

# Small Cell Lung Cancer Treatment Advancements: Unlocking Hope Through Breakthrough Therapies

## **Transcript**

## Diane Mulligan (00:00):

Imagine a lung cancer patient's immune system having home runs because of something called T-cell engagers. I'm Diane Mulligan

## Mitch Jelniker (00:09):

And I'm Mitch Jelniker. Today we're talking about cutting edge treatment fast-tracked by the FDA in the spring of 2024 and it's creating some great hope for people living with small cell lung cancer.

## Dr. Jacob Sands (<u>00:21</u>):

So the chemotherapy is like swinging the bat for a single or a double. You're more likely to get a hit, but it doesn't necessarily win the game in itself. Now what we've seen from the T-cell engagers is particularly exciting because we are seeing numbers that suggest more frequent hit. The question is, are those home runs? We don't yet know. Are they triples? We'll have to see.

#### Maida Mangiameli (00:45):

There's so much hope for people coming after me and even for those of us who may need the next stage of treatments.

## Diane Mulligan (00:55):

Lung cancer is a tough topic. It's a disease that affects patients, families, friends, coworkers, but first, it's a disease that affects people.

#### Mitch Jelniker (01:05):

Advances in lung cancer treatments over the last few years have made it possible to live with lung cancer for years after diagnosis.

## Diane Mulligan (01:13):

The Hope With Answers: Living With Lung Cancer Podcast brings you stories about people truly living with lung cancer. Their research is dedicated to finding new treatments and others who are working to bring hope into the lung cancer experience.

## Mitch Jelniker (01:34):

Welcome to another edition of The Hope With Answers podcast. Today, we're talking about new hope for people living with small cell lung cancer.

## Diane Mulligan (01:41):

And we begin with a leading small cell lung cancer researcher, Dr. Jacob Sands, who's an oncologist with the Dana-Farber Cancer Institute in Boston. Dr. Sands, it's so nice to see you. I'm interested in learning from you. Why is lung cancer so deadly and can people without a smoking history get lung cancer?

#### Dr. Jacob Sands (<u>02:05</u>):

Yeah. So that's a great question. Lung cancer is the second most common among men and women, but does have a high fatality rate. Now, there's a lot changing, I'll say from the get go that what we've seen in improvements in cancer mortality that have been celebrated have largely been driven by some of the advances in lung cancer. That's lung cancer detection and lung cancer treatments. Broadly speaking though, to get back to your question about the smoking history component to that, those with a significant or substantial smoking history do have a higher likelihood of developing lung cancer, but at the same time, anyone with lungs can get lung cancer, as the same goes.

#### (02:49):

So there are increasingly numbers of individuals with no smoking history that get diagnosed with a lung cancer. And there are some things about that workup and expectations then about potential changes in the DNA mutations or genomic alterations, the likelihood of that and particular treatments, how the cancers act in someone with a significant smoking history as compared to someone without any smoking history. There are some real differences, but broadly speaking, anybody with lungs can get lung cancer.

#### Diane Mulligan (03:21):

I think that's such an important point. And when people really learn about lung cancer, they learn that there are different types, there's non-small cell lung cancer and small cell lung cancer. Can you explain to us the difference?

#### Dr. Jacob Sands (<u>03:37</u>):

So the names for those diagnoses come from when they were first known, this was diagnosed by pathology. We say there's a saying in oncology that is tissue is the issue, meaning the diagnosis of the lung cancer happens by the pathologist when looking at the tissue under a microscope. Under a microscope, small cell lung cancer is smaller cells as people would expect. Non-small cell lung cancer are bigger cells than what we see with small cell.

#### (04:06):

Broadly speaking, small cell lung cancer tends to be more aggressive than non-small cell. It tends to spread faster and earlier. So lung screening is really, I'd say the most important thing we can do on a population level to reduce cancer mortality is lung screening by current guidelines. Lung screening is a way of diagnosing lung cancer when it's still in its earliest stages when it's still curable. So one message I'd love to get out there, I know the focus on this discussion is small cell lung cancer. One of the things I'd love to get out there is for individuals between the ages of 50 and 80 with a smoking history, talk to your doctor about lung screening.

#### (04:50):

Now, with lung screening, we can diagnose lung cancer much earlier, but small cell lung cancer tends to grow more rapidly. So even the early detection with small cell lung cancer can be harder. We still can get

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more numbers, but it does grow more aggressively. And this has implications into the treatments as well. The treatment regimen for non-small cell lung cancer at the beginning has similarities to what it is for small cell, but these are different. And then following the other treatments down the line are slightly different as well.

#### Diane Mulligan (05:23):

I'm so glad you started talking about the treatments because that's why we're here today is to talk about some of the new breakthroughs that are going on and I'm interested in not only what are these breakthroughs, but what difference they could make for patients as far as their treatment regimen.

## Dr. Jacob Sands (<u>05:39</u>):

Yeah. It's exciting to see real advances in the treatment of small cell. It is not exciting that anyone needs them, but the fact that people need them, it's exciting to see some real steps forward and to see individuals in clinic that are experiencing years of disease control from some of these advances in the field. First to just mention, the immunotherapy drugs that are now a part of the standard of care, first line of therapy. We are seeing people with years of ongoing disease control and in the best case scenario, I have some patients that are beyond six years from that first discussion about having metastatic small cell lung cancer.

#### (06:19):

Now beyond six years, not currently on any treatments and just coming in and scans looking good. And I'll say optimistically, I believe that there are some individuals we are curing of this incurable diagnosis, which is phenomenal. It's unfortunately small numbers and it is painful to see the cancer grow and to then need other lines of treatment. Now, that being said, there are some very exciting drugs that have been available in clinical trials. And this is part of the value for patients to make sure that they're seeing somebody at one of the bigger academic centers to really know about some of the novel trials that are available, the drugs that are available in trials.

## Diane Mulligan (07:00):

So Dr. Sands, we have these new treatments, many of which have come about in the past five to eight years. But the one I'm really interested in today is T-cell engager. Could you explain about that for me please?

#### Dr. Jacob Sands (<u>07:13</u>):

So it's basically a way of bringing the immune system and the cancer cells together to then create an immune response. I mentioned earlier that in the first line setting with chemotherapy and immunotherapy, we're now seeing long-term responses and even potentially cures of this incurable diagnosis. I know that's a big statement and we need another 10 years to really get the full story on this, but to see people more than six years out, that is almost certainly from the immunotherapy, not the chemotherapy. Now the chemotherapy is a toxin. The chemotherapy kills cells that are aggressively growing. Small cell lung cancer or small cell lung cancer cells are aggressively growing. So the toxin does a lot to them and it affects them.

## (08:02):

So from the initial diagnosis, chemotherapy works incredibly well for the majority of people, but when it works, that's usually for months, not years. With immunotherapy, when that works, it can be for years. So we're seeing that in the first line setting. And now at the time of the cancer growing we've had a

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handful of trials that are drugs in a class called T-cell engagers. And what we're seeing from this is when it's effective, it can be effective for a long time. And these do not cause the side effects that the toxins that the chemotherapies cause.

#### (08:38)

Now there are some side effects that can happen. Any of the immunotherapy drugs, they have a different side effect profile and so we are seeing some of that, but that's usually earlier on and it's more immune system kick up and activation types of things. Not necessarily long-term kinds of classic side effects that people picture from chemotherapy. So overall, I think these have been very well tolerated and fortunately, we're seeing some of these really long-term responses as well.

## Diane Mulligan (09:09):

So am I correct that basically the T-cells connect to the cancer cell and then basically kill that cancer cell, and the T-cells are part of your immune system and that's how this all works? And usually it's after you've gone through chemo and then this is the next line of treatment. When you say first line, second line, is that what that means?

## Dr. Jacob Sands (<u>09:32</u>):

Yes. So these T-cell engagers have been available up to this point in clinical trials. And those clinical trials have eligibility, meaning that there are certain criteria that have to be met for someone to be able to participate in one of these trials. Now for new drugs, we don't typically start those on someone who's never had any treatment. That's usually someone who's had treatment that we know is really effective. And we tend to start with newer drugs when it's further down the line until we really know how effective they are. At this point, we're seeing such promising results from these T-cell engagers that there are now clinical trials being developed for earlier stage as well. So those with the first line of treatment, meaning people without any prior treatment with a new diagnosis, that's first line is the first regimen that they end up getting treated on.

## (10:27):

And there are trials being developed utilizing these in the earlier lines of therapy. But what we've seen thus far, what we have the data for is in patients who have previously been treated with chemotherapy and in most cases immunotherapy earlier on and are not having those really long-term responses, I mentioned. When I say that I think there are some individuals cured of this incurable diagnosis, that's with that first line treatment, that's the chemo and immunotherapy, which is different. But now we're seeing these drugs, also immunotherapy drugs showing a really good sign of response and some real durability. Now it's early enough on, that I can't say whether there's someone with six years, because this is still early on. But I'm hoping that six years from now, I'll be saying the same thing about these immunotherapy drugs that I'm saying now about our first line immunotherapy drugs because those are different.

## Diane Mulligan (11:25):

So exactly which patients should be asking their doctors about this new type of therapy?

#### Dr. Jacob Sands (11:33):

Well, so I'd say anyone with small cell lung cancer should be talking to their doctor about possible clinical trials. And maybe I'll just take a moment to clarify about clinical trials because I see some common misconceptions. One misconception is that many people seem to believe that trials are just for people

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who don't have any treatment options and that's not the case. We have clinical trials available for people with a new diagnosis. In most cases that is taking the known standard of care, the best treatment we have and adding in something else to that. It can be in the second or third line where there are other treatment options. And when I'm seeing patients and talking to them about possible trials, we're also talking about what is available to them, not on a trial, what's the standard treatment that's available to them. But there are some very novel things going on and we're seeing some exciting results on some of these drugs that are available in clinical trials and people only know about that if they're seeing someone who has these available or asking about them.

## (12:39):

So I'd say for those being seen at large academic centers, there likely is somebody that specializes to some degree in small cell lung cancer and is offering clinical trials. If somebody is being seen in the community, it is worth going in and getting a second opinion at one of the larger academic centers just to know what is available from a trial standpoint. It's important to find out about these. Now, that doesn't mean that a clinical trial is right for everybody. For some people getting treated with their local oncologist on standard of care is the right thing to do. So it's not a matter of getting everybody on trials, it's just making sure people know about their options and that they have an opportunity to discuss it and decide themselves.

## Diane Mulligan (13:24):

You have a fantastic analogy, a baseball analogy that you use when we talk specific about the clinical trial that's looking at this type of treatment. Can you talk to me a little bit about that?

## Dr. Jacob Sands (13:35):

Yeah. So in Boston there are a lot of baseball fans and so baseball analogies tend to work well here, but essentially what I've said is that immunotherapy is like swinging for the fences. It's like swinging the bat as hard as you can to try to hit a home run. And unfortunately for when we're talking about our first line small cell lung cancer treatment, that initial immunotherapy I was talking about, which is not the T-cell engager, this is a different immunotherapy that's part of first line. That swing of the bat for as hard as you can, if you connect, it's a home run, it's headlines, it wins the game. And this is what I'm talking about in the cases where I have people who are more than six years from the time that we had that initial discussion about starting treatment, they're more than six years out.

## (14:24):

They're not on anything right now. It still seems like everything has worked well. I mean that is a home run that is win the game. And as I said, I'm hopeful that many of those individuals will still have ongoing control for many years ahead and may not ever need another treatment. I mean, this is that big a deal, but unfortunately when one is swinging the bat as hard as they can, unfortunately in many cases it's a strikeout. The drug doesn't work for the majority of people, but when it works, it's amazing. Whereas the chemotherapy, which I described as a toxin that's killing cells that are actively growing aggressively, the chemotherapy tends to work more frequently, but it doesn't work to the same degree. So the chemotherapy is like swinging the bat for a single or a double. You're more likely to get a hit, but it doesn't necessarily win the game in itself.

#### (15:15):

Now what we've seen from the T-cell engagers is particularly exciting because we are seeing numbers that suggest more frequent hit. So how long will this last? We need another six years to have any kind of sense, but really another 10, 15 to fully know. But the very early look at this class of drugs is that we're

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hitting a home run more frequently. We're getting a response to treatment, meaning that the cancer is shrinking by more than 30% in a higher percentage of patients than those initial immunotherapy drugs. So it's more frequently a hit. The question is, are those home runs? We don't yet know. Are they triples? We'll have to see. So we're anxiously awaiting further maturation of the data or just ongoing, add another year and see how many of these hits end up still being ongoing as we get another year, two years, three years in.

#### Diane Mulligan (16:16):

So small cell lung cancer bottom line is still tremendously aggressive. But what's exciting today is that there is new hope and that hope could lead to a better quality of life for many patients. Is that a good way to sum it up?

## Dr. Jacob Sands (<u>16:29</u>):

It is. I'd say really 15, 20 years ago, some of the biggest advances in oncology were drugs that helped people tolerate the chemo better. Things like nausea are not nearly the same today as they were 20 years ago. We've seen advances in treatments to better delivery of the chemo drugs now in a way that doesn't cause as much of toxicities, but the unlock of the immune system is a whole other arena and these immunotherapy drugs. As we get increasing numbers of these, it's very exciting to see many patients with ongoing control for longer times with less side effects. It really has been an unlock to the next level of oncology care.

## Diane Mulligan (17:18):

It's very exciting. Thank you so much, Dr. Sands. I really appreciate it.

Dr. Jacob Sands (<u>17:22</u>):

Thank you.

## Diane Mulligan (17:24):

I love Dr. Sands baseball analogy. Chemotherapy is like swinging for the fences. Sometimes though you get a single or a double, but with T-cell engagers, sometimes you get a home run.

#### Mitch Jelniker (17:37):

That's right. That provides valuable hope for people living with small cell lung cancer and no one knows that better than our next guest, it's Maida Mangiameli, who is in remission nearly six years after her diagnosis. Maida, it's great to see you. Thanks for joining us. Share your lung cancer journey with us if you would.

## Maida Mangiameli (17:56):

Of course. And thank you for asking me. I had smoked for many, many years and when I finally managed to quit, which took a long time, I developed a cough almost immediately. So I went to immediate care where that doctor who I'd never seen before suggested I go get a chest X-ray, which I had had every two years, but my primary never caught anything. I went for a chest x-ray, and two days later I got a phone call from this man I never saw again saying, "You have lung cancer, make an appointment with your primary care doctor." So my very first bit of advice to doctors these days is be careful how you give us the

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information. I've heard many horror stories like mine of how people find out they have lung cancer. I was diagnosed with extensive small cell lung cancer, which is the most horrible lung cancer you can get.

(18:58):

The times they give you that you might survive are very, very short. I, on the other hand, had an oncologist who number one stopped me from blaming myself that just because I smoked, I didn't deserve cancer. No way to even be certain that's why I have cancer. So I found a great oncologist to begin with. My husband and I had planned our very first ocean cruise for a couple of months later, and when I met the oncologist, he said, "We're going to start chemotherapy in two weeks." And I said, because it was the end of August, "Can we wait until December or January so we can take our cruise?" And again, my wonderful oncologist said, "No, you're canceling the cruise. We're starting your treatments immediately." That saved my life. I had my treatments begin immediately. I'm still here almost six years later.

Mitch Jelniker (20:01):

Awesome.

Diane Mulligan (20:02):

When you were diagnosed, there weren't that many treatments that were out there, but now there's really a lot of new hope, isn't there?

Maida Mangiameli (20:08):

There's so much hope for people coming after me and even for those of us who may need the next stage of treatments, there's a new small cell lung cancer medication or chemotherapy that's being fast-tracked by the FDA. It's in clinical trials now. I don't qualify for clinical trials because of my remission for the last 5 1/2 years, but knowing there's something more out there for me if and when I need it, is very exciting. And the reason I take part in these talks and advocacy is more for the people coming after me than for me.

Mitch Jelniker (20:54):

That's awesome.

Maida Mangiameli (20:55):

I love that. Yeah.

Mitch Jelniker (20:59):

Yeah. Let's see. For me, when I go to the doctor and when I leave, I think, "I should have asked them this, that or the other." What advice do you have for newly diagnosed small cell lung cancer patients? When they're visiting their doctor, what kind of questions about treatment options do you think they should be asking?

Maida Mangiameli (21:16):

The first thing that I suggest to people newly diagnosed with small cell lung cancer, whether it's limited or extensive and extensive simply means it's shown up somewhere beside your lung. And I have a spot in my liver, which was eradicated with my treatments. My biggest piece of advice, try not to go alone. It's very difficult to remember how the doctor's answering your questions, write down your questions if you

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need to, but some doctors like mine do not want to be recorded. So I couldn't whip out my phone and record the conversation, but I had my husband with me who essentially was my caretaker and he was able to remember the answers that I forgot. So that's a big one. Try to bring someone with you. There are many ways to get help and to get people to help you. Formulate the questions you might have for your doctor and your team because it's not just the oncologist. You generally have to see a pulmonologist, a palliative care doctor, a radiation oncologist. You're going to be meeting a lot of different doctors when you're diagnosed with lung cancer, having someone with you helps.

## Diane Mulligan (22:36):

I'm also thinking having that support is really important when we talk about stigma, because there is a stigma with small cell lung cancer, isn't there? I mean, you talked right off the top about the fact that you were a former smoker, and that you did feel some guilt about all of this. When we all know that no one deserves lung cancer.

#### Maida Mangiameli (22:55):

The stigma associated with lung cancer is huge for many people. I'm fortunate. No one in my world blamed me, except me. My family, my friends, my oncology team, my former primary care doctor who is former because he left the state that I live in, no one blamed me. I can't believe how many people have family members even saying, "Well, what did you expect you smoked?" We're trying to stop that because there are so many environmental factors involved in contracting lung cancer. I had a friend whose father died of mesothelioma. He worked in a mine in his whole adult life.

#### (23:41):

There's a group called the White Ribbon Project started by Heidi Onda who was diagnosed with limited small cell lung cancer at quite young in age. I think she was only in her earlier or mid-thirties. And the doctors couldn't figure out why, she was a never smoker. Well, they had to test her basement three times to find out It was loaded with radar. So the stigma, people still, as soon as they hear you have lung cancer will say, "Well, you must have smoked?" I use that as an opening to talk to people about getting screened because there are people who quit smoking 35 years ago who never smoked heavily, get screamed and they have lung cancer. No, we need to stop the stigma.

## (24:26):

If a woman gets breast cancer. People don't ask, "What did you do to yourself to get breast cancer?" If a man gets prostate cancer, no one says, "Well, you must have done something." I know a couple of people who died of pancreatic cancer. No one blames them for getting cancer. So we need to stop people blaming those of us who either smoke or are former smokers.

#### Mitch Jelniker (24:50):

Absolutely. You mentioned screenings, so let's expound on that. Talk about the importance of lung cancer screenings.

#### Maida Mangiameli (24:59):

Lung cancer screening is such a strong tool for early detection. Number one, most insurance pays for screening. Medicare pays for screening. They'd rather pay for screening and catch it early and not have to spend millions of dollars taking care of you. You don't have to get undressed. Nothing hurts. You just lay down on a table and they take a low dose CT scan, chest scan, which means low dose means very low

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dose radiation. It's relatively safe. It's relatively easy, and I don't know the exact percentage, but it's a small percentage of people who are taking advantage of it.

## (25:43):

As I started to say, the earlier your cancer is diagnosed, the better your chances of a long life. I'm unusual. I only know a handful of people who've lived longer than I have with extensive small cell. I am not sure if the other three or four people I know had gotten screened early or if like me, they found out by accident. But I wish I'd been able to be screened earlier because maybe it wouldn't have been extensive. Maybe it would've just been a small tumor in my lung, and yet here I am thankful to still be here.

Mitch Jelniker (26:23):

Here you are.

Diane Mulligan (26:25):

We love that. We absolutely love that, and I do think it's so important that we get more people screened early. It's such a good point. The other thing that you talked about at the very top is you talked a little bit about clinical trials and how hopeful you were because you knew the clinical trials were going on and if your cancer back, then those trials might lead to new treatments that you could benefit from. If your cancer did come back, heaven forbid, would you consider going into a clinical trial?

## Maida Mangiameli (26:55):

My initial tumor was over eight centimeters after four rounds of chemotherapy with carboplatin and etoposide and then 28 days of radiation, which now is done in combination quite often. My tumor went from over eight to down to about two centimeters, and it has stayed at that size for all these years. If it starts to march on the move, if it starts to grow again, if I have more metastases, I absolutely would be looking into clinical trials. The NIH, National Institutes of Health, they run clinical trials all the time. People may qualify for that. Ask your oncologist. Look up on the internet via government sites for clinical trials.

#### (27:49):

One piece of advice I try to give people is don't start Googling because if you start Googling and you want to find out how long you're going to live, there's nothing there that can answer that question. Your oncologist, if you ask your oncologist, how long do I have? They have to answer. So they have to say, "Well, with treatments, it might be 12 to 18 months. Without it might, be three to six." I don't know anyone who has died that quickly from lung cancer. So the only time I suggest people Google is to get actual information, whether you're Googling a drug company, whether you're Googling the government, Lung Cancer Foundation of America, mylivelong.org, mylongevity.org, that's helpful. But clinical trials are phenomenal, absolutely in my wheelhouse if I need them.

Mitch Jelniker (28:45):

What would you say is the advantage to participating in a clinical trial?

Maida Mangiameli (28:51):

Well, one of the advantages of you might be that person that's helped enormously. I have one friend who has non-small cell lung cancer who was on a clinical trial, I think it was for about two years. The company that was making the drug found it really didn't help many people, but six years later, he's still

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here and still on the drug. You might be that person, that drug that they're experimenting on you with is going to help.

Mitch Jelniker (29:19):

Well, Maida, thank you for joining us. We appreciate your time.

Maida Mangiameli (29:22):

Well, thanks a lot for asking me. I love to be able to spread good news.

Diane Mulligan (29:29):

I love Maida's positive attitude, thanks to research and man, she has a lot of reason to be positive right now, especially since the FDA has just approved a new treatment for small cell lung cancer.

Mitch Jelniker (29:41):

Yeah. It's a great reminder, if you're a small cell lung cancer patient, make sure to ask your doctor about the latest treatment options out there. And if you're enjoying this Hope With Answers: Living With Lung Cancer Podcast, consider donating to help LCFA produce this resource because remember, this podcast is really a resource for patients or anyone that's seeking answers, looking for hope and access to updated treatment information, scientific investigation, the very latest and the information about clinical trials.

Diane Mulligan (30:12):

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