

Operator:

Greetings and welcome to **Your Questions Answered About Coronavirus (COVID-19)**, a live and telephone and web education program. It is now my pleasure to introduce your moderator, Lizette Figueroa-Rivera. Thank you. Ms. Figueroa-Rivera, you may begin.

Lizette Figueroa-Rivera:

I want to take this time to thank everyone for participating in today's program. As Shannon Alder said, "One of the most important things you can do on this earth is to let people know that they're not alone." So, we are here for you during this very challenging time. You're not alone.

All of us have unanswered questions and concerns about the coronavirus or COVID-19 pandemic. There're so many unknowns, but at LLS (The Leukemia & Lymphoma Society) and in your treatment centers, there're many healthcare professionals that are working diligently to make sure that your needs are addressed.

I can't say enough about our leadership and how Dr. Gwen Nichols, our Chief Medical Officer, has been working tirelessly to provide guidance and answers to your questions through our various blogs and additional offerings that LLS has put into place to address this coronavirus.

And, Dr. Ruben Mesa, the Director of the Mays Cancer Center at UT Health, San Antonio, MD Anderson, and Board Member of LLS's National Board of Directors has not only been there for his patients and caregivers, as well as staff, but has volunteered his time to speak to different groups about the coronavirus, trying to make sure that folks are well educated and prepared during these difficult times.

I want to thank them both for presenting this program for you today. Dr. Nichols will speak first about LLS and the coronavirus and then Dr. Mesa will provide information about the coronavirus, and then we'll answer your questions.

Support for this program was provided by AbbVie Inc., the Bristol-Myers Squibb Foundation and The Leukemia & Lymphoma Society.

I'm now pleased to introduce Dr. Gwen Nichols, our Chief Medical Officer. I will now turn the program over to you.

Dr. Gwen Nichols:

Thank you, Lizette. And, thank you folks for tuning in. These are really uncertain times and unfortunately cancer has not isolated itself during this coronavirus pandemic. And, I assure you that continued efforts are being made at LLS to help our scientists, to help the research, and to help patients find care that's safe and effective during this very stressful time.

We are amplifying our efforts to provide free information and support at LLS.org. In addition to this COVID webcast, we have a lot of ways online and virtually where you can find support as an individual or as a caregiver, including links to blogs, our *LLS Community*, one-on-one support, and our very important Information Resource Center, where you can talk to an Information Specialist. Also, there are some very important reputable websites for you to get information, because I think there's a lot out there and you need to know, if you're spending time looking online for information, you should be going to the most important and reputable websites, and we have a lot of that information for you and this is just one way to find it, so please take advantage of that.

I also really would like to take a particular moment to talk about Information Specialists. These are oncology professionals, social workers, and nurse educators who will talk to you individually about your cancer care and about information. At this time, when doctors like Dr. Mesa are stressed to the limit trying to help patients when their usual care centers are closed, when patients can't travel the long distances that they need to travel to get their treatment, when perhaps the outpatient center where patients receive their care is closed because someone was sick there, there are just an amazing number of stressors on our care providers.

The LLS Information Resource Center is here to be a physician-extender, to try and help answer questions and direct people to information. You can e-mail them or you can call our toll-free number, and this is entirely free. And, I can tell you that we've received some calls. Our Resource Center is really working overtime because we really believe that we can help make a difference.

And then, the final thing I'd like everyone on this call to know about is what we're doing in Washington, in particular through LLS Advocacy. So, we want to be sure that for patients whose care centers, for instance, cannot provide safe treatment, that

we are able to switch to an out-of-network center, and that Medicare can provide support for patients to get IV infusions at home, and understand that people need to be treated and not have their treatment delayed, which can be the difference in life and death, even if patients don't have the coronavirus.

And, I'd like all of you to know that LLS Advocacy is working every day with a few other important big patient groups to tell our members of Congress exactly why this is important, and to work with CMS (Centers for Medicare & Medicaid Services).

Finally, I'd really love it if the people on this call would all become virtual advocates. You can do that by texting or visiting our website. Being an advocate can be as simple as typing in your name and your zip code and sending a letter to your Congress people that we have pre-populated for you. I hope that all of you will help us to do more to protect cancer patients.

And now, I have the great pleasure to introduce my friend and an amazing physician and colleague, Dr. Ruben Mesa, who is not only the Director of the Mays Cancer Center, but a wonderful board member for the National Board of LLS. Thank you, Ruben.

Dr. Ruben Mesa:

Thank you so much, Gwen. It's a tremendous pleasure to be here today. I know very well how frightening a time this is for all of us and individuals that are facing or have faced a blood cancer now or in the past. There is so much information, so many things being discussed, so I'm really grateful that LLS has pulled this discussion together, for us to be able to share a bit in terms of what we've learned, but more importantly how does it specifically affect individuals with the blood cancers, as well as other resources that people might have.

You know, what I would tell folks is that, this has been an unprecedented time of cooperation in the United States and around the world in the medical community to try to: (1) keep our patients safe and (2) keep their important treatments and other aspects of their care clearly cared for. We want to try to protect you from the virus, but we're also mindful of the diseases that you face and trying to have you receive treatment, if appropriate, in the safest way that you can.

I both direct a cancer center and directly care for blood cancer patients. I'm at work today, and also involved with both our university's response and the overall San Antonio response. I've been in close contact with many of the national efforts as it relates with this, both from the National Cancer Institute (NCI), the American Society of Hematology (ASH), American Society of Clinical Oncology (ASCO), and many colleagues overseas in China, South Korea, Japan, Italy, the UK, and others. And, what I can say is that, there's never been a time of more cooperation, more rapid scientific advancement, the entire scientific community and medical community coming together to both care for patients that are infected now, trying to prevent others from becoming infected, and better learning on how to diagnose and screen for this virus, as well as develop vaccines and new therapies, and clearly being mindful of all of the other medical care that has to occur.

I am going to tackle a few of the key high level issues and questions and then we received many questions in advance of this and we'll try to get to as many of those as we can.

So first, a little bit about the name, because it's a bit confusing. You hear coronavirus, you hear COVID-19, you'll hear SARS-CoV, you'll hear a variety of things. Basically, coronavirus is a virus-type infection.

So, there are many types of coronaviruses. The virus that developed at the end of 2019 has been called the novel coronavirus because it was a new coronavirus. The virus itself has a technical name called SARS-CoV-2. COVID is actually the syndrome that develops in people that have been infected by the virus. So, the virus has one name and COVID is the illness.

In brief, one of the reasons this virus has been as big a problem as it has been internationally are several things. One, it's new, so none of us really came to it with any sense of immunity against the virus. Two, there is a range of individuals that can have a very severe pneumonia and period of inflammation that makes them very ill with the virus, at probably a greater percentage of people affected than, let's say, the percentage of people who become very sick if they have been affected by a cold or by a flu. There's been a higher rate of people passing away from infection from this virus than they might otherwise expect with the seasonal influenza, colds, or other things of that nature.

Now, it has been labeled a pandemic from the World Health Organization (WHO). What is the word pandemic versus epidemic? Epidemic means that there is an infection rapidly going through a community. A pandemic means that there's a serious, contagious infection that has really spread in a large area around the world. So, the pandemic piece is both a reflection on it being both serious and contagious, but also that it has affected many of the areas around the world. And,

this is one of the reasons why there have been such extraordinary steps to really combat this virus, why much of the world now is in some sort of lock-down mode, because it's new, because no one was really immune to it ahead of time, and because the rate of people getting severely ill from it is much higher than our typical infections.

Now with this, there's been much discussion regarding who is at higher risk of becoming sicker from this infection because it is that issue of people becoming more sick that is what is so concerning about this particular infection.

I'll share that it is possible that anyone, even if they're not in a high-risk group, has the potential to become very sick. So, we clearly are trying to limit its spread as much as we can within our society, within our country, and within our cities and regions. But, all of that said, there clearly is a group that we think have a higher risk with some of the information coming from the experiences both from Asia and Europe that have been dealing with cases in advance of the surge in the United States. So, people that fell under that category are people over age 65, people in nursing homes or long-term care facilities, potentially individuals who are pregnant (there's a lot of discussion whether that is the case or not), people with chronic lung disease or moderate-to-severe asthma, people who have serious heart conditions, and people of any age who have severe obesity or underlying medical conditions, such as diabetes, renal failure, or liver disease.

And then the final group, which is really a key part of our discussion today, people who are immunocompromised, including cancer treatment. So, in China they found that individuals undergoing active cancer treatment, who were infected with the virus, did seem to have a higher rate of the disease being very severe.

Now, as I think about the people on this call, people that have potentially myeloma, lymphoma, acute leukemia, chronic leukemia, myeloproliferative neoplasm, myelodysplastic syndrome, or chronic lymphocytic leukemia are a very heterogenous group. Some of you are otherwise very healthy. Others of you may have other medical problems. Some of you are actively receiving chemotherapy. Some of you are not receiving chemotherapy. Some of you are on high doses of steroids that may suppress your immune system. Others of you are not receiving therapies like that. So, you are a very mixed group. And in short, there are some of you who we would view that your immune system may be significantly affected by the treatments or the disease that you have, others where that may be more modest, and others where your risk may be more like the general population.

But, it's important as we go through this crisis for you to connect, in particular, with your healthcare team, just to have a bit of a sense as to where you are in your treatment, the therapies that you're receiving or not, as well as what they view, knowing your full medical history, what that risk is for you.

Now the question of... is an immune system always compromised? Not necessarily. So, the immune system certainly can recover after therapy. Depending upon the therapy that was received, that'll make an impact on whether the immune system is functioning near normal or whether it has never recovered 100%. Individuals that have gone through our most aggressive therapies, in particular allogeneic bone marrow transplant, that leaves individuals probably not with an immune system working at 100%. So I think again, it is important to touch base with your healthcare team just to know if this evolves, how much concern they have or not compared to the general population. Realizing that all of us are needing and trying to stay safe during this process.

What can I do to boost my immune system? Well, at the current time, important things are to get adequate sleep, to eat well, and to clearly follow the directions that have been given to you as it relates to your community and the issues of social distancing. Indeed as a nation, we've been advised, and I think wisely so, to (1) largely try to stay 6 feet or more away from others, particularly other than immediate family members; (2) frequent handwashing; and (3) clearly try to avoid touching your face as much as possible – most of the time how we get infections is, we get things on our hands, we touch our eyes, our mouth, our nose, and then they get into our system. So certainly, follow all of the national guidelines and the local guidelines, in particular. And, to have some sense of connection with your doctor and your healthcare team regarding how much concern they think they have for your exact situation at the current time, as well as if you are currently receiving treatment and whether they have any suggestions in terms of how that continues moving forward or any adjustments.

In our center, and I would say communicating with many of the centers nationally, our goals are to try to keep all of you safe, but also for all of you to still be appropriately treated for the diseases that you're being treated for. So, we're trying to have the environments be safe. In my center today, we are actively treating patients who urgently need chemotherapy. Now clearly, for those individuals that have therapies that were not urgent, that could be delayed without us potentially lessening the impact of their therapy, we certainly will delay those things. But, for the most part, we are trying to keep people on-treatment, but also keep our environment safe for them to enter. We've moved much of our staff to work remotely from home, so that there are less people in the building. We have only one place that people can come in and out of the center and this is very similar to other centers. Everyone who physically walks into the center is being screened both by questions

as well as having their temperature checked before they come into the building. Patients are not allowed visitors at our center today, and this is the case for most centers across the United States. So again, we are keeping the bare minimum number of individuals but having those individuals there who need to be there and have masking of the staff and have it be a safe environment.

How do you reduce your risk? So again, key things you should know as the question about being at a greater risk of getting the infection is addressed. There are 2 things: (1) a risk of having – or getting the infection, and (2) the risk of the disease being more severe. Kind of 2 different concepts. With both of these, it's a question of how strong is your immune response? And, that really will vary depending upon the therapies that you are receiving. Some therapies lower the white cell count, lower our immune response, such as steroids, certain chemotherapies, and certain immunosuppressive therapies. But clearly, all of you are in different modes as it relates to: Are you now a blood cancer survivor? Are you in active treatment? Or, are you in a watch-and-wait protocol? Everyone on this call should at least have some caution at being at as great a risk as the general population, if not more so. So again, everything that you hear, take them seriously and try to follow those guidelines as best you can. But it is helpful throughout this process to connect with your healthcare team.

One big plus that was allowed as of last week is the ability for us to connect with our healthcare team more formally, both by phone visits and by electronic visits. These options have ramped up dramatically around the world, as well as around this country over the last week. Today I will have a clinic where I will see several patients, but it will all be electronic, where I will be able to connect with them on their phone or their iPad through a system, and most centers, both in academic centers and in private practice, have rapidly utilized this. So, you can have a 15-minute discussion with your healthcare provider potentially, regarding what is your risk, what more can you do to stay safe, knowing your very exact specific circumstances, as well as, ask questions whether that has any impact on the treatments that you are receiving.

There's been a lot of discussion about social distancing and self-quarantine. Social distancing is something that's really being recommended for all of us now, basically, to try to diminish the number of people that we are exposed to because this infection is out in the community. And obviously, there are some states, cities, and regions where this is much more prevalent than others, but many of the states around the United States are currently under a shelter-at-home directive, where other than essential businesses or going to the grocery store and other sorts of things, people are really being advised to stay-at-home. For individuals who are immunocompromised and if you are on active treatment and your doctor thinks that you are at higher risk, if you need to go to the grocery store, it's probably best that it not be you. It would really be best that you try to keep that social distance.

Now social distancing. What social distancing does not mean is that you are not entitled to go out and get some fresh air. So again, as you have opportunities to be in your yard or at least in a park but socially distant from others, again 6 feet or more, avoiding crowds, all of these sorts of things, but again this is a period of time where you have to stay feeling well, stay active, really trying to maintain your health.

Now self-quarantine is something different. Self-quarantine is where we have someone who we think has potentially been exposed or potentially has the illness itself, is not severely ill, so they've not needed to be hospitalized or present for medical care, but they clearly are avoiding others, they clearly are staying at home, and there's some information. I'm sure there'll be some on the LLS website, regarding if someone is infected at home, how do we try to have the rest of the family separate from them as best possible, to try to decrease the likelihood of infection within a home.

How long can the virus survive on surfaces? Again, we've been learning more as this evolves. I think part of the reason that the infection has proven as contagious as it is, is because it lives on surfaces longer than we would like. It can live on surfaces for several hours. This information continues to evolve. It may linger in the air for a period of time. It has not been felt to stay on things long enough, such as receiving packages by mail, transmissions through that sort of method has not been thought to be the case. But, it can linger longer than we expect. So, there have been many efforts as areas are cleaned. I know in our center we're cleaning all surfaces that potentially are touched on almost an hourly basis. Again, trying to keep everything as clean as possible.

So, if I test positive for the virus, how do I know when it's safe to be around others again? The current CDC (Centers for Disease Control and Prevention) guidelines with this depend a little bit on whether you have been tested or not. For those that have not been tested, they are recommending that you would be safe to be around others a minimum of seven days after you have the onset of symptoms, and a minimum of three days after the symptoms have resolved and there is no fever. So, they're calling it 7 + 3. So again, giving you at least a week since it came on, at least 72 hours with no fever or symptoms.

Now, for individuals that have been tested, that they were able to be tested, that there are 2 negative tests for at least

24 hours apart. Now, it'll be a small minority of individuals that we have that amount of information, for several reasons. One, there's been more limited testing, there's limited number of masks, gowns, nasal swabs, all the other sorts of things necessary for testing folks. So, the vast majority it will be, as we say, is more empiric without confirmation.

Now, if I test positive and recover, will I be immune from getting the virus again? At this early juncture we can't answer this definitively, but the likelihood, given other infections, is that people will develop immunity as they have for other viruses, but we don't have complete confirmation about this yet.

I've heard that the COVID-19 only impacts adults and that children are immune? Overall, the rate of infection and the severity of infections has clearly been less in children, but we do not believe that children are inherently immune, nor do we want them to get this infection and there truly have been cases of children who have become very ill, but fortunately that has been a minority.

Now, what about receiving care? Well, with there being a shortage of personal protective equipment (PPE), is it safe to get a stem cell transplant? This is a very good question. We know that the process of both stem cell transplantation and receiving therapies, such as CAR T-cell can significantly compromise the immune system. Overall, I know that the majority of stem cell transplant programs are trying to limit or delay stem cell transplants and CAR T-cell therapy for patients, if they think that is an option. It's always a risk-benefit as it relates to if the delay of a transplant is going to put somebody at such greater risk of the disease in terms of their blood disease, does it still make sense to move forward. So clearly, a discussion between you and your stem cell transplant physician should take place, but they certainly are trying to delay them, if they can.

Next a question around televisits. I touched base on that a little bit earlier. But, I think for most individuals, this has become a resource for most physicians and centers and certainly, it's a very helpful thing to be able to do. I would strongly encourage you to utilize those if you have that opportunity. Again, our goal is to try to limit the number of patients physically coming in for care to those that we really think it's important that we see them physically in person, need to do a test in person, or need to administer a drug.

Likewise, if you think that you potentially have the virus, for example, if you are having severe symptoms, you are short of breath and/or you're having chest pain, clearly go to the emergency room as you would otherwise. If you think you might have the infection, but if not as severe as what I described in terms of chest pain, shortness of breath, etc., then contact your physician or their office, and they will have a process for discussing that with you and either giving you a recommendation in terms of next steps care or being cared for at home. But importantly, if it is not severe, do not present to the emergency room because we're trying to spare people going to the emergency room and potentially being exposed to others that have the infection or vice versa and we are trying to protect those environments from being overwhelmed with people coming in. Indeed, many emergency rooms now have gone to both a triage system, as well as a tent triage system, where they're being triaged for potential virus-related issues outside of the physical emergency room.

Are patients able to continue treatment even as hospitals become more and more crowded? The answer is yes, but we're taking that clearly on a case-by-case basis. So, things that are elective, such as elective surgical procedures in most areas around the country have been delayed. Things such as a knee replacement, a hip replacement, cataract surgery, etc., are being delayed as much as possible to try to preserve space in hospitals to deal with acutely infected patients if need be, to be able to preserve resources, to be able to preserve gowns, gloves, masks, things of that nature. Clearly, in the case of blood cancers, most of the therapy that you would need to receive in the hospital are not things that we consider elective or that are easily delayed. So, most of those will probably continue to move forward. If there's the opportunity to delay them, they will. But, most of the things that would be done in the hospital likely would still need to be done. We're not going to not treat someone that has a severe lymphoma, solely because of the fear of the COVID virus, but we're clearly going to try to do it in the safest way that we can.

Does a PET scan fall into that category? I'd say, as it relates to scans, blood tests, and other things, it depends on how important your doctor feels that information is for your treatment at that time. If the PET scan clearly is going to make a big impact in terms of your treatment, or you are receiving another round of treatment, it will proceed as it has before. If there're tests that people think, it'd be nice to do, but it's not urgent, it likely will be delayed – again we're trying to decompress the healthcare system in the safest way that we can, to be able to care for the COVID surge, but not compromise individuals that are currently getting treatment.

So, information on the effects of COVID while on immunotherapy. Immunotherapy itself is a very broad category of things. I mentioned the initial experiences or that it probably does increase the risk of the infection becoming more severe. It's not a guarantee that the disease will become more severe, but it is a higher risk and, again, something that your team clearly needs to be aware of without question.

There's not, as I'm aware, any special care for pediatric cancer patients, but again pediatric cancer patients that again have blood diseases and are on therapy, clearly would be individuals that we would be concerned with and we want to try to keep them as safe as we would the others in that higher risk group.

In the future, what is the timeline for a vaccine to be available to the public? I don't think any of us know, but that timeline clearly will be as short as possible. There are multiple parallel trials ongoing already, where vaccines have been developed and people who volunteer have been receiving them.

Now, what we don't know is whether those vaccines (1) will create an immune response that will recognize the virus and (2) will help prevent people from developing the infection. So, the reason we're not vaccinating people is because there are multiple vaccines being developed in parallel and one may end up being better than another. Also, there are some that may not be effective, or they may not be protective. So clearly, this is moving as fast as I think anything ever has in our medical world. I've been incredibly impressed by the efforts of the FDA and the scientific community to do all of these things, but it will take time to know whether it's safe and whether it works. What we definitely don't want to do is have people receive a vaccine and it either be harmful, or it doesn't actually protect them from the virus and then they have a false sense of security as it relates to that.

Is there evidence to suggest that seasonal changes may reduce or prevent new cases? It's still too early for us to know whether that is the case. There're times that pandemics have not behaved as clearly as, let's say, influenza in terms of a seasonal responsiveness. So, everyone is hoping that the move to summer will help us in this regard, but we don't know that for certain.

So, let me transition to questions and answers. I know we've had many, many come in. I hope some of the discussion helped answer at least some of the core ones. But, we'll turn it over to Lizette to fire some questions both at myself and Dr. Nichols. Thank you.

Ms. Figueroa-Rivera:

Thank you, Dr. Nichols and Dr. Mesa. It is time for your questions. For everyone's benefit please keep your questions general in nature, without many personal details, so the doctors can provide answers general in nature.

The first question Dr. Nichols, I know many cancer medications come from other countries. Should I be concerned for medication shortages? Should I be getting more medication in case I need to be self-quarantined?

Dr. Nichols:

Well, I'd like to answer the second question first and that is you should have on-hand, in case you need to be self-quarantined and also because we don't want you going out to stores if you're on active treatment, to have at least a 2-week supply of your medicines. And, if you need to talk to your healthcare provider in order to get a new prescription, you should do that. And, probably that should be done all the time for a variety of reasons.

The first question about medication shortages, LLS is actively talking to pharmaceutical partners about this and at the current time we know of no cancer medicines for which there is not an adequate substitute and there is no evidence of a shortage. We were quite concerned, particularly with the supply chain in China, and so we contacted our pharmaceutical partners at companies where we knew there were new molecules, where there were no substitutes. And all of them reported currently that they have no shortages. But please, look back at our website because we will be updating that information frequently. Right now, no worries.

Ms. Figueroa-Rivera:

Thank you. Dr. Mesa, we have a lot of folks that are joining us today from urban areas and are asking can COVID-19 move through the ventilation system in apartment complexes?

Dr. Mesa:

It's a very interesting question. I believe at the current time we don't think that is the case. We think that with the impact of gravity as it relates in the air, that's where a lot of this 6-foot of distance and the social distancing comes into play. So, I'm unaware of any data suggesting that it'll be moving through ventilation systems and shared in that way. Although, we're

clearly learning more as we go. But, I don't believe that is thought to be a way that it's being transmitted.

Ms. Figueroa-Rivera:

Thank you. Dr. Nichols, what are some strategies for ensuring good hygiene in my home, particularly as it's becoming increasingly difficult to find bleach, disinfectant, wipes, etc.?

Dr. Nichols:

We have a specific information sheet on that also on the LLS website. But, a quick answer is soap and water and making sure the sponges that you use are clean. The best way to clean your hands is soap and water, hot water. And, it is the best way to clean surfaces as well. And please, please, if you are a cancer patient cleaning, wear gloves when you're cleaning.

Ms. Figueroa-Rivera:

And I know Doctors, that a lot of patients, caregivers, and most of us are utilizing delivery services for groceries or for other items and questions are coming in as to what is safe? Can you bring those packages into your home safely?

Dr. Mesa:

Yes, it's a good question. I think overall the answer to that would be yes. For porous materials, papers, things of that nature, the likelihood of it getting on the surfaces I think is less. I think if someone is significantly immunocompromised, as you touch those things, wash your hands thoroughly, and then pull the food out of your containers in a way without touching the outside of the containers as best you can. But in general, washing your hands, trying to avoid touching your face particularly with deliveries is probably the most conservative approach, but reasonable at this time.

Dr. Nichols:

I wanted to add something about handwashing because I think everyone thinks, oh well, I wash my hands. Hot water, soap, and you need to sing Happy Birthday twice or ABC all the way to Z twice or, I heard that Gloria Gaynor, for those of you who are of my generation, put out you can sing the first chorus of I Will Survive, but that's how long you need to have your hands with the soap. It's much longer than most of us wash our hands under normal circumstances. Pretend you're a surgeon on a TV program and do a really thorough cleaning of your hands. Every time.

Dr. Mesa:

I think that point is really a key one. It's washing your hands a lot longer than people typically do. So, I think that is really a crucial part. As we wash them in healthcare, it means take off your watch and certainly wash above your wrists if you are able. And, to wash them longer than you think is normal.

Ms. Figueroa-Rivera:

Thank you. I know that there's a lot of studies coming out. Dr. Mesa, Joan is asking, she just read a study that said CLL or lymphoma patients may have a longer incubation period, and just wanted to know if that was accurate or if that sounded plausible.

Dr. Mesa:

It certainly could be possible. I think we're learning a lot as it goes, and we have less disease-specific information. This virus was first recognized at the end of December in Asia, so the amount of time that we've known about it is obviously very, very brief. Patients both with lymphoma and CLL may have a decrease in how well their immune system is functioning. The time for them to kind of react to the virus and develop symptoms may be longer. I don't know if we know that for certain, but it certainly is plausible.

Ms. Figueroa-Rivera:

Thank you. And, the next question. We're hearing a lot about over-the-counter medications to relieve any type of fevers. Can you speak to that? We're hearing a lot about Tylenol® and Advil® and don't know which one we can or cannot take.

Dr. Mesa:

So, both of these medicines can reduce fever. There has been some discussion, both yes and no, whether Advil or ibuprofen, the nonsteroidal anti-inflammatory agents, might be harmful in the setting of individuals with the virus. Currently, we're not certain, but that has been a bit of a concern. Tylenol certainly can be used. I think the key is, these things also can mask fever. So, I think if someone develops the infection, best that we figure out again if someone is going to get tested, do they need to get treated, and then yes, using those medications to be more comfortable, I think is fine. I think it's key in terms of determining when is an individual no longer contagious, that being 72 hours of no fever without being on Tylenol or an equivalent that would mask the fever. So, it's a true period of 72 hours with clearly not having fever, without medicines, to kind of suppress the fever.

Similarly, right now for healthcare workers at our center, but also many around the country have gone to self-monitoring, where again to be sure that we haven't developed the infection, checking our temperatures twice a day, but without taking medicines that would otherwise mask it, so that we can at least be aware if we're developing an infection.

Ms. Figueroa-Rivera:

Thank you. Dr. Nichols, next question. Should I be concerned about treatment interruptions if I'm participating in a clinical trial? Should I avoid routine medical care like blood work, even dental care?

Dr. Nichols:

Obviously, this is something that you should discuss with your healthcare provider. But, as Dr. Mesa mentioned, for clinical trials, the FDA has loosened some of the restrictions about where and when you can get testing done if you are on a clinical trial. So, many clinical trials require that patients go to the clinical trial center in order to get their scans or their blood tests. And now, with this, a new proposal from the FDA says you can get your testing closer to home and you can skip the testing that your doctor says is not critical to get, and not compromise the clinical trial or your own health.

But, it is not something that you can make a blanket statement about. And, there are still clinical trials that are ongoing and still patients who need clinical trials, so I want to put in a plug that we have a clinical trial navigation service, so if you are looking for a clinical trial, we can provide help for you to find one. Especially in this time when travel is so difficult, hopefully we can help you find an appropriate trial that's close to your home. So please feel free to contact us.

Dr. Mesa:

And perhaps just to add on to that, I think everything Dr. Nichols said is spot on. And, that each of these sponsors for studies, whether they be the federal cooperative groups or whether they be pharmaceutical companies, for the most part, everyone wants patients to be both well cared for and supported throughout this time, as well as for us to learn what we can from those studies. So, I think again there's tremendous creativity and accommodation, so that the normally incredibly stringent rules of clinical trials are relaxed to make these things kind of feasible moving forward.

Second, in terms of enrolling in clinical trials, again during this period, clearly all centers are prioritizing studies that we think are crucial for the health of those people enrolling. So, treatment studies for blood cancers, particularly when it's an important new option or for an advanced situation with a disease, those studies are still ongoing. Where other studies that might be more less urgent, studies in survivorship, screening, other things, all those are important studies, but those are being put on the back burner during this most immediate period. But, important treatment studies for people with advanced disease for the most part still are ongoing and accruing. And, if you need to be put on a study for your lymphoma or myeloma because your disease is progressing, those options likely still are out there and I would strongly encourage you to utilize the wonderful service that LLS has put together with this navigation system, because they will have both a better sense, as well as likely be able to contact potentially centers that have the study and try to see where that might be an option for an individual.

Ms. Figueroa-Rivera:

Thank you. Dr. Mesa, the next question. I am dependent on blood and blood products. Should I be concerned about transmission? How are blood supplies being tested?

Dr. Mesa:

Yes, so that's an excellent question and I've had discussions with our blood banking folks specifically about that. So first, the current blood supply is not being tested for the infection. Eventually yes, but it's not at the current time. It is felt that the likelihood of blood in the system being affected by the virus is very low for a couple of key reasons. First, individuals, before they donate blood, are screened for symptoms of a cold, flu, respiratory illness, as well as their temperatures checked. So, people who are likely sick are not donating blood. Second, people that are infected by the virus, it is thought largely that the virus is in their respiratory tract, but it's not circulating necessarily in their blood. So that, the likelihood of even in infected people, of it being in their blood is likely very low. Third, there really has not been a sense of people obtaining or becoming infected by receiving blood products. So overall, I would view that if you need a blood product, the likelihood that it is safe is very, very high. Can't say that it's 100%, but that it's very, very high that it is as safe as it would be otherwise.

Truly, the biggest concern in the current environment is that there are less people donating blood and that we have blood shortages. So, for other individuals that are appropriate blood donors, certainly encourage them to be donating blood as they can, because there are issues of potential shortages. And maybe Dr. Nichols, you want to comment on that as you've been hearing about issues of shortages of blood products?

Dr. Nichols:

Absolutely. I think that the donation centers have also made big efforts to make sure that it's safe for donors. Not only that the donors are not sick, but that they don't have the chance of getting sick by donating blood. Also, if you are on a regular transfusion schedule, you should talk with your healthcare provider about whether it would be safe to spread out those therapies. Anything we can do to safely keep you from needing to be at the hospital more than absolutely necessary. And also, saving the blood products for patients. We certainly are hearing areas of the country that have significant shortages of blood. So, if you have friends who are blood donors and healthy young people, we need to encourage them to step up and donate.

Ms. Figueroa-Rivera:

Thank you. We are getting questions as to if blood cancer patients can actually donate blood.

Dr. Mesa:

I would say that would clearly be a discussion between them and their healthcare team. For the majority, the answer is likely no, but again, I would clear that with their healthcare team. There certainly are individuals that are survivors and other sorts of things, but for many they likely would not be appropriate blood donors. And, a tremendous amount has been done in this country to have the blood supply and blood product supply be incredibly safe, both in terms of the stringency of screening donors based on illness, medications, travel, and then the blood itself is rigorously tested for communicable diseases.

Ms. Figueroa-Rivera:

Thank you. Dr. Mesa, if I had coronavirus and recovered, can I still transmit the disease?

Dr. Mesa:

We believe at this point, likely not. Again, that's where the CDC has gone with their guidance of 3 days or more without fever, more than 7 days beyond symptoms, as well as in those that have been tested. But again, if you have recovered and have someone in your life that is severely immunocompromised, giving it even a little bit longer, in terms of trying to keep some distance until this period is over, probably is prudent. But, I think they have a fair amount of confidence around those recommendations in general, in the hopes that will be sufficient.

Ms. Figueroa-Rivera:

Thank you. The last question today for both of you. With changes happening every day, how do I stay up to date on the latest developments about COVID-19?

Dr. Nichols:

Well, I can certainly start. Again, I think the first thing is information that you get should be good quality information. Your local health authority, your local hospital's information site, and then of course the CDC website and LLS's website. We are updating this every day to provide new and important information.

Dr. Mesa:

I would most certainly echo that. There's the local contacts, because again, what that means in rural Wyoming versus midtown Manhattan is different today, but that may be different in the future. Second, how that relates to you as an individual, so that's where I think connecting with your healthcare team, which might be sending an e-mail through your patient portal, an e-visit, a face-to-face visit, but more likely one of the electronic ones. Exactly where you stand and any concerns they may have, I think is important to have. And third, in terms of resources, I think Dr. Nichols is exactly correct. The LLS information is superb and is constantly being updated, so I think that is a great one-stop shop. And clearly, the CDC website that has been incredibly well done, plus it has put forward in a very, very clear manner, so that the information on there is very good and very timely. You keep those things in mind and help your healthcare team link it to your exact situation and those will be great resources for you.

Ms. Figueroa-Rivera:

Thank you. And, thank you all for all of your questions. Again, thank you so much for getting on today. We know that it's a very challenging time for all of us. We did receive over 700 questions, so thank you so much for your participation. I know that going forward we're going to have more blogs, podcasts, and other offerings to help you get more information about the coronavirus, COVID-19.

A special thanks to Dr. Nichols and Dr. Mesa for sharing their knowledge with us and for their continued dedication and support for our cancer patients and their families.

Of course, if we weren't able to get to your question today, as Dr. Nichols mentioned at the beginning of the program, you can contact an Information Specialist at The Leukemia & Lymphoma Society at 1-800-955-4572 from 9 AM to 9 PM Eastern Time, or you can also reach us by e-mail at infocenter@LLS.org. Information Specialists are available to answer your questions about COVID-19, as well as if you are in a clinical trial, or considering a clinical trial at this time, as both doctors mentioned, our Clinical Trial Support Center (CTSC) has nurse navigators that can assist you and inform you about any of the changes in the trials due to the coronavirus. For more information, you can go to www.LLS.org/CTSC, which stands for the Clinical Trial Support Center. And, please find more support services from LLS at LLS.org/patientsupport. We also have additional online support in light of social, or really physical distancing, to enable you to connect with others during this time. You can find more information on LLS.org/chat or LLS.org/community. In the United States, you may also join us in banding together and asking Congress to do more to protect our cancer patients. You could text LLS COVID to 69866 to take action, or online you can go to LLS.org/covidadvocacy.

We really do appreciate you taking time out of your day and participating in this program with us. And, in these unusual times, please rest assured that we are all in this together. Stay well.

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