this point? Any therapies and clinical trials that you're particularly excited about?

Dr. Koff: Well, I think there are many places to be excited in lymphoma. The last few years have seen just an explosion of available therapies, especially for B-cell lymphoma. But there are also emerging therapies for T-cell lymphomas. And as I mentioned, the way we get there is patients participating on clinical trials so that we can figure out which agents work and which agents don't work as well as what we currently have.

As we mentioned before, these immunotherapies are being moved up into earlier lines of therapy. CAR T is also being moved up. What I tell patients is that we are, just in the early days of bispecific therapy and CAR T therapy. This is kind of the first round of agents, and I think as we understand more about how these agents work, which lymphomas or which patients are more likely to respond to them, how we can tinker with the formulas of these drugs or cellular therapies to make them work even better and keep lymphoma away forever or have less side effects, the better that we can make these therapies.

And so, I'm most excited about those, but depending on which lymphoma you have, there are also different types of therapies that are very exciting. So, for patients with CLL/SLL, there's a new class of drugs that I think everybody is excited about that are not immunotherapy, they're not a cellular therapy, but they're actually a pill that you

can take called BTK degraders. And so, I think, that's going to be really important for patients with CLL/SLL in particular, but potentially other types of B-cell lymphoma as well. So, there's lots to be excited about in lymphoma; but the way that we make strides forward is having patients participate in research.

Elissa: Yes, definitely. So, our final question today, on our patient podcast home page, we have a quote that says, "After diagnosis comes hope." What would you say to patients and their loved ones to give them hope after a diagnosis of non-Hodgkin lymphoma?

Dr. Koff: So, I think there's a lot to be hopeful about in lymphoma. As we talked about on this podcast, there are some cases where you can just use watchful waiting; and you don't need to undergo therapy right away. There are some cases where the lymphoma can be managed with therapy that's well-tolerated and can be kept under control for a long period of time. And there are other cases where we are aiming to get rid of the lymphoma completely and forever and have it never come back. We're aiming for cure.

I also think that there are lots of new therapies that we are hoping are going to improve outcomes even more for patients, and so there's a lot of hope on the horizon for agents that we haven't even talked today about.

And I think there's also a lot of hope because lymphoma patients have access to support systems through Blood Cancer United, which is a great resource for our patients who are dealing with a new diagnosis or maybe a diagnosis that they've been dealing with for a long time. And patients can also reach out to lymphoma specialists who, even if they're not your main hematologist/oncologist, can provide you with additional information about your disease and your specific case and help your doctor take the best care of you.

Elissa: That is wonderful. Well thank you so much, Dr. Koff, for joining us today and talking all about non-Hodgkin lymphoma. I am so excited for the future of treatments and all these things that we have coming out that have just arrived that are just kind of getting started, like the immunotherapies. It's just a really exciting time, and I hope that this gives hope to patients.

And I also want to mention for our patients listening, if you thought about the clinical trials and you would like to get more information, we do have a Clinical Trial Support Center, and I will have information in the show notes. Our specialists can line you up with a potential clinical trial that you're eligible for.

And so, again, thank you so very much, Dr. Koff, for being here with us.

Dr. Koff: It was my pleasure. Thanks so much for having me.

Elissa: Thank you.

And thank you to everyone listening today. *The Bloodline with Blood Cancer United* is one part of our mission to improve the quality of lives of patients and their families.

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