This transcript is from the webinar, LLS Research Now: *NEW Research on COVID & Blood Cancer*, held on October 20, 2022.

1
00:01:07.230 --> 00:01:08.460
Good afternoon.

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00:01:08.830 --> 00:01:14.970
James Clethen: My name is James, and I am the manager of advancement operations at LLS.

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00:01:15.470 --> 00:01:18.530
James Clethen: Welcome to LLS Research Now.

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00:01:18.660 --> 00:01:22.270
James Clethen: New research on COVID and blood cancer

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00:01:23.030 --> 00:01:27.190
James Clethen: Before we get started today. A few housekeeping items.

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00:01:27.900 --> 00:01:30.970
James Clethen: Please note that this call is being recorded.

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00:01:31.230 --> 00:01:35.699
James Clethen: We'll send a link to the recording to all of you after the call

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00:01:36.590 --> 00:01:43.960
James Clethen: All participants audio and video is currently disabled in order to cut down on background noise,

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00:01:45.200 --> 00:01:49.729
James Clethen: There will be a Q and A portion at the end of today's panel.

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00:01:50.610 --> 00:01:56.769

James Clethen: You can ask questions during that time by typing into the Q. and A. feature

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00:01:57.270 --> 00:02:02.710
James Clethen: on your computer you'll find the Q. and A feature at the bottom of your screen

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00:02:03.260 --> 00:02:11.970
James Clethen: On a phone or tablet, tap the more button at the bottom of the screen on the right side, then hit Q. and A.

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00:02:12.770 --> 00:02:15.369
James Clethen: That takes care of the housekeeping items.

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00:02:15.950 --> 00:02:25.079
James Clethen: Now I'd like to turn it over to our host, for today's call. LLS Chief Medical officer, Dr. Gwen Nichols.

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00:02:25.770 --> 00:02:47.810
Gwen Nichols: Thank you so much, James, and hello, everyone. I'm Gwen Nichols, the Chief Medical Officer at the Leukemia and Lymphoma Society. Welcome to a special edition of LLS Research Now. This is our series about LLS funded research and the importance of your support in making this groundbreaking research possible.

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00:02:47.870 --> 00:03:02.500
Gwen Nichols: I know that many of us are relieved, that what seems like the worst of the Covid epidemic and pandemic is over yet Covid is not gone, and it still remains a serious threat,

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00:03:02.560 --> 00:03:28.440
Gwen Nichols: especially to the blood cancer patients that we serve, many of whom are immunocompromised. So here at LLS, we are taking the pandemic seriously, and our responsibility to get information to help ensure that patients are informed and protected. And we're doing this through our national patient registry, where we're uncovering

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00:03:28.450 --> 00:03:44.449
Gwen Nichols: with your help. Many of the pieces of information that patients need to understand how effective various treatments are, and who's still vulnerable to serious infection.

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00:03:44.460 --> 00:04:04.009
Gwen Nichols: I want to thank those of you in the audience who have been kind enough to participate in our registry, and you're doing this not just for yourselves, but for others. So, thank you so much. The other reason that I want to thank you is

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00:04:04.020 --> 00:04:14.659
Gwen Nichols: We're committed to sharing these insights, and that's why we have these excellent researchers that you're going to hear from today.

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00:04:14.790 --> 00:04:30.349
Gwen Nichols: Not only is the registry important, but our connection to great researchers. So, I want to thank those of you also who have been wonderful supporters and donors to LLS.

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00:04:30.360 --> 00:04:46.859
Gwen Nichols: It has allowed our efforts and our leadership in Covid research. So, thank you. I don't want to take more time because the discussion is really important and timely. So, I am going to hand this over to my colleague, Dr. Lee Greenberger. Thank you.

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00:04:48.710 --> 00:05:01.219
Lee Greenberger: Well, thank you, Dr. Nichols, and I'd like to get right to our panel discussion. We have a lot to cover today, and I'm going to ask the panel participants to

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00:05:01.550 --> 00:05:14.379
Lee Greenberger: take their mic off. It might put their mic on, and the video on. So, Dr. Noy, Dr. Wiestner, Dr. Kamboj, Dr. Saltzman.

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00:05:15.220 --> 00:05:34.160
Ariela Noy: There you go. It was blocked by the host. So now it's on.

Lee Greenberger: Okay, great. So, Dr. Noy can we start off with you? Just a short introduction. Who you are, just so the audience could identify you.

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00:05:34.170 --> 00:05:47.079
Ariela Noy: Sure, Thank you. I am a professor of medicine at Cornell, and an attending at Memorial Sloan Kettering. I work on the lymphoma service, so my day to day trenches is

lymphoma, leukemia, and about ten to twenty percent of my day is spent on Covid related issues at this point.

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00:05:47.790 --> 00:05:49.790
Lee Greenberger: Okay, Dr. Kamboj

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00:05:50.880 --> 00:06:07.140
Mini Kamboj: Good afternoon from New York. I'm Mini Kamboj. I'm an Infectious Disease Physician by Training. I'm the hospital epidemiologist at Memorial Sloan Kettering, and it's an honor to be here to support LLS and all the phenomenal efforts to keep our patients safe and healthy.

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00:06:07.260 --> 00:06:09.690
Lee Greenberger: Thank you. Dr. Wiestner.

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00:06:09.950 --> 00:06:27.219
Adrian Wiestner: Good afternoon. Yes, I'm Adrian Wiestner. Thank you for having me here. I'm a hematologist working at the NIH clinical center in Maryland. My practice and research are focused on chronic lymphocytic leukemia, novel treatments and their impact on immune function,

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00:06:28.060 --> 00:06:31.600
Lee Greenberger: and my good friend Dr. Larry Saltzman.

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00:06:32.380 --> 00:06:50.419
Larry Saltzman: Good morning or afternoon. Wherever we are. I'm Dr. Larry Saltzman. I am a family physician by training, and the moment, and the Executive Research Director for the Leukemia & Lymphoma Society, responsible for the management of our national patient registry.

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00:06:50.920 --> 00:06:56.899
Lee Greenberger: I might add it's a privilege to work with you on the registry for the last two and a half years.

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00:06:57.760 --> 00:07:05.640

Lee Greenberger: Which brings me to the first question which I'd like to pose to the four of you. So

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00:07:05.930 --> 00:07:24.760
Lee Greenberger: March twenty. Roll it back to March twenty twenty when the Covid outbreak began formally. It's been a long while, and I want to ask the physicians who are treating patients. What's the biggest concern of patients that they've had during this time?
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00:07:24.840 --> 00:07:35.399
Lee Greenberger: And in addition, I want to ask if we could let our guard down? Is Covid. Are we over with Covid? What do blood cancer patients do at this time now?

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00:07:37.730 --> 00:07:41.999
Mini Kamboj: I can go first. So

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00:07:42.010 --> 00:07:58.339
Mini Kamboj: Dr. Greenberger, covid is still here, and I think it's quite clear that Covid is here to stay. That being said, I think the overall threat level from Covid is much less as a physician caring for patients with blood cancers. I think I see first hand, that

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00:07:58.350 --> 00:08:03.159
Mini Kamboj: the risk of severe disease. The risk of hospitalization is much less

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00:08:03.360 --> 00:08:16.409
Mini Kamboj: So, there are still residual concerns, and those concerns are mostly because the risk is mitigated by all the advancements in vaccines and therapeutics. However, the risk is not eliminated.

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00:08:16.480 --> 00:08:28.040
Mini Kamboj: So, I think, all of this is a reason to hope and cautiously resume some of the social activities that we used to enjoy before the pandemic.

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00:08:31.620 --> 00:08:49.150
Ariela Noy: I would agree with that a hundred percent. I would add I think there are different levels of risk which we're probably going to get to during this session. So, it really depends on what the patient's underlying disease process is, and what kind of treatments they've had

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00:08:49.160 --> 00:09:10.360
Ariela Noy: Whether those are ongoing, whether they have dissipated in terms of side effects from previous treatments with regard to immunosuppression, so I do think that the answer is broad, but at the same time we have to individualize risks for a very vulnerable group of people that you know we hold dear as providers.

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00:09:12.600 --> 00:09:19.179
Lee Greenberger: Adrian is you being at the NIH and at the center of government is that the same opinion?

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00:09:20.540 --> 00:09:28.290
Adrian Wiestner: Well, I can't speak really for NIH policy or the Government here, but in my own practice I think what

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00:09:28.530 --> 00:09:44.789
Adrian Wiestner: I would take up this letting the guard down. Now is not the time to completely go back to like we were before Covid came. But I think the guidelines, and maybe also the safety precautions are changing.

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00:09:44.820 --> 00:09:57.329
Adrian Wiestner: There is certainly a way of relaxing and seeing important family members and friends again. So, it is certainly a different world now. Two and a half years after the beginning of this.

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00:09:57.720 --> 00:10:03.799
Lee Greenberger: And, Larry, let me ask you, as a patient who has chronic lymphocytic leukemia,

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00:10:04.100 --> 00:10:05.440
Lee Greenberger: same opinion?

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00:10:06.780 --> 00:10:26.580
Larry Saltzman: Well, I really think it's an individualized type of situation, I mean for me personally, I'm under active treatment, and for those in the audience who know all the big words I was just treated with obinutuzumab, which we know from our research is a Covid

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00:10:26.590 --> 00:10:39.839
Larry Saltzman: vaccine response killer. So, it's unlikely that I have the level of antibodies that many others do. And so I’m going to continue to take it seriously, which means

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00:10:39.850 --> 00:11:01.720
Larry Saltzman: not going to movie theaters. I'm not dining indoors. And if I do see family or friends. I'm going to do a nasal snot test if you will right to see if they're clean or not before we all get in the same room. So, I really think it has to be individualized. I don’t think we are free and clear.

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00:11:02.530 --> 00:11:08.739
Lee Greenberger: Moving on to my next question. If a blood cancer patient gets a COVID infection,

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00:11:08.850 --> 00:11:10.310
Lee Greenberger: what should be done?

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00:11:12.760 --> 00:11:29.849
Mini Kamboj: Earlier the treatment, the better it is. We have effective therapeutics, but really the key is the sooner you start, the more effective they are. And this includes both oral antivirals as well as monoclonal antibodies which would be effective against the prevailing strains.

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00:11:30.280 --> 00:11:41.019
Ariela Noy: Yeah, I can't. Uh I can't echo that enough. We've all seen patients. You know tragically, who refuse to come in. They're so scared about coming in.

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00:11:41.390 --> 00:11:59.270
Ariela Noy: They already have Covid. We already know by their symptoms that they most likely have Covid, and they stay home, and by the time they show up there there's not much we can do if you end up with a full you know both lungs full of covid and fibrosis, which is scarring from the disease.

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00:11:59.280 --> 00:12:11.569

Ariela Noy: The oxygen dependency, you know there's not. There's not much we can do, and we can do so much more now. Patients really need to get out of their hides that if they come to the emergency room, they're going to get Covid there.

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00:12:11.920 --> 00:12:19.029
Ariela Noy: They really need help. And each of those patients, you know, we really spend a lot of time

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00:12:19.260 --> 00:12:47.010
Ariela Noy: trying to figure out. Okay, what was did they have immunity after vaccines? Did they not have immunity? Are they? Should they be getting monoclonal now? Should they be getting Paxlovid instead? What are their concomitant medications, or the contraindications to pack a little bit. So, providers are spending a lot of time individualizing what treatments they need. But that message of please get help as soon as possible is just so critical.

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00:12:49.460 --> 00:12:50.500
Lee Greenberger:

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00:12:50.540 --> 00:13:04.280
Lee Greenberger: Next question. So Covid is changing rapidly. We've heard about omicron in January. Now we're hearing sort of about Post Omicron. And now we're hearing, even beyond that new infections, new strains.

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00:13:04.530 --> 00:13:11.290
Lee Greenberger: What does this mean for the future? What do you think this means for the future of COVID. I heard one person say,

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00:13:11.510 --> 00:13:13.160
Lee Greenberger: were not done with it.

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00:13:13.260 --> 00:13:20.939
Lee Greenberger: What do you think of? What do you think? What is December look like? What does the future look like? And what should patients be concerned about?

Ariela Noy: I'm going to ask Mini to comment because she's the epidemiologist.

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00:13:24.850 --> 00:13:43.259
Mini Kamboj: So, I think if we look at globally right now, there are about three hundred different variants, and pretty much all of them are descendants of what we believe to be the omicron that started it all.

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00:13:43.270 --> 00:13:53.310
Mini Kamboj: And I think that is really the future, Lee, because Sars Covid 2 is an Rna virus. It's going to change. That's what these viruses do whether you know

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00:13:53.360 --> 00:14:08.929
Mini Kamboj: viruses in a similar family that is, Coronavirus. flu viruses. I think the key is really going to be for the vaccines and the therapeutics to keep base with the changing virus. And I think so far, we've done a phenomenal job with that,

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00:14:08.940 --> 00:14:22.809
Mini Kamboj: but just making sure that you know that remains at top of all advocacy, but that we do all research that we do is going to go a long way in protecting our patients. But the virus is going to continue to change.

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00:14:23.300 --> 00:14:27.849
Lee Greenberger: Well, if you follow that up, so. Are you saying that

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00:14:27.940 --> 00:14:40.610
Lee Greenberger: the most important thing people could do is to make sure that they get their vaccines as needed on it, on the according to indication, the way the FDA guidance has been

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00:14:40.620 --> 00:15:08.700
Mini Kamboj: absolutely, absolutely and with the approval of the bivalent vaccine, you know to me that's sort of a turning point in our vaccine strategy how approval came about, because that's a vaccine that's available for prevailing strains, and which is very similar to what we do for influenza. So, I think, having the most current version of the vaccine making sure, staying up to date with the revaccination schedule, and of course, on top of that having

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00:15:08.710 --> 00:15:22.410

Mini Kamboj: anti-body prophylaxis Evusheld. Currently, I think all of these are really important and essential for our patients. One point that I would want to make Lee is Evusheld is not a replacement for a vaccine,

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00:15:22.450 --> 00:15:28.050
Mini Kamboj: so, I think that's a very important message, and that to relay to our patients

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00:15:28.160 --> 00:15:44.889
Lee Greenberger: All right. So, the physicians, you, all physicians, our patients, are blood cancer patients, getting the bivalent vaccine. Are they? Do you find people walking in the door saying, I've got it already, or are we going to be in a situation where saying, I wish I got it?

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00:15:46.510 --> 00:15:58.640
Ariela Noy: but I can tell you that it's mixed right now. That doesn't surprise me we still have. I hate to say this, patients who have never been vaccinated, which drives me bananas.

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00:15:58.650 --> 00:16:16.609
Ariela Noy: So now I'm seeing patients for like. Well, I'm sorry Dr. Noy, but I got my two vaccines, and I got my booster, or I didn't get my boosters. But I don't want to get any more vaccines, so you know, as late as six thirty, or seven thirty last night. I did the begging,

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00:16:16.670 --> 00:16:33.190
Ariela Noy: you know, and I and I go through that person's individual risk factor, you know you're morbidly obese. You have congested heart failure, or whatever it is that they have, and explain to them that the risk of the vaccine, I'm sure many would agree is so small,

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00:16:33.200 --> 00:16:38.589
Ariela Noy: in that population, compared to the death risk

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00:16:38.750 --> 00:16:44.770
Ariela Noy: from Covid. If you have comorbidities, it hasn't changed for those patients.

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00:16:45.160 --> 00:16:52.169
Ariela Noy: So, we are. We are still begging people to get vaccinated. Please please get vaccines.

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00:16:52.990 --> 00:17:02.930
Mini Kamboj: And I would just add that communication has really been essential, because you know, it's confusing there's a first booster. There's a second booster, and now there's a bivalent booster. What should our patients be doing today?

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00:17:03.040 --> 00:17:15.090
Ariela Noy: And I want to congratulate the LLS on phenomenal work. You know, I think, beyond compare, you spearheaded, what was

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00:17:15.220 --> 00:17:35.070
Ariela Noy: surmised but unproven, which is that there are people who really benefit from the three vaccines upfront, and you did amazing work with that. I think you saved a lot of lives by making that possible. And that changed the CDC guidelines, and that that is just incredible work.

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00:17:35.080 --> 00:17:54.900
Lee Greenberger: Thank you for that comment. Yeah, Larry and I will spend hours and more hours that I care to admit on that topic. I want to get back to you know. First of all, to define some patients are immunocompromised. We've seen FDA guidance for immunocompromised patients.

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00:17:54.910 --> 00:17:57.889
Lee Greenberger: Take a step back and say, what

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00:17:57.920 --> 00:18:02.500
Lee Greenberger: does it? What defines an immunocompromised blood cancer patient?

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00:18:06.130 --> 00:18:17.579
Ariela Noy: I'll take a stab at that. I think there are many different variables that are going in there. So, it gets a little bit complicated and it's not always

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00:18:18.000 --> 00:18:34.500
Ariela Noy: black and white. So, some people just have an inherent, immune compromised linked to their underlying disease. So, the simplest explanation, for example, of that would be someone, for example, with chronic, lymphocytic leukemia who's never been treated.

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00:18:34.510 --> 00:18:50.930
Ariela Noy: But we know again, through the LLS work. You know initially, about fifty percent of patients even in that category were not responding to two vaccines. I think the number is up to eighty percent if they get the three vaccines

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00:18:51.170 --> 00:19:03.760
Ariela Noy: for their initial series of vaccination. So, and they're not on therapy. Then we have to add in all the other parameters somebody who has a low gamma globulin

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00:19:03.770 --> 00:19:20.439
Ariela Noy: So, we that's easy to measure. They're not going to respond as well to vaccines. Someone who has a low Cd four count, for example, HIV or some other immunocompromised, or they're functionally being treated

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00:19:20.450 --> 00:19:34.790
Ariela Noy: for t cell suppression, for let's say rheumatoid arthritis, or something like that. They're going to have immune compromise. Then the next level is all the drugs, As I tell my patients. You know we're giving you napalm.

94
00:19:34.800 --> 00:19:57.830
Ariela Noy: So, these drugs that inhibit b cell function, then inhibit t cell function. Whether that's a pill that they're taking like a Bruton's tyrosine kinase whether they're getting a monoclonal antibody that wipes out their immune response through the vaccines. They have to talk to their doctor about each of those drugs and what it means for them,

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00:19:58.190 --> 00:20:12.489
Ariela Noy: and they're really different levels of immune suppression. Uh, you know, you can add in a CAR T auto transplant. All of these are all different levels of immunosuppression, and we are spending a lot of time individualizing our responses, and that's going to be with us for a long, long time

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00:20:12.500 --> 00:20:30.460
Lee Greenberger: You know I think I'm going to jump over to Dr. Wiestner. You treat a lot of CLL patients some of those patients have got BTK inhibitors

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00:20:30.470 --> 00:20:32.530
Lee Greenberger: anti-cd20 Antibodies.

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00:20:32.840 --> 00:20:36.910
Lee Greenberger: Why is? Why are those drugs? What do those drugs do

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00:20:37.180 --> 00:20:43.319
Lee Greenberger: they? What is B-cell suppression mean? What happens if you have no antibodies when you get vaccinated?

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00:20:44.750 --> 00:21:01.500
Adrian Wiestner: Yes, so very, very good questions, and actually not that easy to answer right? Because there is such a tremendous variability between patients. And yes, in general, we consider CLL as quite heavily immunosuppressed,

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00:21:01.510 --> 00:21:19.609
Adrian Wiestner: and especially then when we add treatments like the anti-cd20 antibodies, basically get rid of normal b cells, and it takes the body six to twelve months after completion of therapy, to actually regenerate b cells, and as long as we don't have B cells,

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00:21:19.620 --> 00:21:28.360
Adrian Wiestner: we cannot mount one of the responses we wish to have in response to vaccine, and that's the antibody formation.

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00:21:28.810 --> 00:21:34.809
Adrian Wiestner: It may still be possible to get some t cell response, but that's often harder to measure

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Adrian Wiestner: with the BTK inhibitors we basically block the signal within the B cells that would let them mature to make antibodies.

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00:21:44.590 --> 00:22:08.399
Adrian Wiestner: But surprisingly. We do see some patients on BTK inhibitors that form very robust antibody response to the Covid vaccines, and that actually goes a little bit against the

biologic principle, and but it's an observation we've made in several patients, and so it just gets back to how individual this degree of

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00:22:08.410 --> 00:22:10.670
Adrian Wiestner: immunosuppression really is.

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00:22:10.830 --> 00:22:22.389
Lee Greenberger: And Dr. Wiestner. Let's just define when you say BTK inhibitor. Some of the patients probably note that they don't know. BTK, but they know what the names of the drugs are. Can you tell us what those BTK inhibitors are?

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00:22:22.520 --> 00:22:37.019
Adrian Wiestner: Yeah. So, this would be ibrutinib, which was the first to come as a as such an inhibitor, and then acalabrutinib, zanubrutinib are the three approved ones in clinical uses,

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00:22:37.210 --> 00:22:44.119
Adrian Wiestner: and there are new ones in clinical trials. That those are basically the three that are being prescribed.

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00:22:44.710 --> 00:22:52.309
Lee Greenberger: Okay, so And I'm going to jump back to Dr. Kamboj. Now, so we've heard about B-cells t-cells. So

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00:22:52.420 --> 00:22:57.479
Lee Greenberger: there's been a lot of studies on antibody production mediated by B cells or lack thereof

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00:22:57.790 --> 00:23:05.929
Lee Greenberger: are t-cells important? You know. What do they do? Why, why are people now talking about T-cell responses to vaccines? And why are they important?

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00:23:06.940 --> 00:23:22.650
Mini Kamboj: Great question Dr. Greenberger. And very apt, coming from you. Given your work in the field. But let me say B cells are sort of like the gatekeepers right. They prevent the entry of the virus, they prevent infection.

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00:23:23.020 --> 00:23:34.539
Mini Kamboj: T-cells are more like the armed troops on the ground which is a virus has already entered into a cell, and what it does is it dampens? It dampens the effect

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00:23:34.550 --> 00:23:48.140
Mini Kamboj: of the virus after an infection so t cells mitigate, or can make an infection less severe, and I think we have good clinical data to support that. To support that notion.

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00:23:48.150 --> 00:24:18.020
Mini Kamboj: So, although you know, as an immune, correlate, people often measure antibodies in in response to vaccination. It's important to know. And again, based off your work, Dr. Greenberger, that many vaccinated individuals, I would say, who do not mount an antibody response. We still have measurable t cell response. And what does that mean? From a patient's standpoint it means that you might get a Covid infection, but you will have milder, symptoms, and t cells actually also happen to give you a broad range of immunity

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00:24:18.030 --> 00:24:36.119
Mini Kamboj: compared to what b cells would b cells and more variants specific t cells give you a more broader protection against severe disease from various different variants. So, although, as was mentioned, not easily measurable, but definitely have an important role to play.

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00:24:36.530 --> 00:24:46.319
Lee Greenberger: Okay, I'm going to come back to Evusheld. So, we heard Evusheld mentioned. It's a monoclonal antibody that is used for prevention of infections

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00:24:46.400 --> 00:24:51.609
Lee Greenberger: is that useful for patients. Should all blood cancer patients get Evusheld?

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00:24:54.490 --> 00:25:02.240
Mini Kamboj: Ariels, that's right up your alley.

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00:25:02.800 --> 00:25:14.189
Ariela Noy: Oh, wow, all right. The answer is no. But it needs to be strongly considered. So, it really depends on the level of immunosuppression.

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00:25:14.200 --> 00:25:32.469
Ariela Noy: I think with time we've become more liberal in the beginning. We didn't really have that much struggle in the beginning means January. So, the drug was approved, I believe, late December. You know. Then the distribution and all of that

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00:25:33.440 --> 00:25:34.790
Ariela Noy: and

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00:25:35.700 --> 00:25:55.449
Ariela Noy: when we didn't have a lot of drug we had to parse it out. So, you're looking at the Zarina who had to decide like you know, this person can get it. This person can't based on guidelines that we developed. Now, we have more drug. So basically if the provider thinks it's reasonable

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00:25:55.460 --> 00:26:14.399
Ariela Noy: it's hard to know what reasonable means. But I would say in general if you suspect, or you know, and you can. It's up to the provider you can measure to see if somebody makes responses serologic vaccine responses. But it's not required.

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00:26:14.530 --> 00:26:29.269
Ariela Noy: There's certain drug combinations that we've talked about. We know people are going to stop making antibodies when they're on it, and if a certain amount of time has passed, let's say you've gotten rituximab, and you were fully vaccinated,

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Ariela Noy: you know, a month before you got your booster everything, you know. You knew that you had already responded. If you're six months into that rituximab exposure,

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00:26:39.750 --> 00:26:52.609
Ariela Noy: and it's time for you to get a booster you won't respond to that. So, in that setting it's reasonable to kind of add the Evusheld. But I can't tell you that we know a hundred percent

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00:26:52.620 --> 00:27:12.400
Ariela Noy: How much benefit Evusheld giving. The studies were not designed in hematology patients, and that's another area where LLS is really helping to understand what is going on there. So, long answer. But it’s certainly reasonable as the

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00:27:12.410 --> 00:27:19.230
Ariela Noy: if the variants change next week. You know some of the variants aren't going to be covered again. But that's what we have now.

131
00:27:19.790 --> 00:27:35.730
Lee Greenberger: Yeah, actually, I'm looking at the questions, and there must be about fifty of them. And so many of them about Evusheld. Here's one. Can you? Is it dangerous to get Evusheld? Can you make too much? Could even show you too much antibody that it's of concern?

132
00:27:36.110 --> 00:27:52.360
Ariela Noy: Yeah, it's not in this population because you're not going to dampen an inherent response that the person has. That's why you're giving them passive immunity. But you know, Dr. Kamboj said it very clearly, this is not a vaccine,

133
00:27:52.920 --> 00:27:57.230
Ariela Noy: right? So, it's like a protein that's in your blood

134
00:27:57.330 --> 00:28:00.549
that is going sop up virus,

135
00:28:00.890 --> 00:28:11.530
Ariela Noy: but it's not allowing. You don't make a response. So, you're just relying on that protein. The only side effects really are,

136
00:28:11.760 --> 00:28:23.420
Ariela Noy: you know it's not fun to have an intramuscular injection in each buttock. You have to be watched for about an hour after your injection you can develop fevers, chills

137
00:28:23.430 --> 00:28:42.190
Ariela Noy: Some people could develop a pain at the injection site. So, there is that kind of thing. There have been rare cardiac reports. It's not clear that those are linked. In fact, the new Evusheld fact sheets approved by the FDA just came out about ten days ago. It's not clear.

138
00:28:42.200 --> 00:28:54.210

Ariela Noy: But if you have concerns, you should read the fact sheet. It is not an FDA approved drug. It's an emergency use approval right now. You have to read the fact sheet before you get the drug.

139
00:28:54.870 --> 00:28:58.970
Lee Greenberger: Dr. Wiestner, what are you doing in your practice? And we'll come back to you, Dr. Kamboj.

140
00:28:59.530 --> 00:29:01.259
Adrian Wiestner: Yes, so we

141
00:29:02.900 --> 00:29:16.330
Adrian Wiestner: initially we also had the supply issue. But that's very quickly actually resolved. And so, we were offering it to all CLL patients, and the clinic is really all CLL patients, and irrespective of treatment,

142
00:29:16.340 --> 00:29:27.130
Adrian Wiestner: and to be honest also irrespective of vaccine response yes or no, because it was hard to argue that maybe some additional protection is not a good thing.

143
00:29:27.380 --> 00:29:38.420
Adrian Wiestner: So, I don't know, really, if fully vaccinated people, and I would agree the vaccine is the more important measure, and the Evusheld is just

144
00:29:39.000 --> 00:29:47.679
Adrian Wiestner: It's an additional supportive thing, but it's not giving you a response as Dr. Noy said. It’s just tying things over.

145
00:29:47.690 --> 00:30:08.190
Adrian Wiestner: So, the vaccine is more important. But what I struggle with is when somebody had really good vaccine response, we measure antibody titers. We think this patient also has a t cell response. Does the Evusheld really add anything? How much does it add? And, as was mentioned, we don't actually know right? There's no study for that.

146
00:30:08.770 --> 00:30:26.370

Lee Greenberger: Yeah, I could see. Actually, there's a question from a CML patient who at least in our hands generally make good antibodies asking whether they should get Evusheld or is any downside to it. And I think you've already told us some of the down. Some of the minor side effects that are of concern.

147
00:30:27.370 --> 00:30:28.480
Lee Greenberger:

148
00:30:29.860 --> 00:30:32.909
Lee Greenberger: Okay. I want to move on.

149
00:30:32.990 --> 00:30:34.120
Lee Greenberger:

150
00:30:36.770 --> 00:30:44.320
Mini Kamboj: Lee, can I quickly make a point on Evusheld? Patients who might be eligible. But worrying that too much antibody

151
00:30:44.330 --> 00:31:03.719
Mini Kamboj: might be harmful. I think this is from a phenomenon that we refer to as antibody enhanced disease, and I want to say the Evusheld is designed in such a way that really that has only been a theoretical risk, and really is not known to be a clinical phenomenon, either with Evusheld or otherwise.

152
00:31:04.980 --> 00:31:17.930
Larry Saltzman: Lee, I have a question for the panelists, just because, as a patient and the head of the registry, I get a lot of questions. Covid has been going on for a long time. Vaccines have been out for quite a while,

153
00:31:18.300 --> 00:31:29.010
Larry Saltzman: and so, my question, as we're talking about Evusheld and the like is if a person was vaccinated initially.

154
00:31:29.270 --> 00:31:33.380
Larry Saltzman: Then, sometime later needed treatment

155
00:31:33.450 --> 00:31:35.600
Larry Saltzman: for their leukemia.

156
00:31:35.660 --> 00:31:39.440
Larry Saltzman: Let's say they're a CLLS patient since we're talking about them, and I'm one.

157
00:31:39.560 --> 00:31:55.719
Larry Saltzman: Is It likely that the response they had to the vaccine pretreatment is going to last, or are the drugs that are given for you know any kind of therapy that causes immunosuppression.

158
00:31:55.770 --> 00:32:02.329
Larry Saltzman: Are they going to take away what was a positive response to the vaccine?

159
00:32:02.730 --> 00:32:20.479
Ariela Noy: I tried to address that earlier. It's so complex. But I did not do a good job at it, so I specifically recommend to look at the timing of the vaccines Visa v. both the disease and the treatment

160
00:32:20.490 --> 00:32:40.049
Ariela Noy: right. So, if somebody has a chronic leukemia, for example, they may not have made as much of a robust antibody response anyway. So, we we're probably, you know, thinking, okay, that patient, you know, we probably should move in earlier with the prophylactic antibodies.

161
00:32:40.060 --> 00:32:55.179
Ariela Noy: Somebody who has an acute illness. For example, Diffuse Large B Cell Lymphoma or Burkitt something like that if they got vaccinated and completed their last vaccine three months before they didn't have that acute lymphoma or leukemia at that time.

162
00:32:55.490 --> 00:33:11.820
Ariela Noy: Right? So, they are. They're fully vaccinated, and then it becomes an art like. Do you want to give them Evusheld, you know, three months or six months after their first dose of rituximab chemotherapy. But there are no fixed guidelines

163

00:33:12.120 --> 00:33:20.970
Ariela Noy: and there's no way to really study that. It just becomes the art of medicine and building on what we know.

164
00:33:21.410 --> 00:33:22.250
Okay,

165
00:33:22.450 --> 00:33:25.600
Lee Greenberger: Well, let's step back a second, So

166
00:33:25.770 --> 00:33:35.880
Lee Greenberger: will a vaccine or an antibody therapy actually promote cancer or make the cancer worse? I've seen some questions about that,

167
00:33:38.670 --> 00:33:40.080
Ariela Noy:

168
00:33:41.240 --> 00:33:47.620
Adrian Wiestner: I would say no, I would just say, no? Do we have great data for that? No; But

169
00:33:47.830 --> 00:33:56.629
Adrian Wiestner: what would be a concern that maybe the immune stimulation provided with the vaccine would actually stimulate an immune responsive

170
00:33:56.730 --> 00:34:15.630
Adrian Wiestner: tumor to grow more rapidly. So, what we see in CLL patients certainly is when they get infected, be that Covid or the flu or some other infection, we may see the lymph nodes swell up. So yes, these cells in some ways react to the infection. But

171
00:34:15.639 --> 00:34:29.150
Adrian Wiestner: that goes back down once the infection is clear. Right? So, these lymph nodes shrink back down usually to what they were before the infection. So, I don't think that there is a lasting impact of infections accelerating the disease,

172
00:34:29.310 --> 00:34:44.170

Adrian Wiestner: and likewise, I don't think that vaccines would accelerate the disease. Yes, you can get a lymph node swelling in the axilla, where you've got the intramuscular vaccine. Yes, definitely. But that's transient,

173
00:34:45.310 --> 00:34:57.519
Ariela Noy: And I would add to that also. I mean we've all seen patients now. Come in, and they like I had Covid in January, I felt this lump, and then they get diagnosed with cancer. That cancer was there,

174
00:34:57.690 --> 00:35:18.079
Ariela Noy: you know, before we, especially a low-grade lymphoma or leukemia. It was there before so the cancer may have been slightly exacerbated, but it did not cause the leukemia or lymphoma, you know frankly, millions and millions and millions of people have had

175
00:35:18.090 --> 00:35:20.630
Ariela Noy: Covid. They don't all have cancer now,

176
00:35:20.870 --> 00:35:23.850
Ariela Noy: and that is the epidemiologic answer.

177
00:35:26.530 --> 00:35:27.580
Lee Greenberger:

178
00:35:28.330 --> 00:35:33.199
Lee Greenberger: One final question for Dr. Kamboj. But before we go to Dr. Saltzman,

179
00:35:33.960 --> 00:35:48.650
Lee Greenberger: Yeah, we've heard, and you know you. You go to the six thirty news, and you hear about BQ11 and BQ 275.2 All these different numbers. What! What those mean? And why, you know, why should we be paying attention to that stuff?

180
00:35:48.860 --> 00:36:08.039
Mini Kamboj: Yeah. Great great question, Lee. I might not have all the answers yet, but we should, we should know relatively. And so, as I said globally there are about three hundred sub lineages that are circulating almost all are Omicron. About seventy five percent of these have descended from BA 5, which is the prevailing strain.

181
00:36:08.050 --> 00:36:12.580
Mini Kamboj: And if I were to pick strains that'll become

182
00:36:12.590 --> 00:36:29.110
Mini Kamboj: important over the coming weeks, and especially over the winter season. I, as you nicely outlined early BQ 1.1 it's really at the top of the list BF7 and then there's a strain that's emerging in Singapore. Not so much in the Western world.

183
00:36:29.120 --> 00:36:38.819
Mini Kamboj: It is the XBB. And the reason we are keeping a close eye on these strains is because, it's widely speculated that they might

184
00:36:38.830 --> 00:36:57.889
Mini Kamboj: have an impact on the efficacy of the currently recommended monoclonal antibody, both for treatment as well as for prevention of Covid 19. I don't think we have definitive results, yet other than for BA 4.6, which is already circulating at a proportion of about fifteen percent. But those are exactly the questions. That the picture will be clear in coming weeks.

185
00:36:57.900 --> 00:37:13.700
Lee Greenberger: So, one follow up question. You could see how the audience is pretty educated. Will Paxlovid still works if XBB becomes the dominant variant here?

186
00:37:13.710 --> 00:37:32.700
Mini Kamboj: Yeah, the oral antivirals have actually, have stayed, and you know they've had effectiveness against all the variants that have emerged and just given the mechanism of action, I think that activity will stay, and just as a reminder Paxlovid in clinical trials had as good in efficacy as

187
00:37:32.710 --> 00:37:41.640
Mini Kamboj: did the monoclonal antibodies. It's a great drug, some drug interactions, so which needs some fine maneuvering. But definitely there are options.

188
00:37:42.130 --> 00:37:52.599

Lee Greenberger: Okay, thank you. So, Larry, I'm going to turn it over to you to tell patients about the National Patient Registry, what it means and what the future looks like for it.

189
00:37:52.660 --> 00:38:12.580
Larry Saltzman: Yeah, thank you, Lee. So very quickly. Before I get into some reporting I want to thank, especially Bernie and Ethel Garil whose generous investment to establish the Michael J. Garil a data collective is made all the work I'm about to share with you possible. So, thanks to the Garils.

190
00:38:12.690 --> 00:38:27.960
Larry Saltzman: I want to say that and I want to thank the participants in the registry. We have over twelve thousand participants now who signed up. We do work via blood testing, surveys and looking at medical records

191
00:38:27.970 --> 00:38:42.389
Larry Saltzman: over nine thousand of you have provided survey data. And three thousand of you have been to the lab for blood samples for our Covid response.

192
00:38:42.440 --> 00:38:45.060
Larry Saltzman: And we have

193
00:38:45.530 --> 00:38:56.799
Larry Saltzman: thousands who have also shared their medical records. That's taking time to look through their response to the registry, and our findings are such that

194
00:38:57.100 --> 00:39:13.749
Larry Saltzman: twenty-five percent, and we published now three papers. And this is really amazing that we have been able to hit the publications as rapidly as we have. It's very telling twenty-five percent of patients with B cell malignancies

195
00:39:13.810 --> 00:39:20.980
Larry Saltzman: You have no detectable, and to spike antibodies after the first two vaccinations, having said that

196
00:39:21.000 --> 00:39:38.750

Larry Saltzman: twenty of those people, after having a third vaccination, do respond. So, there is thinking in our research to say that when the new vaccines come out and the boosters come out. It's a good idea to get one, because we think that the more

197
00:39:38.870 --> 00:39:57.340
Larry Saltzman: vaccinations, the more likelihood there is that we are going to make antibodies to the vaccine. Fifty percent of the patients have made t cells, and quite frankly, we're still looking at the difference in t cells there are,

198
00:39:57.350 --> 00:40:11.739
Larry Saltzman: you know, if you get into the weeds, there is CD 4 T cells. There's CD 8 T cells. We're trying to figure out which ones are the ones that are generated in those fifty percent and are they helping with cellular immunity?

199
00:40:11.920 --> 00:40:18.749
Larry Saltzman: We do find and excuse me for saying this, but our research shows that there are

200
00:40:18.910 --> 00:40:34.590
Larry Saltzman: in our population slightly better results with Moderna than Pfizer vaccines. And, it's not I think, only us we've seen that. And then we are seeing as we look at breakthrough infections.

201
00:40:34.600 --> 00:40:41.920
Larry Saltzman: A ten to fifteen percent breakthrough rate, which means people who have been vaccinated, or

202
00:40:42.090 --> 00:40:58.150
Larry Saltzman: especially on treatments. They are getting omicron or post omicron surges. We are looking at the responses to Evusheld moving ahead with the registry. It it's a little bit

203
00:40:58.160 --> 00:41:16.199
Larry Saltzman: I want to you know, say this tongue in cheek. We have had our ice bucket challenge here. With this the registry came along at a great time we were able to study this. We are now looking at what will we be studying next. Will it be uses of

204

00:41:16.480 --> 00:41:27.119
Larry Saltzman: therapeutics in blood cancers. Will it be long-term outcomes of blood cancers? And we're going to continue to keep looking at Covid,

205
00:41:27.130 --> 00:41:44.590
Larry Saltzman: because we want to make sure that we're covering what is still out there. So that's a very quick summary, and I think turn it back to you, so you can answer some of these hundreds of questions in the Q. A. Box.

206
00:41:44.600 --> 00:41:56.350
Lee Greenberger: Yeah, I'm going to have everybody come back on. Dr. Noy, Kamboj and Weistner come back on. We have a ton of questions, and I know we're not going to be able to get through all of them here. Here is one rapid test.

207
00:41:56.640 --> 00:42:22.589
Lee Greenberger: Do they work? I mean, if I you know, if I think I have Covid and I'm rapid test negative. What do I do?

208
00:42:22.600 --> 00:42:42.910
Mini Kamboj: Rapid tests do sometimes work. I have to say the gold standard for testing for Covid remains PCR. And quickly, the way PCR works is that in the lab it amplifies the amount of virus that's present in a sample. So even if you start with a small amount, it will be amplified and will be detected. And that's why PCR is so great. Antigen, it's convenient readily available. But it's just going to detect the amount of virus that's in your sample. It doesn't amplify anything. As a result, what happens if you have someone who's early in the disease course, or is minimally symptomatic, you can get a false negative result. For someone who has fluid symptoms, perhaps the peak illness,

209
00:42:42.920 --> 00:42:50.049
Mini Kamboj: the sensitivity is quite comparable to what you would get with PCR. So just know that as you

210
00:42:50.190 --> 00:43:04.060
Mini Kamboj: get back into the social circles as to the limitations of a rapid test. And if you and your physician have collectively decided that your risk level is high please exercise appropriate precautions accordingly.

211

00:43:04.500 --> 00:43:20.480
Lee Greenberger: So, let me actually my son has Covid. And I said, well, you know, I know he's got a rapid test positive, and I say, does he? Is it safe to go out after rapid when he becomes rapid test negative? When does he know to stop isolating?

212
00:43:20.520 --> 00:43:34.930
Mini Kamboj: Yeah. So, the general CDC recommendation is five days. But you know these are readily accessible and recovering patients are recovering people do keep testing because they want to do the right thing. But I have to say that.

213
00:43:35.000 --> 00:43:44.669
Mini Kamboj: I would say about one in five people who are more than two weeks out completely feeling better, especially with Omicron are going to test positive. What does that mean?

214
00:43:44.890 --> 00:44:00.009
Mini Kamboj: The data that we have so far on infectiousness and antigen positivity is only from early in the illness, like in the first ten days, and we do know there's good correlation. But I have patients who keep testing positive, you know, intermittently for a month out two months out.

215
00:44:00.020 --> 00:44:20.649
Mini Kamboj: I think that is of little clinical consequence, and anything more than fourteen days, if you clinically find I would not really rely on in antigen test at that time point. And Lee, for your son, I hope he gets better soon, but I don't think he needs to do an antigen test. I think isolate for CDC recommended duration.

216
00:44:20.910 --> 00:44:32.680
Lee Greenberger: I'll definitely play it back to him. I bet you he’s not listening. Long Covid. What is Long Covid? And why should we be so concerned about it?

217
00:44:34.560 --> 00:44:49.940
Ariela Noy: I can tackle that one for a second. So long Covid is symptoms after four weeks. It's a real panically a different tree of symptoms. A study just came out from Scotland last week,

218
00:44:49.950 --> 00:44:59.129
Ariela Noy: looking at unvaccinated patients stating that long Covid was present in more than half of the population they used.

219
00:44:59.140 --> 00:45:29.089
Ariela Noy: You know, they have amazing data because they have a national health care program. So, they compared thirty of people who never had Covid had symptoms, and so they could look at what those symptoms were, and attribute how much of it was, Covid. That being said, it is a very varied illness. You have people who have brain fog. You know. A year later they still have days where they just can't concentrate, or an hour that they can't concentrate. You've got people who have chest pain, shortness of breath

220
00:45:29.100 --> 00:45:40.490
Ariela Noy: muscle aches. There is an excellent program at Mount Sinai in New York for people who have this, and doctors are really learning what works, what doesn't work?

221
00:45:40.500 --> 00:46:10.040
Ariela Noy: The data is conflicting. Most of the data says If you've been vaccinated and you have a short illness, your risk for long Covid is much less than if you had an unvaccinated patient. Mini, did you want to comment on that?

222
00:46:10.050 --> 00:46:14.509
Mini Kamboj: No, Ariela, that's exactly right. That’s it. Of course, you know we have limited understanding of long Covid, except that it can be quite debilitating and linger on for months and months. But the current science does suggest that vaccine protects against a long Covid vaccine. People can still get it, but relatively they're protected.

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00:46:15.020 --> 00:46:20.319
Lee Greenberger: So, Dr. Wiestner, you know CLL patients, many of them immunocompromised.

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00:46:20.820 --> 00:46:28.709
Lee Greenberger: We know that a lot of the from our own registry. A lot of these patients are getting Covid. Is long Covid more of a concern in those patients?

225
00:46:31.940 --> 00:46:36.389
Adrian Wiestner: From my personal experience now, but I wouldn't

226
00:46:36.440 --> 00:46:41.249

Adrian Wiestner: be able to really speak for CLL in general,

227
00:46:41.270 --> 00:46:54.549
Adrian Wiestner: but from personal experience with our patients, that Covid more recently, with the appropriate treatments with having been vaccinated, actually had quite mild courses and recovered quickly.

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00:46:55.070 --> 00:46:58.740
Adrian Wiestner: But that's anecdotal from our clinic experience.

229
00:46:59.240 --> 00:47:02.280
Lee Greenberger: Dr. Noy, is that the experience at Sloan Kettering?

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00:47:02.810 --> 00:47:21.179
Ariela Noy: Yeah, I think it's hard to quantitate, but I think generally that is what we're seeing in the population. I don't know if I can give you a quantitative answer, but I could say qualitatively, that seems to be the case. Yes,

231
00:47:22.450 --> 00:47:36.209
Lee Greenberger: Here's a question about venetoclax. So, if somebody could just field that question and say, you know what is venetoclax, and why is it used? And is it a risk for blocking an immune response to a vaccine?

232
00:47:37.870 --> 00:47:53.839
Adrian Wiestner: Maybe it's used a lot in CLL. So let me quickly take a stab at this. So, venetoclax antagonizes a program that lets cells survive and survive during chemotherapy or doing self stress situation. So in CLL

233
00:47:53.850 --> 00:48:00.070
Adrian Wiestner: the venetoclax reactivates the cell death program and kills the CLL cells very quickly.

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00:48:01.060 --> 00:48:07.139
Adrian Wiestner: There is not that much evidence that venetoclax does anything to normal in your function.

235
00:48:07.660 --> 00:48:23.860
Adrian Wiestner: But most of the time venetoclax is combined with anti-cd20 antibodies, and then we're back in the situation where for a year after treatment, there may be no B cells and no vaccine response, at least not by antibody response.

236
00:48:24.080 --> 00:48:41.599
Adrian Wiestner: So, there's very little data on single agent venetoclax, so not combined with anti cd20 we have a few patients, and I think our average response rate to vaccines is about fifty percent in patients on venetoclax without anti cd20.

237
00:48:47.100 --> 00:49:06.799
Lee Greenberger: Here's a question about Obinutuzumab. You talked about well, six to twelve months after Obinutuzumab you should get an immune response to the vaccine. Here's a patient, said, Hey, wait a minute. I'm twenty months out of after infusion of Obinutuzumab. That's the anti cd20 antibody we talked about, and I've not mounted a response to the vaccine.

238
00:49:06.810 --> 00:49:07.959
Lee Greenberger: How could that be?

239
00:49:09.390 --> 00:49:29.290
Ariela Noy: We are seeing this. I could tell you. It makes no sense. I, you know I've seen people who got rituximab five years ago. They have minimal, if any hypo gamma and they still don't respond, we don't know why some patients do not respond,

240
00:49:29.300 --> 00:49:44.970
Ariela Noy: and you know I have to say MSK has been amazing, you know, getting these. I'm sure many had a tremendous role in this, you know, getting all these tests available quickly. So, we do test

241
00:49:44.980 --> 00:49:58.500
Ariela Noy: and you can get tested, as you know LLS did amazing work with this very early on. The donors provided the funding for people to get testing. That's how we know that people didn't respond.

242
00:49:58.510 --> 00:50:14.339

Ariela Noy: I think if someone has an individual concern. They should speak to their doctor about testing, not necessarily about the level. But are they even responding to vaccine? And those patients really do benefit the most

243
00:50:14.350 --> 00:50:22.100
Ariela Noy: from monoclonal antibody therapy prophylaxis, most likely. And if they haven't gotten that treatment,

244
00:50:22.130 --> 00:50:34.460
Ariela Noy: you know, and sometimes the combination, because, as the variants change the available prophylaxis will not cover every variant that is evolving.

245
00:50:34.470 --> 00:50:53.990
Ariela Noy: So, we just updated this week. I had a conversation with our ID management group here. People who got Evusheld who are getting Covid, you know. If they're not getting better quickly, we might even want to give them monoclonal treatment on top of their prophylaxis. It's a vexing problem. Crazy!

246
00:50:55.670 --> 00:51:04.530
Larry Saltzman: I don't mean to pile on, but as a patient, let me just ask this to the group. Do you think

247
00:51:04.930 --> 00:51:11.640
Larry Saltzman: a spouse or a caregiver, or a partner of a patient who's immunocompromised

248
00:51:11.870 --> 00:51:24.269
Larry Saltzman: should act as if they are immunocompromised and limit their activities and social engagements to protect the immunocompromised? Or how far

249
00:51:24.810 --> 00:51:31.459
Larry Saltzman: does this cascade and I’m sorry to ask this, but it comes up a lot. You're the expert. So, perhaps you can chime in.

250
00:51:31.660 --> 00:51:41.789
Mini Kamboj: Yeah, it comes up a lot, and I have my answer prepared because I've rehashed it to my patient several times, and you are exactly right.

251
00:51:41.800 --> 00:51:54.929
Mini Kamboj: You don't want to bring Covid into the household. The household members have to stay up to date, so really my advice to patients as they resume social activities is three. Number one. Stay up to date on your vaccination.

252
00:51:55.050 --> 00:52:02.840
Mini Kamboj: Evusheld as applicable. Make sure your household members, your caregivers anyone you will have prolonged contact with

253
00:52:02.890 --> 00:52:09.120
Mini Kamboj: is appropriately vaccinated, and three, if you test positive, get treatment at the earliest.

254
00:52:09.870 --> 00:52:17.099
Lee Greenberger: One other question on top of that. Do we just throw our masks away? Do we? Should we wear them all the time?

255
00:52:18.240 --> 00:52:22.410
Mini Kamboj: Again. Individual risk. So, I think it's a decision that you

256
00:52:22.490 --> 00:52:23.899
Mini Kamboj: should feel

257
00:52:23.920 --> 00:52:37.120
Mini Kamboj: free to talk to about with their clinician, and that'll help you develop your sort of, risk tolerance as you resume social activities. I think it's a very, very important conversation to have. Generally speaking, I can say

258
00:52:37.130 --> 00:52:59.160
Mini Kamboj: meeting outdoors is better than indoors. That's perhaps not good advice this time of the year. If you are indoor the size of the gathering matters, the vaccination status of the people matter. And most importantly, the ventilation in the space matters. And if you're in a public space where you cannot guarantee the vaccination status of those around you, please wear a high quality mask.

259
00:53:00.790 --> 00:53:04.549
Lee Greenberger: I want to go back to antibody and antibody levels.

260
00:53:04.570 --> 00:53:15.929
Lee Greenberger: And I see this question appearing multiple times, how much we have. So, we're measuring antibodies. You know, in some studies measuring t-cells how much

261
00:53:16.050 --> 00:53:21.849
Lee Greenberger: is a good antibody level? Do we know how that correlates with protection?

262
00:53:25.400 --> 00:53:43.569
Ariela Noy: I'll take that one. So, work at MSK initially looked at the antibody levels. We only looked at one of the many different tests, and you cannot assume that the same value is protective for each of the tests,

263
00:53:43.580 --> 00:54:02.019
Ariela Noy: but it turns out that the value that we spit out is protective regrettably only reflects the delta variant. We are way past Delta and we published a little series here, showing that even high levels of antibody

264
00:54:02.030 --> 00:54:12.349
Ariela Noy: which were protective against Delta were not as good as you know, against Omicron. So, you can't rely on the antibody levels anymore.

265
00:54:12.390 --> 00:54:38.159
Mini Kamboj: Yeah, I would. Yeah, I can't echo that enough. I've seen breakthrough infection with the highest antibody levels. And one thing I want to say is that patients think about getting the new bivalent booster, regardless of whether you've had infection before. Please, Don't, make a decision if you're otherwise eligible. It's been two months since your last booster, regardless of whether you had an Omicron infection, regardless of what your antibody level is. If it's been two months, please go ahead and get the bivalent booster.

266
00:54:38.350 --> 00:54:45.380
Lee Greenberger: Right, and I think that's the message we're hearing over and over. Get vaccinated at the appropriate time,

267
00:54:47.130 --> 00:55:02.340
Adrian Wiestner: Maybe what I would have to quickly to the antibody level is it may also matter what antibodies we're talking about now with Evusheld, we also measure the Evusheld of antibodies, and we definitely know that they will disappear right with time, and actually

268
00:55:02.350 --> 00:55:18.700
Adrian Wiestner: quite quickly. And we also know that Evusheld antibodies don't mean that you also have a T cell response, whereas when we see a response to somebody who is vaccinated and has thousands of the antibody levels in the thousands, I think that

269
00:55:18.940 --> 00:55:28.199
Adrian Wiestner: to me is a good immune response for whatever that's worth. And yes vaccinating again is certainly key.

270
00:55:28.750 --> 00:55:41.099
Lee Greenberger: I actually I can't help myself, but saying, Well, look, you know I got a polio vaccine forty fifty years ago, and I'm still protected. Why, what's the story with this vaccine? It just doesn't last.

271
00:55:42.820 --> 00:55:46.580
Mini Kamboj: It's not the vaccine. It's the virus.

272
00:55:46.650 --> 00:56:12.660
Mini Kamboj: Yeah. And the same story, but with the influence of people hoping it'd be done with the three dose primary series, and that would last us a while. But it's quite clear that this virus is going to continue to evolve. But you know we have great technologies, Mrna, and this can be rapidly scale to manufacturing can be, and again, approval of the bivalent and it's, you know it's sort of a Testament to how the future of this is going to look like.

273
00:56:13.620 --> 00:56:31.970
Lee Greenberger: Yeah. So, that brings me to a good point. So, LLS you know, we've invested in basic research and technology, this vaccine, these so-called Mrna vaccines. They just didn't come out of the thin hair. This has been sort of in the making for decades. And it's just

274
00:56:31.980 --> 00:56:37.379

Lee Greenberger: fascinating and wonderful that these things are actually now working, and can be turned around so quickly.

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00:56:38.820 --> 00:56:39.970
Lee Greenberger:

276
00:56:40.030 --> 00:56:45.890
Lee Greenberger: You know, I think we're approaching just about the end of our time. I wanted to

277
00:56:45.900 --> 00:57:04.739
Lee Greenberger: thank the people who have joined the call, and I want to thank the audience and our donors that have made this possible. I hope this is informative. I want to encourage people, if they have other questions, either to send them in, go to the LLS website. We have a lot of information about Covid. With that

278
00:57:04.750 --> 00:57:10.979
Lee Greenberger: I'd want to turn it back over to Dr. Nichols to close this out in the last two or three minutes.

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00:57:11.630 --> 00:57:32.279
Gwen Nichols: Well, thanks, Lee and I also would like to thank all the panelists. You know we peppered you with a lot of tough questions. And thank you to the audience. There's really, I mean right. Now I see there are one hundred and eighty-two open questions. So, lots for us to discuss.

280
00:57:32.290 --> 00:58:01.700
Gwen Nichols: Please, as Lee said, go to the website. We have a lot of up-to-date information. We change it regularly. Including publications from the National Patient Data registry that Larry talked about. And that link with will be along with the recording of this call will be sent to you in a follow up email from me in the next several days. But please use our website as a resource,

281
00:58:01.710 --> 00:58:21.530
Gwen Nichols: and we will do our best to answer the questions that you have raised. Because there were so many, we were unable to get to even a portion of them. So, thank you for being such great participants. And

282
00:58:21.610 --> 00:58:28.729
Gwen Nichols: we are going to conclude our event now. Thank you again for supporting LLS.