WEBVTT

NOTE duration:"01:29:42"

NOTE recognizability:0.876

NOTE language:en-us

NOTE Confidence: 0.858624616

00:00:00.000 --> 00:00:01.780 Get going, we have a lot to talk about today.

NOTE Confidence: 0.858624616

 $00:00:01.780 \rightarrow 00:00:03.698$  This is such an exciting event and

NOTE Confidence: 0.858624616

00:00:03.698 - > 00:00:05.758 we're so happy to have you all here.

NOTE Confidence: 0.858624616

00:00:05.760 --> 00:00:07.000 My name is Sarah Goldberg,

NOTE Confidence: 0.858624616

00:00:07.000 --> 00:00:09.898 AMA medical oncologist here at Yale,

NOTE Confidence: 0.858624616

 $00:00:09.900 \rightarrow 00:00:12.964$  and again, we come to the Smilow shares event

NOTE Confidence: 0.858624616

00:00:12.964 --> 00:00:15.996 in honor of lung Cancer Awareness Month.

NOTE Confidence: 0.858624616

00:00:16.000 --> 00:00:18.100 Our program is entitled new

NOTE Confidence: 0.858624616

 $00:00:18.100 \dashrightarrow 00:00:19.780$  treatment advances and innovations,

NOTE Confidence: 0.858624616

00:00:19.780 --> 00:00:24.380 and the the plan for this evening is to talk

NOTE Confidence: 0.858624616

 $00{:}00{:}24.487 \dashrightarrow 00{:}00{:}27.110$  about various topics related to lung cancer.

NOTE Confidence: 0.858624616

 $00{:}00{:}27.110$  -->  $00{:}00{:}30.109$  You'll hear a few of us speak and and show NOTE Confidence: 0.858624616

 $00:00:30.109 \rightarrow 00:00:32.289$  a few slides and give you a bit of an.

 $00:00:32.290 \rightarrow 00:00:34.834$  Overview about what's happening in the

NOTE Confidence: 0.858624616

 $00:00:34.834 \rightarrow 00:00:37.315$  field and specifically here at Yale and

NOTE Confidence: 0.858624616

 $00{:}00{:}37{.}315 \dashrightarrow 00{:}00{:}39{.}700$  then we will have a lot of time for

NOTE Confidence: 0.858624616

 $00:00:39.770 \rightarrow 00:00:42.370$  discussion and question and answer periods,

NOTE Confidence: 0.858624616

 $00{:}00{:}42.370 \dashrightarrow 00{:}00{:}44.680$  and we have this wonderful group

NOTE Confidence: 0.858624616

 $00{:}00{:}44.680 \dashrightarrow 00{:}00{:}46.719$  of panelists that you're seeing

NOTE Confidence: 0.858624616

 $00{:}00{:}46.719 \dashrightarrow 00{:}00{:}49.275$  here and you'll hear from every one

NOTE Confidence: 0.858624616

 $00:00:49.275 \rightarrow 00:00:51.500$  throughout the course of the event,

NOTE Confidence: 0.858624616

 $00{:}00{:}51{.}500 \dashrightarrow 00{:}00{:}52{.}892$  so I'll have them introduce themselves

NOTE Confidence: 0.858624616

 $00:00:52.892 \rightarrow 00:00:54.549$  in in just a couple minutes.

NOTE Confidence: 0.858624616

00:00:54.550 --> 00:00:56.254 But first, I'm going to turn

NOTE Confidence: 0.858624616

00:00:56.254 --> 00:00:58.049 this over to Doctor Dan Boffa,

NOTE Confidence: 0.858624616

 $00:00:58.050 \rightarrow 00:01:00.010$  who is a thoracic surgeon.

NOTE Confidence: 0.858624616

00:01:00.010 --> 00:01:01.380 The Chief of Thoracic surgery

NOTE Confidence: 0.858624616

 $00{:}01{:}01{.}380 \dashrightarrow 00{:}01{:}02{.}476$  here at Yale and.

NOTE Confidence: 0.858624616

 $00:01:02.480 \rightarrow 00:01:04.872$  He's going to tell you about the state

- NOTE Confidence: 0.858624616
- $00:01:04.872 \longrightarrow 00:01:07.028$  of the art lung cancer treatments,
- NOTE Confidence: 0.858624616
- $00:01:07.028 \longrightarrow 00:01:09.468$  and then it's all yours.
- NOTE Confidence: 0.756039408
- $00:01:10.220 \longrightarrow 00:01:14.030$  Well, thank you Sarah I.
- NOTE Confidence: 0.756039408
- $00{:}01{:}14.030 \dashrightarrow 00{:}01{:}16.564$  I just really want to thank every body
- NOTE Confidence: 0.756039408
- $00:01:16.570 \longrightarrow 00:01:19.738$  for joining us for a little bit tonight.
- NOTE Confidence: 0.756039408
- $00:01:19.740 \longrightarrow 00:01:22.440$  We're very excited to be
- NOTE Confidence: 0.756039408
- $00:01:22.440 \longrightarrow 00:01:25.140$  able to talk to everybody.
- NOTE Confidence: 0.756039408
- $00:01:25.140 \longrightarrow 00:01:29.332$  This is a we I'm I'm one of
- NOTE Confidence: 0.756039408
- $00:01:29.332 \longrightarrow 00:01:31.060$  the people who've been here,
- NOTE Confidence: 0.756039408
- $00:01:31.060 \longrightarrow 00:01:31.960$  probably the longest.
- NOTE Confidence: 0.756039408
- 00:01:31.960 --> 00:01:35.128 I think I've been here 14 or 15 years
- NOTE Confidence: 0.756039408
- $00{:}01{:}35{.}128 \dashrightarrow 00{:}01{:}37{.}809$  and so I have a pretty good idea
- NOTE Confidence: 0.756039408
- $00:01:37.810 \longrightarrow 00:01:39.898$  of the landscape of lung cancer,
- NOTE Confidence: 0.756039408
- $00{:}01{:}39{.}900 \dashrightarrow 00{:}01{:}42{.}846$  but also within our health system
- NOTE Confidence: 0.756039408
- $00:01:42.846 \dashrightarrow 00:01:46.510$  and what we aspire to do and and be.
- NOTE Confidence: 0.756039408

00:01:46.510 --> 00:01:51.598 So tonight I am going to talk about.

NOTE Confidence: 0.756039408

 $00{:}01{:}51{.}600 \dashrightarrow 00{:}01{:}53{.}454$  Lung cancer is an overview and

NOTE Confidence: 0.756039408

 $00:01:53.454 \longrightarrow 00:01:55.970$  I have the very simple task of

NOTE Confidence: 0.756039408

 $00:01:55.970 \rightarrow 00:01:57.582$  going over everything that's

NOTE Confidence: 0.756039408

 $00:01:57.582 \rightarrow 00:01:59.669$  ever happened in lung cancer.

NOTE Confidence: 0.756039408

00:01:59.670 --> 00:02:03.850 But I have 10 minutes, so we'll finish early.

NOTE Confidence: 0.756039408

 $00:02:03.850 \longrightarrow 00:02:05.518$  The hard thing is I can't.

NOTE Confidence: 0.756039408

 $00:02:05.520 \longrightarrow 00:02:06.870$  I can't hear you all laugh.

NOTE Confidence: 0.756039408

00:02:06.870 --> 00:02:09.313 I'm just gonna assume that you think

NOTE Confidence: 0.756039408

00:02:09.313 --> 00:02:11.687 I'm really funny so I'll keep going.

NOTE Confidence: 0.756039408

 $00{:}02{:}11.690 \dashrightarrow 00{:}02{:}13.146$  Unless unless some body chats

NOTE Confidence: 0.756039408

 $00{:}02{:}13.146 \dashrightarrow 00{:}02{:}17.610$  in just get on with it so.

NOTE Confidence: 0.756039408

 $00:02:17.610 \longrightarrow 00:02:19.536$  I'm, I know that my slides

NOTE Confidence: 0.756039408

 $00{:}02{:}19.536 \dashrightarrow 00{:}02{:}21.240$  are not in presenter mode,

NOTE Confidence: 0.756039408

 $00{:}02{:}21{.}240 \dashrightarrow 00{:}02{:}22{.}570$  so any body that's feeling like

NOTE Confidence: 0.756039408

 $00:02:22.570 \longrightarrow 00:02:24.410$  the urge to chat to tell me

- NOTE Confidence: 0.756039408
- $00:02:24.410 \longrightarrow 00:02:26.057$  that I know that it's just they
- NOTE Confidence: 0.756039408
- $00{:}02{:}26.057 \dashrightarrow 00{:}02{:}27.779$  show up better in this format,
- NOTE Confidence: 0.756039408
- 00:02:27.780 --> 00:02:33.108 so I apologize so.
- NOTE Confidence: 0.756039408
- $00:02:33.110 \rightarrow 00:02:35.598$  The I thought it was the best way
- NOTE Confidence: 0.756039408
- $00{:}02{:}35{.}598 \dashrightarrow 00{:}02{:}38{.}184$  to think about what's new in lung
- NOTE Confidence: 0.756039408
- 00:02:38.184 --> 00:02:41.620 cancer is think about all of the ways
- NOTE Confidence: 0.756039408
- $00:02:41.620 \rightarrow 00:02:44.672$  that we can impact people having
- NOTE Confidence: 0.756039408
- $00:02:44.672 \rightarrow 00:02:48.068$  their lives altered by lung cancer,
- NOTE Confidence: 0.756039408
- $00{:}02{:}48.070 \dashrightarrow 00{:}02{:}51.254$  and one of the one of the cleanest
- NOTE Confidence: 0.756039408
- $00:02:51.254 \rightarrow 00:02:53.700$  and clearest ways is to get
- NOTE Confidence: 0.756039408
- $00:02:53.700 \longrightarrow 00:02:55.264$  people to never smoke.
- NOTE Confidence: 0.756039408
- $00:02:55.270 \longrightarrow 00:02:55.672$  Now,
- NOTE Confidence: 0.756039408
- $00:02:55.672 \longrightarrow 00:02:57.682$  not all lung cancer happens
- NOTE Confidence: 0.756039408
- $00{:}02{:}57{.}682 \dashrightarrow 00{:}02{:}59{.}290$  in people who smoked,
- NOTE Confidence: 0.756039408
- $00:02:59.290 \dashrightarrow 00:03:02.015$  and one out of seven lung cancers takes
- NOTE Confidence: 0.756039408

 $00:03:02.015 \rightarrow 00:03:03.895$  place in somebody who never smoked in there.

NOTE Confidence: 0.756039408

 $00:03:03.900 \longrightarrow 00:03:05.410$  Life but.

NOTE Confidence: 0.756039408

00:03:05.410 --> 00:03:07.138 The majority of lung cancer does

NOTE Confidence: 0.756039408

00:03:07.138 --> 00:03:08.448 happen in people who've smoked,

NOTE Confidence: 0.756039408

 $00:03:08.450 \longrightarrow 00:03:12.004$  and so we want to get people to

NOTE Confidence: 0.756039408

 $00:03:12.004 \rightarrow 00:03:13.818$  either never smoke or people do

NOTE Confidence: 0.756039408

 $00:03:13.818 \longrightarrow 00:03:15.726$  who have smoked to stop smoking.

NOTE Confidence: 0.756039408

 $00{:}03{:}15{.}730 \dashrightarrow 00{:}03{:}19{.}930$  And so there are some real

NOTE Confidence: 0.756039408

00:03:19.930 --> 00:03:22.730 innovations in lung cancer.

NOTE Confidence: 0.756039408

00:03:22.730 --> 00:03:23.318 Quitting,

NOTE Confidence: 0.756039408

 $00:03:23.318 \dashrightarrow 00:03:27.434$  smoking and and people not ever starting.

NOTE Confidence: 0.756039408

 $00:03:27.440 \longrightarrow 00:03:30.156$  So there are we have a program

NOTE Confidence: 0.756039408

 $00:03:30.156 \rightarrow 00:03:33.307$  here that where we combine things

NOTE Confidence: 0.756039408

 $00:03:33.307 \rightarrow 00:03:35.839$  like nicotine replacement therapy

NOTE Confidence: 0.756039408

 $00{:}03{:}35{.}839 \dashrightarrow 00{:}03{:}38{.}787$  and certain medications that that

NOTE Confidence: 0.756039408

 $00:03:38.787 \longrightarrow 00:03:41.197$  curb the craving for nicotine.

- NOTE Confidence: 0.756039408
- $00:03:41.200 \dashrightarrow 00:03:43.760$  And we have a we have a successful
- NOTE Confidence: 0.756039408
- $00{:}03{:}43{.}760 \dashrightarrow 00{:}03{:}46{.}895$  program in getting people to break the habit.
- NOTE Confidence: 0.756039408
- 00:03:46.900 --> 00:03:48.790 Lisa Fuschetto is going to be on
- NOTE Confidence: 0.756039408
- $00{:}03{:}48.790 \dashrightarrow 00{:}03{:}50.801$  a little bit later and we could
- NOTE Confidence: 0.756039408
- $00:03:50.801 \dashrightarrow 00:03:52.860$  talk about all of the things that.
- NOTE Confidence: 0.756039408
- $00{:}03{:}52{.}860 \dashrightarrow 00{:}03{:}55{.}620$  We use and we can talk about electronic
- NOTE Confidence: 0.756039408
- $00:03:55.620 \dashrightarrow 00:03:57.460$  cigarettes and things like that,
- NOTE Confidence: 0.756039408
- $00{:}03{:}57{.}460 \dashrightarrow 00{:}03{:}59{.}692$  but I think there's been a lot of
- NOTE Confidence: 0.756039408
- $00{:}03{:}59{.}692 \dashrightarrow 00{:}04{:}02{.}205$  progress in in breaking that cycle of
- NOTE Confidence: 0.756039408
- $00{:}04{:}02{.}205 \dashrightarrow 00{:}04{:}04{.}095$  people starting smoking and smoking
- NOTE Confidence: 0.756039408
- $00{:}04{:}04{.}163 \dashrightarrow 00{:}04{:}06{.}281$  rates have been declining in the
- NOTE Confidence: 0.756039408
- 00:04:06.281 --> 00:04:08.368 United States and across the world,
- NOTE Confidence: 0.756039408
- 00:04:08.368 --> 00:04:10.706 and I think getting people who are
- NOTE Confidence: 0.756039408
- $00{:}04{:}10.706$  -->  $00{:}04{:}12.647$  active smokers to stop smoking.
- NOTE Confidence: 0.756039408
- $00{:}04{:}12.650 \dashrightarrow 00{:}04{:}15.266$  That's a real area of innovation.
- NOTE Confidence: 0.756039408

- $00:04:15.270 \rightarrow 00:04:18.202$  So if somebody is going to develop
- NOTE Confidence: 0.756039408
- $00{:}04{:}18{.}202 \dashrightarrow 00{:}04{:}20{.}614$  lung cancer, it's a tough cancer.
- NOTE Confidence: 0.756039408
- $00:04:20.620 \rightarrow 00:04:23.200$  It can be a tough cancer to treat and so you.
- NOTE Confidence: 0.756039408
- $00{:}04{:}23.200 \dashrightarrow 00{:}04{:}25.335$  Really want to find it early and
- NOTE Confidence: 0.756039408
- $00{:}04{:}25{.}335 \dashrightarrow 00{:}04{:}27{.}180$  one of the biggest innovations
- NOTE Confidence: 0.756039408
- $00{:}04{:}27{.}180 \dashrightarrow 00{:}04{:}29{.}759$  in in lung cancer's history is
- NOTE Confidence: 0.756039408
- $00:04:29.759 \longrightarrow 00:04:32.357$  the value of screening for it.
- NOTE Confidence: 0.878031996
- $00:04:32.360 \rightarrow 00:04:35.600$  And so people that get one CT scan a year.
- NOTE Confidence: 0.878031996
- 00:04:35.600 --> 00:04:36.920 If you're eligible,
- NOTE Confidence: 0.878031996
- 00:04:36.920 --> 00:04:39.560 it's it's almost always paid for,
- NOTE Confidence: 0.878031996
- $00:04:39.560 \rightarrow 00:04:41.534$  and it really takes very little time.
- NOTE Confidence: 0.878031996
- $00:04:41.540 \dashrightarrow 00:04:44.789$  It's like an hour and it can reduce your
- NOTE Confidence: 0.878031996
- $00:04:44.789 \longrightarrow 00:04:47.564$  chances of dying of lung cancer by 20%.
- NOTE Confidence: 0.878031996
- $00:04:47.570 \rightarrow 00:04:49.766$  It's it's the single most impactful
- NOTE Confidence: 0.878031996
- $00:04:49.766 \longrightarrow 00:04:52.097$  thing that we have in preventing
- NOTE Confidence: 0.878031996
- $00:04:52.097 \rightarrow 00:04:54.485$  people from dying of lung cancer.

- NOTE Confidence: 0.878031996
- $00{:}04{:}54{.}490 \dashrightarrow 00{:}04{:}58{.}240$  Is screening with CT scanning and
- NOTE Confidence: 0.878031996
- $00:04:58.240 \rightarrow 00:05:01.638$  shockingly about 7% of the people who are
- NOTE Confidence: 0.878031996
- $00:05:01.638 \rightarrow 00:05:04.092$  eligible in the United States actually
- NOTE Confidence: 0.878031996
- $00{:}05{:}04.092 \dashrightarrow 00{:}05{:}07.370$  are screened so 95% of people who could
- NOTE Confidence: 0.878031996
- $00:05:07.370 \longrightarrow 00:05:09.230$  get screened actually don't participate
- NOTE Confidence: 0.878031996
- $00:05:09.290 \dashrightarrow 00:05:12.309$  in a screening program and so recently
- NOTE Confidence: 0.878031996
- $00:05:12.309 \rightarrow 00:05:15.747$  they have expanded the eligibility criteria.
- NOTE Confidence: 0.878031996
- $00:05:15.750 \longrightarrow 00:05:17.550$  So just sort of bank this.
- NOTE Confidence: 0.878031996
- 00:05:17.550 00:05:19.727 This is who can get screened if
- NOTE Confidence: 0.878031996
- $00:05:19.727 \longrightarrow 00:05:21.848$  you're between the ages of 50 and 80.
- NOTE Confidence: 0.878031996
- $00:05:21.850 \longrightarrow 00:05:23.887$  If you've been a smoker within the
- NOTE Confidence: 0.878031996
- $00{:}05{:}23.887 \dashrightarrow 00{:}05{:}24.760$  past 15 years.
- NOTE Confidence: 0.878031996
- 00:05:24.760 --> 00:05:26.476 And if you say well, it was 16 years,
- NOTE Confidence: 0.878031996
- $00{:}05{:}26.476 \dashrightarrow 00{:}05{:}28.960$  so I better smoke so I can get screened.
- NOTE Confidence: 0.878031996
- $00{:}05{:}28{.}960 \dashrightarrow 00{:}05{:}30{.}388$  You know we can.
- NOTE Confidence: 0.878031996

 $00:05:30.388 \longrightarrow 00:05:32.173$  We can work with that.

NOTE Confidence: 0.878031996

00:05:32.180 --> 00:05:33.635 The don't don't start smoking

NOTE Confidence: 0.878031996

00:05:33.635 --> 00:05:35.749 just so you can get a CT scan,

NOTE Confidence: 0.878031996

 $00:05:35.750 \longrightarrow 00:05:37.184$  but if you smoked an average

NOTE Confidence: 0.878031996

00:05:37.184 --> 00:05:39.219 of a pack a day for 20 years,

NOTE Confidence: 0.878031996

 $00{:}05{:}39{.}220 \dashrightarrow 00{:}05{:}42{.}315$  so that means a half a pack a day for 40

NOTE Confidence: 0.878031996

00:05:42.315 - 00:05:44.752 years or two packs a day for 10 years.

NOTE Confidence: 0.878031996

 $00:05:44.752 \longrightarrow 00:05:46.264$  But if it's an average of a

NOTE Confidence: 0.878031996

 $00{:}05{:}46{.}264 \dashrightarrow 00{:}05{:}47{.}519$  pack a day for 20 years,

NOTE Confidence: 0.878031996

 $00:05:47.520 \longrightarrow 00:05:48.468$  you are eligible.

NOTE Confidence: 0.878031996

 $00:05:48.468 \dashrightarrow 00:05:50.680$  We have a lung cancer screening program.

NOTE Confidence: 0.878031996

 $00:05:50.680 \longrightarrow 00:05:52.715$  We actually have them at

NOTE Confidence: 0.878031996

00:05:52.715 --> 00:05:55.250 every site every we have them.

NOTE Confidence: 0.878031996

 $00:05:55.250 \rightarrow 00:05:58.298$  A Greenwich Bridgeport in New Haven

NOTE Confidence: 0.878031996

 $00{:}05{:}58.298 \dashrightarrow 00{:}06{:}01.222$  and in New London just give us a

NOTE Confidence: 0.878031996

 $00:06:01.222 \rightarrow 00:06:03.069$  call and we'd be happy to get you.

- NOTE Confidence: 0.878031996
- $00{:}06{:}03{.}070 \dashrightarrow 00{:}06{:}05{.}660$  Signed up and again it reduces your
- NOTE Confidence: 0.878031996
- $00:06:05.660 \longrightarrow 00:06:08.416$  chances of dying of lung cancer by 20%.
- NOTE Confidence: 0.878031996
- $00:06:08.420 \dashrightarrow 00:06:11.500$  So if you have to be treated for lung cancer,
- NOTE Confidence: 0.878031996
- $00{:}06{:}11.500 \dashrightarrow 00{:}06{:}13.613$  we really want to make treatment
- NOTE Confidence: 0.878031996
- $00{:}06{:}13.613 \dashrightarrow 00{:}06{:}16.931$  easier on patients and safer and
- NOTE Confidence: 0.878031996
- $00{:}06{:}16{.}931 \dashrightarrow 00{:}06{:}19{.}995$  so lung cancer surgery has become
- NOTE Confidence: 0.878031996
- $00:06:19.995 \dashrightarrow 00:06:21.999$  much less invasive overtime.
- NOTE Confidence: 0.878031996
- $00{:}06{:}22.000 \dashrightarrow 00{:}06{:}23.770$  So you can see here.
- NOTE Confidence: 0.878031996
- $00:06:23.770 \longrightarrow 00:06:27.550$  This is what a classic thoracotomy was.
- NOTE Confidence: 0.878031996
- $00:06:27.550 \longrightarrow 00:06:28.501$  Now we do.
- NOTE Confidence: 0.878031996
- 00:06:28.501 --> 00:06:30.086 The vast majority of things
- NOTE Confidence: 0.878031996
- $00:06:30.086 \longrightarrow 00:06:31.380$  through little incisions.
- NOTE Confidence: 0.878031996
- $00:06:31.380 \longrightarrow 00:06:33.678$  So the biggest incision ends up
- NOTE Confidence: 0.878031996
- $00:06:33.678 \longrightarrow 00:06:36.120$  being about an inch and a half,
- NOTE Confidence: 0.878031996
- $00:06:36.120 \longrightarrow 00:06:37.776$  and it's all under the armpit.
- NOTE Confidence: 0.878031996

- $00:06:37.780 \longrightarrow 00:06:38.749$  We do this.
- NOTE Confidence: 0.878031996
- 00:06:38.749 --> 00:06:39.718 Either with VATS,
- NOTE Confidence: 0.878031996
- $00:06:39.720 \longrightarrow 00:06:41.454$  which is a camera where the
- NOTE Confidence: 0.878031996
- $00:06:41.454 \rightarrow 00:06:42.610$  surgeons at the bedside,
- NOTE Confidence: 0.878031996
- $00{:}06{:}42.610 \dashrightarrow 00{:}06{:}44.610$  or a robot where the surgeons in the
- NOTE Confidence: 0.878031996
- $00{:}06{:}44.610 \dashrightarrow 00{:}06{:}46.606$  room but in the corner of the room.
- NOTE Confidence: 0.878031996
- 00:06:46.610 --> 00:06:48.134 Either way,
- NOTE Confidence: 0.878031996
- $00{:}06{:}48{.}134 \dashrightarrow 00{:}06{:}51{.}228$  small incisions and it's reduces
- NOTE Confidence: 0.878031996
- $00{:}06{:}51{.}228 \dashrightarrow 00{:}06{:}53{.}248$  the pain and expedites the
- NOTE Confidence: 0.878031996
- $00{:}06{:}53.248 \dashrightarrow 00{:}06{:}55.895$  recovery and does just as good a
- NOTE Confidence: 0.878031996
- $00:06:55.895 \rightarrow 00:06:57.935$  job at treating these for cancer.
- NOTE Confidence: 0.878031996
- $00:06:57.940 \longrightarrow 00:07:00.530$  I will say that if yet that
- NOTE Confidence: 0.878031996
- $00:07:00.530 \longrightarrow 00:07:01.640$  thoracotomy sound horrible,
- NOTE Confidence: 0.878031996
- $00:07:01.640 \rightarrow 00:07:03.537$  but we do them here as well,
- NOTE Confidence: 0.878031996
- $00:07:03.540 \longrightarrow 00:07:05.052$  and sometimes so you have to
- NOTE Confidence: 0.878031996
- $00{:}07{:}05{.}052 \dashrightarrow 00{:}07{:}06{.}060$  do that for cancer,

- NOTE Confidence: 0.878031996
- 00:07:06.060 --> 00:07:07.335 and there are techniques to
- NOTE Confidence: 0.878031996
- $00:07:07.335 \longrightarrow 00:07:08.860$  do that where you don't cut.
- NOTE Confidence: 0.878031996
- $00:07:08.860 \longrightarrow 00:07:10.258$  Big muscles you don't crack or
- NOTE Confidence: 0.878031996
- 00:07:10.258 --> 00:07:11.700 break ribs or things like that,
- NOTE Confidence: 0.878031996
- $00{:}07{:}11.700 \dashrightarrow 00{:}07{:}14.115$  and so even when we're not doing
- NOTE Confidence: 0.878031996
- 00:07:14.115 --> 00:07:15.150 minimally invasive surgery,
- NOTE Confidence: 0.878031996
- 00:07:15.150 -> 00:07:17.775 we're we tend to have an approach
- NOTE Confidence: 0.878031996
- $00{:}07{:}17.775 \dashrightarrow 00{:}07{:}20.424$  that is less traumatic and and
- NOTE Confidence: 0.878031996
- $00:07:20.424 \longrightarrow 00:07:22.336$  easier to recover from.
- NOTE Confidence: 0.878031996
- $00:07:22.340 \rightarrow 00:07:23.400$  There are non-surgical options.
- NOTE Confidence: 0.878031996
- $00:07:23.400 \longrightarrow 00:07:24.990$  I'm going to talk a little
- NOTE Confidence: 0.92797240444444
- $00:07:25.039 \rightarrow 00:07:26.959$  bit more about radiation in a few minutes,
- NOTE Confidence: 0.92797240444444
- $00:07:26.960 \dashrightarrow 00:07:29.192$  but we do have things like ablation which
- NOTE Confidence: 0.92797240444444
- $00{:}07{:}29{.}192 \dashrightarrow 00{:}07{:}31{.}518$  is like putting a hot wire in a tumor.
- NOTE Confidence: 0.92797240444444
- $00{:}07{:}31.520 \dashrightarrow 00{:}07{:}33.412$  So we've made treatment
- NOTE Confidence: 0.92797240444444

 $00:07:33.412 \rightarrow 00:07:35.777$  easier and safer for patients,

NOTE Confidence: 0.92797240444444

 $00:07:35.780 \longrightarrow 00:07:37.810$  both by making surgery safer.

NOTE Confidence: 0.92797240444444

 $00:07:37.810 \longrightarrow 00:07:39.625$  But we do have nonsurgical

NOTE Confidence: 0.92797240444444

00:07:39.625 --> 00:07:41.440 treatments which are also safe,

NOTE Confidence: 0.927972404444444

 $00:07:41.440 \longrightarrow 00:07:43.546$  and so people some people are

NOTE Confidence: 0.92797240444444

 $00:07:43.546 \longrightarrow 00:07:45.593$  not healthy enough enough to have NOTE Confidence: 0.92797240444444

00:07:45.593 --> 00:07:47.346 surgery or surgery would not leave

NOTE Confidence: 0.92797240444444

 $00:07:47.346 \rightarrow 00:07:49.110$  them with enough lung function to

NOTE Confidence: 0.92797240444444

 $00{:}07{:}49{.}170 \dashrightarrow 00{:}07{:}50{.}978$  do the things that they want to do.

NOTE Confidence: 0.92797240444444

 $00:07:50.980 \longrightarrow 00:07:52.964$  We really try to.

NOTE Confidence: 0.92797240444444

 $00:07:52.964 \longrightarrow 00:07:55.444$  Taylor up treatment to meet

NOTE Confidence: 0.92797240444444

 $00:07:55.450 \rightarrow 00:07:56.766$  people's goals of care.

NOTE Confidence: 0.927972404444444

 $00:07:56.766 \longrightarrow 00:07:58.411$  And so we have surgical

NOTE Confidence: 0.92797240444444

 $00:07:58.411 \rightarrow 00:08:00.168$  and non surgical options.

NOTE Confidence: 0.927972404444444

 $00:08:00.170 \longrightarrow 00:08:01.170$  Uhm, chemotherapy?

NOTE Confidence: 0.92797240444444

 $00:08:01.170 \rightarrow 00:08:04.670$  This is traditionally been one of the

NOTE Confidence: 0.92797240444444

00:08:04.670 --> 00:08:07.427 least exciting parts of the talk,

NOTE Confidence: 0.92797240444444

 $00:08:07.430 \rightarrow 00:08:09.310$  and that's not just 'cause I'm a surgeon,

NOTE Confidence: 0.92797240444444

 $00:08:09.310 \longrightarrow 00:08:11.944$  but it's it is an incredibly

NOTE Confidence: 0.92797240444444

 $00:08:11.944 \longrightarrow 00:08:14.240$  exciting part of the talk.

NOTE Confidence: 0.92797240444444

 $00{:}08{:}14.240 \dashrightarrow 00{:}08{:}14.677$  Chemotherapy,

NOTE Confidence: 0.92797240444444

 $00:08:14.677 \rightarrow 00:08:18.610$  now we have new ways of looking at tumors

NOTE Confidence: 0.927972404444444

00:08:18.691 --> 00:08:21.949 and understanding why tumors are growing,

NOTE Confidence: 0.92797240444444

 $00:08:21.950 \longrightarrow 00:08:24.666$  and we have new agents that take

NOTE Confidence: 0.927972404444444

 $00{:}08{:}24.666 \dashrightarrow 00{:}08{:}27.072$  advantage of some of things that

NOTE Confidence: 0.92797240444444

 $00:08:27.072 \rightarrow 00:08:29.400$  are unique to the tumor cells,

NOTE Confidence: 0.92797240444444

 $00:08:29.400 \rightarrow 00:08:31.248$  and so there is targeted therapy

NOTE Confidence: 0.92797240444444

 $00:08:31.248 \longrightarrow 00:08:31.864$  and immunotherapy.

NOTE Confidence: 0.92797240444444

 $00:08:31.870 \longrightarrow 00:08:34.190$  So targeted therapy is basically

NOTE Confidence: 0.92797240444444

00:08:34.190 --> 00:08:36.510 a special type of chemotherapy

NOTE Confidence: 0.92797240444444

 $00{:}08{:}36{.}585 \dashrightarrow 00{:}08{:}38{.}790$  that takes advantage of genetic

 $00:08:38.790 \rightarrow 00:08:41.520$  changes that happen in tumor cells.

NOTE Confidence: 0.92797240444444

00:08:41.520 --> 00:08:45.885 So Simply put. Every cell has DNA in it.

NOTE Confidence: 0.92797240444444

 $00:08:45.890 \dashrightarrow 00:08:47.846$  That's like the Book of Directions

NOTE Confidence: 0.92797240444444

 $00:08:47.846 \rightarrow 00:08:49.531$  that tells the cell everything

NOTE Confidence: 0.92797240444444

 $00{:}08{:}49{.}531 \dashrightarrow 00{:}08{:}51{.}729$  it needs to know how to function

NOTE Confidence: 0.92797240444444

 $00{:}08{:}51.729 \dashrightarrow 00{:}08{:}53.210$  when the cell divides,

NOTE Confidence: 0.92797240444444

 $00:08:53.210 \longrightarrow 00:08:55.786$  it has to duplicate that book of directions.

NOTE Confidence: 0.92797240444444

 $00:08:55.790 \longrightarrow 00:08:57.480$  It's a very sloppy process

NOTE Confidence: 0.92797240444444

 $00{:}08{:}57{.}480 \dashrightarrow 00{:}08{:}58{.}832$  and it makes mistakes.

NOTE Confidence: 0.92797240444444

 $00:08:58.840 \dashrightarrow 00:09:01.535$  And cancer cells make lots of mistakes,

NOTE Confidence: 0.92797240444444

 $00:09:01.540 \longrightarrow 00:09:03.736$  and some of those mistakes actually

NOTE Confidence: 0.92797240444444

 $00:09:03.736 \longrightarrow 00:09:06.118$  helped the cancer grow and so

NOTE Confidence: 0.92797240444444

 $00:09:06.118 \dashrightarrow 00:09:07.810$  targeted therapy takes advantage

NOTE Confidence: 0.92797240444444

00:09:07.810 --> 00:09:09.502 of those specific mistakes,

NOTE Confidence: 0.92797240444444

 $00{:}09{:}09{.}510 \dashrightarrow 00{:}09{:}11{.}385$  disrupts that so that the

NOTE Confidence: 0.92797240444444

 $00:09:11.385 \dashrightarrow 00:09:13.260$  cancer cells can't grow anymore.

NOTE Confidence: 0.92797240444444

 $00:09:13.260 \longrightarrow 00:09:14.900$  And because it's something that.

NOTE Confidence: 0.92797240444444

 $00{:}09{:}14{.}900 \dashrightarrow 00{:}09{:}20{.}124$  Is is a mistake or an error mutation

NOTE Confidence: 0.92797240444444

 $00:09:20.130 \longrightarrow 00:09:21.552$  you you don't really find that

NOTE Confidence: 0.92797240444444

 $00:09:21.552 \longrightarrow 00:09:23.507$  in the normal cells and so these

NOTE Confidence: 0.927972404444444

 $00:09:23.507 \rightarrow 00:09:24.779$  targeted therapies they're they're

NOTE Confidence: 0.92797240444444

 $00:09:24.779 \longrightarrow 00:09:26.590$  really effective at the cancer cells,

NOTE Confidence: 0.92797240444444

 $00:09:26.590 \longrightarrow 00:09:27.526$  but they do.

NOTE Confidence: 0.92797240444444

 $00:09:27.526 \longrightarrow 00:09:29.398$  They're far less toxic to the

NOTE Confidence: 0.92797240444444

 $00:09:29.398 \longrightarrow 00:09:31.367$  normal cells that don't have

NOTE Confidence: 0.92797240444444

 $00:09:31.367 \longrightarrow 00:09:32.959$  these these genetic changes.

NOTE Confidence: 0.92797240444444

00:09:32.960 --> 00:09:36.448 So if this is a group of patients,

NOTE Confidence: 0.92797240444444

 $00{:}09{:}36{.}450 \dashrightarrow 00{:}09{:}38{.}975$  the thing about mutations are

NOTE Confidence: 0.92797240444444

00:09:38.975 -> 00:09:40.995 they're not incredibly common,

NOTE Confidence: 0.92797240444444

 $00:09:41.000 \dashrightarrow 00:09:43.058$  but they're in pockets of patients,

NOTE Confidence: 0.927972404444444

 $00{:}09{:}43.060 \dashrightarrow 00{:}09{:}44.817$  and so if this is just a

- $00:09:44.817 \longrightarrow 00:09:46.240$  big cohort of patients.
- NOTE Confidence: 0.92797240444444
- $00:09:46.240 \longrightarrow 00:09:47.088$  And you say, well,
- NOTE Confidence: 0.92797240444444
- 00:09:47.088 --> 00:09:49.219 how many of them have a K RASK mutation?
- NOTE Confidence: 0.92797240444444
- $00:09:49.220 \longrightarrow 00:09:51.383$  So that's a kind of change that
- NOTE Confidence: 0.92797240444444
- $00:09:51.383 \longrightarrow 00:09:53.858$  has as a treatment for well,
- NOTE Confidence: 0.92797240444444
- 00:09:53.860 --> 00:09:54.802 it's about 14%.
- NOTE Confidence: 0.927972404444444
- $00:09:54.802 \longrightarrow 00:09:57.000$  So that doesn't sound like a lot,
- NOTE Confidence: 0.92797240444444
- $00:09:57.000 \rightarrow 00:09:59.160$  but when you take into consideration
- NOTE Confidence: 0.92797240444444
- $00:09:59.160 \dashrightarrow 00:10:00.600$  there's something called EGFR,
- NOTE Confidence: 0.92797240444444
- $00:10:00.600 \longrightarrow 00:10:01.947$  that's another 14%.
- NOTE Confidence: 0.92797240444444
- $00{:}10{:}01{.}947 \dashrightarrow 00{:}10{:}04{.}192$  There's ALK and met changes
- NOTE Confidence: 0.92797240444444
- $00:10:04.192 \longrightarrow 00:10:05.800$  that have targets,
- NOTE Confidence: 0.92797240444444
- $00{:}10{:}05{.}800 \dashrightarrow 00{:}10{:}08{.}439$  and that's another 10% between the two.
- NOTE Confidence: 0.92797240444444
- $00{:}10{:}08{.}440 \dashrightarrow 00{:}10{:}11{.}400$  And then you have beer after two red.
- NOTE Confidence: 0.92797240444444
- $00:10:11.400 \rightarrow 00:10:13.056$  So when you get to all of these changes,
- NOTE Confidence: 0.92797240444444
- $00:10:13.060 \rightarrow 00:10:13.860$  all of a sudden,

- NOTE Confidence: 0.92797240444444
- $00:10:13.860 \longrightarrow 00:10:16.720$  a significant portion of patients.
- NOTE Confidence: 0.92797240444444
- $00:10:16.720 \longrightarrow 00:10:18.660$  Have a really good option
- NOTE Confidence: 0.92797240444444
- $00:10:18.660 \rightarrow 00:10:20.600$  with targeted therapy and so.
- NOTE Confidence: 0.92797240444444
- $00:10:20.600 \rightarrow 00:10:22.684$  That's something that's really
- NOTE Confidence: 0.927972404444444
- 00:10:22.684 --> 00:10:25.289 new and is really exciting,
- NOTE Confidence: 0.92797240444444
- $00:10:25.290 \longrightarrow 00:10:27.726$  and so we have options and so
- NOTE Confidence: 0.92797240444444
- 00:10:27.726 --> 00:10:29.719 for advanced stage lung cancer,
- NOTE Confidence: 0.92797240444444
- $00:10:29.720 \longrightarrow 00:10:31.930$  the stage four lung cancer
- NOTE Confidence: 0.92797240444444
- $00:10:31.930 \longrightarrow 00:10:34.140$  the survival for stage
- NOTE Confidence: 0.879743919
- 00:10:34.223 --> 00:10:36.513 four lung cancer has quadrupled
- NOTE Confidence: 0.879743919
- $00:10:36.513 \longrightarrow 00:10:38.803$  in the past five years.
- NOTE Confidence: 0.879743919
- 00:10:38.810 --> 00:10:40.229 That's that's crazy.
- NOTE Confidence: 0.879743919
- $00{:}10{:}40{.}229 \dashrightarrow 00{:}10{:}42{.}594$  That's that's unheard of progress.
- NOTE Confidence: 0.879743919
- $00{:}10{:}42.600 \dashrightarrow 00{:}10{:}44.448$  Uhm, so any body that tells you they
- NOTE Confidence: 0.879743919
- $00{:}10{:}44{.}448 \dashrightarrow 00{:}10{:}46{.}620$  they know what your future is or they
- NOTE Confidence: 0.879743919

 $00:10:46.620 \rightarrow 00:10:48.369$  know what's going to happen to you.

NOTE Confidence: 0.879743919

 $00:10:48.370 \rightarrow 00:10:50.880$  They very well may not, because it's

NOTE Confidence: 0.879743919

 $00:10:50.880 \longrightarrow 00:10:53.250$  the field is changing so quickly.

NOTE Confidence: 0.879743919

00:10:53.250 --> 00:10:56.790 Immunotherapy immunotherapy are drugs that

NOTE Confidence: 0.879743919

 $00:10:56.790 \rightarrow 00:10:59.450$  take advantage of your own immune system.

NOTE Confidence: 0.879743919

00:10:59.450 --> 00:11:01.905 So cancer cells can turn

NOTE Confidence: 0.879743919

 $00:11:01.905 \longrightarrow 00:11:03.869$  off the immune system.

NOTE Confidence: 0.879743919

 $00{:}11{:}03.870 \dashrightarrow 00{:}11{:}06.054$  The immune system is designed to

NOTE Confidence: 0.879743919

00:11:06.054 --> 00:11:07.927 identify things that are invaders

NOTE Confidence: 0.879743919

 $00:11:07.927 \longrightarrow 00:11:09.997$  or foreign things that are not

NOTE Confidence: 0.879743919

 $00:11:09.997 \longrightarrow 00:11:11.870$  supposed to be in the body.

NOTE Confidence: 0.879743919

 $00{:}11{:}11{.}870 \dashrightarrow 00{:}11{:}12{.}788$  Cancer cells are.

NOTE Confidence: 0.879743919

 $00:11:12.788 \longrightarrow 00:11:14.624$  Very different than the normal body,

NOTE Confidence: 0.879743919

 $00:11:14.630 \rightarrow 00:11:16.502$  but the immune system can ignore

NOTE Confidence: 0.879743919

 $00{:}11{:}16{.}502 \dashrightarrow 00{:}11{:}18{.}086$  them because the immune system

NOTE Confidence: 0.879743919

 $00:11:18.086 \longrightarrow 00:11:19.997$  can trick us or the cancer cells

- NOTE Confidence: 0.879743919
- 00:11:19.997 00:11:21.610 can trick the immune system.
- NOTE Confidence: 0.879743919
- 00:11:21.610 -> 00:11:23.358 So immunotherapy are drugs
- NOTE Confidence: 0.879743919
- $00:11:23.358 \longrightarrow 00:11:25.106$  that do several things.
- NOTE Confidence: 0.879743919
- $00:11:25.110 \rightarrow 00:11:28.046$  One of them is they block the tumor
- NOTE Confidence: 0.879743919
- 00:11:28.046 --> 00:11:30.888 cells ability to trick the immune system,
- NOTE Confidence: 0.879743919
- $00{:}11{:}30{.}890 \dashrightarrow 00{:}11{:}32{.}954$  and so it stops ignoring it
- NOTE Confidence: 0.879743919
- $00:11:32.954 \rightarrow 00:11:35.329$  and takes out the cancer cell.
- NOTE Confidence: 0.879743919
- $00:11:35.330 \longrightarrow 00:11:38.390$  Sometimes we have the rapies.
- NOTE Confidence: 0.879743919
- $00{:}11{:}38{.}390 \dashrightarrow 00{:}11{:}40{.}560$  That are like vaccine the rapies
- NOTE Confidence: 0.879743919
- $00:11:40.560 \longrightarrow 00:11:42.730$  that actually teach the immune
- NOTE Confidence: 0.879743919
- $00:11:42.807 \longrightarrow 00:11:44.907$  system that the cancer is bad.
- NOTE Confidence: 0.879743919
- 00:11:44.910 --> 00:11:46.765 And then there are ways to make
- NOTE Confidence: 0.879743919
- $00{:}11{:}46.765 \dashrightarrow 00{:}11{:}48.110$  the immune system stronger.
- NOTE Confidence: 0.879743919
- $00{:}11{:}48{.}110 \dashrightarrow 00{:}11{:}50{.}645$  And there's there's actually AT
- NOTE Confidence: 0.879743919
- $00{:}11{:}50.645 \dashrightarrow 00{:}11{:}53.180$  cell infusions where where your
- NOTE Confidence: 0.879743919

 $00{:}11{:}53{.}261 \dashrightarrow 00{:}11{:}55{.}865$  blood can be removed and educated

NOTE Confidence: 0.879743919

 $00:11:55.865 \rightarrow 00:11:58.010$  and re introduced to you.

NOTE Confidence: 0.879743919

 $00:11:58.010 \rightarrow 00:11:59.330$  So immunotherapy and immunotherapy

NOTE Confidence: 0.879743919

 $00:11:59.330 \longrightarrow 00:12:02.038$  if we go back to that grid where

NOTE Confidence: 0.879743919

 $00{:}12{:}02.038 \dashrightarrow 00{:}12{:}04.030$  those green people and red people,

NOTE Confidence: 0.879743919

00:12:04.030 --> 00:12:06.669 that's a whole another slice of the

NOTE Confidence: 0.879743919

 $00:12:06.669 \rightarrow 00:12:08.838$  population that has a good option.

NOTE Confidence: 0.879743919

00:12:08.840 --> 00:12:10.568 Now that didn't before,

NOTE Confidence: 0.879743919

 $00{:}12{:}10.568 \dashrightarrow 00{:}12{:}14.009$  so and there are markers we can tell,

NOTE Confidence: 0.879743919

 $00:12:14.010 \longrightarrow 00:12:15.942$  just like we can look for these

NOTE Confidence: 0.879743919

 $00:12:15.942 \rightarrow 00:12:16.494$  genetic changes.

NOTE Confidence: 0.879743919

 $00:12:16.500 \rightarrow 00:12:17.956$  There are markers that can tell up.

NOTE Confidence: 0.879743919

 $00:12:17.960 \rightarrow 00:12:20.270$  Immune therapy is likely to work.

NOTE Confidence: 0.879743919

 $00{:}12{:}20{.}270 \dashrightarrow 00{:}12{:}22{.}658$  Radiation has also become a lot

NOTE Confidence: 0.879743919

 $00{:}12{:}22.658 \dashrightarrow 00{:}12{:}25.609$  safer and a lot more effective,

NOTE Confidence: 0.879743919

 $00:12:25.610 \rightarrow 00:12:29.002$  so the the probably one of the most

NOTE Confidence: 0.879743919

 $00:12:29.002 \longrightarrow 00:12:31.360$  exciting things in radiation is

NOTE Confidence: 0.879743919

00:12:31.360 - 00:12:34.204 the change the way it's delivered

NOTE Confidence: 0.879743919

 $00:12:34.204 \longrightarrow 00:12:36.678$  instead of the traditional form

NOTE Confidence: 0.879743919

 $00:12:36.680 \rightarrow 00:12:39.186$  which is a more limited number

NOTE Confidence: 0.879743919

 $00{:}12{:}39{.}186 \dashrightarrow 00{:}12{:}42{.}051$  of beams coming from a more limited

NOTE Confidence: 0.879743919

 $00:12:42.051 \longrightarrow 00:12:43.335$  number of directions.

NOTE Confidence: 0.879743919

 $00{:}12{:}43{.}340 \dashrightarrow 00{:}12{:}47{.}430$  There's a stereotactic radiation or

NOTE Confidence: 0.879743919

 $00:12:47.430 \rightarrow 00:12:49.884$  stereotactic oblated radiotherapy,

NOTE Confidence: 0.879743919

 $00:12:49.890 \longrightarrow 00:12:50.931$  where instead of.

NOTE Confidence: 0.879743919

00:12:50.931 --> 00:12:53.013 Just a couple of beams coming

NOTE Confidence: 0.879743919

 $00:12:53.013 \longrightarrow 00:12:54.699$  from from from to back.

NOTE Confidence: 0.879743919

 $00{:}12{:}54.700 \dashrightarrow 00{:}12{:}56.506$  There's a large number of radiation

NOTE Confidence: 0.879743919

 $00{:}12{:}56{.}506 \dashrightarrow 00{:}12{:}58{.}423$  beams that come from all different

NOTE Confidence: 0.879743919

 $00{:}12{:}58{.}423 \dashrightarrow 00{:}13{:}00{.}397$  directions they meet in the middle.

NOTE Confidence: 0.879743919

 $00:13:00.400 \rightarrow 00:13:02.600$  So the thing in the middle gets a huge dose,

 $00:13:02.600 \rightarrow 00:13:03.620$  but everything around it

NOTE Confidence: 0.879743919

 $00:13:03.620 \longrightarrow 00:13:04.895$  gets a really small dose,

NOTE Confidence: 0.879743919

 $00:13:04.900 \rightarrow 00:13:07.270$  so there's there's far less symptoms,

NOTE Confidence: 0.879743919

00:13:07.270 --> 00:13:08.646 side effects or recovery,

NOTE Confidence: 0.879743919

 $00{:}13{:}08.646 \dashrightarrow 00{:}13{:}11.170$  and so it's a really good nonsurgical

NOTE Confidence: 0.879743919

 $00{:}13{:}11{.}170 \dashrightarrow 00{:}13{:}14{.}298$  option that a lot of patients have that

NOTE Confidence: 0.879743919

 $00{:}13{:}14.298 \dashrightarrow 00{:}13{:}16.645$  didn't have a really ten years ago.

NOTE Confidence: 0.92770768

 $00:13:19.300 \longrightarrow 00:13:21.658$  So we have other were also.

NOTE Confidence: 0.92770768

 $00{:}13{:}21.660 \dashrightarrow 00{:}13{:}23.080$  Our general approach is

NOTE Confidence: 0.92770768

 $00{:}13{:}23.080 \dashrightarrow 00{:}13{:}24.500$  a little bit different.

NOTE Confidence: 0.92770768

 $00:13:24.500 \longrightarrow 00:13:26.798$  So just like a campfire that's

NOTE Confidence: 0.92770768

 $00{:}13{:}26.798 \dashrightarrow 00{:}13{:}29.060$  smoldering can can reignite.

NOTE Confidence: 0.92770768

 $00{:}13{:}29.060 \dashrightarrow 00{:}13{:}30.964$  We're offering more treatments

NOTE Confidence: 0.92770768

 $00:13:30.964 \rightarrow 00:13:32.868$  to early stage patients,

NOTE Confidence: 0.92770768

00:13:32.870 -> 00:13:34.894 so we're giving chemotherapy,

NOTE Confidence: 0.92770768

 $00:13:34.894 \rightarrow 00:13:37.424$  realizing that that not all

- NOTE Confidence: 0.92770768
- $00:13:37.424 \rightarrow 00:13:40.020$  early stage patients are early.
- NOTE Confidence: 0.92770768
- 00:13:40.020 --> 00:13:41.690 They may have microscopic cancer
- NOTE Confidence: 0.92770768
- $00{:}13{:}41.690 \dashrightarrow 00{:}13{:}44.257$  that that was not seen on the CT
- NOTE Confidence: 0.92770768
- $00{:}13{:}44.257 \dashrightarrow 00{:}13{:}46.210$  scans and the PET scans because they
- NOTE Confidence: 0.92770768
- 00:13:46.274 --> 00:13:48.459 really can't see microscopic cancer.
- NOTE Confidence: 0.92770768
- $00:13:48.460 \longrightarrow 00:13:49.904$  So we're doing more.
- NOTE Confidence: 0.92770768
- $00:13:49.904 \rightarrow 00:13:51.709$  For people that look like
- NOTE Confidence: 0.92770768
- 00:13:51.709 -> 00:13:53.710 their early staged UM,
- NOTE Confidence: 0.92770768
- $00:13:53.710 \longrightarrow 00:13:57.265$  the in that includes these
- NOTE Confidence: 0.92770768
- $00:13:57.265 \longrightarrow 00:13:59.170$  the standard chemotherapy.
- NOTE Confidence: 0.92770768
- 00:13:59.170 --> 00:14:01.710 But there's also targeted
- NOTE Confidence: 0.92770768
- $00:14:01.710 \longrightarrow 00:14:04.030$  therapy trials where were.
- NOTE Confidence: 0.92770768
- $00:14:04.030 \longrightarrow 00:14:04.582$  Doctor Herbst,
- NOTE Confidence: 0.92770768
- $00{:}14{:}04{.}582 \dashrightarrow 00{:}14{:}05{.}686$  who's on this call,
- NOTE Confidence: 0.92770768
- $00{:}14{:}05.690 \dashrightarrow 00{:}14{:}08.108$  was a leading investigator that showed
- NOTE Confidence: 0.92770768

 $00:14:08.108 \rightarrow 00:14:10.868$  that that giving EGFR therapy after

NOTE Confidence: 0.92770768

00:14:10.868 --> 00:14:13.964 earlier stage lung cancer may help,

NOTE Confidence: 0.92770768

00:14:13.970 --> 00:14:15.458 and and now, immunotherapy,

NOTE Confidence: 0.92770768

 $00:14:15.458 \rightarrow 00:14:17.690$  may have a role as well.

NOTE Confidence: 0.92770768

 $00:14:17.690 \longrightarrow 00:14:19.330$  And and for some situations,

NOTE Confidence: 0.92770768

 $00:14:19.330 \longrightarrow 00:14:21.043$  giving radiation after

NOTE Confidence: 0.92770768

00:14:21.043 --> 00:14:23.327 surgery can be helpful.

NOTE Confidence: 0.92770768

00:14:23.330 --> 00:14:25.530 Uhm?

NOTE Confidence: 0.92770768

00:14:25.530 --> 00:14:28.421 We also treat late stage cancer like

NOTE Confidence: 0.92770768

 $00:14:28.421 \longrightarrow 00:14:30.799$  it's early stage and in certain

NOTE Confidence: 0.92770768

 $00{:}14{:}30{.}799 \dashrightarrow 00{:}14{:}34{.}136$  settings so we we know that if you have

NOTE Confidence: 0.92770768

 $00:14:34.136 \rightarrow 00:14:36.929$  cancer that spreads to a vital organ,

NOTE Confidence: 0.92770768

 $00:14:36.930 \longrightarrow 00:14:39.387$  if it only spreads to a couple of spots,

NOTE Confidence: 0.92770768

 $00{:}14{:}39{.}390 \dashrightarrow 00{:}14{:}40{.}758$  that's actually very different

NOTE Confidence: 0.92770768

 $00{:}14{:}40.758 \dashrightarrow 00{:}14{:}42.810$  than if it spreads a lot.

NOTE Confidence: 0.92770768

 $00:14:42.810 \longrightarrow 00:14:44.510$  And so we have options.

- NOTE Confidence: 0.92770768
- $00:14:44.510 \rightarrow 00:14:47.114$  We've been come more aggressive in
- NOTE Confidence: 0.92770768
- $00{:}14{:}47{.}114 \dashrightarrow 00{:}14{:}48{.}954$  treating people that have cancer,
- NOTE Confidence: 0.92770768
- $00{:}14{:}48{.}954 \dashrightarrow 00{:}14{:}52{.}416$  that is that has spread from the lungs to
- NOTE Confidence: 0.92770768
- $00:14:52.416 \rightarrow 00:14:54.566$  other vital organs really aggressively.
- NOTE Confidence: 0.92770768
- $00:14:54.570 \longrightarrow 00:14:55.980$  Now it's not for everybody.
- NOTE Confidence: 0.92770768
- $00{:}14{:}55{.}980 \dashrightarrow 00{:}14{:}57{.}805$  And and it's like everything
- NOTE Confidence: 0.92770768
- $00:14:57.805 \longrightarrow 00:14:59.265$  that I'm talking about.
- NOTE Confidence: 0.92770768
- $00:14:59.270 \longrightarrow 00:15:01.178$  We really try to match the
- NOTE Confidence: 0.92770768
- $00:15:01.178 \longrightarrow 00:15:02.450$  treatment to the patients.
- NOTE Confidence: 0.92770768
- $00{:}15{:}02{.}450 \dashrightarrow 00{:}15{:}05{.}434$  So we maximize the chance that it helps
- NOTE Confidence: 0.92770768
- $00:15:05.434 \rightarrow 00:15:08.296$  and minimizes the chance that it's harmful.
- NOTE Confidence: 0.92770768
- $00{:}15{:}08{.}300 \dashrightarrow 00{:}15{:}10{.}916$  But that's that's definitely an innovation
- NOTE Confidence: 0.92770768
- $00:15:10.916 \rightarrow 00:15:15.650$  that's that's come on more recently and.
- NOTE Confidence: 0.92770768
- $00{:}15{:}15{.}650 \dashrightarrow 00{:}15{:}17{.}799$  It all comes down to a team.
- NOTE Confidence: 0.92770768
- $00:15:17.800 \longrightarrow 00:15:19.170$  There's a saying in surgery
- NOTE Confidence: 0.92770768

 $00:15:19.170 \longrightarrow 00:15:20.540$  that when you're a hammer,

NOTE Confidence: 0.92770768

 $00{:}15{:}20{.}540 \dashrightarrow 00{:}15{:}23{.}105$  the world is a nail and that means if

NOTE Confidence: 0.92770768

00:15:23.105 --> 00:15:25.785 you've got one way of of doing things well,

NOTE Confidence: 0.92770768

 $00:15:25.790 \longrightarrow 00:15:26.666$  it's like magic.

NOTE Confidence: 0.92770768

00:15:26.666 - 00:15:29.080 That way is the right way every time,

NOTE Confidence: 0.92770768

 $00{:}15{:}29{.}080 \dashrightarrow 00{:}15{:}31{.}327$  but we all know that that the

NOTE Confidence: 0.92770768

 $00:15:31.327 \longrightarrow 00:15:33.270$  world is more complicated.

NOTE Confidence: 0.92770768

 $00{:}15{:}33{.}270 \dashrightarrow 00{:}15{:}34{.}510$  That and cancer is more

NOTE Confidence: 0.92770768

 $00{:}15{:}34{.}510 \dashrightarrow 00{:}15{:}35{.}254$  complicated than that,

NOTE Confidence: 0.92770768

 $00{:}15{:}35{.}260 \dashrightarrow 00{:}15{:}38{.}716$  and so we pride ourselves on being a

NOTE Confidence: 0.92770768

 $00{:}15{:}38{.}716$  -->  $00{:}15{:}42{.}065$  really big team with a lot of experts

NOTE Confidence: 0.92770768

 $00:15:42.070 \rightarrow 00:15:45.395$  so that we can really offer what?

NOTE Confidence: 0.92770768

00:15:45.400 --> 00:15:48.662 Is the best for every patient because

NOTE Confidence: 0.92770768

 $00{:}15{:}48.662 \dashrightarrow 00{:}15{:}51.042$  every patient represents a different

NOTE Confidence: 0.92770768

 $00:15:51.042 \rightarrow 00:15:53.988$  battle against cancer and they have

NOTE Confidence: 0.92770768

 $00:15:53.988 \rightarrow 00:15:56.917$  different goals and they have different.

- NOTE Confidence: 0.92770768
- $00{:}15{:}56{.}920 \dashrightarrow 00{:}15{:}59{.}872$  Histories and different medical
- NOTE Confidence: 0.92770768
- $00{:}15{:}59.872 \dashrightarrow 00{:}16{:}02.086$  strengths and limitations,
- NOTE Confidence: 0.92770768
- $00:16:02.090 \rightarrow 00:16:05.834$  and so we really try to tailor the best
- NOTE Confidence: 0.92770768
- $00:16:05.834 \rightarrow 00:16:08.965$  treatment to the patient and their tumor.
- NOTE Confidence: 0.92770768
- $00{:}16{:}08{.}970 \dashrightarrow 00{:}16{:}10{.}950$  So I think I did finish a little early.
- NOTE Confidence: 0.92770768
- $00{:}16{:}10{.}950 \dashrightarrow 00{:}16{:}11{.}898$  I hope so.
- NOTE Confidence: 0.92770768
- 00:16:11.898 --> 00:16:14.110 I'm sure you guys got all that.
- NOTE Confidence: 0.92770768
- $00{:}16{:}14{.}110 \dashrightarrow 00{:}16{:}16{.}470$  There's no opportunity to review any of that.
- NOTE Confidence: 0.92770768
- 00:16:16.470 --> 00:16:17.258 And no,
- NOTE Confidence: 0.92770768
- 00:16:17.258 --> 00:16:20.410 I'm I'm happy if I if there are
- NOTE Confidence: 0.92770768
- 00:16:20.514 --> 00:16:21.930 any questions,
- NOTE Confidence: 0.92770768
- $00{:}16{:}21{.}930 \dashrightarrow 00{:}16{:}24{.}258$  please ask me at the end.
- NOTE Confidence: 0.957769488
- 00:16:26.590 --> 00:16:27.530 Thank you so much Dan.
- NOTE Confidence: 0.957769488
- $00{:}16{:}27.530 \dashrightarrow 00{:}16{:}29.560$  That was a wonderful whirl<br/>wind
- NOTE Confidence: 0.957769488
- 00:16:29.560 --> 00:16:32.590 tour of of advances in lung cancer,
- NOTE Confidence: 0.957769488

 $00:16:32.590 \longrightarrow 00:16:35.890$  so that's fantastic, so I'll ask.

NOTE Confidence: 0.957769488

 $00{:}16{:}35{.}890 \dashrightarrow 00{:}16{:}37{.}658$  I think most if not all of our

NOTE Confidence: 0.957769488

 $00{:}16{:}37{.}658 \dashrightarrow 00{:}16{:}38{.}773$  panelists have their videos on

NOTE Confidence: 0.957769488

 $00:16:38.773 \rightarrow 00:16:40.470$  turn them on if you if you can.

NOTE Confidence: 0.957769488

 $00{:}16{:}40{.}470 \dashrightarrow 00{:}16{:}42{.}955$  So so our audience can see us,

NOTE Confidence: 0.957769488

 $00{:}16{:}42{.}960$  -->  $00{:}16{:}45{.}704$  and I think now what we're going to NOTE Confidence: 0.957769488

 $00:16:45.704 \rightarrow 00:16:48.986$  do is is spend some time to talking

NOTE Confidence: 0.957769488

 $00{:}16{:}48.986 \dashrightarrow 00{:}16{:}51.322$  about the different treatments and

NOTE Confidence: 0.957769488

 $00{:}16{:}51{.}322 \dashrightarrow 00{:}16{:}54{.}190$  modalities we have for for treating

NOTE Confidence: 0.957769488

 $00:16:54.272 \rightarrow 00:16:57.040$  lung cancer and touch on some of the.

NOTE Confidence: 0.957769488

 $00:16:57.040 \longrightarrow 00:16:58.700$  Topics that Dan brought up.

NOTE Confidence: 0.957769488

 $00{:}16{:}58{.}700 \dashrightarrow 00{:}17{:}00{.}440$  And so I'm going to open it up to the panel.

NOTE Confidence: 0.957769488

 $00{:}17{:}00{.}440 \dashrightarrow 00{:}17{:}02{.}736$  I I like every one to introduce themselves.

NOTE Confidence: 0.957769488

 $00{:}17{:}02.740 \dashrightarrow 00{:}17{:}05.272$  I'll I'll call you out, but in the meantime,

NOTE Confidence: 0.957769488

 $00:17:05.272 \longrightarrow 00:17:06.284$  while we're doing that,

NOTE Confidence: 0.957769488

 $00:17:06.290 \rightarrow 00:17:07.534$  if people have questions,

- NOTE Confidence: 0.957769488
- $00:17:07.534 \longrightarrow 00:17:09.867$  post them in the chat and I will
- NOTE Confidence: 0.957769488
- $00{:}17{:}09.867 \dashrightarrow 00{:}17{:}11.070$  try to get to every one's questions.
- NOTE Confidence: 0.957769488
- $00{:}17{:}11.070 \dashrightarrow 00{:}17{:}11.920$  We have it like I said,
- NOTE Confidence: 0.957769488
- $00:17:11.920 \longrightarrow 00:17:13.211$  we have a good amount of time
- NOTE Confidence: 0.957769488
- $00{:}17{:}13.211 \dashrightarrow 00{:}17{:}14.596$  to have a nice discussion,
- NOTE Confidence: 0.957769488
- $00{:}17{:}14.600 \dashrightarrow 00{:}17{:}15.872$  so so let's.
- NOTE Confidence: 0.957769488
- $00{:}17{:}15.872 \dashrightarrow 00{:}17{:}17.992$  Let's have the panelists introduce
- NOTE Confidence: 0.957769488
- $00{:}17{:}17{.}992 \dashrightarrow 00{:}17{:}18{.}416$  themselves.
- NOTE Confidence: 0.957769488
- $00{:}17{:}18{.}420 \dashrightarrow 00{:}17{:}21{.}282$  We've tried to have good representation
- NOTE Confidence: 0.957769488
- 00:17:21.282 --> 00:17:23.190 from various teams throughout
- NOTE Confidence: 0.957769488
- $00{:}17{:}23.268 \dashrightarrow 00{:}17{:}25.800$  our our network at various sites
- NOTE Confidence: 0.957769488
- $00{:}17{:}25{.}800 \dashrightarrow 00{:}17{:}27{.}770$  in different specialties and so.
- NOTE Confidence: 0.957769488
- $00:17:27.770 \dashrightarrow 00:17:30.946$  Let's let's hear tell us for our panelists.
- NOTE Confidence: 0.957769488
- 00:17:30.950 --> 00:17:32.090 Tell everybody who you are,
- NOTE Confidence: 0.957769488
- $00:17:32.090 \rightarrow 00:17:34.538$  what you do and where you work really hurts.
- NOTE Confidence: 0.957769488

 $00:17:34.540 \rightarrow 00:17:35.380$  Would you like to start?

NOTE Confidence: 0.800787375714286

00:17:35.650 --> 00:17:36.310 Yeah, thanks Sarah.

NOTE Confidence: 0.800787375714286

 $00{:}17{:}36{.}310 \dashrightarrow 00{:}17{:}38{.}614$  Great to be here. So I'm Roy Herbst,

NOTE Confidence: 0.800787375714286

00:17:38.614 --> 00:17:40.750 I'm the chief of medical oncology

NOTE Confidence: 0.800787375714286

 $00{:}17{:}40.822 \dashrightarrow 00{:}17{:}43.204$  here at Yale and Smile and the

NOTE Confidence: 0.800787375714286

00:17:43.204 --> 00:17:44.952 associate director for Translational

NOTE Confidence: 0.800787375714286

 $00{:}17{:}44.952 \dashrightarrow 00{:}17{:}47.230$  research at the Cancer Center,

NOTE Confidence: 0.800787375714286

 $00{:}17{:}47.230 \dashrightarrow 00{:}17{:}48.664$  and I guess most appropriate for

NOTE Confidence: 0.800787375714286

00:17:48.664 --> 00:17:50.473 night is I'm the rector of the

NOTE Confidence: 0.800787375714286

 $00:17:50.473 \rightarrow 00:17:52.081$  Spencer with the Rasic cancers and

NOTE Confidence: 0.800787375714286

 $00:17:52.081 \longrightarrow 00:17:53.616$  really happy to be here to night.

NOTE Confidence: 0.795047605

 $00:17:55.470 \longrightarrow 00:17:56.301$  Great thanks Eric.

NOTE Confidence: 0.795047605

00:17:56.301 - 00:17:57.686 Great to have you here.

NOTE Confidence: 0.795047605

 $00{:}17{:}57.690 \dashrightarrow 00{:}17{:}58.672$  Jennifer possick.

NOTE Confidence: 0.795047605

 $00:17:58.672 \rightarrow 00:18:00.636$  Tell us about yourself.

NOTE Confidence: 0.7246933916666667

00:18:01.720 --> 00:18:03.452 Hi, I'm Jennifer possick.

- NOTE Confidence: 0.7246933916666667
- $00{:}18{:}03{.}452 \dashrightarrow 00{:}18{:}06{.}789$  I'm a pulmonologist and the director
- NOTE Confidence: 0.7246933916666667
- 00:18:06.789 --> 00:18:08.858 of the Winchester Center for Lung
- NOTE Confidence: 0.7246933916666667
- $00{:}18{:}08{.}860 \dashrightarrow 00{:}18{:}11{.}527$  Disease and I practice out at North
- NOTE Confidence: 0.7246933916666667
- $00{:}18{:}11.527 \dashrightarrow 00{:}18{:}14.368$  Haven both as part of the Thoracic
- NOTE Confidence: 0.7246933916666667
- $00{:}18{:}14.368 \dashrightarrow 00{:}18{:}16.792$  on cology program and as part of
- NOTE Confidence: 0.7246933916666667
- 00:18:16.800 --> 00:18:18.768 the Winchester Pulmonary Clinic.
- NOTE Confidence: 0.850178295555555
- 00:18:20.240 --> 00:18:22.805 Great, it's great to have you on the panel.
- NOTE Confidence: 0.850178295555555
- 00:18:22.810 --> 00:18:23.848 Holly Robinson, you're going to be
- NOTE Confidence: 0.850178295555555
- $00:18:23.848 \longrightarrow 00:18:25.049$  talking to us in a few minutes,
- NOTE Confidence: 0.85017829555555
- $00:18:25.050 \longrightarrow 00:18:27.234$  but let's introduce you to the
- NOTE Confidence: 0.850178295555555
- $00:18:27.234 \rightarrow 00:18:29.458$  to the group. Go ahead everyone.
- NOTE Confidence: 0.835174913076923
- 00:18:29.570 --> 00:18:30.488 I'm Holly Robinson.
- NOTE Confidence: 0.835174913076923
- 00:18:30.488 --> 00:18:32.018 I'm the clinical social worker
- NOTE Confidence: 0.835174913076923
- $00{:}18{:}32.018 \dashrightarrow 00{:}18{:}33.880$  with the thoracic oncology team.
- NOTE Confidence: 0.835174913076923
- $00{:}18{:}33{.}880 \dashrightarrow 00{:}18{:}36{.}099$  I work with both medical oncology and
- NOTE Confidence: 0.835174913076923

 $00:18:36.099 \rightarrow 00:18:38.270$  surgery in the outpatient setting.

NOTE Confidence: 0.835174913076923

00:18:38.270 --> 00:18:40.601 Arpal Menology team any of our patients

NOTE Confidence: 0.835174913076923

 $00:18:40.601 \rightarrow 00:18:42.720$  that come through thoracic oncology?

NOTE Confidence: 0.890460565

 $00:18:45.720 \longrightarrow 00:18:46.490$  Jennifer Pope

NOTE Confidence: 0.5999736

00:18:48.890 --> 00:18:50.810 hi, my name is Jennifer Pope.

NOTE Confidence: 0.877239629

 $00{:}18{:}50{.}810 \dashrightarrow 00{:}18{:}53{.}642$  I'm the clinical trials team manager

NOTE Confidence: 0.877239629

 $00:18:53.642 \longrightarrow 00:18:56.650$  for the thoracic oncology group,

NOTE Confidence: 0.877239629

 $00:18:56.650 \longrightarrow 00:18:58.484$  so I work for the Cancer Center.

NOTE Confidence: 0.877239629

00:18:58.490 --> 00:19:00.340 In the Clinical Trials Office

NOTE Confidence: 0.877239629

 $00:19:00.340 \longrightarrow 00:19:02.190$  with a group of individuals

NOTE Confidence: 0.877239629

 $00{:}19{:}02.257 \dashrightarrow 00{:}19{:}04.009$  who helped facilitate that.

NOTE Confidence: 0.877239629

 $00:19:04.010 \longrightarrow 00:19:05.702$  All of the clinical trials in

NOTE Confidence: 0.877239629

 $00:19:05.702 \rightarrow 00:19:06.860$  the thoracic oncology group.

NOTE Confidence: 0.880547648333333

00:19:08.460 --> 00:19:11.160 Great, thank you. And Mike Connor.

NOTE Confidence: 0.6141560975

 $00:19:12.690 \longrightarrow 00:19:14.726$  I'm by telling your ram one

NOTE Confidence: 0.6141560975

 $00:19:14.726 \longrightarrow 00:19:16.300$  of the medical oncologists

- NOTE Confidence: 0.80323891125
- $00:19:16.310 \longrightarrow 00:19:17.845$  stand in the Trumbull and
- NOTE Confidence: 0.80323891125
- $00:19:17.845 \longrightarrow 00:19:18.766$  Fairfield Care centers.
- NOTE Confidence: 0.765959366
- $00{:}19{:}19{.}130 \dashrightarrow 00{:}19{:}23.840$  Come and I have a special interest and focus
- NOTE Confidence: 0.8512420666666667
- $00:19:23.850 \rightarrow 00:19:27.080$  on thoracic malignancies and feel
- NOTE Confidence: 0.876985
- $00{:}19{:}27{.}090 \dashrightarrow 00{:}19{:}29{.}140$  very lucky to be able to lean on
- NOTE Confidence: 0.876985
- $00{:}19{:}29{.}140 \dashrightarrow 00{:}19{:}31{.}009$ Sarah and Doctor Herbst and Doctor
- NOTE Confidence: 0.876985
- 00:19:31.009 --> 00:19:32.574 Dettinger and Doctor Boffa whenever
- NOTE Confidence: 0.76643831
- $00{:}19{:}32{.}590 \dashrightarrow 00{:}19{:}33{.}340$  I have questions.
- NOTE Confidence: 0.93978537
- $00:19:35.900 \rightarrow 00:19:36.580$  And Henry.
- NOTE Confidence: 0.86405298
- 00:19:39.080 --> 00:19:40.480 Hi everybody, I'm Henry park. I'm a
- NOTE Confidence: 0.729287823
- $00{:}19{:}40{.}490 \dashrightarrow 00{:}19{:}42{.}450$  radiation on cologist and then the
- NOTE Confidence: 0.729287823
- $00{:}19{:}42{.}450 \dashrightarrow 00{:}19{:}44{.}410$  chief of thoracic radius dumb.
- NOTE Confidence: 0.729287823
- $00{:}19{:}44{.}410 \dashrightarrow 00{:}19{:}46{.}480$  I'm sorry, sorry I'm the
- NOTE Confidence: 0.729287823
- $00{:}19{:}46{.}480 \dashrightarrow 00{:}19{:}47{.}320$  chief of tho racic radiation.
- NOTE Confidence: 0.729287823
- $00{:}19{:}47{.}320 \dashrightarrow 00{:}19{:}50{.}195$  IO at Yale and I I work out of New
- NOTE Confidence: 0.729287823

00:19:50.195 --> 00:19:51.893 Haven and in Waterford as well.

NOTE Confidence: 0.827835351428572

00:19:52.970 --> 00:19:55.934 And we had an do explaining

NOTE Confidence: 0.827835351428572

 $00{:}19{:}55{.}934 \dashrightarrow 00{:}19{:}57{.}060$  radiation. Excellence.

NOTE Confidence: 0.891143158461538

 $00:19:59.170 \longrightarrow 00:20:00.170$  Great, OK, so wonderful.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}00{.}170 \dashrightarrow 00{:}20{:}02{.}569$  So thank you again to all of our panelists.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}02{.}570 \dashrightarrow 00{:}20{:}04.706$  It's a it's always fun to get together.

NOTE Confidence: 0.891143158461538

00:20:04.710 --> 00:20:06.762 It's too bad we couldn't all be in person,

NOTE Confidence: 0.891143158461538

 $00:20:06.770 \longrightarrow 00:20:08.778$  but it's it's wonderful to see you all.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}08.780 \dashrightarrow 00{:}20{:}10.444$  Thanks again for joining.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}10.444 \dashrightarrow 00{:}20{:}12.940$  So we have some great questions

NOTE Confidence: 0.891143158461538

 $00{:}20{:}13.013 \dashrightarrow 00{:}20{:}14.981$  in the chat and let's get

NOTE Confidence: 0.891143158461538

 $00{:}20{:}14.981 \dashrightarrow 00{:}20{:}17.200$  started on on the first one.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}17{.}200 \dashrightarrow 00{:}20{:}18{.}370$  So let's see.

NOTE Confidence: 0.891143158461538

00:20:18.370 --> 00:20:20.290 I'm Jennifer Possick Dr plastic.

NOTE Confidence: 0.891143158461538

 $00{:}20{:}20{.}290 \dashrightarrow 00{:}20{:}21{.}984$  I'm going to ask you this question

NOTE Confidence: 0.891143158461538

 $00:20:21.984 \rightarrow 00:20:24.430$  first so John Anderson is asking.

00:20:24.430 --> 00:20:26.146 He says his lung cancer showed

NOTE Confidence: 0.891143158461538

 $00:20:26.146 \longrightarrow 00:20:28.010$  up 39 years after he stopped.

NOTE Confidence: 0.891143158461538

00:20:28.010 --> 00:20:29.786 I assume he means stop smoking.

NOTE Confidence: 0.891143158461538

 $00:20:29.790 \rightarrow 00:20:31.610$  Is there a relationship there?

NOTE Confidence: 0.923443758

 $00:20:33.020 \longrightarrow 00:20:35.936$  So I think one of the things that highlights

NOTE Confidence: 0.923443758

 $00:20:35.936 \longrightarrow 00:20:38.477$  is that all cancers are different.

NOTE Confidence: 0.923443758

 $00{:}20{:}38{.}480 \dashrightarrow 00{:}20{:}42{.}544$  You know, we, we know from screening and

NOTE Confidence: 0.923443758

 $00:20:42.544 \rightarrow 00:20:46.054$  also just from observing the clinical path

NOTE Confidence: 0.923443758

 $00{:}20{:}46.054 \dashrightarrow 00{:}20{:}48.310$  that our patients go on that you know,

NOTE Confidence: 0.923443758

 $00{:}20{:}48.310 \dashrightarrow 00{:}20{:}51.026$  some cancers grow quickly, others grow slow.

NOTE Confidence: 0.923443758

 $00{:}20{:}51{.}030 \dashrightarrow 00{:}20{:}53{.}795$  We also know that those cigarette smoking

NOTE Confidence: 0.923443758

 $00{:}20{:}53.795 \dashrightarrow 00{:}20{:}56.959$  is of course the exposure and risk factor

NOTE Confidence: 0.923443758

 $00:20:56.959 \rightarrow 00:21:00.039$  for lung cancer that is most prominent,

NOTE Confidence: 0.923443758

 $00:21:00.040 \longrightarrow 00:21:01.725$  most common in that we're

NOTE Confidence: 0.923443758

00:21:01.725 --> 00:21:02.736 most concerned about.

 $00:21:02.740 \longrightarrow 00:21:04.510$  There are many other reasons.

NOTE Confidence: 0.923443758

00:21:04.510 -> 00:21:06.250 White people develop lung cancer.

NOTE Confidence: 0.923443758

 $00{:}21{:}06{.}250 \dashrightarrow 00{:}21{:}08{.}098$  There are other exposure risk factors

NOTE Confidence: 0.923443758

 $00:21:08.098 \rightarrow 00:21:10.110$  and there are plenty of people for

NOTE Confidence: 0.923443758

00:21:10.110 --> 00:21:12.102 whom we never identify at risk,

NOTE Confidence: 0.923443758

00:21:12.102 --> 00:21:14.646 and I think as Dan highlighted,

NOTE Confidence: 0.923443758

 $00{:}21{:}14.650 \dashrightarrow 00{:}21{:}16.793$  you know there are there are many

NOTE Confidence: 0.923443758

 $00{:}21{:}16.793 \dashrightarrow 00{:}21{:}18.491$  patients who develop lung cancer who

NOTE Confidence: 0.923443758

00:21:18.491 $\operatorname{-->}$ 00:21:20.313 aren't smokers and who don't have

NOTE Confidence: 0.923443758

 $00:21:20.313 \rightarrow 00:21:21.764$  significant second hand smoke exposure.

NOTE Confidence: 0.923443758

 $00{:}21{:}21{.}764 \dashrightarrow 00{:}21{:}24.802$  So similarly there are people who can

NOTE Confidence: 0.923443758

00:21:24.802 --> 00:21:27.509 have personal histories of smoking that's

NOTE Confidence: 0.923443758

 $00{:}21{:}27{.}509 \dashrightarrow 00{:}21{:}30{.}155$  fairly limited or fairly long ago,

NOTE Confidence: 0.923443758

 $00:21:30.160 \longrightarrow 00:21:34.640$  but do do still go on to develop.

NOTE Confidence: 0.923443758

 $00{:}21{:}34.640 \dashrightarrow 00{:}21{:}37.832$  Develop cancers that we treat you know.

NOTE Confidence: 0.923443758

00:21:37.832 --> 00:21:38.614 Of course,

- NOTE Confidence: 0.923443758
- $00:21:38.614 \rightarrow 00:21:40.960$  the guidelines for screening are developed

 $00{:}21{:}41.024 \dashrightarrow 00{:}21{:}43.298$  around trying to set parameters that

NOTE Confidence: 0.923443758

 $00:21:43.298 \rightarrow 00:21:45.460$  catch the majority of people right,

NOTE Confidence: 0.923443758

00:21:45.460 - 00:21:47.335 and they're driven by experience

NOTE Confidence: 0.923443758

00:21:47.335 --> 00:21:48.835 and large clinical trials,

NOTE Confidence: 0.923443758

00:21:48.840 --> 00:21:50.530 but they won't catch everything,

NOTE Confidence: 0.923443758

 $00:21:50.530 \longrightarrow 00:21:53.714$  and so we have to be vigilant to pick

NOTE Confidence: 0.923443758

 $00:21:53.714 \rightarrow 00:21:55.690$  those up in other ways other than just.

NOTE Confidence: 0.897369403333333

 $00{:}21{:}58{.}520 \dashrightarrow 00{:}22{:}01{.}985$  Great, thank you. We see that a lot

NOTE Confidence: 0.897369403333333

00:22:01.985 - 00:22:03.660 where people smoked a long time ago,

NOTE Confidence: 0.897369403333333

 $00:22:03.660 \rightarrow 00:22:06.692$  and it's always a question if it's related

NOTE Confidence: 0.897369403333333

 $00:22:06.692 \rightarrow 00:22:10.218$  or if it's just sometimes happens right?

NOTE Confidence: 0.897369403333333

 $00{:}22{:}10{.}220 \dashrightarrow 00{:}22{:}12{.}390$  OK, a mazing questions and great

NOTE Confidence: 0.897369403333333

 $00{:}22{:}12{.}390 \dashrightarrow 00{:}22{:}15{.}190$  great group here who are really,

NOTE Confidence: 0.897369403333333

 $00:22:15.190 \rightarrow 00:22:18.100$  really engaged, which is wonderful.

00:22:18.100 --> 00:22:20.508 So Roy, I'm going to ask you this

NOTE Confidence: 0.897369403333333

 $00{:}22{:}20.508 \dashrightarrow 00{:}22{:}22.665$  question so Peter Dubner is asking how

NOTE Confidence: 0.897369403333333

 $00{:}22{:}22{.}665 \dashrightarrow 00{:}22{:}25{.}708$  common today is the use of some form of

NOTE Confidence: 0.897369403333333

 $00:22:25.708 \rightarrow 00:22:27.838$  chemotherapy for early stage lung cancer.

NOTE Confidence: 0.897369403333333

00:22:27.840 --> 00:22:30.270 In addition to surgery and SBRT,

NOTE Confidence: 0.897369403333333

 $00:22:30.270 \longrightarrow 00:22:31.414$  he's asking specifically for

NOTE Confidence: 0.897369403333333

 $00:22:31.414 \longrightarrow 00:22:32.558$  the percent of cases.

NOTE Confidence: 0.897369403333333

 $00:22:32.560 \longrightarrow 00:22:33.838$  If you can give a percent.

NOTE Confidence: 0.924067857368421

00:22:35.310 - > 00:22:37.464 Well, you know the the reason

NOTE Confidence: 0.924067857368421

 $00:22:37.464 \rightarrow 00:22:39.594$  why we're making progress in lung

NOTE Confidence: 0.924067857368421

 $00:22:39.594 \longrightarrow 00:22:41.778$  cancer and we are still not enough,

NOTE Confidence: 0.924067857368421

 $00:22:41.780 \longrightarrow 00:22:43.928$  but we're continuing to raise bars

NOTE Confidence: 0.924067857368421

00:22:43.928 --> 00:22:46.850 because we work in a multi modality way.

NOTE Confidence: 0.924067857368421

 $00:22:46.850 \longrightarrow 00:22:48.938$  So if we have a lung cancer and

NOTE Confidence: 0.924067857368421

 $00:22:48.938 \longrightarrow 00:22:51.305$  even if it's early and even if you

NOTE Confidence: 0.924067857368421

00:22:51.305 -> 00:22:53.500 can be treated by Dan expertly as

- NOTE Confidence: 0.924067857368421
- 00:22:53.500 -> 00:22:55.705 you heard or by Henry with with
- NOTE Confidence: 0.924067857368421
- 00:22:55.710 --> 00:22:57.930 surgery and or Henry with radiation,
- NOTE Confidence: 0.924067857368421
- $00:22:57.930 \longrightarrow 00:22:59.982$  we still worry that the cancer
- NOTE Confidence: 0.924067857368421
- $00{:}22{:}59{.}982 \dashrightarrow 00{:}23{:}01{.}350$  can spread or metastasize.
- NOTE Confidence: 0.924067857368421
- $00:23:01.350 \longrightarrow 00:23:03.990$  And that's why we use chemotherapy.
- NOTE Confidence: 0.924067857368421
- $00:23:03.990 \longrightarrow 00:23:04.842$  So chemotherapy.
- NOTE Confidence: 0.924067857368421
- 00:23:04.842 --> 00:23:07.824 Definitely is a big part of our
- NOTE Confidence: 0.924067857368421
- $00:23:07.824 \rightarrow 00:23:10.320$  treatment plan and in early lung cancer
- NOTE Confidence: 0.924067857368421
- $00{:}23{:}10{.}320 \dashrightarrow 00{:}23{:}12{.}310$  would depend on the stage that's
- NOTE Confidence: 0.924067857368421
- $00{:}23{:}12{.}310 \dashrightarrow 00{:}23{:}14{.}630$  dependent on the size of the tumor and
- NOTE Confidence: 0.924067857368421
- $00:23:14.630 \longrightarrow 00:23:16.780$  whether or not there are any lymph nodes.
- NOTE Confidence: 0.924067857368421
- $00{:}23{:}16.780 \dashrightarrow 00{:}23{:}18.852$  But in a large number of early lung
- NOTE Confidence: 0.924067857368421
- $00:23:18.852 \rightarrow 00:23:20.807$  cancers we are recommending chemotherapy
- NOTE Confidence: 0.924067857368421
- 00:23:20.807 --> 00:23:23.092 has been demonstrated through large
- NOTE Confidence: 0.924067857368421
- $00:23:23.092 \rightarrow 00:23:25.198$  clinical trials to improve survival.
- NOTE Confidence: 0.924067857368421

 $00:23:25.200 \rightarrow 00:23:26.766$  The thing that's even more exciting

NOTE Confidence: 0.924067857368421

 $00{:}23{:}26.766 \dashrightarrow 00{:}23{:}29.205$  is that now we know that some of

NOTE Confidence: 0.924067857368421

 $00{:}23{:}29{.}205 \dashrightarrow 00{:}23{:}30{.}875$  these new targeted the rapies and

NOTE Confidence: 0.924067857368421

 $00:23:30.875 \rightarrow 00:23:32.630$  immunotherapy that doctor told us about.

NOTE Confidence: 0.924067857368421

 $00:23:32.630 \rightarrow 00:23:35.150$  We now know that why wait with those until?

NOTE Confidence: 0.924067857368421

 $00{:}23{:}35{.}150 \dashrightarrow 00{:}23{:}36{.}642$  The cancer has spread.

NOTE Confidence: 0.924067857368421

 $00{:}23{:}36{.}642 \dashrightarrow 00{:}23{:}39{.}614$  We now have opportunities and a lot of

NOTE Confidence: 0.924067857368421

 $00{:}23{:}39{.}614 \dashrightarrow 00{:}23{:}41{.}931$  that's come out of science from this

NOTE Confidence: 0.924067857368421

00:23:41.931 - 00:23:45.350 team to give an oral drug a targeted

NOTE Confidence: 0.924067857368421

 $00:23:45.350 \rightarrow 00:23:48.240$  therapy after surgery in specific patients.

NOTE Confidence: 0.924067857368421

 $00:23:48.240 \longrightarrow 00:23:49.750$  If they have the right.

NOTE Confidence: 0.924067857368421

 $00:23:49.750 \longrightarrow 00:23:51.015$  You know genetics in their

NOTE Confidence: 0.924067857368421

 $00{:}23{:}51.015 \dashrightarrow 00{:}23{:}52.630$  tumor is Dan was talking about.

NOTE Confidence: 0.924067857368421

 $00{:}23{:}52{.}630 \dashrightarrow 00{:}23{:}54{.}766$  Or we could even use immuno therapy.

NOTE Confidence: 0.924067857368421

 $00:23:54.770 \longrightarrow 00:23:57.266$  So it is important to do what's called

NOTE Confidence: 0.924067857368421

 $00:23:57.266 \rightarrow 00:23:59.448$  agement therapy in the right circumstance.

 $00:23:59.450 \longrightarrow 00:24:01.004$  And that's why when you come to

NOTE Confidence: 0.924067857368421

 $00{:}24{:}01{.}004 \dashrightarrow 00{:}24{:}02{.}492$  see us will discuss will discuss

NOTE Confidence: 0.924067857368421

 $00{:}24{:}02{.}492 \dashrightarrow 00{:}24{:}04{.}270$  it on a call just like this.

NOTE Confidence: 0.924067857368421

 $00:24:04.270 \longrightarrow 00:24:05.520$  We call it tumor board.

NOTE Confidence: 0.924067857368421

 $00{:}24{:}05{.}520 \dashrightarrow 00{:}24{:}07{.}725$  And will make the best decision to

NOTE Confidence: 0.924067857368421

 $00{:}24{:}07{.}725 \dashrightarrow 00{:}24{:}09{.}869$  best inform and improve your care.

NOTE Confidence: 0.7481912

 $00:24:12.170 \longrightarrow 00:24:14.610$  Great, thank you.

NOTE Confidence: 0.928235228571428

 $00:24:14.610 \longrightarrow 00:24:16.710$  So there's a couple of questions about,

NOTE Confidence: 0.928235228571428

 $00{:}24{:}16.710 \dashrightarrow 00{:}24{:}20.830$  UM, about different risk factors for

NOTE Confidence: 0.928235228571428

 $00{:}24{:}20{.}830 \dashrightarrow 00{:}24{:}22{.}940$  cancer and one one person in particular.

NOTE Confidence: 0.928235228571428

00:24:22.940 --> 00:24:24.775 Mary Winchell is asking about

NOTE Confidence: 0.928235228571428

 $00{:}24{:}24{.}775 \dashrightarrow 00{:}24{:}26{.}610$  carcinoid tumors and and and

NOTE Confidence: 0.928235228571428

 $00{:}24{:}26.677 \dashrightarrow 00{:}24{:}28.637$  and different and risk factors.

NOTE Confidence: 0.928235228571428

 $00{:}24{:}28.640 \dashrightarrow 00{:}24{:}30.005$  Specifically asking about burning in

NOTE Confidence: 0.928235228571428

 $00{:}24{:}30.005 \dashrightarrow 00{:}24{:}32.290$  a wood stove. But this is a common.

 $00:24:32.290 \rightarrow 00:24:33.674$  This is a common issue that comes up,

NOTE Confidence: 0.928235228571428

 $00{:}24{:}33{.}680$  -->  $00{:}24{:}35{.}842$  you know, we know about smoking, but what?

NOTE Confidence: 0.928235228571428

 $00:24:35.842 \longrightarrow 00:24:37.310$  What are other risk factors

NOTE Confidence: 0.928235228571428

 $00:24:37.310 \longrightarrow 00:24:38.785$  for lung cancer or carcinoid?

NOTE Confidence: 0.928235228571428

 $00{:}24{:}38{.}790 \dashrightarrow 00{:}24{:}39{.}738$  And do you want to do?

NOTE Confidence: 0.928235228571428

 $00{:}24{:}39{.}740 \dashrightarrow 00{:}24{:}40{.}640$  You want to take that?

NOTE Confidence: 0.928235228571428

 $00{:}24{:}41{.}470 \dashrightarrow 00{:}24{:}44{.}660$  Sure, so.

NOTE Confidence: 0.907980992352941

 $00{:}24{:}44{.}660 \dashrightarrow 00{:}24{:}46{.}599$  There we know that one out

NOTE Confidence: 0.907980992352941

 $00{:}24{:}46{.}599 \dashrightarrow 00{:}24{:}48{.}326$  of seven lung cancers happens

NOTE Confidence: 0.907980992352941

 $00:24:48.326 \longrightarrow 00:24:50.396$  in somebody who never smoked.

NOTE Confidence: 0.907980992352941

 $00{:}24{:}50{.}400 \dashrightarrow 00{:}24{:}53{.}935$  So there there is certainly a genetic

NOTE Confidence: 0.907980992352941

 $00{:}24{:}53{.}935 \dashrightarrow 00{:}24{:}57{.}487$  component and and I talked about cancers

NOTE Confidence: 0.907980992352941

 $00{:}24{:}57{.}487 \dashrightarrow 00{:}25{:}00{.}881$  and books of directions and so that

NOTE Confidence: 0.907980992352941

 $00:25:00.881 \rightarrow 00:25:04.178$  can affect when a cancer that error,

NOTE Confidence: 0.907980992352941

 $00:25:04.180 \longrightarrow 00:25:08.408$  that happens when one cell becomes 2.

NOTE Confidence: 0.907980992352941

 $00:25:08.410 \rightarrow 00:25:10.530$  Can actually trigger the cancer.

- NOTE Confidence: 0.907980992352941
- $00{:}25{:}10.530 \dashrightarrow 00{:}25{:}14.877$  Also those errors can come about because
- NOTE Confidence: 0.907980992352941
- 00:25:14.880 --> 00:25:17.284 chemicals or exposures radiation,
- NOTE Confidence: 0.907980992352941
- $00:25:17.284 \rightarrow 00:25:20.289$  not the kind Henry gives,
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}20{.}290 \dashrightarrow 00{:}25{:}23{.}026$  but from the sun or from other sources
- NOTE Confidence: 0.907980992352941
- $00:25:23.026 \rightarrow 00:25:25.612$  they can damage the book of directions
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}25{.}612 \dashrightarrow 00{:}25{:}28{.}676$  and so if it damages it in a way
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}28.676 \dashrightarrow 00{:}25{:}30.832$  that it makes a mistake that causes
- NOTE Confidence: 0.907980992352941
- $00:25:30.832 \rightarrow 00:25:33.646$  the cell to lose control of itself,
- NOTE Confidence: 0.907980992352941
- $00:25:33.650 \rightarrow 00:25:36.442$  then then a cancer can develop and so
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}36{.}442 \dashrightarrow 00{:}25{:}39{.}370$  there are a number of things that that.
- NOTE Confidence: 0.907980992352941
- $00:25:39.370 \rightarrow 00:25:41.134$  They're called carcinogens and
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}41{.}134 \dashrightarrow 00{:}25{:}43{.}339$  exposures that increase the risk
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}43{.}339 \dashrightarrow 00{:}25{:}45{.}520$  of these mistakes happening.
- NOTE Confidence: 0.907980992352941
- $00{:}25{:}45{.}520 \dashrightarrow 00{:}25{:}49{.}579$  Radon is one that we hear a lot about.
- NOTE Confidence: 0.907980992352941
- $00:25:49.580 \longrightarrow 00:25:52.128$  Arsenic actually is one,
- NOTE Confidence: 0.907980992352941

 $00:25:52.128 \rightarrow 00:25:55.950$  but there are family histories where

NOTE Confidence: 0.907980992352941

 $00:25:55.950 \rightarrow 00:25:58.950$  either they you you start with a book

NOTE Confidence: 0.907980992352941

 $00{:}25{:}58{.}950 \dashrightarrow 00{:}26{:}01{.}618$  of directions that's kind of primed for

NOTE Confidence: 0.907980992352941

 $00:26:01.618 \rightarrow 00:26:04.562$  a mistake to happen or your your every

NOTE Confidence: 0.907980992352941

 $00{:}26{:}04.562 \dashrightarrow 00{:}26{:}07.530$  cell has an ability to correct mistakes.

NOTE Confidence: 0.907980992352941

 $00:26:07.530 \longrightarrow 00:26:09.498$  Kind of a proof reading.

NOTE Confidence: 0.907980992352941

 $00{:}26{:}09{.}498 \dashrightarrow 00{:}26{:}13{.}103$  Mechanism there are families that that have

NOTE Confidence: 0.907980992352941

 $00:26:13.103 \rightarrow 00:26:15.948$  faulty or less effective proofreading,

NOTE Confidence: 0.907980992352941

 $00:26:15.950 \rightarrow 00:26:17.504$  and so they just make more mistakes.

NOTE Confidence: 0.907980992352941

 $00{:}26{:}17.510 \dashrightarrow 00{:}26{:}22.816$  So I think John had asked about.

NOTE Confidence: 0.907980992352941

 $00{:}26{:}22.820 \dashrightarrow 00{:}26{:}25.010$  About skin cancer and so this

NOTE Confidence: 0.907980992352941

 $00{:}26{:}25.010 \dashrightarrow 00{:}26{:}27.241$  is what's shocking is that the

NOTE Confidence: 0.907980992352941

 $00:26:27.241 \longrightarrow 00:26:29.691$  number of mistakes in the body is

NOTE Confidence: 0.907980992352941

00:26:29.691 --> 00:26:31.979 really good at protecting itself.

NOTE Confidence: 0.907980992352941

 $00:26:31.980 \longrightarrow 00:26:33.450$  So it's not just one mistake.

NOTE Confidence: 0.907980992352941

 $00:26:33.450 \longrightarrow 00:26:35.934$  Usually usually have a bunch of

- NOTE Confidence: 0.907980992352941
- $00:26:35.934 \rightarrow 00:26:39.055$  changes in your book of directions or
- NOTE Confidence: 0.907980992352941
- 00:26:39.055 --> 00:26:41.815 your DNA before it cancer develops,
- NOTE Confidence: 0.907980992352941
- $00:26:41.820 \longrightarrow 00:26:44.492$  and you can tolerate a whole bunch of
- NOTE Confidence: 0.907980992352941
- $00:26:44.492 \rightarrow 00:26:47.378$  these before it actually turns into a cancer.
- NOTE Confidence: 0.907980992352941
- 00:26:47.380 --> 00:26:49.942 But what's shocking is in order for
- NOTE Confidence: 0.907980992352941
- $00:26:49.942 \longrightarrow 00:26:52.726$  one cell to become a cancer, actually.
- NOTE Confidence: 0.907980992352941
- $00{:}26{:}52{.}726 \dashrightarrow 00{:}26{:}54{.}862$  All of those mistakes probably have
- NOTE Confidence: 0.907980992352941
- $00:26:54.862 \rightarrow 00:26:56.470$  happened in millions of cells.
- NOTE Confidence: 0.907980992352941
- $00:26:56.470 \longrightarrow 00:26:58.852$  It's actually a miracle that people
- NOTE Confidence: 0.907980992352941
- $00:26:58.852 \rightarrow 00:27:01.349$  don't get hundreds of cancers and,
- NOTE Confidence: 0.907980992352941
- $00:27:01.350 \rightarrow 00:27:02.870$  and you probably cancers probably
- NOTE Confidence: 0.907980992352941
- $00:27:02.870 \longrightarrow 00:27:05.088$  develop all the time in your body
- NOTE Confidence: 0.907980992352941
- $00{:}27{:}05{.}088 \dashrightarrow 00{:}27{:}06{.}048$  does eliminate them.
- NOTE Confidence: 0.907980992352941
- $00{:}27{:}06.050 \dashrightarrow 00{:}27{:}10.554$  So it turns out that about 25% of people
- NOTE Confidence: 0.907980992352941
- $00:27:10.554 \rightarrow 00:27:13.062$  that have lung cancer have already
- NOTE Confidence: 0.907980992352941

 $00:27:13.062 \rightarrow 00:27:15.438$  had another cancer in their lifetime,

NOTE Confidence: 0.907980992352941

 $00{:}27{:}15{.}440 \dashrightarrow 00{:}27{:}19{.}265$  and there is a real risk of a subsequent

NOTE Confidence: 0.907980992352941

00:27:19.265 --> 00:27:20.814 cancer after having lung cancer.

NOTE Confidence: 0.907980992352941

 $00:27:20.814 \rightarrow 00:27:22.854$  And so the more the more things

NOTE Confidence: 0.907980992352941

 $00{:}27{:}22.854 \dashrightarrow 00{:}27{:}23.739$  we can screen.

NOTE Confidence: 0.907980992352941

 $00:27:23.740 \longrightarrow 00:27:26.125$  For the more diligent you

NOTE Confidence: 0.907980992352941

 $00:27:26.125 \longrightarrow 00:27:28.510$  are about looking for things.

NOTE Confidence: 0.907980992352941

 $00:27:28.510 \rightarrow 00:27:31.422$  The more likely you are to find something

NOTE Confidence: 0.907980992352941

 $00{:}27{:}31{.}422 \dashrightarrow 00{:}27{:}34{.}307$  that is in a in a curable stage now,

NOTE Confidence: 0.907980992352941

 $00:27:34.310 \longrightarrow 00:27:35.200$  the carcinoid.

NOTE Confidence: 0.907980992352941

 $00{:}27{:}35{.}200 \dashrightarrow 00{:}27{:}37{.}870$  That's one where there really is.

NOTE Confidence: 0.907980992352941

 $00:27:37.870 \longrightarrow 00:27:40.860$  I'm not aware of Carcinoids

NOTE Confidence: 0.907980992352941

 $00:27:40.860 \longrightarrow 00:27:42.654$  linked to smoking.

NOTE Confidence: 0.907980992352941

 $00:27:42.660 \longrightarrow 00:27:44.220$  That's one that we think is.

NOTE Confidence: 0.907980992352941

 $00:27:44.220 \longrightarrow 00:27:46.252$  It's something that develops

NOTE Confidence: 0.907980992352941

 $00:27:46.252 \rightarrow 00:27:48.284$  in non smoking cancers,

- NOTE Confidence: 0.907980992352941
- $00{:}27{:}48.290 \dashrightarrow 00{:}27{:}49.910$  but it's and there was the
- NOTE Confidence: 0.907980992352941
- $00:27:49.910 \longrightarrow 00:27:51.270$  question about 39 years ago.
- NOTE Confidence: 0.907980992352941
- $00{:}27{:}51{.}270 \dashrightarrow 00{:}27{:}54{.}566$  Just so you know that that any time you
- NOTE Confidence: 0.907980992352941
- $00:27:54.566 \rightarrow 00:27:56.874$  stop smoking you make yourself live
- NOTE Confidence: 0.907980992352941
- $00{:}27{:}56{.}874 \dashrightarrow 00{:}28{:}00{.}239$  longer so the smoking is a horrible idea.
- NOTE Confidence: 0.907980992352941
- $00:28:00.240 \longrightarrow 00:28:01.460$  For a lot of reasons,
- NOTE Confidence: 0.907980992352941
- $00:28:01.460 \rightarrow 00:28:03.644$  lung cancer is one of those reasons,
- NOTE Confidence: 0.907980992352941
- $00{:}28{:}03.650 \dashrightarrow 00{:}28{:}06.212$  but the people on average smokers live
- NOTE Confidence: 0.907980992352941
- $00{:}28{:}06{.}212 \dashrightarrow 00{:}28{:}09{.}110$  about 12 years shorter than non smokers.
- NOTE Confidence: 0.907980992352941
- $00:28:09.110 \longrightarrow 00:28:10.480$  And it's not the lung.
- NOTE Confidence: 0.912422896
- 00:28:10.480 --> 00:28:11.964 Cancer is the most common way you
- NOTE Confidence: 0.912422896
- $00{:}28{:}11{.}964 \dashrightarrow 00{:}28{:}13{.}900$ get into trouble, it's emphysema.
- NOTE Confidence: 0.912422896
- $00{:}28{:}13.900 \dashrightarrow 00{:}28{:}15.850$  It's other cancers.
- NOTE Confidence: 0.912422896
- 00:28:15.850 --> 00:28:18.286 So by stopping 39 years ago you
- NOTE Confidence: 0.912422896
- 00:28:18.286 --> 00:28:20.577 you made your you have made
- NOTE Confidence: 0.912422896

00:28:20.577 --> 00:28:22.899 yourself lived longer so it wasn't

NOTE Confidence: 0.912422896

 $00{:}28{:}22{.}899 \dashrightarrow 00{:}28{:}26{.}640$  a wasted thing but the the lung

NOTE Confidence: 0.912422896

 $00:28:26.640 \rightarrow 00:28:28.980$  cancer probably developed because.

NOTE Confidence: 0.912422896

 $00{:}28{:}28{.}980 \dashrightarrow 00{:}28{:}31{.}732$  Some of the changes to the DNA happened

NOTE Confidence: 0.912422896

00:28:31.732 --> 00:28:34.549 and overtime additional changes accumulated,

NOTE Confidence: 0.912422896

 $00{:}28{:}34{.}550 \dashrightarrow 00{:}28{:}36{.}370$  and then it finally got to the

NOTE Confidence: 0.912422896

 $00:28:36.370 \rightarrow 00:28:38.075$  point that there were enough changes

NOTE Confidence: 0.912422896

00:28:38.075 --> 00:28:39.803 in the Book of Directions that

NOTE Confidence: 0.912422896

 $00:28:39.803 \longrightarrow 00:28:41.368$  a cancer cell developed.

NOTE Confidence: 0.912422896

00:28:41.370 - 00:28:43.530 That was a really short answer,

NOTE Confidence: 0.912422896

 $00:28:43.530 \longrightarrow 00:28:46.230$  very thorough.

NOTE Confidence: 0.9076731675

00:28:46.230 --> 00:28:48.758 OK Henry, I'm gonna ask you a question.

NOTE Confidence: 0.9076731675

 $00{:}28{:}48{.}760 \dashrightarrow 00{:}28{:}50{.}391$  You know. I think this this comes

NOTE Confidence: 0.9076731675

 $00:28:50.391 \longrightarrow 00:28:51.960$  up a lot and it's something

NOTE Confidence: 0.9076731675

 $00{:}28{:}51{.}960 \dashrightarrow 00{:}28{:}53{.}586$  we all discuss as a team.

NOTE Confidence: 0.9076731675

00:28:53.590 --> 00:28:57.020 How do how does a patient know

 $00:28:57.020 \longrightarrow 00:28:59.545$  whether they should be thinking

NOTE Confidence: 0.9076731675

 $00:28:59.545 \longrightarrow 00:29:01.565$  about surgery or radiation?

NOTE Confidence: 0.9076731675

 $00:29:01.570 \longrightarrow 00:29:03.730$  And does every patient with lung

NOTE Confidence: 0.9076731675

 $00{:}29{:}03.730 \dashrightarrow 00{:}29{:}06.402$  cancer need to meet with with all

NOTE Confidence: 0.9076731675

 $00:29:06.402 \longrightarrow 00:29:07.563$  different different specialties

NOTE Confidence: 0.9076731675

 $00:29:07.563 \longrightarrow 00:29:09.950$  or or is 1 sufficient?

NOTE Confidence: 0.9076731675

00:29:09.950 --> 00:29:10.790 Well, I think it really depends

NOTE Confidence: 0.810646467857143

 $00{:}29{:}10.800 \dashrightarrow 00{:}29{:}13.488$  on the stage of the patient that the

NOTE Confidence: 0.810646467857143

 $00{:}29{:}13.488 \dashrightarrow 00{:}29{:}15.587$  other countries that the patient has.

NOTE Confidence: 0.810646467857143

 $00:29:15.590 \longrightarrow 00:29:17.258$  So it's for early stage cancers

NOTE Confidence: 0.810646467857143

 $00{:}29{:}17{.}258 \dashrightarrow 00{:}29{:}19{.}370$  like we talked about a lot of times

NOTE Confidence: 0.810646467857143

 $00{:}29{:}19{.}370 \dashrightarrow 00{:}29{:}21{.}270$  surgery or SBRT are very good options,

NOTE Confidence: 0.810646467857143

 $00:29:21.270 \longrightarrow 00:29:24.285$  and for some people to have to have something

NOTE Confidence: 0.810646467857143

 $00:29:24.285 \longrightarrow 00:29:26.276$  called ablation as well, like that,

NOTE Confidence: 0.810646467857143

 $00{:}29{:}26{.}276$  -->  $00{:}29{:}28{.}012$  like like we heard from Dan earlier.

 $00:29:28.020 \longrightarrow 00:29:29.916$  I think it really depends on

NOTE Confidence: 0.810646467857143

 $00{:}29{:}29{.}916$  -->  $00{:}29{:}31.650$  your overall your overall health

NOTE Confidence: 0.810646467857143

 $00:29:31.650 \longrightarrow 00:29:33.286$  or other medical conditions.

NOTE Confidence: 0.810646467857143

00:29:33.290 --> 00:29:35.492 You have your ability to undergo

NOTE Confidence: 0.810646467857143

 $00{:}29{:}35{.}492 \dashrightarrow 00{:}29{:}38{.}309$  surgery and and and you're you're.

NOTE Confidence: 0.810646467857143

 $00:29:38.310 \rightarrow 00:29:40.508$  You're also your goals of care generally.

NOTE Confidence: 0.810646467857143

 $00:29:40.510 \longrightarrow 00:29:42.643$  In terms of if you even want to undergo

NOTE Confidence: 0.810646467857143

 $00:29:42.643 \rightarrow 00:29:44.782$  surgery and really want to have this

NOTE Confidence: 0.810646467857143

00:29:44.782 --> 00:29:46.569 removed versus undergo something like SBRT,

NOTE Confidence: 0.810646467857143

 $00{:}29{:}46{.}570 \dashrightarrow 00{:}29{:}49{.}978$  which is not invasive and and we're

NOTE Confidence: 0.810646467857143

 $00{:}29{:}49{.}978 \dashrightarrow 00{:}29{:}53{.}740$  able to treat on sorry lights went out.

NOTE Confidence: 0.810646467857143

 $00:29:53.740 \longrightarrow 00:29:56.040$  Thank you, still see me.

NOTE Confidence: 0.810646467857143

 $00:29:56.040 \longrightarrow 00:29:57.033$  So we can,

NOTE Confidence: 0.810646467857143

 $00:29:57.033 \rightarrow 00:29:59.740$  so I think it's very helpful for most

NOTE Confidence: 0.810646467857143

 $00{:}29{:}59{.}740 \dashrightarrow 00{:}30{:}01{.}676$  of a lot of patients with early stage

NOTE Confidence: 0.810646467857143

 $00:30:01.676 \rightarrow 00:30:03.565$  lung cancers to meet with both the

 $00{:}30{:}03.565 \dashrightarrow 00{:}30{:}05.217$  surgeon and a radiation on cologist to

NOTE Confidence: 0.810646467857143

 $00:30:05.217 \longrightarrow 00:30:06.946$  discuss their options and see you know

NOTE Confidence: 0.810646467857143

 $00:30:06.946 \rightarrow 00:30:09.580$  where you know the your overall goals,

NOTE Confidence: 0.810646467857143

 $00{:}30{:}09{.}580 \dashrightarrow 00{:}30{:}10{.}270$  align the best,

NOTE Confidence: 0.810646467857143

 $00{:}30{:}10.270 \dashrightarrow 00{:}30{:}12.159$  and we work very well together as a

NOTE Confidence: 0.810646467857143

 $00:30:12.159 \longrightarrow 00:30:13.734$  team here to to really discuss things

NOTE Confidence: 0.810646467857143

 $00{:}30{:}13.734 \dashrightarrow 00{:}30{:}15.596$  at tumor board and with each other over

NOTE Confidence: 0.810646467857143

 $00:30:15.596 \rightarrow 00:30:17.484$  the phone as well as with each patient.

NOTE Confidence: 0.810646467857143

 $00:30:17.484 \rightarrow 00:30:19.280$  To really make sure that you're really

NOTE Confidence: 0.810646467857143

 $00:30:19.280 \longrightarrow 00:30:21.770$  aligns well for stage three lung cancers

NOTE Confidence: 0.810646467857143

 $00:30:21.770 \longrightarrow 00:30:23.954$  or even stage two lung cancers where

NOTE Confidence: 0.810646467857143

 $00:30:23.954 \dashrightarrow 00:30:26.630$  we are not always using surgery for.

NOTE Confidence: 0.810646467857143

 $00:30:26.630 \longrightarrow 00:30:27.078$  For some,

NOTE Confidence: 0.810646467857143

 $00{:}30{:}27.078 \dashrightarrow 00{:}30{:}28.422$  for certain patients who may not

NOTE Confidence: 0.810646467857143

 $00:30:28.422 \longrightarrow 00:30:30.057$  be the best candidates for them,

 $00:30:30.060 \dashrightarrow 00:30:34.127$  we often use we often use radiation.

NOTE Confidence: 0.810646467857143

00:30:34.130 --> 00:30:35.529 It's a tough man,

NOTE Confidence: 0.810646467857143

 $00:30:35.529 \rightarrow 00:30:36.648$  conjunction with chemotherapy

NOTE Confidence: 0.810646467857143

 $00:30:36.650 \rightarrow 00:30:37.934$  or just radiation alone.

NOTE Confidence: 0.810646467857143

 $00:30:37.934 \rightarrow 00:30:39.866$  The help of those patients too.

NOTE Confidence: 0.810646467857143

 $00{:}30{:}39{.}870 \dashrightarrow 00{:}30{:}41{.}742$  So and then also for stage

NOTE Confidence: 0.810646467857143

00:30:41.742 --> 00:30:42.990 four patients we like,

NOTE Confidence: 0.810646467857143

 $00:30:42.990 \longrightarrow 00:30:43.970$  we heard from Daniel ER,

NOTE Confidence: 0.810646467857143

 $00{:}30{:}43{.}970 \dashrightarrow 00{:}30{:}46{.}903$  we often treat them or be treat

NOTE Confidence: 0.810646467857143

 $00:30:46.903 \rightarrow 00:30:50.261$  certain areas like you know with local

NOTE Confidence: 0.810646467857143

 $00{:}30{:}50{.}261 \dashrightarrow 00{:}30{:}52{.}776$  the rapy like surgery or radiation.

NOTE Confidence: 0.810646467857143

 $00:30:52.780 \longrightarrow 00:30:53.622$  With men,

NOTE Confidence: 0.810646467857143

 $00:30:53.622 \rightarrow 00:30:55.727$  it's often in conjunction with

NOTE Confidence: 0.810646467857143

00:30:55.727 --> 00:30:56.990 chemotherapy or immunotherapy,

NOTE Confidence: 0.810646467857143

 $00{:}30{:}56{.}990 \dashrightarrow 00{:}30{:}58{.}433$  or targeted the rapy,

NOTE Confidence: 0.810646467857143

 $00:30:58.433 \rightarrow 00:31:01.650$  to help out as many patients as possible.

- NOTE Confidence: 0.810646467857143
- $00{:}31{:}01{.}650 \dashrightarrow 00{:}31{:}03{.}882$  So I think I'm often involved in the
- NOTE Confidence: 0.810646467857143
- 00:31:03.882 --> 00:31:06.279 care of patients from of all stages,
- NOTE Confidence: 0.810646467857143
- 00:31:06.280 --> 00:31:07.880 with all sorts of conditions,
- NOTE Confidence: 0.810646467857143
- 00:31:07.880 > 00:31:09.889 and I work very closely with the
- NOTE Confidence: 0.810646467857143
- $00:31:09.889 \dashrightarrow 00:31:11.313$  medical oncologists and the surgeons
- NOTE Confidence: 0.810646467857143
- $00:31:11.313 \rightarrow 00:31:13.321$  to really find where we fit in best.
- NOTE Confidence: 0.924232374166667
- $00:31:14.610 \longrightarrow 00:31:16.066$  And you want to take this last
- NOTE Confidence: 0.924232374166667
- $00:31:16.066 \rightarrow 00:31:17.553$  question that was just posted 20.
- NOTE Confidence: 0.924232374166667
- 00:31:17.553 00:31:18.692 Maybe the second last,
- NOTE Confidence: 0.924232374166667
- 00:31:18.692 --> 00:31:20.306 I guess now, which is related
- NOTE Confidence: 0.924232374166667
- $00:31:20.306 \rightarrow 00:31:21.816$  to what you're talking about,
- NOTE Confidence: 0.924232374166667
- $00:31:21.820 \dashrightarrow 00:31:23.755$  but I think again this comes up a lot.
- NOTE Confidence: 0.924232374166667
- $00:31:23.760 \longrightarrow 00:31:26.238$  Why not give radiation even to
- NOTE Confidence: 0.924232374166667
- $00:31:26.238 \dashrightarrow 00:31:28.600$  people with stage four disease?
- NOTE Confidence: 0.924232374166667
- $00:31:28.600 \longrightarrow 00:31:29.750$  So we sometimes do give
- NOTE Confidence: 0.7066986075

00:31:29.760 --> 00:31:30.720 Falcon radiation for patients

NOTE Confidence: 0.7066986075

 $00{:}31{:}30{.}720 \dashrightarrow 00{:}31{:}31{.}680$  with stage four disease,

NOTE Confidence: 0.7066986075

 $00:31:31.680 \longrightarrow 00:31:34.590$  especially if there if there aren't

NOTE Confidence: 0.7066986075

 $00:31:34.590 \rightarrow 00:31:37.012$  too many areas that are that are

NOTE Confidence: 0.7066986075

 $00{:}31{:}37{.}012 \dashrightarrow 00{:}31{:}38{.}677$  spread beyond the Chester beyond

NOTE Confidence: 0.7066986075

00:31:38.677 --> 00:31:40.682 the the the either the primary

NOTE Confidence: 0.7066986075

 $00:31:40.682 \longrightarrow 00:31:42.660$  lung cancer where it came from,

NOTE Confidence: 0.7066986075

 $00:31:42.660 \rightarrow 00:31:43.588$  or the lymph nodes.

NOTE Confidence: 0.7066986075

00:31:43.588 --> 00:31:45.222 Sometimes it goes to the brain or

NOTE Confidence: 0.7066986075

 $00{:}31{:}45{.}222 \dashrightarrow 00{:}31{:}46{.}742$  it goes to other the other part of

NOTE Confidence: 0.7066986075

 $00{:}31{:}46{.}742 \dashrightarrow 00{:}31{:}48{.}253$  the lung or the I mean the other

NOTE Confidence: 0.7066986075

 $00:31:48.253 \longrightarrow 00:31:49.780$  lung or or other organs in the body.

NOTE Confidence: 0.7066986075

 $00:31:49.780 \longrightarrow 00:31:51.440$  And if there's only a few number,

NOTE Confidence: 0.7066986075

 $00:31:51.440 \longrightarrow 00:31:52.742$  then we're often able to give

NOTE Confidence: 0.7066986075

 $00:31:52.742 \longrightarrow 00:31:54.572$  radiation to all of those sites,

NOTE Confidence: 0.7066986075

 $00:31:54.572 \longrightarrow 00:31:56.424$  but we can't sometimes treat

- NOTE Confidence: 0.7066986075
- 00:31:56.424 --> 00:31:58.680 every single spot if there's many,
- NOTE Confidence: 0.7066986075
- $00:31:58.680 \longrightarrow 00:31:59.676$  there's many areas.
- NOTE Confidence: 0.7066986075
- 00:31:59.676 --> 00:32:01.004 Because it's the the,
- NOTE Confidence: 0.7066986075
- $00:32:01.010 \rightarrow 00:32:03.186$  the side effects go up for every site
- NOTE Confidence: 0.7066986075
- $00:32:03.186 \longrightarrow 00:32:05.844$  that we treat in the larger areas as well.
- NOTE Confidence: 0.7066986075
- $00:32:05.850 \longrightarrow 00:32:08.882$  So it really depends a lot on each
- NOTE Confidence: 0.7066986075
- $00:32:08.882 \longrightarrow 00:32:10.467$  individual patient and as well
- NOTE Confidence: 0.7066986075
- $00:32:10.467 \longrightarrow 00:32:12.065$  as the overall burden of disease
- NOTE Confidence: 0.7066986075
- 00:32:12.065 --> 00:32:13.883 that they have in terms of how
- NOTE Confidence: 0.7066986075
- $00:32:13.883 \longrightarrow 00:32:15.315$  much we can safely treat.
- NOTE Confidence: 0.7066986075
- $00:32:15.315 \rightarrow 00:32:17.200$  But that's a conversation we have.
- NOTE Confidence: 0.7066986075
- $00:32:17.200 \longrightarrow 00:32:18.766$  I mean often at the beginning,
- NOTE Confidence: 0.7066986075
- $00{:}32{:}18.770 \dashrightarrow 00{:}32{:}20.891$  but we we will often start with
- NOTE Confidence: 0.7066986075
- $00:32:20.891 \longrightarrow 00:32:22.355$  systemic therapy first to make
- NOTE Confidence: 0.7066986075
- $00:32:22.355 \longrightarrow 00:32:24.084$  sure that you have a drug that
- NOTE Confidence: 0.7066986075

 $00:32:24.084 \rightarrow 00:32:25.570$  works well for you overall.

NOTE Confidence: 0.7066986075

 $00{:}32{:}25{.}570 \dashrightarrow 00{:}32{:}27{.}658$  And then if things are working well then we

NOTE Confidence: 0.7066986075

 $00:32:27.658 \rightarrow 00:32:29.770$  can consider what's called consolidation,

NOTE Confidence: 0.7066986075

 $00:32:29.770 \longrightarrow 00:32:30.392$  meaning that.

NOTE Confidence: 0.7066986075

 $00{:}32{:}30{.}392 \dashrightarrow 00{:}32{:}32{.}569$  You treat all the sites of disease

NOTE Confidence: 0.7066986075

 $00{:}32{:}32{.}569 \dashrightarrow 00{:}32{:}34{.}562$  that they that you have at the

NOTE Confidence: 0.7066986075

00:32:34.562 --> 00:32:36.100 beginning or we save radiation

NOTE Confidence: 0.7066986075

 $00:32:36.100 \longrightarrow 00:32:38.194$  for if everything is stable for a

NOTE Confidence: 0.7066986075

 $00{:}32{:}38{.}194 \dashrightarrow 00{:}32{:}39{.}910$  long time and then something just

NOTE Confidence: 0.7066986075

00:32:39.910 --> 00:32:42.309 a few spots grow or then we may

NOTE Confidence: 0.7066986075

 $00{:}32{:}42{.}309 \dashrightarrow 00{:}32{:}44{.}269$  be able to have some benefit with

NOTE Confidence: 0.7066986075

 $00{:}32{:}44{.}332 \dashrightarrow 00{:}32{:}46{.}507$  using radiation for those patients.

NOTE Confidence: 0.9029767366666667

 $00{:}32{:}48.550 \dashrightarrow 00{:}32{:}51.960$  Great thanks, complicated Mike.

NOTE Confidence: 0.9029767366666667

 $00{:}32{:}51{.}960 \dashrightarrow 00{:}32{:}54{.}120$  I'm going to ask you a question and then

NOTE Confidence: 0.9029767366666667

 $00:32:54.181 \rightarrow 00:32:56.155$  I think will will close this portion

NOTE Confidence: 0.9029767366666667

 $00:32:56.155 \dashrightarrow 00:32:58.212$  of the discussion and I'll I'll give

- NOTE Confidence: 0.9029767366666667
- $00:32:58.212 \rightarrow 00:32:59.940$  a few words about clinical research,
- NOTE Confidence: 0.9029767366666667
- $00{:}32{:}59{.}940 \dashrightarrow 00{:}33{:}01{.}710$  clinical trials and research and
- NOTE Confidence: 0.9029767366666667
- $00{:}33{:}01{.}710 \dashrightarrow 00{:}33{:}03{.}480$  will take some more questions.
- NOTE Confidence: 0.9029767366666667
- $00:33:03.480 \longrightarrow 00:33:06.366$  So the question for you is
- NOTE Confidence: 0.9029767366666667
- $00:33:06.366 \longrightarrow 00:33:07.930$  is about lung nodules.
- NOTE Confidence: 0.9029767366666667
- $00:33:07.930 \longrightarrow 00:33:10.450$  So this is something that as as
- NOTE Confidence: 0.9029767366666667
- $00{:}33{:}10.525 \dashrightarrow 00{:}33{:}12.823$  a thoracic oncologist we we often
- NOTE Confidence: 0.9029767366666667
- $00:33:12.823 \rightarrow 00:33:16.771$  have to address someone is asking
- NOTE Confidence: 0.9029767366666667
- $00:33:16.771 \longrightarrow 00:33:18.556$  about they have lung nodules.
- NOTE Confidence: 0.9029767366666667
- $00:33:18.560 \dashrightarrow 00:33:21.824$  One is 6 millimeters, one is 3 millimeters.
- NOTE Confidence: 0.9029767366666667
- $00{:}33{:}21.830 \dashrightarrow 00{:}33{:}23.705$  Would those nodules require study
- NOTE Confidence: 0.9029767366666667
- 00:33:23.705 --> 00:33:26.430 for cancer or do we just watch?
- NOTE Confidence: 0.9029767366666667
- $00{:}33{:}26{.}430 \dashrightarrow 00{:}33{:}28{.}278$  Especially I guess in this in
- NOTE Confidence: 0.9029767366666667
- $00{:}33{:}28{.}278 \dashrightarrow 00{:}33{:}29{.}454$  this patient's history there's a
- NOTE Confidence: 0.9029767366666667
- $00:33:29.454 \rightarrow 00:33:30.750$  history of head and neck cancer.
- NOTE Confidence: 0.9029767366666667

 $00:33:30.750 \longrightarrow 00:33:32.390$  So what do we do with lung nodules?

NOTE Confidence: 0.9029767366666667

 $00{:}33{:}32{.}390 \dashrightarrow 00{:}33{:}33{.}080$  These come up a lot.

NOTE Confidence: 0.9029767366666667

00:33:33.080 - 00:33:34.284 These very tiny nodules.

NOTE Confidence: 0.9029767366666667

 $00:33:34.284 \rightarrow 00:33:35.682$  How do we think about those?

NOTE Confidence: 0.9029767366666667

00:33:35.682 --> 00:33:36.708 How do you think about those?

NOTE Confidence: 0.9029767366666667

00:33:36.708 --> 00:33:37.628 You're on mute if you're

NOTE Confidence: 0.9029767366666667

00:33:37.628 --> 00:33:38.500 going to start talking.

NOTE Confidence: 0.8600822075

00:33:40.190 --> 00:33:43.060 Yeah, I think those are always very

NOTE Confidence: 0.8600822075

00:33:43.060 --> 00:33:45.830 tricky and very anxiety provoking.

NOTE Confidence: 0.8600822075

00:33:45.830 --> 00:33:47.920 UM, you know, I I.

NOTE Confidence: 0.8600822075

 $00{:}33{:}47{.}920 \dashrightarrow 00{:}33{:}49{.}646$  I don't know exactly what the numbers

NOTE Confidence: 0.8600822075

00:33:49.646 --> 00:33:52.265 are but I would say that a substantial

NOTE Confidence: 0.8600822075

 $00:33:52.265 \dashrightarrow 00:33:55.570$  number of completely healthy otherwise

NOTE Confidence: 0.8600822075

 $00{:}33{:}55{.}570 \dashrightarrow 00{:}33{:}57{.}795$  healthy people have lung nodules.

NOTE Confidence: 0.8600822075

 $00:33:57.800 \dashrightarrow 00:34:00.026$  And then it can happen from a prior

NOTE Confidence: 0.8600822075

 $00:34:00.026 \rightarrow 00:34:02.779$  pneumonia, some some exposures.

- NOTE Confidence: 0.8600822075
- 00:34:02.780 --> 00:34:05.066 But I think that being said,
- NOTE Confidence: 0.8600822075
- $00{:}34{:}05{.}070 \dashrightarrow 00{:}34{:}07{.}702$  part of it depends on what they look like,
- NOTE Confidence: 0.8600822075
- $00:34:07.702 \longrightarrow 00:34:10.368$  how big they are, what the pattern is.
- NOTE Confidence: 0.669636743333333
- $00{:}34{:}10.770 \dashrightarrow 00{:}34{:}11.298$  And and are
- NOTE Confidence: 0.7977791866666667
- $00:34:11.310 \longrightarrow 00:34:12.780$  they changing? That's
- NOTE Confidence: 0.9493603966666667
- $00:34:12.840 \longrightarrow 00:34:15.990$  probably the biggest factor,
- NOTE Confidence: 0.9493603966666667
- $00:34:15.990 \longrightarrow 00:34:18.760$  so we think for you know someone who
- NOTE Confidence: 0.898190338
- $00:34:18.770 \longrightarrow 00:34:19.840$  comes in and they're worried
- NOTE Confidence: 0.9016538466666667
- $00:34:19.850 \longrightarrow 00:34:20.810$  about their nodules.
- NOTE Confidence: 0.888195211428572
- $00:34:21.100 \rightarrow 00:34:25.496$  You know. Generally we will repeat scans
- NOTE Confidence: 0.907601766
- $00:34:23.570 \longrightarrow 00:34:24.520$  at a certain period of
- NOTE Confidence: 0.9202789766666667
- $00{:}34{:}24{.}530 \dashrightarrow 00{:}34{:}25{.}490$  time, and if
- NOTE Confidence: 0.8504562875
- $00{:}34{:}25{.}500 \dashrightarrow 00{:}34{:}28{.}480$  they change then the concern goes
- NOTE Confidence: 0.8504562875
- $00{:}34{:}28{.}480 \dashrightarrow 00{:}34{:}30{.}714$  up quite a bit. And if it doesn't,
- NOTE Confidence: 0.8504562875
- $00:34:30.714 \longrightarrow 00:34:32.058$  then we might wait them out.
- NOTE Confidence: 0.875901376666667

- $00:34:32.070 \longrightarrow 00:34:33.360$  Continue to follow
- NOTE Confidence: 0.85497389
- $00{:}34{:}33{.}930 \dashrightarrow 00{:}34{:}34{.}518$  and we think if
- NOTE Confidence: 0.84893444
- $00:34:34.530 \longrightarrow 00:34:36.910$  there is steady significant change then
- NOTE Confidence: 0.84893444
- 00:34:36.910 --> 00:34:38.740 I think that would definitely work.
- NOTE Confidence: 0.90664953
- $00{:}34{:}41{.}590 \dashrightarrow 00{:}34{:}43{.}180$  Diving in and and
- NOTE Confidence: 0.7895016275
- $00:34:43.190 \longrightarrow 00:34:44.180$  knowing for sure,
- NOTE Confidence: 0.7895016275
- $00:34:44.180 \longrightarrow 00:34:47.120$  but probably by a biopsy, if
- NOTE Confidence: 0.7755503425
- $00:34:47.130 \longrightarrow 00:34:48.260$  not by a pet scan.
- NOTE Confidence: 0.9007075075
- $00{:}34{:}50{.}870 \dashrightarrow 00{:}34{:}53{.}310$  Great, thank you, Mike.
- NOTE Confidence: 0.9007075075
- 00:34:53.310 --> 00:34:55.830 OK, I'm gonna take a break from the
- NOTE Confidence: 0.9007075075
- $00{:}34{:}55{.}830 \dashrightarrow 00{:}34{:}58{.}358$  panel in the discussion and I'm gonna
- NOTE Confidence: 0.9007075075
- $00{:}34{:}58{.}358 \dashrightarrow 00{:}35{:}01{.}274$  give a few words about research and then
- NOTE Confidence: 0.9007075075
- $00:35:01.274 \dashrightarrow 00:35:03.050$  we're going to come back to our panel.
- NOTE Confidence: 0.9007075075
- $00{:}35{:}03{.}050 \dashrightarrow 00{:}35{:}04{.}808$  We will inspire some more questions
- NOTE Confidence: 0.9007075075
- $00:35:04.808 \longrightarrow 00:35:06.404$  or they're already are quite a
- NOTE Confidence: 0.9007075075
- $00:35:06.404 \rightarrow 00:35:07.550$  few that we're going to get to

 $00:35:07.550 \longrightarrow 00:35:08.438$  in in just a few minutes.

NOTE Confidence: 0.9007075075

00:35:08.440 --> 00:35:10.340 So would you go anywhere?

NOTE Confidence: 0.912617847142857

 $00:35:12.760 \rightarrow 00:35:16.176$  I'm going to share my screen here.

NOTE Confidence: 0.912617847142857

 $00{:}35{:}16{.}180 \dashrightarrow 00{:}35{:}18{.}180$  Talk a little bit about research and then

NOTE Confidence: 0.912617847142857

 $00{:}35{:}18.180 \dashrightarrow 00{:}35{:}22.090$  we'll come back to the full group. OK, so.

NOTE Confidence: 0.879055586428572

 $00{:}35{:}25{.}240 \dashrightarrow 00{:}35{:}27{.}361$  And when we were putting together this

NOTE Confidence: 0.879055586428572

 $00{:}35{:}27{.}361 \dashrightarrow 00{:}35{:}29{.}727$  program we we really wanted to address

NOTE Confidence: 0.879055586428572

 $00{:}35{:}29{.}730 \dashrightarrow 00{:}35{:}32{.}565$  topics that were of interest to our

NOTE Confidence: 0.879055586428572

 $00{:}35{:}32{.}565 \dashrightarrow 00{:}35{.}35{.}788$  our patients in our Community and and

NOTE Confidence: 0.879055586428572

00:35:35.788 --> 00:35:39.834 answer questions that that people have in

NOTE Confidence: 0.730012688

00:35:38.800 --> 00:35:39.830 our, our, you know we. We

NOTE Confidence: 0.852009946

 $00{:}35{:}39{.}840 \dashrightarrow 00{:}35{:}41{.}751$  are commonly asked in clinic and and

NOTE Confidence: 0.852009946

 $00{:}35{:}41.751 \dashrightarrow 00{:}35{:}43.997$  that are on a lot of people's minds.

NOTE Confidence: 0.852009946

 $00{:}35{:}44.000 \dashrightarrow 00{:}35{:}46.184$  And one thing that we think is so

NOTE Confidence: 0.852009946

 $00{:}35{:}46{.}184 \dashrightarrow 00{:}35{:}48{.}024$  important here and I think many of you

 $00:35:48.024 \rightarrow 00:35:50.323$  do too is is research and really

NOTE Confidence: 0.852009946

 $00{:}35{:}50{.}323 \dashrightarrow 00{:}35{:}52{.}249$  thinking about what the advances have

NOTE Confidence: 0.852009946

 $00:35:52.249 \dashrightarrow 00:35:54.282$  been in lung Cancer Research and.

NOTE Confidence: 0.852009946

 $00:35:54.282 \rightarrow 00:35:55.690$  And where we're going.

NOTE Confidence: 0.852009946

 $00{:}35{:}55{.}690 \dashrightarrow 00{:}35{:}56{.}943$  And so I wanted to just address

NOTE Confidence: 0.852009946

 $00:35:56.943 \longrightarrow 00:35:57.800$  some of those things.

NOTE Confidence: 0.852009946

00:35:57.800 - 00:35:59.650 There's also some very basic

NOTE Confidence: 0.852009946

 $00:35:59.650 \rightarrow 00:36:01.130$  topics related to research,

NOTE Confidence: 0.852009946

00:36:01.130 --> 00:36:03.533 such as what is a clinical trial that I

NOTE Confidence: 0.852009946

 $00:36:03.533 \rightarrow 00:36:05.860$  thought we would just start out by talking,

NOTE Confidence: 0.852009946

 $00:36:05.860 \longrightarrow 00:36:06.517$  talking about that,

NOTE Confidence: 0.852009946

 $00{:}36{:}06{.}517 \dashrightarrow 00{:}36{:}08{.}050$  and then I'm going to give you

NOTE Confidence: 0.852009946

00:36:08.098 --> 00:36:09.488 some examples of some really

NOTE Confidence: 0.852009946

 $00:36:09.488 \longrightarrow 00:36:10.600$  amazing advances we've seen.

NOTE Confidence: 0.832258398571429

 $00:36:14.280 \longrightarrow 00:36:16.877$  So, so first is very basic definitions.

NOTE Confidence: 0.832258398571429

 $00:36:16.880 \rightarrow 00:36:20.930$  This is from the NCI website the the

- NOTE Confidence: 0.832258398571429
- $00:36:20.930 \rightarrow 00:36:23.308$  the government branch that deals
- NOTE Confidence: 0.832258398571429
- $00:36:23.308 \longrightarrow 00:36:25.870$  with cancer and helps with funding
- NOTE Confidence: 0.832258398571429
- $00{:}36{:}25{.}938 \dashrightarrow 00{:}36{:}27{.}754$  research and clinical clinical
- NOTE Confidence: 0.832258398571429
- $00:36:27.754 \dashrightarrow 00:36:30.478$  trials and other research in cancer.
- NOTE Confidence: 0.832258398571429
- $00:36:30.480 \longrightarrow 00:36:31.113$  Among other things.
- NOTE Confidence: 0.832258398571429
- 00:36:31.113 --> 00:36:32.379 Mike, I'm gonna ask you about
- NOTE Confidence: 0.832258398571429
- $00:36:32.379 \longrightarrow 00:36:33.326$  yourself on mute if you can.
- NOTE Confidence: 0.8346169
- $00{:}36{:}34{.}770 \dashrightarrow 00{:}36{:}35{.}840$  Just that's my dog.
- NOTE Confidence: 0.924059473333333
- 00:36:37.860 --> 00:36:39.510 OK, So what are clinical trials?
- NOTE Confidence: 0.924059473333333
- 00:36:39.510 --> 00:36:40.306 And this is again,
- NOTE Confidence: 0.924059473333333
- $00:36:40.306 \longrightarrow 00:36:41.500$  this is a very basic question,
- NOTE Confidence: 0.924059473333333
- $00:36:41.500 \rightarrow 00:36:43.570$  but it's something that a lot of people ask.
- NOTE Confidence: 0.924059473333333
- $00{:}36{:}43{.}570 \dashrightarrow 00{:}36{:}45{.}418$  I get this question a lot in clinic,
- NOTE Confidence: 0.924059473333333
- $00{:}36{:}45{.}420 \dashrightarrow 00{:}36{:}47{.}513$  so clinical trials by the NCI definition
- NOTE Confidence: 0.924059473333333
- $00{:}36{:}47{.}513 \dashrightarrow 00{:}36{:}49{.}193$  are research studies that involve
- NOTE Confidence: 0.924059473333333

 $00:36:49.193 \rightarrow 00:36:50.645$  people so pretty straightforward

NOTE Confidence: 0.924059473333333

 $00:36:50.645 \rightarrow 00:36:52.457$  and really important because through

NOTE Confidence: 0.924059473333333

 $00:36:52.457 \rightarrow 00:36:54.585$  clinical trials we find new ways to

NOTE Confidence: 0.924059473333333

 $00:36:54.585 \rightarrow 00:36:56.259$  improve treatments and the quality

NOTE Confidence: 0.924059473333333

 $00:36:56.259 \rightarrow 00:36:58.377$  of life for people with disease.

NOTE Confidence: 0.924059473333333

 $00{:}36{:}58{.}380 \dashrightarrow 00{:}37{:}00{.}074$  The other thing that's really important to

NOTE Confidence: 0.924059473333333

 $00:37:00.074 \rightarrow 00:37:01.801$  know is that clinical trials are really

NOTE Confidence: 0.924059473333333

 $00:37:01.801 \longrightarrow 00:37:03.511$  the final step in this long process

NOTE Confidence: 0.924059473333333

00:37:03.511 --> 00:37:05.170 that starts with research in a lab.

NOTE Confidence: 0.924059473333333

 $00:37:05.170 \longrightarrow 00:37:07.984$  So the very beginning of any new

NOTE Confidence: 0.924059473333333

00:37:07.984 --> 00:37:10.220 drug or treatment or strategy

NOTE Confidence: 0.924059473333333

 $00:37:10.220 \longrightarrow 00:37:12.575$  for dealing with any disease,

NOTE Confidence: 0.924059473333333

00:37:12.580 --> 00:37:13.276 including cancer,

NOTE Confidence: 0.924059473333333

 $00:37:13.276 \longrightarrow 00:37:15.364$  is usually starting in a lab.

NOTE Confidence: 0.924059473333333

 $00:37:15.370 \rightarrow 00:37:16.975$  Seeing something that that works

NOTE Confidence: 0.924059473333333

 $00:37:16.975 \longrightarrow 00:37:19.647$  in a cell or works in in an animal,

00:37:19.650 - 00:37:22.014 and then bringing it through very

NOTE Confidence: 0.924059473333333

00:37:22.014 --> 00:37:23.590 painstaking process many years,

NOTE Confidence: 0.924059473333333

 $00:37:23.590 \rightarrow 00:37:25.666$  typically into into the clinic where

NOTE Confidence: 0.924059473333333

 $00:37:25.666 \rightarrow 00:37:27.050$  we can treat people.

NOTE Confidence: 0.924059473333333

 $00:37:27.050 \longrightarrow 00:37:28.270$  And so there's this says.

NOTE Confidence: 0.924059473333333

 $00:37:28.270 \dashrightarrow 00:37:29.692$  Before any new treatment is used

NOTE Confidence: 0.924059473333333

 $00:37:29.692 \rightarrow 00:37:30.980$  with people in clinical trials,

NOTE Confidence: 0.924059473333333

 $00:37:30.980 \rightarrow 00:37:32.975$  researchers worked for many years

NOTE Confidence: 0.924059473333333

 $00{:}37{:}32{.}975 \dashrightarrow 00{:}37{:}35{.}701$  to understand its effect in the lab

NOTE Confidence: 0.924059473333333

 $00{:}37{:}35{.}701 \dashrightarrow 00{:}37{:}37{.}699$  and animals and also to understand

NOTE Confidence: 0.924059473333333

 $00:37:37.699 \longrightarrow 00:37:38.960$  its side effects.

NOTE Confidence: 0.924059473333333

 $00:37:38.960 \dashrightarrow 00:37:41.011$  So you all have probably heard about

NOTE Confidence: 0.924059473333333

 $00{:}37{:}41.011 \dashrightarrow 00{:}37{:}42.789$  different phases of clinical trials.

NOTE Confidence: 0.924059473333333

 $00{:}37{:}42.790 \dashrightarrow 00{:}37{:}44.310$  There's a phase one trial,

NOTE Confidence: 0.924059473333333

 $00{:}37{:}44{.}310 \dashrightarrow 00{:}37{:}46{.}055$  which sometimes people will call

00:37:46.055 - 00:37:47.800 an early phase clinical trial.

NOTE Confidence: 0.924059473333333

 $00{:}37{:}47.800 \dashrightarrow 00{:}37{:}49.864$  This is really the typically the

NOTE Confidence: 0.924059473333333

 $00:37:49.864 \longrightarrow 00:37:52.485$  first time a drug or medication is

NOTE Confidence: 0.924059473333333

00:37:52.485 - 00:37:54.825 brought into the clinic and child,

NOTE Confidence: 0.924059473333333

 $00:37:54.830 \longrightarrow 00:37:55.816$  and people.

NOTE Confidence: 0.924059473333333

00:37:55.816 --> 00:37:57.788 Sometimes it's actually also,

NOTE Confidence: 0.924059473333333

 $00{:}37{:}57{.}790 \dashrightarrow 00{:}38{:}00{.}338$  it can be medicines that have been

NOTE Confidence: 0.924059473333333

 $00:38:00.338 \rightarrow 00:38:03.590$  tested or even approved for use by the FDA,

NOTE Confidence: 0.924059473333333

00:38:03.590 --> 00:38:05.564 but it's being tried in a different

NOTE Confidence: 0.924059473333333

 $00:38:05.564 \longrightarrow 00:38:05.846$  combination.

NOTE Confidence: 0.924059473333333

 $00:38:05.850 \dashrightarrow 00:38:07.656$  So if you're putting two drugs that

NOTE Confidence: 0.924059473333333

 $00{:}38{:}07.656 \dashrightarrow 00{:}38{:}09.239$  have never been tried together.

NOTE Confidence: 0.924059473333333

 $00{:}38{:}09{.}240 \dashrightarrow 00{:}38{:}10{.}374$  And you're using that as a treatment

NOTE Confidence: 0.924059473333333

 $00:38:10.374 \longrightarrow 00:38:11.060$  for the first time.

NOTE Confidence: 0.924059473333333

 $00:38:11.060 \rightarrow 00:38:12.536$  Sometimes that's a phase one study,

NOTE Confidence: 0.924059473333333

 $00:38:12.540 \longrightarrow 00:38:14.451$  even if those drugs are very far

- NOTE Confidence: 0.924059473333333
- $00:38:14.451 \rightarrow 00:38:16.200$  along in development or even approved,
- NOTE Confidence: 0.924059473333333
- $00:38:16.200 \longrightarrow 00:38:17.677$  and the main question in a phase
- NOTE Confidence: 0.924059473333333
- $00:38:17.677 \longrightarrow 00:38:18.310$  one trial is,
- NOTE Confidence: 0.924059473333333
- $00{:}38{:}18{.}310 \dashrightarrow 00{:}38{:}21{.}089$  is the treatment safe and often also
- NOTE Confidence: 0.924059473333333
- $00:38:21.089 \longrightarrow 00:38:24.028$  to find the best or safest dose?
- NOTE Confidence: 0.924059473333333
- $00{:}38{:}24.030 \dashrightarrow 00{:}38{:}25.260$  But you know the amazing thing
- NOTE Confidence: 0.924059473333333
- $00:38:25.260 \longrightarrow 00:38:26.080$  with phase one trials.
- NOTE Confidence: 0.924059473333333
- $00:38:26.080 \rightarrow 00:38:27.610$  These early trials more and more.
- NOTE Confidence: 0.924059473333333
- $00{:}38{:}27.610 \dashrightarrow 00{:}38{:}29.948$  Now these days we are seeing pretty
- NOTE Confidence: 0.924059473333333
- $00:38:29.948 \rightarrow 00:38:31.721$  amazing activity and and benefit
- NOTE Confidence: 0.924059473333333
- $00:38:31.721 \longrightarrow 00:38:33.481$  in these trials because they're
- NOTE Confidence: 0.924059473333333
- 00:38:33.481 --> 00:38:35.569 starting to get very much smarter
- NOTE Confidence: 0.924059473333333
- $00:38:35.569 \rightarrow 00:38:37.501$  in how we're using the medicines
- NOTE Confidence: 0.924059473333333
- $00:38:37.501 \dashrightarrow 00:38:39.486$  and which patients were treated.
- NOTE Confidence: 0.924059473333333
- 00:38:39.486 --> 00:38:40.728 And so again,
- NOTE Confidence: 0.924059473333333

00:38:40.730 -> 00:38:42.634 the goal is typically to make sure the

NOTE Confidence: 0.924059473333333

 $00:38:42.634 \rightarrow 00:38:44.639$  medicine is safe and to find the best dose.

NOTE Confidence: 0.924059473333333

 $00{:}38{:}44{.}640 \dashrightarrow 00{:}38{:}46{.}494$  But it's also to see how well it works

NOTE Confidence: 0.924059473333333

 $00:38:46.494 \rightarrow 00:38:48.466$  and how it affects the body and fights.

NOTE Confidence: 0.924059473333333

 $00:38:48.470 \longrightarrow 00:38:49.922$  Cancer phase two studies,

NOTE Confidence: 0.924059473333333

 $00:38:49.922 \dashrightarrow 00:38:52.829$  or when the drug gets through phase one.

NOTE Confidence: 0.924059473333333

 $00:38:52.830 \longrightarrow 00:38:54.378$  So it's proven to be safe.

NOTE Confidence: 0.924059473333333

 $00:38:54.380 \longrightarrow 00:38:56.516$  We know the best dose and we have

NOTE Confidence: 0.924059473333333

 $00:38:56.516 \rightarrow 00:38:57.942$  some indication that there might

NOTE Confidence: 0.924059473333333

 $00:38:57.942 \longrightarrow 00:38:59.337$  be a good benefit there,

NOTE Confidence: 0.924059473333333

 $00{:}38{:}59{.}340 \dashrightarrow 00{:}39{:}00{.}691$  and so then it's brought into a

NOTE Confidence: 0.924059473333333

 $00:39:00.691 \rightarrow 00:39:02.051$  bigger study which is a phase two

NOTE Confidence: 0.924059473333333

 $00:39:02.051 \rightarrow 00:39:03.320$  study and the main question there is,

NOTE Confidence: 0.924059473333333

 $00:39:03.320 \longrightarrow 00:39:04.660$  does the treatment work?

NOTE Confidence: 0.924059473333333

00:39:04.660 --> 00:39:05.330 And again,

NOTE Confidence: 0.924059473333333

 $00:39:05.330 \rightarrow 00:39:06.805$  we're really trying to understand

- NOTE Confidence: 0.924059473333333
- $00{:}39{:}06{.}805 \dashrightarrow 00{:}39{:}08{.}566$  if there's a positive effect on
- NOTE Confidence: 0.924059473333333
- 00:39:08.566 --> 00:39:09.280 a certain cancer,
- NOTE Confidence: 0.862311533
- $00:39:09.280 \longrightarrow 00:39:10.900$  so usually phase two studies
- NOTE Confidence: 0.862311533
- $00:39:10.900 \rightarrow 00:39:12.520$  are in a particular cancer.
- NOTE Confidence: 0.862311533
- $00:39:12.520 \rightarrow 00:39:15.103$  It's not in a lot of different cancer types,
- NOTE Confidence: 0.862311533
- $00{:}39{:}15{.}110 \dashrightarrow 00{:}39{:}16{.}631$  and again, the the other goal is to see
- NOTE Confidence: 0.862311533
- $00:39:16.631 \rightarrow 00:39:18.056$  how the treatment affects the body.
- NOTE Confidence: 0.862311533
- 00:39:18.060 00:39:19.686 We're also still in every phase
- NOTE Confidence: 0.862311533
- $00:39:19.686 \rightarrow 00:39:21.470$  looking very closely at side effects,
- NOTE Confidence: 0.862311533
- $00:39:21.470 \rightarrow 00:39:23.018$  making sure the treatments are not
- NOTE Confidence: 0.862311533
- $00{:}39{:}23.018 \dashrightarrow 00{:}39{:}25.210$  dangerous in any way for people.
- NOTE Confidence: 0.862311533
- $00{:}39{:}25{.}210 \dashrightarrow 00{:}39{:}26{.}190$  And then in phase three,
- NOTE Confidence: 0.862311533
- $00:39:26.190 \rightarrow 00:39:28.230$  these are usually the larger trials.
- NOTE Confidence: 0.862311533
- $00{:}39{:}28{.}230 \dashrightarrow 00{:}39{:}29{.}958$  Very often these are randomized trials
- NOTE Confidence: 0.862311533
- $00{:}39{:}29{.}958 \dashrightarrow 00{:}39{:}31{.}791$  where some people get one treatment
- NOTE Confidence: 0.862311533

 $00:39:31.791 \rightarrow 00:39:33.663$  and some people get another treatment,

NOTE Confidence: 0.862311533

00:39:33.670 --> 00:39:35.152 sometimes multiple different

NOTE Confidence: 0.862311533

00:39:35.152 --> 00:39:37.128 groups of treatment options,

NOTE Confidence: 0.862311533

 $00:39:37.130 \rightarrow 00:39:38.761$  and the purpose here is to compare

NOTE Confidence: 0.862311533

 $00:39:38.761 \dashrightarrow 00:39:40.849$  it to the current standard of care.

NOTE Confidence: 0.862311533

 $00{:}39{:}40{.}850 \dashrightarrow 00{:}39{:}42{.}821$  So this is a question that often comes up

NOTE Confidence: 0.862311533

 $00:39:42.821 \rightarrow 00:39:44.895$  when I'm talking to people about trials is,

NOTE Confidence: 0.862311533

 $00:39:44.900 \longrightarrow 00:39:45.950$  well, I might.

NOTE Confidence: 0.862311533

 $00{:}39{:}45{.}950 \dashrightarrow 00{:}39{:}49{.}469$  I get a pasivo or sugar pill in oncology.

NOTE Confidence: 0.862311533

 $00:39:49.470 \longrightarrow 00:39:50.990$  That's actually pretty rare.

NOTE Confidence: 0.862311533

 $00:39:50.990 \dashrightarrow 00:39:53.270$  We really don't typically do that,

NOTE Confidence: 0.862311533

 $00:39:53.270 \longrightarrow 00:39:54.396$  and that's because it really

NOTE Confidence: 0.862311533

 $00:39:54.396 \longrightarrow 00:39:55.619$  wouldn't typically be.

NOTE Confidence: 0.862311533

 $00:39:55.619 \rightarrow 00:39:57.502$  Ethical to not give someone any treatment

NOTE Confidence: 0.862311533

 $00:39:57.502 \rightarrow 00:39:59.957$  and so usually what a phase three trial is.

NOTE Confidence: 0.862311533

 $00:39:59.960 \rightarrow 00:40:01.969$  It's comparing this new treatment that we

 $00:40:01.969 \rightarrow 00:40:04.367$  think might be better than what's available,

NOTE Confidence: 0.862311533

 $00{:}40{:}04{.}370 \dashrightarrow 00{:}40{:}06{.}314$  and so we're comparing the new

NOTE Confidence: 0.862311533

 $00{:}40{:}06{.}314 \dashrightarrow 00{:}40{:}07{.}943$  treatment to the current standard.

NOTE Confidence: 0.862311533

 $00:40:07.943 \longrightarrow 00:40:10.740$  So let's say one chemotherapy to another

NOTE Confidence: 0.862311533

 $00:40:10.740 \longrightarrow 00:40:14.239$  or a targeted therapy to the chemotherapy.

NOTE Confidence: 0.862311533

 $00{:}40{:}14.240 \dashrightarrow 00{:}40{:}16.607$  So what are the benefits and risks of trials?

NOTE Confidence: 0.862311533

00:40:16.610 --> 00:40:16.862 Well,

NOTE Confidence: 0.862311533

 $00{:}40{:}16.862 \dashrightarrow 00{:}40{:}19.130$  I guess the way that I think about the

NOTE Confidence: 0.862311533

 $00{:}40{:}19.187 \dashrightarrow 00{:}40{:}21.291$  benefits is it really isn't a way to

NOTE Confidence: 0.862311533

 $00:40:21.291 \longrightarrow 00:40:23.310$  get early access to new treatments.

NOTE Confidence: 0.862311533

 $00{:}40{:}23.310 \dashrightarrow 00{:}40{:}25.137$  These are drugs that are have shown

NOTE Confidence: 0.862311533

 $00{:}40{:}25{.}137 \dashrightarrow 00{:}40{:}26{.}983$  promise in the lab and now are

NOTE Confidence: 0.862311533

 $00:40:26.983 \rightarrow 00:40:28.489$  coming into clinic or have shown

NOTE Confidence: 0.862311533

 $00{:}40{:}28{.}544 \dashrightarrow 00{:}40{:}29{.}800$  promise in early trials.

NOTE Confidence: 0.862311533

 $00:40:29.800 \longrightarrow 00:40:31.264$  But now we're moving along in

 $00{:}40{:}31{.}264 \dashrightarrow 00{:}40{:}32{.}929$  development and then I think a lot

NOTE Confidence: 0.862311533

 $00:40:32.929 \longrightarrow 00:40:34.406$  of people really like the idea of

NOTE Confidence: 0.862311533

 $00{:}40{:}34{.}462 \dashrightarrow 00{:}40{:}36{.}177$  advancing medical knowledge and and NOTE Confidence: 0.862311533

 $00{:}40{:}36{.}177 \dashrightarrow 00{:}40{:}37{.}892$  thinking that they're they're helping

NOTE Confidence: 0.862311533

 $00{:}40{:}37{.}900 \dashrightarrow 00{:}40{:}39{.}910$  to us to understand the disease

NOTE Confidence: 0.862311533

 $00{:}40{:}39{.}910$  -->  $00{:}40{:}42{.}370$  better and and trying to get better NOTE Confidence: 0.862311533

 $00:40:42.370 \rightarrow 00:40:44.476$  treatments for people in the future.

NOTE Confidence: 0.862311533

 $00{:}40{:}44{.}480 \dashrightarrow 00{:}40{:}46{.}020$  And then there are of course risks.

NOTE Confidence: 0.862311533

 $00{:}40{:}46{.}020$  -->  $00{:}40{:}48{.}428$  And with every clinical trial we always NOTE Confidence: 0.862311533

 $00:40:48.428 \longrightarrow 00:40:50.485$  talk to people about the possible

NOTE Confidence: 0.862311533

 $00{:}40{:}50{.}485 \dashrightarrow 00{:}40{:}52{.}520$  risks we we know that actually many NOTE Confidence: 0.862311533

 $00{:}40{:}52{.}520$  -->  $00{:}40{:}54{.}060$  times where you know we're we have NOTE Confidence: 0.862311533

 $00:40:54.060 \rightarrow 00:40:55.699$  a medicine that's very promising.

NOTE Confidence: 0.862311533

 $00{:}40{:}55.700 \dashrightarrow 00{:}40{:}57.058$  But it turns out it's actually not

NOTE Confidence: 0.862311533

 $00:40:57.058 \longrightarrow 00:40:58.340$  better than the standard of care.

NOTE Confidence: 0.862311533

 $00:40:58.340 \longrightarrow 00:41:00.100$  And so if someone is on a trial,

- NOTE Confidence: 0.862311533
- $00:41:00.100 \longrightarrow 00:41:01.654$  they might get a medicine that's not

 $00{:}41{:}01{.}654 \dashrightarrow 00{:}41{:}03{.}182$  clearly better than the standard treatment.

NOTE Confidence: 0.862311533

 $00:41:03.182 \rightarrow 00:41:05.714$  There could be unexpected side effects.

NOTE Confidence: 0.862311533

 $00:41:05.720 \rightarrow 00:41:07.360$  This is followed so closely,

NOTE Confidence: 0.862311533

 $00{:}41{:}07{.}360 \dashrightarrow 00{:}41{:}09{.}168$  and it's a huge effort to make sure

NOTE Confidence: 0.862311533

 $00{:}41{:}09{.}168 \dashrightarrow 00{:}41{:}10{.}895$  the side effects aren't going to

NOTE Confidence: 0.862311533

 $00:41:10.895 \rightarrow 00:41:12.719$  be harmful or dangerous for people.

NOTE Confidence: 0.862311533

00:41:12.720 --> 00:41:14.488 But it still could happen on a trial.

NOTE Confidence: 0.862311533

 $00{:}41{:}14.490 \dashrightarrow 00{:}41{:}16.258$  And I will say that sometimes on trials

NOTE Confidence: 0.862311533

 $00:41:16.258 \rightarrow 00:41:18.030$  there's more visits and testing just again,

NOTE Confidence: 0.862311533

00:41:18.030 --> 00:41:19.335 because we're watching people so

NOTE Confidence: 0.862311533

 $00{:}41{:}19.335 \dashrightarrow 00{:}41{:}21.139$  closely to make sure that it's safe.

NOTE Confidence: 0.945753635

00:41:23.330 --> 00:41:25.160 I wanted to also talk about

NOTE Confidence: 0.945753635

00:41:25.160 --> 00:41:25.770 translational research.

NOTE Confidence: 0.945753635

 $00{:}41{:}25{.}770 \dashrightarrow 00{:}41{:}27{.}443$  This is a topic that come that

 $00:41:27.443 \longrightarrow 00:41:29.391$  we also will talk a lot about in

NOTE Confidence: 0.945753635

 $00{:}41{:}29{.}391 \dashrightarrow 00{:}41{:}31{.}385$  clinic because we do a lot of these

NOTE Confidence: 0.945753635

00:41:31.385 --> 00:41:33.177 types of studies here at Yale and

NOTE Confidence: 0.945753635

 $00:41:33.180 \longrightarrow 00:41:34.990$  many academic centers do this.

NOTE Confidence: 0.945753635

 $00{:}41{:}34{.}990 \dashrightarrow 00{:}41{:}37{.}357$  The idea is that this can go both ways.

NOTE Confidence: 0.945753635

 $00:41:37.360 \longrightarrow 00:41:39.677$  It goes from the bench or the

NOTE Confidence: 0.945753635

00:41:39.677 --> 00:41:41.868 laboratory to the clinic and back,

NOTE Confidence: 0.945753635

 $00:41:41.870 \longrightarrow 00:41:44.222$  and so the part of this is that

NOTE Confidence: 0.945753635

 $00{:}41{:}44{.}222$  -->  $00{:}41{:}45{.}950$  outcomes obtained in the laboratory.

NOTE Confidence: 0.945753635

 $00:41:45.950 \rightarrow 00:41:47.150$  So like interesting findings,

NOTE Confidence: 0.945753635

00:41:47.150 --> 00:41:49.350 may be a new medicine that someone

NOTE Confidence: 0.945753635

 $00{:}41{:}49{.}350 \dashrightarrow 00{:}41{:}51{.}050$  is developing in a laboratory.

NOTE Confidence: 0.945753635

 $00:41:51.050 \rightarrow 00:41:52.457$  We can then bring into the clinic

NOTE Confidence: 0.945753635

 $00:41:52.457 \longrightarrow 00:41:54.028$  and see if we get able to help.

NOTE Confidence: 0.945753635

 $00:41:54.030 \longrightarrow 00:41:54.585$  People with it,

NOTE Confidence: 0.945753635

 $00:41:54.585 \rightarrow 00:41:56.090$  but it also can go the other way,

- NOTE Confidence: 0.945753635
- $00:41:56.090 \longrightarrow 00:41:57.402$  where sometimes things we've
- NOTE Confidence: 0.945753635
- $00:41:57.402 \longrightarrow 00:41:58.714$  seen in the clinic.
- NOTE Confidence: 0.945753635
- $00:41:58.720 \longrightarrow 00:42:00.155$  Someone who has an amazing
- NOTE Confidence: 0.945753635
- $00:42:00.155 \longrightarrow 00:42:01.303$  response to a treatment,
- NOTE Confidence: 0.945753635
- $00{:}42{:}01{.}310 \dashrightarrow 00{:}42{:}02{.}696$  even more than we would expect,
- NOTE Confidence: 0.945753635
- $00{:}42{:}02.700 \dashrightarrow 00{:}42{:}05.820$  or some interesting different.
- NOTE Confidence: 0.945753635
- $00:42:05.820 \longrightarrow 00:42:08.348$  Side effect or or unique aspect.
- NOTE Confidence: 0.945753635
- $00{:}42{:}08{.}348 \dashrightarrow 00{:}42{:}10{.}224$  We might then either take a piece
- NOTE Confidence: 0.945753635
- $00:42:10.224 \longrightarrow 00:42:12.024$  of the tumor or a blood sample
- NOTE Confidence: 0.945753635
- $00:42:12.024 \rightarrow 00:42:13.702$  and study it in the laboratory
- NOTE Confidence: 0.945753635
- $00:42:13.702 \rightarrow 00:42:15.358$  to understand that better,
- NOTE Confidence: 0.945753635
- $00:42:15.360 \longrightarrow 00:42:16.298$  and so it can go both ways.
- NOTE Confidence: 0.945753635
- $00:42:16.300 \longrightarrow 00:42:18.364$  And this is really an important
- NOTE Confidence: 0.945753635
- $00{:}42{:}18{.}364 \dashrightarrow 00{:}42{:}20{.}150$  area of research as well.
- NOTE Confidence: 0.945753635
- $00:42:20.150 \longrightarrow 00:42:21.998$  I wanted to just give an example
- NOTE Confidence: 0.945753635

 $00:42:21.998 \longrightarrow 00:42:23.366$  of translational research and how

NOTE Confidence: 0.945753635

 $00:42:23.366 \longrightarrow 00:42:24.950$  it's really helped us to improve

NOTE Confidence: 0.945753635

 $00:42:24.950 \rightarrow 00:42:26.208$  our understanding of lung cancer.

NOTE Confidence: 0.945753635

 $00{:}42{:}26{.}210 \dashrightarrow 00{:}42{:}27{.}680$  Dan alluded to this before and I'll

NOTE Confidence: 0.945753635

 $00:42:27.680 \longrightarrow 00:42:29.427$  just show you a little bit more detail,

NOTE Confidence: 0.945753635

 $00{:}42{:}29{.}430 \dashrightarrow 00{:}42{:}31{.}800$  so this is a bit of a timeline in how NOTE Confidence: 0.945753635

00:42:31.865 - 00:42:33.979 we have started to how we really,

NOTE Confidence: 0.945753635

 $00:42:33.980 \longrightarrow 00:42:35.476$  the understanding of mutations

NOTE Confidence: 0.945753635

 $00{:}42{:}35{.}476 \dashrightarrow 00{:}42{:}37{.}346$  in lung cancer have evolved.

NOTE Confidence: 0.945753635

 $00:42:37.350 \longrightarrow 00:42:39.961$  So back in 2004 we really only

NOTE Confidence: 0.945753635

 $00:42:39.961 \longrightarrow 00:42:42.239$  knew about two main drivers,

NOTE Confidence: 0.945753635

 $00:42:42.240 \rightarrow 00:42:44.270$  two main driver mutations in lung cancer,

NOTE Confidence: 0.945753635

 $00{:}42{:}44{.}270 \dashrightarrow 00{:}42{:}45{.}419$  EGFR and KRAS.

NOTE Confidence: 0.945753635

 $00:42:45.419 \longrightarrow 00:42:47.334$  This wasn't that long ago,

NOTE Confidence: 0.945753635

 $00:42:47.340 \longrightarrow 00:42:49.446$  just you know, 1617 years ago.

NOTE Confidence: 0.945753635

 $00:42:49.450 \longrightarrow 00:42:51.418$  Over the next couple of years.

- NOTE Confidence: 0.945753635
- $00:42:51.420 \rightarrow 00:42:53.070$  We started to understand more about
- NOTE Confidence: 0.945753635
- $00:42:53.070 \longrightarrow 00:42:54.530$  the different mutations in cancer.
- NOTE Confidence: 0.945753635
- $00{:}42{:}54{.}530 \dashrightarrow 00{:}42{:}56{.}651$  This is what Dan was talking about
- NOTE Confidence: 0.945753635
- $00:42:56.651 \rightarrow 00:42:58.466$  with the different when they show
- NOTE Confidence: 0.945753635
- $00{:}42{:}58{.}466 \dashrightarrow 00{:}42{:}59{.}976$  the different people in different
- NOTE Confidence: 0.945753635
- $00:42:59.976 \longrightarrow 00:43:01.380$  colors and different mutations
- NOTE Confidence: 0.945753635
- $00:43:01.380 \longrightarrow 00:43:03.108$  that we might find in the cancer.
- NOTE Confidence: 0.945753635
- $00{:}43{:}03{.}108 \dashrightarrow 00{:}43{:}04{.}928$  And so as we started to understand
- NOTE Confidence: 0.945753635
- $00:43:04.928 \longrightarrow 00:43:05.790$  things better,
- NOTE Confidence: 0.945753635
- $00:43:05.790 \longrightarrow 00:43:07.548$  we started to develop better treatments.
- NOTE Confidence: 0.945753635
- 00:43:07.550 --> 00:43:08.816 But you could see there's still
- NOTE Confidence: 0.945753635
- 00:43:08.816 --> 00:43:10.503 this big piece of the pie where we
- NOTE Confidence: 0.945753635
- 00:43:10.503 --> 00:43:11.953 didn't know what was going on in
- NOTE Confidence: 0.945753635
- $00{:}43{:}11{.}953 \dashrightarrow 00{:}43{:}13{.}219$  the tumors of those patients and
- NOTE Confidence: 0.945753635
- $00:43:13.219 \longrightarrow 00:43:14.769$  it really was by getting biopsies
- NOTE Confidence: 0.945753635

 $00:43:14.769 \rightarrow 00:43:16.284$  and studying those tumor samples

NOTE Confidence: 0.945753635

 $00:43:16.284 \longrightarrow 00:43:18.055$  in the lab that we started to

NOTE Confidence: 0.945753635

 $00:43:18.055 \longrightarrow 00:43:19.370$  be able to fill this in.

NOTE Confidence: 0.945753635

 $00:43:19.370 \longrightarrow 00:43:20.714$  And you can see here just

NOTE Confidence: 0.945753635

 $00:43:20.714 \longrightarrow 00:43:21.870$  a couple of years ago.

NOTE Confidence: 0.945753635

00:43:21.870 --> 00:43:22.686 Or understanding more,

NOTE Confidence: 0.945753635

 $00:43:22.686 \longrightarrow 00:43:23.502$  we're getting additional

NOTE Confidence: 0.945753635

 $00:43:23.502 \rightarrow 00:43:25.009$  pieces of the pie you know.

NOTE Confidence: 0.945753635

00:43:25.010 --> 00:43:25.763 Back in 2009,

NOTE Confidence: 0.945753635

 $00:43:25.763 \rightarrow 00:43:27.269$  we didn't know about this alteration,

NOTE Confidence: 0.945753635

 $00{:}43{:}27{.}270 \dashrightarrow 00{:}43{:}28{.}485$  called Ross one.

NOTE Confidence: 0.945753635

 $00:43:28.485 \rightarrow 00:43:31.214$  Now we do a very important finding

NOTE Confidence: 0.945753635

 $00:43:31.214 \longrightarrow 00:43:32.978$  in lung cancer because we have

NOTE Confidence: 0.945753635

 $00:43:32.978 \longrightarrow 00:43:34.195$  good targeted therapies and

NOTE Confidence: 0.945753635

 $00:43:34.195 \longrightarrow 00:43:35.615$  there's many other examples too.

NOTE Confidence: 0.945753635

 $00:43:35.620 \rightarrow 00:43:36.766$  And then here we are today.

- NOTE Confidence: 0.945753635
- $00:43:36.770 \longrightarrow 00:43:38.840$  So we now look at this, this pie.
- NOTE Confidence: 0.945753635
- 00:43:38.840 --> 00:43:39.822 This is, I think,
- NOTE Confidence: 0.945753635
- $00:43:39.822 \longrightarrow 00:43:40.118$  beautiful.
- NOTE Confidence: 0.945753635
- $00:43:40.118 \rightarrow 00:43:42.170$  We really understand so much more
- NOTE Confidence: 0.945753635
- $00{:}43{:}42.170 \dashrightarrow 00{:}43{:}43.265$  about lung cancer.
- NOTE Confidence: 0.945753635
- $00:43:43.270 \longrightarrow 00:43:44.355$  And of course the best part is
- NOTE Confidence: 0.945753635
- $00:43:44.355 \rightarrow 00:43:46.220$  that we're able to target so many
- NOTE Confidence: 0.945753635
- $00:43:46.220 \rightarrow 00:43:47.770$  of these alterations with really
- NOTE Confidence: 0.933405850833333
- $00:43:47.836 \longrightarrow 00:43:48.740$  effective drugs.
- NOTE Confidence: 0.933405850833333
- $00:43:48.740 \longrightarrow 00:43:50.126$  And so this is an example.
- NOTE Confidence: 0.933405850833333
- 00:43:50.130 --> 00:43:51.210 I wanted to show you because
- NOTE Confidence: 0.933405850833333
- $00{:}43{:}51{.}210 \dashrightarrow 00{:}43{:}52{.}190$  it was a study that.
- NOTE Confidence: 0.933405850833333
- $00{:}43{:}52{.}190 \dashrightarrow 00{:}43{:}54{.}010$  That we participated in here at Yale.
- NOTE Confidence: 0.933405850833333
- $00{:}43{:}54.010 \dashrightarrow 00{:}43{:}55.555$  Many other sites across the
- NOTE Confidence: 0.933405850833333
- $00{:}43{:}55{.}555 \dashrightarrow 00{:}43{:}57{.}100$  country participated in as well.
- NOTE Confidence: 0.933405850833333

 $00:43:57.100 \longrightarrow 00:43:58.876$  Again, what we did was we.

NOTE Confidence: 0.933405850833333

 $00:43:58.880 \rightarrow 00:44:01.448$  We looked at biopsies from patients.

NOTE Confidence: 0.933405850833333

 $00:44:01.450 \longrightarrow 00:44:03.470$  Mostly the patients had biopsies

NOTE Confidence: 0.933405850833333

 $00:44:03.470 \longrightarrow 00:44:05.490$  done for their clinical care,

NOTE Confidence: 0.933405850833333

 $00{:}44{:}05{.}490 \dashrightarrow 00{:}44{:}07{.}079$  and then we studied these in the

NOTE Confidence: 0.933405850833333

 $00:44:07.079 \longrightarrow 00:44:08.313$  lab in collaboration with all

NOTE Confidence: 0.933405850833333

 $00{:}44{:}08{.}313 \dashrightarrow 00{:}44{:}09{.}578$  these other really wonderful cancer

NOTE Confidence: 0.933405850833333

 $00{:}44{:}09{.}578 \dashrightarrow 00{:}44{:}11{.}254$  centers and we were able to fill

NOTE Confidence: 0.933405850833333

 $00:44:11.254 \rightarrow 00:44:12.562$  in this pie and really understand

NOTE Confidence: 0.933405850833333

 $00{:}44{:}12.570 \dashrightarrow 00{:}44{:}13.782$  what was happening in lung cancer

NOTE Confidence: 0.933405850833333

 $00:44:13.782 \longrightarrow 00:44:15.290$  and so why is that important?

NOTE Confidence: 0.933405850833333

00:44:15.290 - 00:44:17.650 Well, because now we can really have this

NOTE Confidence: 0.933405850833333

 $00:44:17.650 \rightarrow 00:44:19.050$  personalized therapy for lung cancer.

NOTE Confidence: 0.933405850833333

00:44:19.050 --> 00:44:20.114 This was, you know,

NOTE Confidence: 0.933405850833333

 $00:44:20.114 \rightarrow 00:44:21.710 20$  years ago where everybody with

NOTE Confidence: 0.933405850833333

 $00:44:21.763 \rightarrow 00:44:23.367$  lung cancer especially advanced.

- NOTE Confidence: 0.933405850833333
- $00:44:23.370 \longrightarrow 00:44:24.755$  Disease got really the same
- NOTE Confidence: 0.933405850833333
- 00:44:24.755 --> 00:44:25.863 treatment which was chemotherapy,
- NOTE Confidence: 0.933405850833333
- $00{:}44{:}25.870 \dashrightarrow 00{:}44{:}27.742$  and now that we understand the
- NOTE Confidence: 0.933405850833333
- $00:44:27.742 \longrightarrow 00:44:29.450$  mutations in lung cancer better,
- NOTE Confidence: 0.933405850833333
- $00:44:29.450 \rightarrow 00:44:31.473$  we can really have personalized therapy or
- NOTE Confidence: 0.933405850833333
- $00{:}44{:}31{.}473 \dashrightarrow 00{:}44{:}33{.}719$  some people will call it precision medicine,
- NOTE Confidence: 0.933405850833333
- 00:44:33.720 00:44:35.640 where if we find one mutation you get
- NOTE Confidence: 0.933405850833333
- 00:44:35.640 --> 00:44:37.200 treatment a a different mutation,
- NOTE Confidence: 0.933405850833333
- $00:44:37.200 \longrightarrow 00:44:38.058$  treatment, being, etc.
- NOTE Confidence: 0.933405850833333
- $00:44:38.058 \longrightarrow 00:44:40.060$  And they think of this as like
- NOTE Confidence: 0.933405850833333
- $00:44:40.119 \longrightarrow 00:44:40.927$  a lock and key.
- NOTE Confidence: 0.933405850833333
- $00:44:40.930 \longrightarrow 00:44:42.106$  If we understand,
- NOTE Confidence: 0.933405850833333
- 00:44:42.106 --> 00:44:44.458 you know what key will open,
- NOTE Confidence: 0.933405850833333
- $00{:}44{:}44{.}460 \dashrightarrow 00{:}44{:}45{.}172$  what lock.
- NOTE Confidence: 0.933405850833333
- $00:44:45.172 \longrightarrow 00:44:47.308$  We really can be most effective
- NOTE Confidence: 0.933405850833333

- $00:44:47.308 \longrightarrow 00:44:48.900$  in our treatments.
- NOTE Confidence: 0.933405850833333
- $00:44:48.900 \rightarrow 00:44:50.556$  And this is from several years ago now,
- NOTE Confidence: 0.933405850833333
- $00{:}44{:}50{.}560 \dashrightarrow 00{:}44{:}52{.}736$  but this really made a splash in the
- NOTE Confidence: 0.933405850833333
- $00:44:52.736 \longrightarrow 00:44:54.569$  news because it it worked so well
- NOTE Confidence: 0.933405850833333
- $00{:}44{:}54{.}569 \dashrightarrow 00{:}44{:}56{.}585$  for some people and you can see here
- NOTE Confidence: 0.933405850833333
- $00:44:56.585 \rightarrow 00:44:58.666$  in the Boston Globe a drug that works.
- NOTE Confidence: 0.933405850833333
- 00:44:58.666 --> 00:44:59.398 For some,
- NOTE Confidence: 0.933405850833333
- $00:44:59.398 \rightarrow 00:45:01.960$  this is looking at the EGFR therapies.
- NOTE Confidence: 0.933405850833333
- $00:45:01.960 \longrightarrow 00:45:03.826$  Once we understand that some people
- NOTE Confidence: 0.933405850833333
- $00:45:03.826 \rightarrow 00:45:05.988$  had this EGFR mutation in their cancer.
- NOTE Confidence: 0.933405850833333
- $00:45:05.990 \rightarrow 00:45:07.817$  The medication was found to work very,
- NOTE Confidence: 0.933405850833333
- $00:45:07.820 \rightarrow 00:45:10.230$  very well.
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}10{.}230 \dashrightarrow 00{:}45{:}11{.}748$  So I wanted to talk about
- NOTE Confidence: 0.933405850833333
- $00:45:11.748 \rightarrow 00:45:12.760$  immune therapy very briefly.
- NOTE Confidence: 0.933405850833333
- $00:45:12.760 \longrightarrow 00:45:14.590$  Dan mentioned what this was,
- NOTE Confidence: 0.933405850833333
- $00:45:14.590 \rightarrow 00:45:15.386$  what this was about,

- NOTE Confidence: 0.933405850833333
- $00{:}45{:}15{.}386 \dashrightarrow 00{:}45{:}17{.}098$  and I just wanted to talk about it
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}17.098 \dashrightarrow 00{:}45{:}18.496$  in the context of clinical trials.
- NOTE Confidence: 0.933405850833333
- $00:45:18.500 \longrightarrow 00:45:20.652$  In the lab and this was done by
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}20.652 \dashrightarrow 00{:}45{:}22.359$  researchers at Yale and elsewhere,
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}22{.}360 \dashrightarrow 00{:}45{:}23{.}335$  it was started.
- NOTE Confidence: 0.933405850833333
- $00:45:23.335 \rightarrow 00:45:24.960$  People were starting to understand
- NOTE Confidence: 0.933405850833333
- $00:45:24.960 \longrightarrow 00:45:26.594$  that immune therapy might be
- NOTE Confidence: 0.933405850833333
- 00:45:26.594 --> 00:45:28.134 very effective for for cancer,
- NOTE Confidence: 0.933405850833333
- 00:45:28.140 --> 00:45:28.830 including lung cancer,
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}28.830 \dashrightarrow 00{:}45{:}30.210$  and so this was brought into
- NOTE Confidence: 0.933405850833333
- $00:45:30.210 \longrightarrow 00:45:31.536$  the clinic in an early phase.
- NOTE Confidence: 0.933405850833333
- $00:45:31.540 \rightarrow 00:45:33.724$  Clinical trial is a phase one trial,
- NOTE Confidence: 0.933405850833333
- $00{:}45{:}33{.}730 \dashrightarrow 00{:}45{:}35{.}506$  the medication that's now known as
- NOTE Confidence: 0.933405850833333
- 00:45:35.506 --> 00:45:37.317 Nimbola Mab was called M DX 1106,
- NOTE Confidence: 0.933405850833333
- $00:45:37.317 \longrightarrow 00:45:38.780$  and Yale was one of the first
- NOTE Confidence: 0.933405850833333

 $00{:}45{:}38{.}840 \dashrightarrow 00{:}45{:}40{.}380$  sites to have this medication

NOTE Confidence: 0.933405850833333

 $00:45:40.380 \longrightarrow 00:45:41.612$  to having in therapies,

NOTE Confidence: 0.933405850833333

 $00:45:41.620 \longrightarrow 00:45:43.204$  and this is a patient of doctor again,

NOTE Confidence: 0.933405850833333

 $00:45:43.210 \rightarrow 00:45:44.698$  just maybe she's even on the call today.

NOTE Confidence: 0.933405850833333

00:45:44.700 --> 00:45:47.139 I don't know, but this was in a magazine,

NOTE Confidence: 0.933405850833333

 $00:45:47.140 \longrightarrow 00:45:49.268$  so that's why I'm showing her picture.

NOTE Confidence: 0.933405850833333

 $00{:}45{:}49{.}270 \dashrightarrow 00{:}45{:}50{.}824$  And she was treated in June of

NOTE Confidence: 0.933405850833333

 $00:45:50.824 \rightarrow 00:45:52.368 2010$  and she had a beautiful,

NOTE Confidence: 0.933405850833333

 $00:45:52.370 \rightarrow 00:45:54.130$  beautiful response to this treatment.

NOTE Confidence: 0.933405850833333

 $00:45:54.130 \longrightarrow 00:45:56.116$  On this phase one trial and

NOTE Confidence: 0.933405850833333

 $00:45:56.116 \rightarrow 00:45:57.910$  she's still doing well today.

NOTE Confidence: 0.933405850833333

00:45:57.910 --> 00:45:58.370 So really,

NOTE Confidence: 0.933405850833333

 $00:45:58.370 \longrightarrow 00:45:59.580$  a wonderful story of immune

NOTE Confidence: 0.933405850833333

 $00:45:59.580 \rightarrow 00:46:02.820$  therapy and in clinical research.

NOTE Confidence: 0.933405850833333

 $00:46:02.820 \rightarrow 00:46:03.918$  And so this is another story.

NOTE Confidence: 0.933405850833333

 $00:46:03.920 \longrightarrow 00:46:05.300$  I wanted to show here,

- NOTE Confidence: 0.933405850833333
- 00:46:05.300 --> 00:46:06.973 and I'm actually going to ask Doctor
- NOTE Confidence: 0.933405850833333
- 00:46:06.973 --> 00:46:09.159 Herbst if he can tell us about this study,
- NOTE Confidence: 0.933405850833333
- $00:46:09.160 \longrightarrow 00:46:10.948$  because he's one of the lead
- NOTE Confidence: 0.933405850833333
- $00:46:10.948 \longrightarrow 00:46:12.140$  investigators on this and
- NOTE Confidence: 0.920300175769231
- 00:46:12.203 --> 00:46:13.723 it's really an amazing study
- NOTE Confidence: 0.920300175769231
- $00:46:13.723 \longrightarrow 00:46:15.243$  that we've learned so much
- NOTE Confidence: 0.920300175769231
- $00:46:15.300 \longrightarrow 00:46:16.956$  from and is still ongoing now.
- NOTE Confidence: 0.920300175769231
- $00:46:16.960 \longrightarrow 00:46:19.570$  So Roy, do you want to tell us a
- NOTE Confidence: 0.920300175769231
- $00:46:19.570 \longrightarrow 00:46:22.070$  bit about this study? Absolutely
- NOTE Confidence: 0.583858142
- $00:46:22.080 \longrightarrow 00:46:24.792$  yeah thanks. Uh Sarah.
- NOTE Confidence: 0.583858142
- $00{:}46{:}24.792 \dashrightarrow 00{:}46{:}27.773$  So this is a study called the lung
- NOTE Confidence: 0.583858142
- $00{:}46{:}27.773 \dashrightarrow 00{:}46{:}29.678$  Cancer Master protocol and know what.
- NOTE Confidence: 0.583858142
- $00:46:29.680 \longrightarrow 00:46:32.844$  Basically this is is it's a public
- NOTE Confidence: 0.583858142
- $00{:}46{:}32{.}844 \dashrightarrow 00{:}46{:}34{.}901$  private partnership where what we've
- NOTE Confidence: 0.583858142
- $00{:}46{:}34{.}901 \dashrightarrow 00{:}46{:}37{.}861$  done is we have set up a study that's
- NOTE Confidence: 0.583858142

 $00:46:37.861 \longrightarrow 00:46:40.555$  open all over the United States and

NOTE Confidence: 0.583858142

00:46:40.555 --> 00:46:42.670 the drugs that we get you can see on

NOTE Confidence: 0.583858142

 $00:46:42.732 \rightarrow 00:46:45.420$  the bottom right come from different NOTE Confidence: 0.583858142

 $00:46:45.420 \rightarrow 00:46:46.914$  pharmaceutical companies and and

NOTE Confidence: 0.583858142

 $00:46:46.914 \rightarrow 00:46:48.993$  and what they do is they provide

NOTE Confidence: 0.583858142

 $00{:}46{:}48{.}993 \dashrightarrow 00{:}46{:}50{.}796$  the drugs and and resources.

NOTE Confidence: 0.583858142

 $00{:}46{:}50.796 \dashrightarrow 00{:}46{:}53.187$  Is something called the F NIH the foundation

NOTE Confidence: 0.583858142

 $00:46:53.187 \rightarrow 00:46:55.245$  for the National Institute of Health?

NOTE Confidence: 0.583858142

 $00:46:55.250 \dashrightarrow 00:46:58.018$  That's in the upper right of that circle.

NOTE Confidence: 0.583858142

 $00:46:58.020 \longrightarrow 00:46:59.890$  And why that's important is

NOTE Confidence: 0.583858142

 $00{:}46{:}59{.}890 \dashrightarrow 00{:}47{:}01{.}760$  because with those resources were

NOTE Confidence: 0.583858142

 $00{:}47{:}01{.}829 \dashrightarrow 00{:}47{:}03{.}816$  able to provide tumor profiling,

NOTE Confidence: 0.583858142

 $00{:}47{:}03.816 \dashrightarrow 00{:}47{:}06.997$  meaning sequencing of tumors free to all

NOTE Confidence: 0.583858142

 $00:47:06.997 \rightarrow 00:47:09.740$  sites that have this open around the US.

NOTE Confidence: 0.583858142

 $00:47:09.740 \longrightarrow 00:47:12.218$  And that's now almost 700 sites,

NOTE Confidence: 0.583858142

 $00:47:12.220 \rightarrow 00:47:12.962$  including Yale,

- NOTE Confidence: 0.583858142
- $00{:}47{:}12.962 \dashrightarrow 00{:}47{:}15.930$  the Smilow Cancer Hospital at all of our

 $00{:}47{:}15{.}999 \dashrightarrow 00{:}47{:}19{.}058$ 15 plus locations and also the Veterans

NOTE Confidence: 0.583858142

 $00:47:19.058 \rightarrow 00:47:21.169$  Administration Hospital in West Haven.

NOTE Confidence: 0.583858142

00:47:21.170 --> 00:47:22.759 And if you look on the right,

NOTE Confidence: 0.583858142

 $00:47:22.760 \longrightarrow 00:47:24.488$  what you can see is that this is a

NOTE Confidence: 0.583858142

 $00:47:24.488 \longrightarrow 00:47:25.636$  collaborative study between multiple groups

NOTE Confidence: 0.583858142

 $00:47:25.636 \rightarrow 00:47:27.609$  and I don't know if there's another slide,

NOTE Confidence: 0.583858142

 $00:47:27.610 \longrightarrow 00:47:31.528$  but basically is if there is.

NOTE Confidence: 0.583858142

 $00{:}47{:}31{.}530 \dashrightarrow 00{:}47{:}32{.}952$  Has that one perfect?

NOTE Confidence: 0.583858142

 $00:47:32.952 \rightarrow 00:47:33.828$  Yeah yeah, yeah.

NOTE Confidence: 0.583858142

 $00:47:33.828 \longrightarrow 00:47:35.288$  So they're all the sites

NOTE Confidence: 0.583858142

 $00{:}47{:}35{.}288 \dashrightarrow 00{:}47{:}36{.}819$  that's not a COVID map though.

NOTE Confidence: 0.583858142

 $00{:}47{:}36.820 \dashrightarrow 00{:}47{:}38.884$  Those are all sites where someone

NOTE Confidence: 0.583858142

 $00:47:38.884 \longrightarrow 00:47:40.918$  can go and get this study,

NOTE Confidence: 0.583858142

 $00{:}47{:}40.918 \dashrightarrow 00{:}47{:}42.234$  and that's important because

- $00:47:42.234 \longrightarrow 00:47:43.550$  not everyone can travel.
- NOTE Confidence: 0.583858142
- $00:47:43.550 \longrightarrow 00:47:45.517$  So that's why we have our care
- NOTE Confidence: 0.583858142
- $00:47:45.517 \rightarrow 00:47:47.006$  centers all throughout Connecticut,
- NOTE Confidence: 0.583858142
- $00{:}47{:}47.006 \dashrightarrow 00{:}47{:}47.810$  Rhode Island.
- NOTE Confidence: 0.583858142
- $00{:}47{:}47{.}810 \dashrightarrow 00{:}47{:}49{.}250$  And that's why we have these sites now.
- NOTE Confidence: 0.583858142
- $00:47:49.250 \rightarrow 00:47:50.888$  You can take away that picture for a second,
- NOTE Confidence: 0.583858142
- $00:47:50.890 \longrightarrow 00:47:51.856$  go one back.
- NOTE Confidence: 0.583858142
- $00{:}47{:}51.856 \dashrightarrow 00{:}47{:}53.788$  What we have is basically every one
- NOTE Confidence: 0.583858142
- $00{:}47{:}53.788 \dashrightarrow 00{:}47{:}54.730$  gets screened.
- NOTE Confidence: 0.583858142
- $00{:}47{:}54{.}730 \dashrightarrow 00{:}47{:}56{.}480$  One of the frustrations about
- NOTE Confidence: 0.583858142
- $00:47:56.480 \rightarrow 00:47:58.116$  protocols is you get screened and
- NOTE Confidence: 0.583858142
- $00:47:58.116 \longrightarrow 00:47:59.520$  then you're not eligible and that
- NOTE Confidence: 0.583858142
- $00:47:59.572 \longrightarrow 00:48:01.048$  will still happen with this study.
- NOTE Confidence: 0.583858142
- $00:48:01.050 \rightarrow 00:48:02.408$  But the hope is with this study.
- NOTE Confidence: 0.583858142
- $00:48:02.410 \longrightarrow 00:48:04.165$  You get screened in the upper and the top.
- NOTE Confidence: 0.583858142
- $00:48:04.170 \longrightarrow 00:48:06.424$  Sarah can sort of point that out

- NOTE Confidence: 0.583858142
- $00:48:06.424 \rightarrow 00:48:08.238$  screening protocols and then based on
- NOTE Confidence: 0.583858142
- 00:48:08.238 --> 00:48:10.666 that result you can either on the left
- NOTE Confidence: 0.583858142
- 00:48:10.666 --> 00:48:12.794 or the right you you get different
- NOTE Confidence: 0.583858142
- $00:48:12.794 \rightarrow 00:48:15.538$  drugs based on what your tumor shows.
- NOTE Confidence: 0.583858142
- $00{:}48{:}15{.}538 \dashrightarrow 00{:}48{:}18{.}658$  This is the personalized medicine.
- NOTE Confidence: 0.583858142
- $00:48:18.660 \longrightarrow 00:48:20.390$  Putting the right drug for
- NOTE Confidence: 0.583858142
- $00:48:20.390 \longrightarrow 00:48:22.540$  the cancer at the right time.
- NOTE Confidence: 0.583858142
- 00:48:22.540 --> 00:48:24.340 So we're very proud that you know many of
- NOTE Confidence: 0.583858142
- $00{:}48{:}24{.}340 \dashrightarrow 00{:}48{:}26{.}318$  us here are involved that to get insured.
- NOTE Confidence: 0.583858142
- 00:48:26.320 --> 00:48:27.856 Dr Goldberg, Dr.
- NOTE Confidence: 0.583858142
- 00:48:27.856 --> 00:48:28.880 Chang myself,
- NOTE Confidence: 0.583858142
- 00:48:28.880 --> 00:48:30.692 you know Jennifer Pope over there
- NOTE Confidence: 0.583858142
- $00{:}48{:}30{.}692 \dashrightarrow 00{:}48{:}32{.}690$  and our screen she's so important.
- NOTE Confidence: 0.583858142
- $00{:}48{:}32.690 \dashrightarrow 00{:}48{:}34.436$  In getting these trials open and
- NOTE Confidence: 0.583858142
- $00:48:34.436 \longrightarrow 00:48:35.946$  running through the group so
- NOTE Confidence: 0.583858142

 $00:48:35.946 \rightarrow 00:48:37.692$  it's really exciting that we have

NOTE Confidence: 0.583858142

 $00{:}48{:}37{.}692 \dashrightarrow 00{:}48{:}39{.}023$  these drugs available 'cause we

NOTE Confidence: 0.583858142

 $00:48:39.023 \rightarrow 00:48:40.430$  want to be able to say OK.

NOTE Confidence: 0.583858142

 $00:48:40.430 \rightarrow 00:48:42.050$  What's causing this tumor to grow?

NOTE Confidence: 0.583858142

 $00:48:42.050 \rightarrow 00:48:44.409$  What's the engine Dan talked about that,

NOTE Confidence: 0.583858142

 $00:48:44.410 \rightarrow 00:48:45.730$  and how can we get the right drug?

NOTE Confidence: 0.583858142

 $00:48:45.730 \longrightarrow 00:48:47.396$  So thanks Sarah for bringing this up.

NOTE Confidence: 0.8606060175

 $00:48:47.890 \longrightarrow 00:48:49.026$  Now this is great.

NOTE Confidence: 0.8606060175

00:48:49.026 --> 00:48:50.730 It's it's just such a wonderful

NOTE Confidence: 0.8606060175

 $00:48:50.791 \longrightarrow 00:48:52.750$  example of of a study that that

NOTE Confidence: 0.8606060175

 $00{:}48{:}52.750 \dashrightarrow 00{:}48{:}54.690$  we're so involved in here at Yale.

NOTE Confidence: 0.8606060175

 $00{:}48{:}54{.}690 \dashrightarrow 00{:}48{:}55{.}390$  But as you could see,

NOTE Confidence: 0.8606060175

 $00:48:55.390 \longrightarrow 00:48:57.125$  is all throughout the country

NOTE Confidence: 0.8606060175

 $00:48:57.125 \rightarrow 00:48:59.390$  and is really making an impact.

NOTE Confidence: 0.8606060175

00:48:59.390 --> 00:49:02.198 So I I also just wanted to show this,

NOTE Confidence: 0.8606060175

 $00:49:02.200 \longrightarrow 00:49:03.635$  you know again, with all of the

- NOTE Confidence: 0.8606060175
- 00:49:03.635 00:49:04.599 different studies that we have,
- NOTE Confidence: 0.8606060175
- $00:49:04.600 \rightarrow 00:49:06.415$  we've really made amazing progress
- NOTE Confidence: 0.8606060175
- 00:49:06.415 --> 00:49:08.230 that we've had several drugs.
- NOTE Confidence: 0.8606060175
- $00:49:08.230 \rightarrow 00:49:10.038$  You could see. Some of the examples here.
- NOTE Confidence: 0.8606060175
- $00:49:10.040 \rightarrow 00:49:11.636$  These have now been approved by the FDA.
- NOTE Confidence: 0.8606060175
- $00:49:11.636 \rightarrow 00:49:13.325$  And you, they're available as part
- NOTE Confidence: 0.8606060175
- $00{:}49{:}13.325 \dashrightarrow 00{:}49{:}15.215$  of standard treatment and these
- NOTE Confidence: 0.8606060175
- $00{:}49{:}15{.}215 \dashrightarrow 00{:}49{:}17{.}160$  were drugs that were studied here.
- NOTE Confidence: 0.8606060175
- 00:49:17.160 --> 00:49:18.160 And again,
- NOTE Confidence: 0.8606060175
- 00:49:18.160 00:49:20.072 this is the way to get them initially
- NOTE Confidence: 0.8606060175
- $00:49:20.072 \longrightarrow 00:49:21.641$  before they were approved was on
- NOTE Confidence: 0.8606060175
- $00{:}49{:}21.641 \dashrightarrow 00{:}49{:}23.195$  these clinical trials and and it
- NOTE Confidence: 0.8606060175
- $00{:}49{:}23{.}246 \dashrightarrow 00{:}49{:}25{.}004$  was the trials that helped us
- NOTE Confidence: 0.8606060175
- $00{:}49{:}25.004 \dashrightarrow 00{:}49{:}27.730$  understand how beneficial they were.
- NOTE Confidence: 0.8606060175
- $00:49:27.730 \longrightarrow 00:49:29.249$  Then when I showed the same picture,
- NOTE Confidence: 0.8606060175

 $00:49:29.250 \rightarrow 00:49:30.370$  I think we both really like it.

NOTE Confidence: 0.8606060175

 $00{:}49{:}30{.}370 \dashrightarrow 00{:}49{:}31{.}890$  It's I think this is one of the

NOTE Confidence: 0.8606060175

 $00{:}49{:}31.890 \dashrightarrow 00{:}49{:}33.401$  last times the whole team was

NOTE Confidence: 0.8606060175

 $00:49:33.401 \longrightarrow 00:49:34.485$  together before the pandemic.

NOTE Confidence: 0.8606060175

 $00:49:34.490 \longrightarrow 00:49:35.678$  Now we all see each other

NOTE Confidence: 0.8606060175

 $00{:}49{:}35{.}678 \dashrightarrow 00{:}49{:}36{.}930$  on zoom calls all the time.

NOTE Confidence: 0.8606060175

 $00:49:36.930 \longrightarrow 00:49:38.550$  But this is our team.

NOTE Confidence: 0.8606060175

 $00:49:38.550 \longrightarrow 00:49:40.110$  It's a really a fantastic team.

NOTE Confidence: 0.8606060175

 $00:49:40.110 \longrightarrow 00:49:41.950$  Many different disciplines coming together

NOTE Confidence: 0.8606060175

 $00{:}49{:}41{.}950 \dashrightarrow 00{:}49{:}44{.}870$  to study and treat and fight lung cancer.

NOTE Confidence: 0.8606060175

 $00:49:44.870 \longrightarrow 00:49:46.142$  And it's really a wonderful

NOTE Confidence: 0.8606060175

 $00:49:46.142 \longrightarrow 00:49:47.115$  team to be part of.

NOTE Confidence: 0.8606060175

00:49:47.115 --> 00:49:48.465 Roy mentioned this that we're at

NOTE Confidence: 0.8606060175

 $00:49:48.465 \rightarrow 00:49:49.669$  so many different sites across

NOTE Confidence: 0.8606060175

 $00{:}49{:}49{.}669 \dashrightarrow 00{:}49{:}50{.}879$  Connecticut and now Rhode Island

NOTE Confidence: 0.8606060175

 $00{:}49{:}50.879 \dashrightarrow 00{:}49{:}52.647$  two and that also is wonderful and

- NOTE Confidence: 0.8606060175
- $00{:}49{:}52.647 \dashrightarrow 00{:}49{:}53.897$  you have some representatives from
- NOTE Confidence: 0.8606060175
- 00:49:53.897 > 00:49:55.775 the different sites on this panel
- NOTE Confidence: 0.8606060175
- 00:49:55.775 --> 00:49:57.400 today which is also fantastic.
- NOTE Confidence: 0.91963756
- 00:49:59.490 --> 00:50:03.390 Alright. So I'm going to stop
- NOTE Confidence: 0.91963756
- $00:50:03.390 \longrightarrow 00:50:05.540$  sharing and open up for discussion.
- NOTE Confidence: 0.91963756
- 00:50:05.540 --> 00:50:08.295 Maybe I'll I'll start and
- NOTE Confidence: 0.91963756
- 00:50:08.295 --> 00:50:10.499 ask Jenn Popa question.
- NOTE Confidence: 0.91963756
- $00:50:10.500 \rightarrow 00:50:12.410$  Jen is Roy mentioned you.
- NOTE Confidence: 0.91963756
- $00{:}50{:}12{.}410 \dashrightarrow 00{:}50{:}14{.}876$  You're such an integral part of
- NOTE Confidence: 0.91963756
- $00{:}50{:}14.876 \dashrightarrow 00{:}50{:}17.492$  our our research team and I think
- NOTE Confidence: 0.91963756
- $00:50:17.492 \longrightarrow 00:50:19.774$  you know all of the progress that
- NOTE Confidence: 0.91963756
- $00{:}50{:}19{.}774 \dashrightarrow 00{:}50{:}22{.}133$  we've we've seen in in that in
- NOTE Confidence: 0.91963756
- $00{:}50{:}22.133 \dashrightarrow 00{:}50{:}24.140$  clinical trials and in research.
- NOTE Confidence: 0.91963756
- $00{:}50{:}24.140 \dashrightarrow 00{:}50{:}25.640$  There's a whole engine behind it,
- NOTE Confidence: 0.91963756
- $00:50:25.640 \longrightarrow 00:50:27.005$  and you're such a part of that.
- NOTE Confidence: 0.91963756

 $00:50:27.010 \longrightarrow 00:50:28.710$  To make all these trials,

NOTE Confidence: 0.91963756

 $00:50:28.710 \longrightarrow 00:50:32.007$  these trials work, which is just fantastic.

NOTE Confidence: 0.91963756

 $00{:}50{:}32.010 \dashrightarrow 00{:}50{:}33.487$  There's a lot of questions that often

NOTE Confidence: 0.91963756

 $00:50:33.487 \rightarrow 00:50:35.000$  come up about logistics of trials,

NOTE Confidence: 0.91963756

 $00{:}50{:}35{.}000 \dashrightarrow 00{:}50{:}36{.}498$  and I would love to just hear

NOTE Confidence: 0.91963756

 $00{:}50{:}36{.}498 \dashrightarrow 00{:}50{:}37{.}858$  your thoughts on this and and

NOTE Confidence: 0.91963756

 $00:50:37.858 \longrightarrow 00:50:38.963$  how you think about this.

NOTE Confidence: 0.91963756

00:50:38.970 --> 00:50:41.150 Tell us about, you know,

NOTE Confidence: 0.91963756

 $00:50:41.150 \longrightarrow 00:50:41.945$  just again, logistically,

NOTE Confidence: 0.91963756

 $00:50:41.945 \longrightarrow 00:50:43.535$  how does it work for patients

NOTE Confidence: 0.91963756

 $00:50:43.535 \longrightarrow 00:50:44.689$  when they're on a trial?

NOTE Confidence: 0.91963756

 $00:50:44.690 \longrightarrow 00:50:46.244$  Do they have to pay for them?

NOTE Confidence: 0.91963756

 $00:50:46.250 \longrightarrow 00:50:47.786$  Do they always have to travel

NOTE Confidence: 0.91963756

 $00:50:47.786 \longrightarrow 00:50:48.810$  to to New Haven?

NOTE Confidence: 0.91963756

 $00:50:48.810 \longrightarrow 00:50:49.790$  Or the main campus?

NOTE Confidence: 0.91963756

00:50:49.790 --> 00:50:51.260 Or how does it work logistically?

 $00:50:52.890 \longrightarrow 00:50:55.810$  Well, we have a team to help first,

NOTE Confidence: 0.9035538825

 $00{:}50{:}55{.}810 \dashrightarrow 00{:}51{:}00{.}698$  so I have a staff of nurses who some of some

NOTE Confidence: 0.9035538825

 $00:51:00.700 \rightarrow 00:51:04.260$  of the participants may have met before.

NOTE Confidence: 0.9035538825

 $00{:}51{:}04{.}260 \dashrightarrow 00{:}51{:}07{.}200$  Heather and Alan, who are our research

NOTE Confidence: 0.9035538825

 $00{:}51{:}07{.}200 \dashrightarrow 00{:}51{:}10{.}167$  nurses and when we think a trial

NOTE Confidence: 0.9035538825

 $00{:}51{:}10{.}167 \dashrightarrow 00{:}51{:}12{.}597$  might be appropriate for a patient,

NOTE Confidence: 0.9035538825

 $00{:}51{:}12.600 \dashrightarrow 00{:}51{:}14.558$  usually you meet with one of them

NOTE Confidence: 0.9035538825

 $00:51:14.558 \rightarrow 00:51:16.677$  first and they go through a consent

NOTE Confidence: 0.9035538825

 $00{:}51{:}16.677 \dashrightarrow 00{:}51{:}19.001$  form with you and they talk about

NOTE Confidence: 0.9035538825

 $00:51:19.001 \rightarrow 00:51:20.793$  the trial and the requirements

NOTE Confidence: 0.9035538825

 $00:51:20.793 \dashrightarrow 00:51:23.257$  of the study as it was mentioned.

NOTE Confidence: 0.9035538825

 $00{:}51{:}23.260 \dashrightarrow 00{:}51{:}24.318$  There to night,

NOTE Confidence: 0.9035538825

 $00:51:24.318 \rightarrow 00:51:27.492$  often clinical trial has more requirements

NOTE Confidence: 0.9035538825

 $00{:}51{:}27{.}492 \dashrightarrow 00{:}51{:}30{.}300$  for patients than standard therapy,

NOTE Confidence: 0.9035538825

 $00{:}51{:}30{.}300 \dashrightarrow 00{:}51{:}32{.}787$  so will tell you what those are and

 $00:51:32.787 \longrightarrow 00:51:34.936$  will talk to you about the cost.

NOTE Confidence: 0.9035538825

 $00:51:34.940 \longrightarrow 00:51:38.468$  So typically anything that would be an

NOTE Confidence: 0.9035538825

 $00{:}51{:}38{.}468 \dashrightarrow 00{:}51{:}40{.}752$  extra requirement is covered by the

NOTE Confidence: 0.9035538825

 $00:51:40.752 \rightarrow 00:51:43.513$  clinical trial and anything that would

NOTE Confidence: 0.9035538825

 $00{:}51{:}43{.}513 \dashrightarrow 00{:}51{:}45{.}690$  be a part of your normal treatment

NOTE Confidence: 0.9035538825

 $00:51:45.748 \rightarrow 00:51:48.470$  is covered by you or your insurance,

NOTE Confidence: 0.9035538825

 $00:51:48.470 \longrightarrow 00:51:50.770$  just like it normally would.

NOTE Confidence: 0.9035538825

 $00:51:50.770 \rightarrow 00:51:53.870$  And of course everything is is voluntary,

NOTE Confidence: 0.9035538825

 $00:51:53.870 \longrightarrow 00:51:55.226$  so we present it to you.

NOTE Confidence: 0.9035538825

 $00{:}51{:}55{.}230 \dashrightarrow 00{:}51{:}57{.}343$  And we talked to you about possible

NOTE Confidence: 0.9035538825

 $00{:}51{:}57{.}343 \dashrightarrow 00{:}51{:}59{.}954$  alternatives and then it's up to you

NOTE Confidence: 0.9035538825

 $00{:}51{:}59{.}954 \dashrightarrow 00{:}52{:}02{.}468$  whether you'd like to participate or not.

NOTE Confidence: 0.9035538825

 $00:52:02.470 \rightarrow 00:52:05.294$  And of course people can change their mind

NOTE Confidence: 0.9035538825

 $00:52:05.294 \rightarrow 00:52:08.016$  at later time if they if they decide.

NOTE Confidence: 0.9035538825

 $00:52:08.020 \longrightarrow 00:52:08.490$  Great

NOTE Confidence: 0.917339128333333

 $00:52:08.810 \rightarrow 00:52:11.270$  thank you for explaining all that.

00:52:11.270 --> 00:52:13.286 I just wanted to take a second and

NOTE Confidence: 0.917339128333333

 $00{:}52{:}13.286 \dashrightarrow 00{:}52{:}14.974$  have Lisa Fucito introduced herself

NOTE Confidence: 0.917339128333333

 $00:52:14.974 \rightarrow 00:52:17.224$  'cause she just joined the panel.

NOTE Confidence: 0.917339128333333

 $00{:}52{:}17{.}230 \dashrightarrow 00{:}52{:}19{.}382$  He said do you want to just introduce

NOTE Confidence: 0.917339128333333

 $00:52:19.382 \rightarrow 00:52:22.884$  yourself to to our or participants here we

NOTE Confidence: 0.917339128333333

 $00{:}52{:}22{.}884 \dashrightarrow 00{:}52{:}27{.}288$  have a whole group of people who are very.

NOTE Confidence: 0.917339128333333

 $00{:}52{:}27{.}290 \dashrightarrow 00{:}52{:}29{.}058$  Interactive on our chat so I will be

NOTE Confidence: 0.917339128333333

 $00:52:29.058 \rightarrow 00:52:30.635$  asking you some questions but introduce

NOTE Confidence: 0.917339128333333

 $00{:}52{:}30{.}635 \dashrightarrow 00{:}52{:}32{.}510$  yourself so they know who you are.

NOTE Confidence: 0.9647975866666667

 $00:52:33.590 \longrightarrow 00:52:34.460$  Sure, thanks for

NOTE Confidence: 0.956813558571428

 $00{:}52{:}34{.}470 \dashrightarrow 00{:}52{:}36{.}409$  having me and I apologize for forgetting

NOTE Confidence: 0.763384926

00:52:36.420 --> 00:52:38.550 I'm late. I'm Lisa Bushido.

NOTE Confidence: 0.763384926

00:52:38.550 --> 00:52:40.310 I'm the director of the Tobacco Treatment

NOTE Confidence: 0.9200868166666667

 $00{:}52{:}40{.}320 \dashrightarrow 00{:}52{:}42{.}126$  Service at SMILOW and I'm very pleased NOTE Confidence: 0.920086816666667

 $00{:}52{:}42.126$  -->  $00{:}52{:}44.429$  to say that we are now represented across NOTE Confidence: 0.920086816666667

 $00:52:44.429 \rightarrow 00:52:46.270$  our care network across the state,

NOTE Confidence: 0.9200868166666667

 $00{:}52{:}46.270 \dashrightarrow 00{:}52{:}48.912$  so that that was a wonderful IT improvement

NOTE Confidence: 0.9200868166666667

 $00{:}52{:}48{.}912 \dashrightarrow 00{:}52{:}51{.}030$  that we made over the last couple of years.

NOTE Confidence: 0.9200868166666667

00:52:51.030 --> 00:52:52.319 I'm also a clinical psychologist

NOTE Confidence: 0.920086816666667

 $00{:}52{:}52{.}319 \dashrightarrow 00{:}52{:}54{.}314$  by training an associate professor

NOTE Confidence: 0.9200868166666667

 $00:52:54.314 \rightarrow 00:52:55.910$  in the Psychiatry department,

NOTE Confidence: 0.920086816666667

 $00:52:55.910 \longrightarrow 00:52:57.838$  and in addition to running the

NOTE Confidence: 0.9200868166666667

 $00:52:57.838 \rightarrow 00:52:59.656$  service and helping individuals

NOTE Confidence: 0.920086816666667

 $00{:}52{:}59{.}656 \dashrightarrow 00{:}53{:}01{.}440$  stop their to bacco use,

NOTE Confidence: 0.9200868166666667

00:53:01.440 --> 00:53:02.970 I run a bunch of clinical

NOTE Confidence: 0.9200868166666667

 $00:53:02.970 \longrightarrow 00:53:04.499$  trials where we try to test.

NOTE Confidence: 0.920086816666667

 $00{:}53{:}04{.}500 \dashrightarrow 00{:}53{:}07{.}104$  Innovative strategies to try to bring

NOTE Confidence: 0.9200868166666667

 $00:53:07.104 \rightarrow 00:53:09.220$  to bacco treatment into oncology care.

NOTE Confidence: 0.9200868166666667

 $00{:}53{:}09{.}220 \dashrightarrow 00{:}53{:}12{.}136$  We're also testing some of the

NOTE Confidence: 0.920086816666667

 $00:53:12.136 \rightarrow 00:53:14.481$  alternative products that have come

NOTE Confidence: 0.9200868166666667

 $00:53:14.481 \rightarrow 00:53:16.280$  out and looking at the potential

- NOTE Confidence: 0.9200868166666667
- $00:53:16.280 \rightarrow 00:53:18.050$  safety profiles of those products as
- NOTE Confidence: 0.9200868166666667
- $00{:}53{:}18{.}101 \dashrightarrow 00{:}53{:}19{.}935$  well as the option for harm reduction.
- NOTE Confidence: 0.9200868166666667
- $00{:}53{:}19{.}940 \dashrightarrow 00{:}53{:}21{.}596$  So pleased to be a part of the panel
- NOTE Confidence: 0.9200868166666667
- $00{:}53{:}21{.}596 \dashrightarrow 00{:}53{:}23{.}027$  and happy to answer any questions
- NOTE Confidence: 0.9200868166666667
- $00{:}53{:}23.027 \dashrightarrow 00{:}53{:}23.987$  that may come up.
- NOTE Confidence: 0.916044863333333
- $00{:}53{:}25{.}380 \dashrightarrow 00{:}53{:}27{.}819$  Greatly so thank you so much for joining us.
- NOTE Confidence: 0.916044863333333
- 00:53:27.820 --> 00:53:29.370 Don't leave yourself yet so
- NOTE Confidence: 0.916044863333333
- 00:53:29.370 --> 00:53:31.580 I'm gonna ask you a question.
- NOTE Confidence: 0.916044863333333
- $00{:}53{:}31{.}580 \dashrightarrow 00{:}53{:}33{.}902$  You know, I think there's a lot of of.
- NOTE Confidence: 0.82424577
- 00:53:35.350 00:53:36.310 Like I mean things
- NOTE Confidence: 0.917155632857143
- $00{:}53{:}36{.}320 \dashrightarrow 00{:}53{:}37{.}892$  that are unclear about E cigarettes
- NOTE Confidence: 0.917155632857143
- $00{:}53{:}37{.}892 \dashrightarrow 00{:}53{:}39{.}909$  out there and and how we should think
- NOTE Confidence: 0.917155632857143
- 00:53:39.909 --> 00:53:42.068 about them in terms of the risk and can
- NOTE Confidence: 0.917155632857143
- 00:53:42.068 --> 00:53:43.776 they help you quit smoking? Can you?
- NOTE Confidence: 0.917155632857143
- $00{:}53{:}43.776 \dashrightarrow 00{:}53{:}45.640$  Can you talk a little bit about that
- NOTE Confidence: 0.917155632857143

 $00{:}53{:}45{.}698 \dashrightarrow 00{:}53{:}47{.}434$  and things that you're doing to try

NOTE Confidence: 0.917155632857143

 $00:53:47.434 \longrightarrow 00:53:49.050$  to come to understand that better?

NOTE Confidence: 0.7987834

00:53:51.350 --> 00:53:52.884 Yeah, great questions and you

NOTE Confidence: 0.7987834

 $00:53:52.884 \rightarrow 00:53:54.600$  know it's so confusing because you

NOTE Confidence: 0.9296146465

 $00{:}53{:}54{.}654 \dashrightarrow 00{:}53{:}56{.}586$  know these products came into the United

NOTE Confidence: 0.9296146465

 $00{:}53{:}56{.}586$  -->  $00{:}53{:}58{.}888$  States in about 2007 and they continue NOTE Confidence: 0.9296146465

 $00:53:58.888 \rightarrow 00:54:01.542$  to evolve and the technology you know

NOTE Confidence: 0.9296146465

 $00:54:01.542 \rightarrow 00:54:03.380$  continues to expand year to year.

NOTE Confidence: 0.9296146465

 $00{:}54{:}03{.}380 \dashrightarrow 00{:}54{:}05{.}620$  So the number of products and different

NOTE Confidence: 0.913188608333333

 $00:54:05.630 \longrightarrow 00:54:07.178$  devices you can use in flavor.

NOTE Confidence: 0.913188608333333

00:54:07.180 --> 00:54:08.500 I mean it's it's numerous so it's

NOTE Confidence: 0.913188608333333

 $00:54:08.500 \longrightarrow 00:54:09.828$  it's really. It's a confusing

NOTE Confidence: 0.926484248333333

 $00:54:09.840 \longrightarrow 00:54:11.178$  market I think for a consumer,

NOTE Confidence: 0.926484248333333

 $00{:}54{:}11{.}180 \dashrightarrow 00{:}54{:}13{.}574$  let alone those of us who are

NOTE Confidence: 0.926484248333333

 $00:54:13.574 \longrightarrow 00:54:15.669$  trying to treat the behavior.

NOTE Confidence: 0.926484248333333

 $00:54:15.670 \longrightarrow 00:54:17.460$  So I think that's the big.

00:54:17.460 --> 00:54:19.130 That's the big question, right?

NOTE Confidence: 0.926484248333333

 $00:54:19.130 \longrightarrow 00:54:20.105$  You know they were introduced.

NOTE Confidence: 0.926484248333333

00:54:20.105 - 00:54:22.085 With the hope that they could

NOTE Confidence: 0.926484248333333

 $00{:}54{:}22.085 \dashrightarrow 00{:}54{:}24.335$  potentially help people who are smoking

NOTE Confidence: 0.926484248333333

 $00{:}54{:}24{.}335 \dashrightarrow 00{:}54{:}26{.}246$  transition to this as an alternative,

NOTE Confidence: 0.926484248333333

 $00{:}54{:}26{.}250 \dashrightarrow 00{:}54{:}29{.}169$  the thought being that perhaps by not

NOTE Confidence: 0.926484248333333

 $00:54:29.169 \rightarrow 00:54:31.516$  smoking actual tobacco and transitioning

NOTE Confidence: 0.926484248333333

 $00:54:31.516 \rightarrow 00:54:34.576$  the nicotine delivery to this alternative

NOTE Confidence: 0.926484248333333

 $00{:}54{:}34{.}576 \dashrightarrow 00{:}54{:}37{.}835$  system that perhaps it might offer a

NOTE Confidence: 0.926484248333333

00:54:37.835 --> 00:54:40.370 harm reduction profile or potential,

NOTE Confidence: 0.926484248333333

 $00:54:40.370 \longrightarrow 00:54:42.414$  but there's a lot that's

NOTE Confidence: 0.926484248333333

 $00:54:42.414 \rightarrow 00:54:43.898$  come with these products.

NOTE Confidence: 0.926484248333333

 $00:54:43.900 \longrightarrow 00:54:44.822$  So unfortunately,

NOTE Confidence: 0.926484248333333

 $00:54:44.822 \rightarrow 00:54:46.666$  because they're flavored now,

NOTE Confidence: 0.926484248333333

 $00{:}54{:}46{.}670 \dashrightarrow 00{:}54{:}48{.}650$  we see a lot of young people who might not

 $00:54:48.702 \longrightarrow 00:54:50.634$  have ever turned to tobacco and nicotine.

NOTE Confidence: 0.926484248333333

 $00{:}54{:}50{.}640 \dashrightarrow 00{:}54{:}52{.}770$  Products now starting to use them,

NOTE Confidence: 0.926484248333333

00:54:52.770 --> 00:54:54.300 and I think if you could,

NOTE Confidence: 0.926484248333333

 $00:54:54.300 \longrightarrow 00:54:55.818$  you know never start using any

NOTE Confidence: 0.926484248333333

 $00{:}54{:}55{.}818$  -->  $00{:}54{:}56{.}830$  to bacco or nicotine products.

NOTE Confidence: 0.926484248333333

 $00:54:56.830 \longrightarrow 00:54:58.090$  That would be a good thing.

NOTE Confidence: 0.926484248333333

 $00{:}54{:}58{.}090 \dashrightarrow 00{:}54{:}59{.}850$  So so that's a concern.

NOTE Confidence: 0.926484248333333

 $00{:}55{:}00{.}140 \dashrightarrow 00{:}55{:}00{.}770$  Also,

NOTE Confidence: 0.927354814

00:55:00.780 --> 00:55:02.010 I think a concern is

NOTE Confidence: 0.944896485555555

 $00:55:02.470 \longrightarrow 00:55:04.125$  just the amount of nicotine

NOTE Confidence: 0.944896485555555

 $00:55:04.125 \longrightarrow 00:55:05.449$  that they can deliver.

NOTE Confidence: 0.944896485555555

 $00:55:05.450 \rightarrow 00:55:07.244$  People are now getting exposed to

NOTE Confidence: 0.944896485555555

 $00{:}55{:}07{.}244 \dashrightarrow 00{:}55{:}09{.}200$  nicotine levels that are much higher

NOTE Confidence: 0.944896485555555

 $00:55:09.262 \dashrightarrow 00:55:11.002$  than they would have otherwise

NOTE Confidence: 0.944896485555555

 $00:55:11.002 \dashrightarrow 00:55:12.742$  if they were smoking cigarettes.

NOTE Confidence: 0.944896485555555

 $00:55:12.750 \dashrightarrow 00:55:15.006$  And so while the nicotine itself

00:55:15.006 - 00:55:16.510 isn't isn't really dangerous,

NOTE Confidence: 0.944896485555555

 $00{:}55{:}16{.}510 \dashrightarrow 00{:}55{:}18{.}930$  I think just the fact that people can very

NOTE Confidence: 0.944896485555555

 $00:55:18.930 \rightarrow 00:55:21.467$  quickly start to use an amount of nicotine.

NOTE Confidence: 0.944896485555555

 $00:55:21.470 \longrightarrow 00:55:23.806$  That they're not used to their their

NOTE Confidence: 0.944896485555555

 $00{:}55{:}23.806 \dashrightarrow 00{:}55{:}26.078$  dependence levels and other things I can

NOTE Confidence: 0.944896485555555

 $00:55:26.078 \rightarrow 00:55:28.530$  come with being dependent on nicotine.

NOTE Confidence: 0.944896485555555

 $00:55:28.530 \rightarrow 00:55:30.993$  It's just that trajectory just

NOTE Confidence: 0.944896485555555

 $00:55:30.993 \dashrightarrow 00:55:32.414$  grows so much more quickly than I

NOTE Confidence: 0.944896485555555

 $00:55:32.414 \rightarrow 00:55:33.948$  think it used to for other people.

NOTE Confidence: 0.944896485555555

 $00:55:33.950 \dashrightarrow 00:55:35.231$  But back to the question of does

NOTE Confidence: 0.944896485555555

 $00:55:35.231 \longrightarrow 00:55:36.020$  it help people stop?

NOTE Confidence: 0.944896485555555

 $00:55:36.020 \rightarrow 00:55:39.082$  Isn't an alternative right now?

NOTE Confidence: 0.944896485555555

 $00:55:39.082 \longrightarrow 00:55:40.762$  The most of the data suggests

NOTE Confidence: 0.944896485555555

 $00:55:40.762 \longrightarrow 00:55:41.740$  that while there,

NOTE Confidence: 0.944896485555555

 $00:55:41.740 \longrightarrow 00:55:42.940$  there is the potential that

 $00:55:42.940 \rightarrow 00:55:44.850$  it may help some people.

NOTE Confidence: 0.944896485555555

 $00{:}55{:}44.850 \dashrightarrow 00{:}55{:}46.850$  There's been large scale controlled

NOTE Confidence: 0.944896485555555

 $00:55:46.850 \rightarrow 00:55:48.740$  trials that have compared it to using

NOTE Confidence: 0.944896485555555

 $00:55:48.740 \longrightarrow 00:55:50.490$  for example the nicotine patch.

NOTE Confidence: 0.944896485555555

 $00:55:50.490 \longrightarrow 00:55:51.826$  And there's there's some.

NOTE Confidence: 0.944896485555555

 $00{:}55{:}51{.}826 \dashrightarrow 00{:}55{:}53{.}496$  Data that suggests that perhaps

NOTE Confidence: 0.944896485555555

 $00:55:53.500 \rightarrow 00:55:55.606$  it might be kind of on par with,

NOTE Confidence: 0.944896485555555

 $00:55:55.610 \rightarrow 00:55:57.026$  you know, using the nicotine patch,

NOTE Confidence: 0.944896485555555

 $00{:}55{:}57{.}030 \dashrightarrow 00{:}55{:}58{.}690$  or may be a tiny bit better.

NOTE Confidence: 0.892283695

 $00:55:59.320 \longrightarrow 00:56:00.448$  People don't usually stop

NOTE Confidence: 0.87600318375

 $00:56:00.480 \longrightarrow 00:56:01.323$  using the product,

NOTE Confidence: 0.87600318375

00:56:01.323 --> 00:56:03.290 so you know a year out someone

NOTE Confidence: 0.87600318375

 $00:56:03.356 \dashrightarrow 00:56:05.366$  might still be using any cigarette,

NOTE Confidence: 0.87600318375

 $00{:}56{:}05{.}370 \dashrightarrow 00{:}56{:}07{.}410$  whereas with the nicotine patch most

NOTE Confidence: 0.87600318375

 $00{:}56{:}07{.}410 \dashrightarrow 00{:}56{:}09{.}876$  people would have stopped and so we

NOTE Confidence: 0.87600318375

 $00:56:09.876 \rightarrow 00:56:11.592$  don't know what the long term effects

- NOTE Confidence: 0.87600318375
- $00:56:11.592 \rightarrow 00:56:14.120$  are going to be of using an E cigarette.
- NOTE Confidence: 0.87600318375
- $00{:}56{:}14.120 \dashrightarrow 00{:}56{:}16.122$  The short term data that we have
- NOTE Confidence: 0.87600318375
- $00:56:16.122 \longrightarrow 00:56:17.769$  suggests that if you took a
- NOTE Confidence: 0.87600318375
- 00:56:17.769 --> 00:56:19.038 cigarette versus an E cigarette,
- NOTE Confidence: 0.87600318375
- $00:56:19.040 \longrightarrow 00:56:21.497$  probably the short term health effects are.
- NOTE Confidence: 0.87600318375
- $00{:}56{:}21.500 \dashrightarrow 00{:}56{:}23.525$  Are not as bad with an E cigarette,
- NOTE Confidence: 0.87600318375
- $00:56:23.525 \longrightarrow 00:56:25.760$  but we don't really know long
- NOTE Confidence: 0.87600318375
- $00:56:25.760 \longrightarrow 00:56:27.420$  term what the effects will be,
- NOTE Confidence: 0.87600318375
- $00{:}56{:}27{.}420 \dashrightarrow 00{:}56{:}29{.}359$  and so that's a concern that people
- NOTE Confidence: 0.87600318375
- $00{:}56{:}29{.}359 \dashrightarrow 00{:}56{:}31{.}885$  tend to go on to continue to use them.
- NOTE Confidence: 0.87600318375
- $00:56:31.890 \longrightarrow 00:56:33.647$  But the other concern is that most
- NOTE Confidence: 0.87600318375
- 00:56:33.647 --> 00:56:35.816 people who use E cigarettes who were a
- NOTE Confidence: 0.87600318375
- $00:56:35.816 \rightarrow 00:56:37.484$  cigarette smoker continue to be what
- NOTE Confidence: 0.87600318375
- $00:56:37.484 \rightarrow 00:56:39.453$  we call dual users, so they don't.
- NOTE Confidence: 0.87600318375
- 00:56:39.453 --> 00:56:41.515 They don't actually go on to stop smoking,
- NOTE Confidence: 0.87600318375

 $00:56:41.515 \rightarrow 00:56:44.228$  they actually go on to continue to use both.

NOTE Confidence: 0.87600318375

 $00:56:44.230 \rightarrow 00:56:46.534$  And if there is a harm reduction benefit,

NOTE Confidence: 0.87600318375

 $00:56:46.540 \rightarrow 00:56:48.436$  it's really for people who completely

NOTE Confidence: 0.87600318375

 $00{:}56{:}48{.}436 \dashrightarrow 00{:}56{:}50{.}574$  switched to E cigarettes and the data

NOTE Confidence: 0.87600318375

 $00:56:50.574 \rightarrow 00:56:52.206$  is just not really supporting that.

NOTE Confidence: 0.87600318375

 $00:56:52.210 \longrightarrow 00:56:54.846$  It's it's helping people to to

NOTE Confidence: 0.87600318375

 $00:56:54.846 \longrightarrow 00:56:56.334$  make that switch so,

NOTE Confidence: 0.87600318375

 $00:56:56.340 \longrightarrow 00:56:58.630$  so that's kind of kind of where we stand.

NOTE Confidence: 0.87600318375

 $00{:}56{:}58{.}630 \dashrightarrow 00{:}57{:}00{.}655$  I think at this point you know we continue

NOTE Confidence: 0.87600318375

 $00{:}57{:}00{.}655 \dashrightarrow 00{:}57{:}02{.}928$  to recommend and advise individuals to use,

NOTE Confidence: 0.87600318375

00:57:02.930 --> 00:57:03.596 you know,

NOTE Confidence: 0.87600318375

 $00{:}57{:}03.596 \dashrightarrow 00{:}57{:}04.928$  the FDA approved medications,

NOTE Confidence: 0.87600318375

 $00{:}57{:}04{.}930 \dashrightarrow 00{:}57{:}06{.}918$  but if if some one is coming in

NOTE Confidence: 0.87600318375

 $00{:}57{:}06{.}918$  -->  $00{:}57{:}08{.}440$  and they are just not,

NOTE Confidence: 0.87600318375

 $00:57:08.440 \dashrightarrow 00:57:11.275$  you know they don't want to choose that path.

NOTE Confidence: 0.87600318375

 $00:57:11.280 \rightarrow 00:57:13.458$  We obviously open up the dialogue

- NOTE Confidence: 0.87600318375
- $00:57:13.458 \rightarrow 00:57:14.910$  to consider E cigarettes,
- NOTE Confidence: 0.87600318375
- 00:57:14.910 --> 00:57:17.742 but we really advise people you want
- NOTE Confidence: 0.87600318375
- $00:57:17.742 \longrightarrow 00:57:19.674$  to be on the lowest dose possible
- NOTE Confidence: 0.87600318375
- $00:57:19.674 \rightarrow 00:57:21.690$  for the shortest amount of time,
- NOTE Confidence: 0.87600318375
- $00{:}57{:}21.690 \dashrightarrow 00{:}57{:}23.840$  and you want to absolutely not smoke.
- NOTE Confidence: 0.87600318375
- $00:57:23.840 \longrightarrow 00:57:25.030$  And then you have to come off
- NOTE Confidence: 0.87600318375
- $00:57:25.030 \longrightarrow 00:57:25.540$  of this product.
- NOTE Confidence: 0.87600318375
- $00:57:25.540 \longrightarrow 00:57:26.224$  And that's really,
- NOTE Confidence: 0.87600318375
- 00:57:26.224 --> 00:57:26.680 you know,
- NOTE Confidence: 0.87600318375
- $00:57:26.680 \rightarrow 00:57:28.480$  kind of the framework that we are advising.
- NOTE Confidence: 0.87600318375
- 00:57:28.480 --> 00:57:29.560 And interestingly,
- NOTE Confidence: 0.87600318375
- $00{:}57{:}29{.}560 \dashrightarrow 00{:}57{:}31{.}310$  we are now seeing a lot more people
- NOTE Confidence: 0.87600318375
- $00:57:31.310 \rightarrow 00:57:32.967$  in our program coming in specifically
- NOTE Confidence: 0.87600318375
- 00:57:32.967 --> 00:57:34.547 for E cigarette dependence.
- NOTE Confidence: 0.914512513333333
- $00{:}57{:}36{.}650 \dashrightarrow 00{:}57{:}40{.}675$  You're doing a mazing work. Thank you, Dan.
- NOTE Confidence: 0.914512513333333

00:57:40.675 --> 00:57:43.350 There's a question from earlier,

NOTE Confidence: 0.914512513333333

 $00{:}57{:}43.350 \dashrightarrow 00{:}57{:}44.910$  I think, about something that you

NOTE Confidence: 0.914512513333333

 $00{:}57{:}44{.}910 \dashrightarrow 00{:}57{:}46{.}558$  mentioned in your talk and I just

NOTE Confidence: 0.914512513333333

 $00:57:46.558 \rightarrow 00:57:48.870$  wanted to to hear your thoughts

NOTE Confidence: 0.914512513333333

 $00:57:48.870 \longrightarrow 00:57:51.295$  on this about life expectancy.

NOTE Confidence: 0.914512513333333

 $00:57:51.300 \longrightarrow 00:57:52.556$  That has kept quadrupled.

NOTE Confidence: 0.914512513333333

 $00{:}57{:}52{.}556 \dashrightarrow 00{:}57{:}54{.}800$  Tell us a little more about that.

NOTE Confidence: 0.914512513333333

00:57:54.800 - 00:57:59.310 So yeah, the. The first

NOTE Confidence: 0.9045315

 $00{:}57{:}59{.}310 \dashrightarrow 00{:}58{:}03{.}350$  thing to know about life expectancy is if

NOTE Confidence: 0.9045315

 $00:58:03.350 \rightarrow 00:58:08.210$  you look online you will see for each stage.

NOTE Confidence: 0.9045315

00:58:08.210 --> 00:58:10.712 Median survival like on average people

NOTE Confidence: 0.9045315

00:58:10.712 --> 00:58:13.529 will live a certain amount of time,

NOTE Confidence: 0.9045315

 $00{:}58{:}13.530 \dashrightarrow 00{:}58{:}16.127$  or they'll say they'll have a survival

NOTE Confidence: 0.9045315

 $00{:}58{:}16{.}127 \dashrightarrow 00{:}58{:}19{.}347$  curve and it's called the five year survival

NOTE Confidence: 0.9045315

 $00:58:19.350 \rightarrow 00:58:22.374$  and the first thing people think well,

NOTE Confidence: 0.9045315

 $00:58:22.380 \longrightarrow 00:58:24.666$  does that mean at five years

- NOTE Confidence: 0.9045315
- 00:58:24.666 --> 00:58:26.190 everybody just drops dead?

 $00:58:26.190 \longrightarrow 00:58:28.542$  No, the five year survival

NOTE Confidence: 0.9045315

 $00{:}58{:}28{.}542 \dashrightarrow 00{:}58{:}30{.}893$  we think we're alive at five

NOTE Confidence: 0.9045315

 $00:58:30.893 \rightarrow 00:58:33.343$  years we consider you a cure now.

NOTE Confidence: 0.9045315

 $00:58:33.350 \rightarrow 00:58:35.726$  Not everybody that makes it to five years

NOTE Confidence: 0.9045315

 $00:58:35.726 \dashrightarrow 00:58:38.348$  does and not every body that that makes 25.

NOTE Confidence: 0.9045315

00:58:38.350 --> 00:58:39.850 Years for free,

NOTE Confidence: 0.9045315

 $00:58:39.850 \longrightarrow 00:58:43.350$  but that's just sort of the language

NOTE Confidence: 0.9045315

 $00:58:43.448 \longrightarrow 00:58:46.706$  of of cancer is around 5 year survival.

NOTE Confidence: 0.9045315

00:58:46.710 -> 00:58:50.294 But what people won't tell you is.

NOTE Confidence: 0.9045315

 $00:58:50.300 \longrightarrow 00:58:54.025$  Almost nobody survives what their

NOTE Confidence: 0.9045315

 $00{:}58{:}54.025 \dashrightarrow 00{:}58{:}56.468$  predicted to, so it's just a.

NOTE Confidence: 0.9045315

 $00{:}58{:}56{.}468 \dashrightarrow 00{:}58{:}57{.}179$  It's a really.

NOTE Confidence: 0.9045315

 $00{:}58{:}57{.}180 \dashrightarrow 00{:}59{:}00{.}430$  It gives you an idea of what groups will do,

NOTE Confidence: 0.9045315

 $00:59:00.430 \dashrightarrow 00:59:03.566$  but it really has no implications

 $00:59:03.566 \rightarrow 00:59:07.737$  for you specifically because the

NOTE Confidence: 0.9045315

00:59:07.737 --> 00:59:09.579 people may be older than you.

NOTE Confidence: 0.9045315

 $00:59:09.580 \dashrightarrow 00:59:12.254$  They may be less healthy that you.

NOTE Confidence: 0.9045315

 $00{:}59{:}12.260 \dashrightarrow 00{:}59{:}14.796$  You may have three things and most

NOTE Confidence: 0.9045315

 $00{:}59{:}14.796 \dashrightarrow 00{:}59{:}17.026$  people in there have 20 things you

NOTE Confidence: 0.9045315

00:59:17.026 - 00:59:19.479 may have had just one lobe removed,

NOTE Confidence: 0.9045315

 $00{:}59{:}19{.}480 \dashrightarrow 00{:}59{:}20{.}377$  or two lobes.

NOTE Confidence: 0.9045315

 $00{:}59{:}20{.}377 \dashrightarrow 00{:}59{:}22{.}171$  Removed and some of those people

NOTE Confidence: 0.9045315

00:59:22.171 --> 00:59:23.966 had three lobes removed and you

NOTE Confidence: 0.9045315

00:59:23.966 --> 00:59:26.240 may have never had a heart attack,

NOTE Confidence: 0.9045315

 $00:59:26.240 \longrightarrow 00:59:28.506$  so there really is the,

NOTE Confidence: 0.9045315

 $00{:}59{:}28.506 \dashrightarrow 00{:}59{:}31.674$  so I would not ever take a survival

NOTE Confidence: 0.9045315

 $00{:}59{:}31.674 \dashrightarrow 00{:}59{:}34.265$  number off the Internet and think

NOTE Confidence: 0.9045315

 $00:59:34.265 \dashrightarrow 00:59:37.558$  that is what's going to apply to you.

NOTE Confidence: 0.9045315

00:59:37.560 --> 00:59:39.768 And the way I frame it with patients

NOTE Confidence: 0.9045315

 $00{:}59{:}39{.}768 \dashrightarrow 00{:}59{:}41{.}784$  because I because I am a part time

- NOTE Confidence: 0.9045315
- $00:59:41.784 \rightarrow 00:59:43.770$  from a part of the country where
- NOTE Confidence: 0.9045315
- 00:59:43.770 -> 00:59:45.750 we do say things pretty plainly
- NOTE Confidence: 0.9045315
- $00{:}59{:}45{.}750 \dashrightarrow 00{:}59{:}47{.}456$  where I'm from the Midwest.
- NOTE Confidence: 0.9045315
- $00:59:47.456 \dashrightarrow 00:59:49.798$  And by the way, I'd like to think of things.
- NOTE Confidence: 0.9045315
- 00:59:49.800 --> 00:59:51.966 Are you more or less likely
- NOTE Confidence: 0.9045315
- $00:59:51.966 \rightarrow 00:59:54.022$  to be cured and are you?
- NOTE Confidence: 0.9045315
- $00{:}59{:}54{.}022 \dashrightarrow 00{:}59{:}55{.}966$  Is there hope and are you
- NOTE Confidence: 0.9045315
- $00:59:55.966 \rightarrow 00:59:57.840$  doing everything possible?
- NOTE Confidence: 0.9045315
- $00{:}59{:}57{.}840 \dashrightarrow 00{:}59{:}59{.}500$  Those are the big things.
- NOTE Confidence: 0.9045315
- $00:59:59.500 \rightarrow 01:00:01.870$  Everything else is just so imprecise
- NOTE Confidence: 0.9045315
- $01{:}00{:}01{.}870 \dashrightarrow 01{:}00{:}04{.}518$  that I wouldn't get hung up on it.
- NOTE Confidence: 0.9045315
- 01:00:04.520 --> 01:00:06.746 So what do I mean by quadrupling?
- NOTE Confidence: 0.9045315
- $01:00:06.750 \longrightarrow 01:00:08.280$  Well, this is a scary number.
- NOTE Confidence: 0.9045315
- $01:00:08.280 \longrightarrow 01:00:10.230$  So believe it or not,
- NOTE Confidence: 0.9045315
- $01:00:10.230 \rightarrow 01:00:10.970$  uhm.
- NOTE Confidence: 0.925243827222222

01:00:14.720 --> 01:00:16.212 UH-55 ten years ago,

NOTE Confidence: 0.925243827222222

 $01{:}00{:}16.212 \dashrightarrow 01{:}00{:}18.918$  the chance of being alive at five

NOTE Confidence: 0.925243827222222

 $01:00:18.918 \longrightarrow 01:00:21.648$  years with stage four cancer was 5%.

NOTE Confidence: 0.925243827222222

 $01:00:21.650 \longrightarrow 01:00:24.240$  Now it's 20% now does that mean

NOTE Confidence: 0.925243827222222

 $01:00:24.240 \rightarrow 01:00:26.057$  everybody with stage four cancer

NOTE Confidence: 0.925243827222222

 $01:00:26.057 \longrightarrow 01:00:28.140$  has an 80% chance of not making it?

NOTE Confidence: 0.925243827222222

01:00:28.140 --> 01:00:29.403 No, it's it's.

NOTE Confidence: 0.925243827222222

 $01{:}00{:}29{.}403 \dashrightarrow 01{:}00{:}31{.}929$  It's such a moving target that

NOTE Confidence: 0.925243827222222

 $01:00:31.929 \longrightarrow 01:00:33.920$  honestly we don't even know,

NOTE Confidence: 0.925243827222222

 $01:00:33.920 \rightarrow 01:00:37.280$  but the early it's like watching the

NOTE Confidence: 0.925243827222222

 $01{:}00{:}37{.}280 \dashrightarrow 01{:}00{:}39{.}639$  presidential election with early data.

NOTE Confidence: 0.925243827222222

 $01:00:39.640 \dashrightarrow 01:00:41.817$  You know things change, but but it's.

NOTE Confidence: 0.925243827222222

 $01:00:41.820 \dashrightarrow 01:00:44.865$  Already looking good the the early vote.

NOTE Confidence: 0.925243827222222

 $01{:}00{:}44.870 \dashrightarrow 01{:}00{:}47.250$  The early ballots haven't been counted and

NOTE Confidence: 0.925243827222222

 $01:00:47.250 \rightarrow 01:00:49.470$  the the candidate you want is winning.

NOTE Confidence: 0.925243827222222

 $01:00:49.470 \rightarrow 01:00:52.930$  So I would say based on what we know already,

 $01{:}00{:}52{.}930 \dashrightarrow 01{:}00{:}55{.}037$  which it doesn't take into consideration a

NOTE Confidence: 0.925243827222222

 $01:00:55.037 \rightarrow 01:00:57.368$  whole bunch of innovations that have hit.

NOTE Confidence: 0.925243827222222

01:00:57.370 --> 01:00:58.810 It's already quadrupled,

NOTE Confidence: 0.925243827222222

 $01:00:58.810 \longrightarrow 01:01:02.170$  so I would anticipate it to do

NOTE Confidence: 0.925243827222222

 $01:01:02.257 \longrightarrow 01:01:04.364$  a lot more in somebody.

NOTE Confidence: 0.925243827222222

 $01{:}01{:}04{.}364 \dashrightarrow 01{:}01{:}09{.}300$  So Peter struck a nerve here about outcomes

NOTE Confidence: 0.925243827222222

 $01:01:09.418 \longrightarrow 01:01:13.830$  in rank and so I do have to tell you so.

NOTE Confidence: 0.925243827222222

 $01:01:13.830 \longrightarrow 01:01:17.344$  Outcomes it's a fair question and and

NOTE Confidence: 0.925243827222222

01:01:17.344 --> 01:01:20.848 the the chance of of not surviving

NOTE Confidence: 0.925243827222222

 $01:01:20.848 \rightarrow 01:01:24.274$  surgery is is lower here than than

NOTE Confidence: 0.925243827222222

 $01:01:24.274 \rightarrow 01:01:27.655$  the majority of places in the area,

NOTE Confidence: 0.925243827222222

 $01{:}01{:}27.660 \dashrightarrow 01{:}01{:}28.688$  if not the country.

NOTE Confidence: 0.925243827222222

 $01{:}01{:}28.688 \dashrightarrow 01{:}01{:}31.715$  So in my hands with my team the chance of

NOTE Confidence: 0.925243827222222

01:01:31.715 --> 01:01:33.881 not surviving lung cancer surgery nationally,

NOTE Confidence: 0.925243827222222

 $01:01:33.881 \longrightarrow 01:01:36.618$  it's about 5% in on my team,

 $01:01:36.620 \longrightarrow 01:01:38.580$  it's significantly less than 1%,

NOTE Confidence: 0.925243827222222

 $01:01:38.580 \longrightarrow 01:01:40.476$  so safety is something we live

NOTE Confidence: 0.925243827222222

 $01{:}01{:}40.476 \dashrightarrow 01{:}01{:}42.240$  and breathe and it's not me.

NOTE Confidence: 0.925243827222222

 $01:01:42.240 \rightarrow 01:01:45.350$  It's my nurses, my PA's.

NOTE Confidence: 0.925243827222222

01:01:45.350 --> 01:01:46.244 My OR team.

NOTE Confidence: 0.925243827222222

 $01{:}01{:}46.244 \dashrightarrow 01{:}01{:}49.345$  It's it's so safety here is is something we

NOTE Confidence: 0.925243827222222

 $01:01:49.345 \rightarrow 01:01:52.165$  take incredibly safely and so seriously.

NOTE Confidence: 0.925243827222222

 $01:01:52.170 \rightarrow 01:01:54.954$  And all of my partners do as well.

NOTE Confidence: 0.925243827222222

 $01{:}01{:}54{.}960 \dashrightarrow 01{:}01{:}59{.}213$  The state of Connecticut in 2020 was tide,

NOTE Confidence: 0.925243827222222

 $01:01:59.213 \longrightarrow 01:02:03.544$  or maybe it was 2019 was tide for

NOTE Confidence: 0.925243827222222

 $01{:}02{:}03{.}544 \dashrightarrow 01{:}02{:}05{.}799$  the lowest lung cancer mortality

NOTE Confidence: 0.925243827222222

 $01{:}02{:}05{.}799 \dashrightarrow 01{:}02{:}08{.}846$  in the country and don't ask me

NOTE Confidence: 0.925243827222222

 $01{:}02{:}08.846 \dashrightarrow 01{:}02{:}11.487$  what the other state was 'cause

NOTE Confidence: 0.925243827222222

 $01{:}02{:}11{.}487 \dashrightarrow 01{:}02{:}14{.}345$  I don't remember but and we do,

NOTE Confidence: 0.925243827222222

 $01:02:14.345 \rightarrow 01:02:16.535$  the majority were the biggest provider

NOTE Confidence: 0.925243827222222

 $01:02:16.535 \longrightarrow 01:02:18.834$  for lung cancer in the state and

- NOTE Confidence: 0.925243827222222
- $01:02:18.834 \longrightarrow 01:02:21.178$  so we take pride in that number.
- NOTE Confidence: 0.925243827222222
- 01:02:21.180 --> 01:02:24.378 I will say about rankings though.
- NOTE Confidence: 0.925243827222222
- 01:02:24.380 --> 01:02:25.114 You know,
- NOTE Confidence: 0.925243827222222
- $01{:}02{:}25{.}114 \dashrightarrow 01{:}02{:}27{.}316$  being the best means you failed
- NOTE Confidence: 0.925243827222222
- $01:02:27.316 \longrightarrow 01:02:29.350$  the least at being perfect.
- NOTE Confidence: 0.925243827222222
- $01:02:29.350 \longrightarrow 01:02:29.876$  We don't,
- NOTE Confidence: 0.925243827222222
- $01:02:29.876 \longrightarrow 01:02:31.980$  but we're not lasard in on being the
- NOTE Confidence: 0.925243827222222
- $01:02:32.041 \longrightarrow 01:02:34.155$  best were lasered in on being better.
- NOTE Confidence: 0.925243827222222
- $01:02:34.160 \longrightarrow 01:02:35.360$  So that is our goal.
- NOTE Confidence: 0.925243827222222
- $01:02:35.360 \longrightarrow 01:02:37.816$  That is our end game and so our
- NOTE Confidence: 0.925243827222222
- $01:02:37.816 \longrightarrow 01:02:39.898$  motto here is everyday better.
- NOTE Confidence: 0.925243827222222
- 01:02:39.900 --> 01:02:43.223 We're constantly trying to learn about
- NOTE Confidence: 0.925243827222222
- $01:02:43.223 \rightarrow 01:02:45.344$  this is this might be an opportunity
- NOTE Confidence: 0.925243827222222
- 01:02:45.344 --> 01:02:51.310 to get better right now, but. Sorry.
- NOTE Confidence: 0.925243827222222
- $01:02:51.310 \rightarrow 01:02:55.520$  Hey buddy, give Me 2 seconds the.
- NOTE Confidence: 0.925243827222222

01:02:55.520 --> 01:02:57.620 The chief of Cardiac's calling

NOTE Confidence: 0.925243827222222

 $01:02:57.620 \longrightarrow 01:03:00.576$  me the UM so but but so I don't.

NOTE Confidence: 0.925243827222222

01:03:00.580 --> 01:03:02.974 I'm I'm not fixated on rankings or

NOTE Confidence: 0.925243827222222

 $01:03:02.974 \rightarrow 01:03:05.350$  things like that I think you should.

NOTE Confidence: 0.925243827222222

 $01{:}03{:}05{.}350 \dashrightarrow 01{:}03{:}07{.}222$  You should find the physician and

NOTE Confidence: 0.925243827222222

 $01{:}03{:}07{.}222 \dashrightarrow 01{:}03{:}09{.}400$  a team that you believe is going

NOTE Confidence: 0.925243827222222

 $01:03:09.400 \longrightarrow 01:03:10.280$  to care for you.

NOTE Confidence: 0.925243827222222

01:03:10.280 --> 01:03:11.558 You know lung and lung surgery.

NOTE Confidence: 0.925243827222222

01:03:11.560 --> 01:03:15.736 Yes, Yale is top ranked or lung and lung

NOTE Confidence: 0.925243827222222

 $01:03:15.736 \rightarrow 01:03:18.740$  cancer surgery, but that doesn't matter.

NOTE Confidence: 0.925243827222222

 $01{:}03{:}18.740 \dashrightarrow 01{:}03{:}19.700$  That's to me.

NOTE Confidence: 0.925243827222222

 $01:03:19.700 \longrightarrow 01:03:21.940$  It's do you connect with your team?

NOTE Confidence: 0.925243827222222

 $01:03:21.940 \rightarrow 01:03:27.540$  Is your team well organized? It come.

NOTE Confidence: 0.925243827222222

 $01:03:27.540 \longrightarrow 01:03:29.619$  I gotta go. So go take your call.

NOTE Confidence: 0.925243827222222

01:03:29.620 --> 01:03:30.628 Alright thanks guys.

NOTE Confidence: 0.8639533255

01:03:33.090 --> 01:03:34.158 OK, I'm gonna ask.

- NOTE Confidence: 0.8639533255
- $01:03:34.158 \rightarrow 01:03:36.064$  I think two more questions and then
- NOTE Confidence: 0.8639533255
- 01:03:36.064 --> 01:03:37.984 I'm going to turn this over to Halle
- NOTE Confidence: 0.8639533255
- $01:03:37.984 \rightarrow 01:03:40.330$  to to give us some words of wisdom.
- NOTE Confidence: 0.8639533255
- $01:03:40.330 \longrightarrow 01:03:42.130$  So Jennifer Possick I want to
- NOTE Confidence: 0.8639533255
- $01:03:42.130 \longrightarrow 01:03:43.988$  ask you a question that is
- NOTE Confidence: 0.8639533255
- $01:03:43.988 \longrightarrow 01:03:45.770$  asked by one of our attendees.
- NOTE Confidence: 0.8639533255
- $01:03:45.770 \longrightarrow 01:03:47.291$  So this is this is an important
- NOTE Confidence: 0.8639533255
- $01:03:47.291 \longrightarrow 01:03:48.953$  one that I think really applies
- NOTE Confidence: 0.8639533255
- $01{:}03{:}48{.}953 \dashrightarrow 01{:}03{:}51{.}278$  to a lot of people have had lung
- NOTE Confidence: 0.8639533255
- $01:03:51.278 \longrightarrow 01:03:53.465$  cancer so for those of us with
- NOTE Confidence: 0.8639533255
- $01:03:53.465 \rightarrow 01:03:54.880$  reduced lung function from surgery
- NOTE Confidence: 0.8639533255
- 01:03:54.931 --> 01:03:56.835 or radiation SBRT what are the most
- NOTE Confidence: 0.8639533255
- $01:03:56.835 \rightarrow 01:03:58.429$  effective ways to maximize lung
- NOTE Confidence: 0.8639533255
- $01:03:58.429 \rightarrow 01:04:00.229$  function from the remaining tissue?
- NOTE Confidence: 0.906159695
- $01:04:01.090 \longrightarrow 01:04:02.522$  I'm so glad that.
- NOTE Confidence: 0.906159695

01:04:02.522 $\operatorname{-->}$ 01:04:05.165 Somebody asked that and of course I'm

NOTE Confidence: 0.906159695

 $01{:}04{:}05{.}165 \dashrightarrow 01{:}04{:}07{.}570$  inherently biased as a pulmonologist

NOTE Confidence: 0.906159695

 $01:04:07.570 \longrightarrow 01:04:10.210$  that I think that patients,

NOTE Confidence: 0.906159695

01:04:10.210 --> 01:04:13.230 partnering with a pulmonologist during

NOTE Confidence: 0.906159695

01:04:13.230 --> 01:04:15.764 their journey of their lung cancer

NOTE Confidence: 0.906159695

 $01:04:15.764 \rightarrow 01:04:17.644$  treatment is really crucially important.

NOTE Confidence: 0.906159695

01:04:17.650 $\operatorname{-->}$ 01:04:19.338 And that's why I'm so glad that I

NOTE Confidence: 0.906159695

 $01{:}04{:}19{.}338 \dashrightarrow 01{:}04{:}20{.}961$  get to collaborate with the rest

NOTE Confidence: 0.906159695

01:04:20.961 --> 01:04:23.600 of these people on this call in the

NOTE Confidence: 0.906159695

 $01:04:23.600 \rightarrow 01:04:26.120$  care of people with lung cancer.

NOTE Confidence: 0.906159695

01:04:26.120 --> 01:04:28.870 So I think that the short answer is that

NOTE Confidence: 0.906159695

 $01:04:28.870 \longrightarrow 01:04:31.018$  there's not just one solution to that,

NOTE Confidence: 0.906159695

 $01:04:31.020 \rightarrow 01:04:32.524$  it's different for every person.

NOTE Confidence: 0.906159695

 $01:04:32.524 \longrightarrow 01:04:34.494$  And it really starts with

NOTE Confidence: 0.906159695

 $01:04:34.494 \rightarrow 01:04:37.114$  having your pulmonary status,

NOTE Confidence: 0.906159695

01:04:37.114 --> 01:04:39.799 your underlying pre-existing lung disease,

- NOTE Confidence: 0.906159695
- 01:04:39.800 --> 01:04:43.230 and your post treatment pulmonary.
- NOTE Confidence: 0.906159695
- $01:04:43.230 \longrightarrow 01:04:46.066$  Status characterized so.
- NOTE Confidence: 0.906159695
- $01:04:46.066 \rightarrow 01:04:49.010$  So meeting with a pulmonary pulmonary
- NOTE Confidence: 0.906159695
- 01:04:49.010 --> 01:04:50.986 physician talking about the things
- NOTE Confidence: 0.906159695
- $01:04:50.986 \longrightarrow 01:04:53.050$  that maybe you carried with you.
- NOTE Confidence: 0.906159695
- $01{:}04{:}53{.}050 \dashrightarrow 01{:}04{:}54{.}760$  Pre existing into your diagnosis
- NOTE Confidence: 0.906159695
- 01:04:54.760 --> 01:04:55.786 of lung cancer,
- NOTE Confidence: 0.906159695
- $01:04:55.790 \rightarrow 01:04:58.569$  be that COPD or pulmonary fibrosis or
- NOTE Confidence: 0.906159695
- $01:04:58.569 \rightarrow 01:05:00.974$  other conditions that don't necessarily
- NOTE Confidence: 0.906159695
- $01:05:00.974 \rightarrow 01:05:03.558$  primarily affect the lungs and then
- NOTE Confidence: 0.906159695
- $01:05:03.558 \rightarrow 01:05:05.406$  thinking about the way that the
- NOTE Confidence: 0.906159695
- $01{:}05{:}05{.}406 \dashrightarrow 01{:}05{:}07{.}189$  treatments are either being presented
- NOTE Confidence: 0.906159695
- $01{:}05{:}07{.}190 \dashrightarrow 01{:}05{:}09{.}626$  with or that you've experienced have NOTE Confidence: 0.906159695
- $01:05:09.626 \rightarrow 01:05:11.871$  affected your lungs afterwards and
- NOTE Confidence: 0.906159695
- $01:05:11.871 \rightarrow 01:05:13.960$  optimizing your particular situation.
- NOTE Confidence: 0.906159695

 $01{:}05{:}13.960 \dashrightarrow 01{:}05{:}16.504$  And that can mean with medications

NOTE Confidence: 0.906159695

 $01:05:16.504 \rightarrow 01:05:19.550$  that can mean by managing other

NOTE Confidence: 0.906159695

 $01{:}05{:}19.550 \dashrightarrow 01{:}05{:}22.322$  health conditions you have but one of NOTE Confidence: 0.906159695

 $01:05:22.322 \rightarrow 01:05:24.940$  the things that can be helpful for.

NOTE Confidence: 0.906159695

 $01:05:24.940 \longrightarrow 01:05:27.236$  A large number of people and that

NOTE Confidence: 0.906159695

01:05:27.236 --> 01:05:29.964 I can't speak highly enough about

NOTE Confidence: 0.906159695

 $01:05:29.964 \longrightarrow 01:05:31.638$  is pulmonary rehabilitation.

NOTE Confidence: 0.906159695

 $01{:}05{:}31{.}640 \dashrightarrow 01{:}05{:}34{.}167$  And some people may be familiar with

NOTE Confidence: 0.906159695

 $01{:}05{:}34{.}167 \dashrightarrow 01{:}05{:}36{.}540$  that that they've undergone it as

NOTE Confidence: 0.906159695

 $01:05:36.540 \rightarrow 01:05:38.690$  part of their treatment journey.

NOTE Confidence: 0.906159695

 $01{:}05{:}38.690 \dashrightarrow 01{:}05{:}40.734$  Or it's been presented to them outside

NOTE Confidence: 0.906159695

 $01{:}05{:}40.734 \dashrightarrow 01{:}05{:}42.827$  of the context of their lung cancer.

NOTE Confidence: 0.906159695

 $01{:}05{:}42.830 \dashrightarrow 01{:}05{:}45.212$  And it's an exercise program that

NOTE Confidence: 0.906159695

 $01:05:45.212 \rightarrow 01:05:48.034$  is aimed at helping people who

NOTE Confidence: 0.906159695

 $01:05:48.034 \rightarrow 01:05:50.917$  specifically have lung issues and

NOTE Confidence: 0.906159695

 $01{:}05{:}50{.}917 \dashrightarrow 01{:}05{:}52{.}662$  have difficulty breathing as one

- NOTE Confidence: 0.906159695
- $01:05:52.662 \rightarrow 01:05:54.946$  of the reasons why they have a.
- NOTE Confidence: 0.906159695
- 01:05:54.950 --> 01:05:56.399 Hard time exercising.
- NOTE Confidence: 0.906159695
- $01:05:56.399 \longrightarrow 01:05:59.297$  And it's done in a structured
- NOTE Confidence: 0.906159695
- $01:05:59.300 \longrightarrow 01:06:01.170$  environment with a group.
- NOTE Confidence: 0.906159695
- $01:06:01.170 \rightarrow 01:06:03.270$  There's tons of education that's part of it,
- NOTE Confidence: 0.906159695
- $01{:}06{:}03.270 \dashrightarrow 01{:}06{:}05.890$  and they come up with a tailored exercise
- NOTE Confidence: 0.906159695
- $01:06:05.890 \dashrightarrow 01:06:09.370$  plan and prescription for each person,
- NOTE Confidence: 0.906159695
- $01:06:09.370 \longrightarrow 01:06:11.008$  and they guide you through that.
- NOTE Confidence: 0.906159695
- 01:06:11.010 01:06:13.235 I've never had anybody go
- NOTE Confidence: 0.906159695
- 01:06:13.235 --> 01:06:14.570 through pulmonary rehab.
- NOTE Confidence: 0.906159695
- 01:06:14.570 --> 01:06:17.036 Who hasn't made progress or felt
- NOTE Confidence: 0.906159695
- $01:06:17.036 \rightarrow 01:06:19.540$  better in some way when they're done,
- NOTE Confidence: 0.906159695
- $01:06:19.540 \longrightarrow 01:06:21.910$  everybody learns a ton and it's
- NOTE Confidence: 0.906159695
- $01:06:21.910 \longrightarrow 01:06:23.710$  incredibly durable benefit.
- NOTE Confidence: 0.906159695
- 01:06:23.710 --> 01:06:24.910 You know,
- NOTE Confidence: 0.906159695

- $01:06:24.910 \longrightarrow 01:06:26.443$  you carry it with you long after
- NOTE Confidence: 0.906159695
- $01:06:26.443 \longrightarrow 01:06:27.100$  the program is.
- NOTE Confidence: 0.906159695
- $01{:}06{:}27{.}100 \dashrightarrow 01{:}06{:}29{.}780$  And complete it and it helps from more
- NOTE Confidence: 0.906159695
- $01:06:29.780 \rightarrow 01:06:32.052$  than just the standpoint of managing
- NOTE Confidence: 0.906159695
- $01{:}06{:}32.052 \dashrightarrow 01{:}06{:}34.877$  your lung cancer and the and the
- NOTE Confidence: 0.906159695
- 01:06:34.877 --> 01:06:37.565 consequences of your lung cancer therapy,
- NOTE Confidence: 0.906159695
- $01:06:37.570 \longrightarrow 01:06:39.490$  it helped you in many other
- NOTE Confidence: 0.906159695
- $01{:}06{:}39{.}490 \dashrightarrow 01{:}06{:}40{.}750$  respects with your health as well.
- NOTE Confidence: 0.9666995
- 01:06:42.600 --> 01:06:45.220 Thank you alright, I think we're
- NOTE Confidence: 0.9666995
- $01{:}06{:}45{.}220 \dashrightarrow 01{:}06{:}48{.}750$  going to go back to hearing some
- NOTE Confidence: 0.8666141445
- $01{:}06{:}48.750 \dashrightarrow 01{:}06{:}50.444$  a little bit of a talk here
- NOTE Confidence: 0.8666141445
- $01:06:50.444 \longrightarrow 01:06:52.397$  and then we will open it back
- NOTE Confidence: 0.8666141445
- $01:06:52.397 \longrightarrow 01:06:54.143$  up to the panelists for some.
- NOTE Confidence: 0.8666141445
- $01:06:54.150 \rightarrow 01:06:56.817$  Closing remarks is where I think we're
- NOTE Confidence: 0.8666141445
- $01:06:56.820 \rightarrow 01:06:59.004$  we're coming up on eight o'clock soon,
- NOTE Confidence: 0.8666141445
- $01:06:59.010 \longrightarrow 01:07:00.450$  which is our end time.

- NOTE Confidence: 0.8666141445
- $01:07:00.450 \longrightarrow 01:07:02.834$  So I am going to turn this over
- NOTE Confidence: 0.8666141445
- 01:07:02.834 --> 01:07:05.228 to Holly Robinson are wonderful,
- NOTE Confidence: 0.8666141445
- $01{:}07{:}05{.}230 \dashrightarrow 01{:}07{:}07{.}105$  wonderful social worker and she's
- NOTE Confidence: 0.8666141445
- 01:07:07.105 --> 01:07:10.310 going to talk to you a bit about
- NOTE Confidence: 0.8666141445
- $01{:}07{:}10.310 \dashrightarrow 01{:}07{:}12.395$  social work and supportive services.
- NOTE Confidence: 0.8666141445
- 01:07:12.400 --> 01:07:14.230 So thank you for calling
- NOTE Confidence: 0.7593072066666667
- $01:07:14.240 \longrightarrow 01:07:16.649$  5 Doctor Goldberg.
- NOTE Confidence: 0.7593072066666667
- 01:07:16.650 --> 01:07:18.090 I'll fly through. I promise.
- NOTE Confidence: 0.72011162125
- 01:07:18.180 --> 01:07:21.636 All right. No problem, no no rush.
- NOTE Confidence: 0.72011162125
- $01:07:21.640 \longrightarrow 01:07:22.545$  Have a few more questions
- NOTE Confidence: 0.72011162125
- $01:07:22.545 \longrightarrow 01:07:24.550$  at the end. OK, alright.
- NOTE Confidence: 0.95667446
- 01:07:27.220 --> 01:07:27.790 Next time.
- NOTE Confidence: 0.8576915075
- 01:07:29.640 --> 01:07:31.080 OK, I'm going to
- NOTE Confidence: 0.843109971428571
- $01{:}07{:}31{.}090 \dashrightarrow 01{:}07{:}32{.}630$  go a little bit about social work.
- NOTE Confidence: 0.843109971428571
- $01{:}07{:}32.630 \dashrightarrow 01{:}07{:}34.850$  My role within the interdisciplinary team,
- NOTE Confidence: 0.843109971428571

 $01:07:34.850 \longrightarrow 01:07:37.126$  and so the supportive services

NOTE Confidence: 0.843109971428571

 $01:07:37.126 \longrightarrow 01:07:39.058$  that all of our patients are long.

NOTE Confidence: 0.843109971428571

 $01{:}07{:}39.060 \dashrightarrow 01{:}07{:}41.524$  Patients have access to. Here at smilow.

NOTE Confidence: 0.843109971428571

 $01:07:41.530 \longrightarrow 01:07:43.350$  I've always kind of struggled with my

NOTE Confidence: 0.843109971428571

 $01{:}07{:}43.350 \dashrightarrow 01{:}07{:}44.790$  elevator speech when people ask me.

NOTE Confidence: 0.843109971428571

 $01:07:44.790 \longrightarrow 01:07:46.554$  Well, how can social work help me? NOTE Confidence: 0.843109971428571

 $01:07:46.554 \rightarrow 01:07:48.290$  I get the deer in headlights look

NOTE Confidence: 0.843109971428571

 $01{:}07{:}48.349 \dashrightarrow 01{:}07{:}50.379$  often times when I come to the door

NOTE Confidence: 0.843109971428571

 $01{:}07{:}50{.}379 \dashrightarrow 01{:}07{:}52{.}033$  and introduce myself because I

NOTE Confidence: 0.843109971428571

 $01{:}07{:}52.033 \dashrightarrow 01{:}07{:}53.477$  have this negative connotation.

NOTE Confidence: 0.843109971428571

 $01:07:53.480 \longrightarrow 01:07:54.990$  People think I'm there to,

NOTE Confidence: 0.843109971428571

 $01:07:54.990 \rightarrow 01:07:56.824$  you know, buffer bad news or B.

NOTE Confidence: 0.843109971428571

01:07:56.830 --> 01:07:59.406 I can never make it just a social

NOTE Confidence: 0.843109971428571

 $01:07:59.406 \longrightarrow 01:08:00.900$  visit to say hello.

NOTE Confidence: 0.843109971428571

 $01:08:00.900 \rightarrow 01:08:01.899$  First and foremost,

NOTE Confidence: 0.843109971428571

 $01:08:01.899 \longrightarrow 01:08:03.897$  my role is to offer emotional

- NOTE Confidence: 0.843109971428571
- $01:08:03.897 \rightarrow 01:08:05.854$  support surrounding all the different
- NOTE Confidence: 0.843109971428571
- $01{:}08{:}05{.}854 \dashrightarrow 01{:}08{:}07{.}418$  stressors that are experienced
- NOTE Confidence: 0.843109971428571
- $01:08:07.418 \longrightarrow 01:08:09.548$  with a lung cancer diagnosis.
- NOTE Confidence: 0.843109971428571
- $01:08:09.550 \rightarrow 01:08:12.160$  I think oftentimes the broad ways
- NOTE Confidence: 0.843109971428571
- $01:08:12.160 \longrightarrow 01:08:14.492$  people are impacted when they
- NOTE Confidence: 0.843109971428571
- 01:08:14.492 --> 01:08:17.077 receive a cancer diagnosis aren't
- NOTE Confidence: 0.843109971428571
- 01:08:17.077 --> 01:08:19.145 always anticipated right away,
- NOTE Confidence: 0.843109971428571
- $01:08:19.150 \rightarrow 01:08:21.358$  so certainly we offer the emotional,
- NOTE Confidence: 0.843109971428571
- $01{:}08{:}21{.}360 \dashrightarrow 01{:}08{:}24{.}774$  practical and social support as one
- NOTE Confidence: 0.843109971428571
- $01:08:24.774 \longrightarrow 01:08:28.020$  navigates their diagnosis and treatment.
- NOTE Confidence: 0.843109971428571
- $01:08:28.020 \rightarrow 01:08:30.540$  We also work to link patients.
- NOTE Confidence: 0.843109971428571
- $01{:}08{:}30{.}540 \dashrightarrow 01{:}08{:}33{.}342$  Families to both the hospital and
- NOTE Confidence: 0.843109971428571
- $01:08:33.342 \rightarrow 01:08:35.760$  community resources to really address
- NOTE Confidence: 0.843109971428571
- $01{:}08{:}35.760 \dashrightarrow 01{:}08{:}39.078$  ones needs that we identify in a
- NOTE Confidence: 0.843109971428571
- $01:08:39.078 \rightarrow 01:08:41.306$  psychosocial assessment or help to
- NOTE Confidence: 0.843109971428571

 $01:08:41.306 \longrightarrow 01:08:43.706$  manage the barriers that might impact

NOTE Confidence: 0.843109971428571

 $01{:}08{:}43.706 \dashrightarrow 01{:}08{:}45.748$  their accessibility to treatment.

NOTE Confidence: 0.8641126

 $01:08:47.840 \longrightarrow 01:08:49.346$  Social work services?

NOTE Confidence: 0.8641126

 $01{:}08{:}49{.}346 \dashrightarrow 01{:}08{:}51{.}564$  Well, it's not perfect and I I know

NOTE Confidence: 0.8641126

 $01:08:51.564 \rightarrow 01:08:52.920$  there are people I have not met.

NOTE Confidence: 0.8641126

 $01:08:52.920 \longrightarrow 01:08:54.716$  There's certainly available to

NOTE Confidence: 0.8641126

 $01:08:54.716 \longrightarrow 01:08:57.410$  everyone from the point of one's

NOTE Confidence: 0.8641126

 $01{:}08{:}57{.}489 \dashrightarrow 01{:}09{:}00{.}059$  diagnosis and throughout their entire

NOTE Confidence: 0.8641126

01:09:00.059 --> 01:09:02.629 experience with their lung cancer.

NOTE Confidence: 0.8641126

 $01:09:02.630 \longrightarrow 01:09:03.539$  People's needs change.

NOTE Confidence: 0.8641126

01:09:03.539 --> 01:09:05.357 Often times I might meet somebody

NOTE Confidence: 0.8641126

 $01{:}09{:}05{.}357 \dashrightarrow 01{:}09{:}07{.}148$  at that very first appointment.

NOTE Confidence: 0.8641126

 $01{:}09{:}07{.}150 \dashrightarrow 01{:}09{:}10{.}264$  I know that it feels like a revolving door,

NOTE Confidence: 0.8641126

 $01{:}09{:}10.270 \dashrightarrow 01{:}09{:}12.310$  and there's instances where people are

NOTE Confidence: 0.8641126

 $01:09:12.310 \longrightarrow 01:09:14.350$  just being overloaded with information.

NOTE Confidence: 0.8641126

 $01:09:14.350 \longrightarrow 01:09:16.264$  So half the time people might

- NOTE Confidence: 0.8641126
- $01:09:16.264 \rightarrow 01:09:17.780$  not even remember meeting me.

01:09:17.780 --> 01:09:19.430 But their needs, like I said,

NOTE Confidence: 0.8641126

 $01{:}09{:}19{.}430 \dashrightarrow 01{:}09{:}21{.}580$  do evolve and change throughout

NOTE Confidence: 0.8641126

 $01:09:21.580 \longrightarrow 01:09:22.440$  their experience,

NOTE Confidence: 0.8641126

 $01{:}09{:}22{.}440 \dashrightarrow 01{:}09{:}25{.}528$  and so their need to tap into that

NOTE Confidence: 0.8641126

 $01{:}09{:}25{.}528$  -->  $01{:}09{:}28{.}597$  kind of support evolves as well.

NOTE Confidence: 0.8641126

 $01:09:28.600 \longrightarrow 01:09:30.260$  You can switch sides please.

NOTE Confidence: 0.7594116

01:09:36.000 $\operatorname{-->}$ 01:09:39.270 Alright, again it's very normal to have a

NOTE Confidence: 0.7594116

 $01:09:39.270 \rightarrow 01:09:41.772$  really broad range of emotional responses

NOTE Confidence: 0.7594116

 $01:09:41.772 \rightarrow 01:09:44.460$  when one is diagnosed with cancer.

NOTE Confidence: 0.7594116

 $01{:}09{:}44.460 \dashrightarrow 01{:}09{:}46.128$  Oftentimes there's that anxiety

NOTE Confidence: 0.7594116

01:09:46.128 --> 01:09:48.213 during an initial work up,

NOTE Confidence: 0.7594116

 $01{:}09{:}48.220 \dashrightarrow 01{:}09{:}49.600$  just not having answers.

NOTE Confidence: 0.7594116

 $01{:}09{:}49{.}600 \dashrightarrow 01{:}09{:}51{.}670$  There's so much unknown that's scary,

NOTE Confidence: 0.7594116

 $01{:}09{:}51{.}670 \dashrightarrow 01{:}09{:}53{.}830$  and there's a lot of fear surrounding that.

 $01:09:53.830 \rightarrow 01:09:56.340$  There's shock and disbelief sometimes,

NOTE Confidence: 0.7594116

 $01:09:56.340 \longrightarrow 01:09:58.420$  especially with the more

NOTE Confidence: 0.7594116

 $01:09:58.420 \longrightarrow 01:09:59.460$  incidental diagnosis.

NOTE Confidence: 0.7594116

01:09:59.460 --> 01:10:00.975 There's just this in congruence

NOTE Confidence: 0.7594116

01:10:00.975 --> 01:10:02.187 between how somebody is.

NOTE Confidence: 0.7594116

 $01{:}10{:}02{.}190 \dashrightarrow 01{:}10{:}05{.}478$  Feeling they might go on eight mile hikes

NOTE Confidence: 0.7594116

 $01{:}10{:}05{.}478 \dashrightarrow 01{:}10{:}08{.}170$  regularly and then they are diagnosed with

NOTE Confidence: 0.7594116

 $01:10:08.170 \longrightarrow 01:10:11.409$  lung cancer and it just doesn't match up.

NOTE Confidence: 0.7594116

01:10:11.410 --> 01:10:14.138 A lot of Greeks, in terms of ways

NOTE Confidence: 0.7594116

01:10:14.138 --> 01:10:16.226 in which you anticipate your life,

NOTE Confidence: 0.7594116

 $01:10:16.230 \rightarrow 01:10:19.310$  might change ways in which that normalcy

NOTE Confidence: 0.7594116

01:10:19.310 --> 01:10:22.466 is kind of stripped from you again.

NOTE Confidence: 0.7594116

 $01:10:22.466 \longrightarrow 01:10:23.846$  And we have mentioned this,

NOTE Confidence: 0.7594116

01:10:23.850 --> 01:10:25.002 I, I think,

NOTE Confidence: 0.7594116

 $01{:}10{:}25.002 \dashrightarrow 01{:}10{:}26.922$  lung cancer is often experienced

NOTE Confidence: 0.7594116

 $01{:}10{:}26{.}922 \dashrightarrow 01{:}10{:}29{.}271$  as more of a disenfranchised

 $01{:}10{:}29{.}271 \dashrightarrow 01{:}10{:}32{.}283$  diagnosis because of the stigma and

NOTE Confidence: 0.7594116

01:10:32.283 --> 01:10:34.559 association with smoking histories.

NOTE Confidence: 0.7594116

 $01{:}10{:}34{.}560 \dashrightarrow 01{:}10{:}36{.}684$  So sometimes there's shame and a

NOTE Confidence: 0.7594116

 $01:10:36.684 \rightarrow 01:10:39.379$  lot of guilt that can go with that.

NOTE Confidence: 0.7594116

01:10:39.380 --> 01:10:42.060 Uhm, sometimes though, even relief.

NOTE Confidence: 0.7594116

01:10:42.060 --> 01:10:43.908 I think there's a number of

NOTE Confidence: 0.7594116

 $01:10:43.908 \rightarrow 01:10:45.534$  different patients who I've worked

NOTE Confidence: 0.7594116

 $01:10:45.534 \rightarrow 01:10:47.550$  with who have been experiencing a

NOTE Confidence: 0.7594116

 $01{:}10{:}47.550 \dashrightarrow 01{:}10{:}49.399$  certain symptom set for some time,

NOTE Confidence: 0.7594116

 $01:10:49.400 \rightarrow 01:10:51.129$  might have been treated for different things,

NOTE Confidence: 0.7594116

 $01{:}10{:}51{.}130 \dashrightarrow 01{:}10{:}53.426$  or just was never given a real explanation

NOTE Confidence: 0.7594116

 $01:10:53.426 \longrightarrow 01:10:55.317$  for how they had been feeling.

NOTE Confidence: 0.7594116

 $01:10:55.320 \longrightarrow 01:10:57.035$  And so to finally get a label.

NOTE Confidence: 0.7594116

01:10:57.040 $\operatorname{-->}$ 01:10:59.216 And then with that a plan for how

NOTE Confidence: 0.7594116

 $01:10:59.216 \rightarrow 01:11:01.061$  they're going to address that with

01:11:01.061 --> 01:11:03.232 an entire team behind them, I think.

NOTE Confidence: 0.7594116

 $01:11:03.232 \rightarrow 01:11:05.409$  Having that kind of plan and access

NOTE Confidence: 0.7594116

 $01{:}11{:}05{.}409 \dashrightarrow 01{:}11{:}07{.}904$  to care can reduce a lot of things.

NOTE Confidence: 0.90653074777778

 $01:11:10.160 \rightarrow 01:11:11.635$  I'm meeting with the patient

NOTE Confidence: 0.90653074777778

 $01:11:11.635 \longrightarrow 01:11:12.815$  and their support system.

NOTE Confidence: 0.906530747777778

01:11:12.820 $\operatorname{-->}$ 01:11:14.692 The first thing I want to assess for

NOTE Confidence: 0.90653074777778

 $01:11:14.692 \rightarrow 01:11:16.968$  is who exactly is their support system.

NOTE Confidence: 0.90653074777778

 $01:11:16.970 \rightarrow 01:11:19.594$  What are the things that you enjoy doing?

NOTE Confidence: 0.90653074777778

01:11:19.600 --> 01:11:21.920 What do you have access to that helps

NOTE Confidence: 0.90653074777778

 $01{:}11{:}21{.}920 \dashrightarrow 01{:}11{:}25{.}144$  you on a regular day before your cancer

NOTE Confidence: 0.90653074777778

01:11:25.144 --> 01:11:26.860 diagnosis addressed your stress?

NOTE Confidence: 0.90653074777778

01:11:26.860 --> 01:11:28.770 Uhm, I think those things.

NOTE Confidence: 0.90653074777778

 $01:11:28.770 \longrightarrow 01:11:30.624$  Those things that you have in

NOTE Confidence: 0.90653074777778

 $01:11:30.624 \rightarrow 01:11:32.687$  your own back pocket are the best

NOTE Confidence: 0.90653074777778

01:11:32.687 --> 01:11:34.900 toolkit that I want to go to first.

NOTE Confidence: 0.90653074777778

01:11:34.900 --> 01:11:37.021 It is important to be able to

 $01:11:37.021 \longrightarrow 01:11:37.930$  identify these activities.

NOTE Confidence: 0.90653074777778

 $01:11:37.930 \longrightarrow 01:11:40.255$  These pieces that help you

NOTE Confidence: 0.90653074777778

 $01{:}11{:}40.255 \dashrightarrow 01{:}11{:}42.580$  maintain some routine and normalcy.

NOTE Confidence: 0.90653074777778

01:11:42.580 --> 01:11:45.430 Again, the activities you enjoy doing.

NOTE Confidence: 0.90653074777778

01:11:45.430 --> 01:11:48.216 I've joked before I know that there's

NOTE Confidence: 0.90653074777778

01:11:48.216 --> 01:11:50.610 been some move in order to reduce or

NOTE Confidence: 0.90653074777778

 $01:11:50.610 \longrightarrow 01:11:52.117$  to improve that FaceTime with your

NOTE Confidence: 0.90653074777778

 $01{:}11{:}52{.}117 \dashrightarrow 01{:}11{:}53{.}895$  loved ones at a family dinner 'cause

NOTE Confidence: 0.90653074777778

 $01:11:53.895 \rightarrow 01:11:55.729$  everybody is glued to their smartphones.

NOTE Confidence: 0.90653074777778

 $01:11:55.730 \rightarrow 01:11:57.710$  At this point, I've seen.

NOTE Confidence: 0.90653074777778

 $01:11:57.710 \longrightarrow 01:11:59.326$  Where they put all their phones in a

NOTE Confidence: 0.90653074777778

01:11:59.326 --> 01:12:00.886 basket and whoever reaches for that

NOTE Confidence: 0.90653074777778

 $01:12:00.886 \longrightarrow 01:12:02.898$  phone first has to pay their bill.

NOTE Confidence: 0.90653074777778

01:12:02.898 --> 01:12:04.558 So I've challenged patients and

NOTE Confidence: 0.90653074777778

 $01:12:04.558 \rightarrow 01:12:05.850$  their family members.

01:12:05.850 --> 01:12:08.118 I want you to go out to dinner and

NOTE Confidence: 0.90653074777778

 $01{:}12{:}08.118 \dashrightarrow 01{:}12{:}10.034$  whoever mentions cancer first has to

NOTE Confidence: 0.90653074777778

 $01:12:10.034 \rightarrow 01:12:12.124$  pay the bill or whoever, whatever.

NOTE Confidence: 0.90653074777778

 $01:12:12.124 \rightarrow 01:12:14.594$  Whoever brings up everything that's

NOTE Confidence: 0.90653074777778

 $01:12:14.594 \rightarrow 01:12:17.066$  going on with somebody's health

NOTE Confidence: 0.90653074777778

01:12:17.066 --> 01:12:18.725 needs needs to do something because

NOTE Confidence: 0.90653074777778

 $01:12:18.725 \longrightarrow 01:12:20.395$  I think it's important to be able

NOTE Confidence: 0.90653074777778

 $01:12:20.395 \longrightarrow 01:12:21.753$  to carve out some of that time.

NOTE Confidence: 0.90653074777778

 $01:12:21.760 \longrightarrow 01:12:23.008$  Sometimes these doctors appointments,

NOTE Confidence: 0.90653074777778

 $01:12:23.008 \rightarrow 01:12:24.568$  especially when you're starting up.

NOTE Confidence: 0.90653074777778

 $01:12:24.570 \longrightarrow 01:12:26.400$  It can feel all consuming.

NOTE Confidence: 0.90653074777778

 $01:12:26.400 \longrightarrow 01:12:27.450$  So you've got to be able to.

NOTE Confidence: 0.90653074777778

 $01{:}12{:}27{.}450 \dashrightarrow 01{:}12{:}29{.}838$  Find that balance.

NOTE Confidence: 0.90653074777778

 $01{:}12{:}29.840 \dashrightarrow 01{:}12{:}32.122$  One thing that we talked about often

NOTE Confidence: 0.90653074777778

 $01:12:32.122 \rightarrow 01:12:34.600$  is this all or nothing mentality.

NOTE Confidence: 0.90653074777778

01:12:34.600 --> 01:12:36.917 Again, I think it can be very,

01:12:36.920 --> 01:12:38.944 very hard and there's a lot of grief

NOTE Confidence: 0.90653074777778

 $01:12:38.944 \rightarrow 01:12:40.627$  associated with the change in normalcy.

NOTE Confidence: 0.90653074777778

 $01:12:40.630 \rightarrow 01:12:43.670$  Change in that physical functioning

NOTE Confidence: 0.90653074777778

 $01{:}12{:}43.670 \dashrightarrow 01{:}12{:}45.756$  sometimes as a result of the cancer

NOTE Confidence: 0.90653074777778

 $01{:}12{:}45.756 \dashrightarrow 01{:}12{:}47.330$  or the treatments themselves.

NOTE Confidence: 0.90653074777778

 $01{:}12{:}47{.}330 \dashrightarrow 01{:}12{:}49{.}528$  People aren't able to do the things

NOTE Confidence: 0.90653074777778

 $01:12:49.528 \longrightarrow 01:12:51.874$  to the same level that they may

NOTE Confidence: 0.90653074777778

 $01:12:51.874 \rightarrow 01:12:53.878$  have been doing a year before.

NOTE Confidence: 0.90653074777778

 $01:12:53.880 \longrightarrow 01:12:54.795$  That being said,

NOTE Confidence: 0.90653074777778

 $01:12:54.795 \rightarrow 01:12:56.625$  I still think there's really great

NOTE Confidence: 0.90653074777778

 $01:12:56.625 \rightarrow 01:12:58.589$  benefit in continuing these activities.

NOTE Confidence: 0.90653074777778

 $01{:}12{:}58{.}590 \dashrightarrow 01{:}13{:}00{.}342$  Finding a more modified.

NOTE Confidence: 0.90653074777778

 $01{:}13{:}00{.}342 \dashrightarrow 01{:}13{:}03{.}680$  Way to engage in them and be able to

NOTE Confidence: 0.90653074777778

 $01:13:03.680 \longrightarrow 01:13:06.429$  put them to practice in terms of your coping.

NOTE Confidence: 0.90653074777778

 $01:13:06.430 \rightarrow 01:13:07.468$  Next slide please.

 $01:13:09.600 \rightarrow 01:13:11.875$  So some of the supportive services

NOTE Confidence: 0.97375464

 $01:13:11.875 \rightarrow 01:13:13.455$  available through social work.

NOTE Confidence: 0.97375464

01:13:13.460 --> 01:13:16.764 I facilitate the lung Cancer Support group.

NOTE Confidence: 0.97375464

01:13:16.770 --> 01:13:19.230 I will say Dr. Boffa and one of our team

NOTE Confidence: 0.97375464

 $01:13:19.299 \rightarrow 01:13:21.518$  Zoom meeting is coined to the group,

NOTE Confidence: 0.97375464

01:13:21.520 --> 01:13:23.845 the Crown jewel of the

NOTE Confidence: 0.97375464

01:13:23.845 --> 01:13:25.240 Thoracic Oncology program.

NOTE Confidence: 0.97375464

 $01{:}13{:}25{.}240 \dashrightarrow 01{:}13{:}27{.}174$  I know other colleagues heard that so

NOTE Confidence: 0.97375464

01:13:27.174 --> 01:13:29.099 we are branding the group with that

NOTE Confidence: 0.97375464

 $01:13:29.099 \dashrightarrow 01:13:30.695$  and we're gonna get posters made.

NOTE Confidence: 0.97375464

 $01:13:30.700 \longrightarrow 01:13:33.358$  We're not going back on that.

NOTE Confidence: 0.97375464

01:13:33.360 --> 01:13:35.076 The lung Cancer Support Group

NOTE Confidence: 0.97375464

01:13:35.076 --> 01:13:37.566 is truly a wonderful group.

NOTE Confidence: 0.97375464

 $01:13:37.570 \longrightarrow 01:13:39.106$  Like I said, first and foremost,

NOTE Confidence: 0.97375464

 $01:13:39.110 \rightarrow 01:13:41.537$  we do want to identify somebody's

NOTE Confidence: 0.97375464

 $01{:}13{:}41{.}537 \dashrightarrow 01{:}13{:}43{.}559$  immediate supports that are going to

 $01{:}13{:}43{.}559 \dashrightarrow 01{:}13{:}46{.}265$  back them and support them as they're

NOTE Confidence: 0.97375464

 $01{:}13{:}46.265 \dashrightarrow 01{:}13{:}47.897$  navigating their cancer experience.

NOTE Confidence: 0.97375464

 $01:13:47.900 \longrightarrow 01:13:49.825$  But I really do think that there's

NOTE Confidence: 0.97375464

 $01:13:49.825 \longrightarrow 01:13:51.693$  something to be said to being to

NOTE Confidence: 0.97375464

01:13:51.693 --> 01:13:53.493 being able to connect with a group

NOTE Confidence: 0.97375464

01:13:53.493 --> 01:13:55.557 of other people who get to a great

NOTE Confidence: 0.97375464

 $01:13:55.557 \rightarrow 01:13:57.620$  extent what it is you're going through.

NOTE Confidence: 0.97375464

 $01{:}13{:}57{.}620 \dashrightarrow 01{:}14{:}00{.}287$  We talked about there being no cookie

NOTE Confidence: 0.97375464

 $01:14:00.287 \rightarrow 01:14:02.259$  cutter experience with lung cancer.

NOTE Confidence: 0.97375464

01:14:02.260 --> 01:14:03.724 Everybody is experienced.

NOTE Confidence: 0.97375464

01:14:03.724 --> 01:14:05.612 Is their own UM,

NOTE Confidence: 0.97375464

 $01{:}14{:}05{.}612 \dashrightarrow 01{:}14{:}08{.}144$  but with this group in particular,

NOTE Confidence: 0.97375464

 $01:14:08.150 \longrightarrow 01:14:10.736$  I think people's ability to share

NOTE Confidence: 0.97375464

 $01{:}14{:}10.736 \dashrightarrow 01{:}14{:}12.969$  those experiences and find some

NOTE Confidence: 0.97375464

 $01{:}14{:}12{.}969 \dashrightarrow 01{:}14{:}15{.}555$  commonality is just worth its weight.

 $01{:}14{:}15{.}560 \dashrightarrow 01{:}14{:}16{.}228$  In gold.

NOTE Confidence: 0.97375464

 $01:14:16.228 \rightarrow 01:14:17.898$  It's pretty incredibly because we've

NOTE Confidence: 0.97375464

01:14:17.898 --> 01:14:20.158 got people who participate in a group NOTE Confidence: 0.97375464

01:14:20.158 --> 01:14:22.703 who've been there long before I got to

NOTE Confidence: 0.97375464

 $01{:}14{:}22.703 \dashrightarrow 01{:}14{:}24.749$  smilow and started facilitating the group.

NOTE Confidence: 0.97375464

01:14:24.750 --> 01:14:26.454 We've got people who are diagnosed NOTE Confidence: 0.97375464

 $01{:}14{:}26{.}454 \dashrightarrow 01{:}14{:}28{.}560$  with stage four lung cancer 10 years

NOTE Confidence: 0.97375464

 $01{:}14{:}28{.}560 \dashrightarrow 01{:}14{:}30{.}085$  ago were still active participants

NOTE Confidence: 0.97375464

01:14:30.085 --> 01:14:32.322 and have gone through a number of

NOTE Confidence: 0.97375464

 $01{:}14{:}32{.}322 \dashrightarrow 01{:}14{:}33{.}897$  different treatments they can speak.

NOTE Confidence: 0.97375464

 $01:14:33.900 \longrightarrow 01:14:35.760$  To their experience with that.

NOTE Confidence: 0.97375464

01:14:35.760 --> 01:14:36.756 But again, I,

NOTE Confidence: 0.97375464

 $01:14:36.756 \longrightarrow 01:14:39.080$  I think this just also reflects the

NOTE Confidence: 0.97375464

 $01{:}14{:}39{.}149 \dashrightarrow 01{:}14{:}41{.}853$  innovations in a lot of the cancer care.

NOTE Confidence: 0.97375464

01:14:41.860 --> 01:14:43.428 It's really incredible and

NOTE Confidence: 0.97375464

01:14:43.428 --> 01:14:44.996 I think it's really.

01:14:45.000 --> 01:14:47.118 It really have helps add hope,

NOTE Confidence: 0.97375464

 $01{:}14{:}47{.}120 \dashrightarrow 01{:}14{:}48{.}555$  especially to newer members who

NOTE Confidence: 0.97375464

01:14:48.555 --> 01:14:50.723 are coming in and can hear from

NOTE Confidence: 0.97375464

 $01{:}14{:}50{.}723 \dashrightarrow 01{:}14{:}52{.}739$  others who have been managing and

NOTE Confidence: 0.97375464

01:14:52.739 --> 01:14:54.348 maintaining really good quality of

NOTE Confidence: 0.97375464

01:14:54.348 --> 01:14:56.399 life for some time with what otherwise

NOTE Confidence: 0.97375464

 $01{:}14{:}56{.}400 \dashrightarrow 01{:}15{:}00{.}150$  feels like a really lousy diagnosis.

NOTE Confidence: 0.97375464

 $01:15:00.150 \longrightarrow 01:15:02.124$  Group meets on the 1st and the

NOTE Confidence: 0.97375464

 $01:15:02.124 \rightarrow 01:15:03.750$  third Tuesday of every month.

NOTE Confidence: 0.97375464

 $01:15:03.750 \longrightarrow 01:15:05.480$  My understanding is that we're

NOTE Confidence: 0.97375464

 $01:15:05.480 \rightarrow 01:15:07.733$  still the only lung cancer specific

NOTE Confidence: 0.97375464

01:15:07.733 --> 01:15:09.577 support group in Connecticut,

NOTE Confidence: 0.97375464

 $01{:}15{:}09{.}580 \dashrightarrow 01{:}15{:}13{.}087$  so it is really just a wonderful

NOTE Confidence: 0.97375464

 $01{:}15{:}13.087 \dashrightarrow 01{:}15{:}15.260$  group to tap into.

NOTE Confidence: 0.97375464

 $01{:}15{:}15{.}260 \dashrightarrow 01{:}15{:}16{.}928$  Some other groups that are offered

 $01:15:16.928 \rightarrow 01:15:19.410$  by some of my social work colleagues

NOTE Confidence: 0.97375464

01:15:19.410 --> 01:15:21.585 include the meaning centered psychotherapy

NOTE Confidence: 0.97375464

 $01{:}15{:}21.585 \dashrightarrow 01{:}15{:}24.258$  group for patients with advanced cancer.

NOTE Confidence: 0.97375464

 $01{:}15{:}24.260 \dashrightarrow 01{:}15{:}27.921$  This is a time limited eight week

NOTE Confidence: 0.97375464

 $01:15:27.921 \rightarrow 01:15:30.706$  group that really addresses the

NOTE Confidence: 0.97375464

01:15:30.706 --> 01:15:32.398 existential stressors associated

NOTE Confidence: 0.97375464

 $01:15:32.398 \longrightarrow 01:15:35.459$  with a life limiting cancer.

NOTE Confidence: 0.97375464

01:15:35.460 --> 01:15:37.338 They're set topics for each group.

NOTE Confidence: 0.97375464

 $01:15:37.340 \longrightarrow 01:15:39.380$  It's a pretty intimate group,

NOTE Confidence: 0.97375464

 $01:15:39.380 \rightarrow 01:15:43.340$  usually where you are able to have really

NOTE Confidence: 0.97375464

 $01{:}15{:}43{.}340 \dashrightarrow 01{:}15{:}46{.}169$  profound discussions with those around you.

NOTE Confidence: 0.97375464

 $01:15:46.170 \longrightarrow 01:15:48.450$  Just about your experience and

NOTE Confidence: 0.97375464

 $01:15:48.450 \longrightarrow 01:15:50.730$  what becomes important in the

NOTE Confidence: 0.97375464

 $01{:}15{:}50.815 \dashrightarrow 01{:}15{:}53.100$  setting of a cancer diagnosis.

NOTE Confidence: 0.97375464

01:15:53.100 --> 01:15:55.115 As we are available for

NOTE Confidence: 0.97375464

 $01:15:55.115 \rightarrow 01:15:56.324$  the patients themselves,

- NOTE Confidence: 0.97375464
- $01:15:56.330 \longrightarrow 01:15:58.724$  we certainly are also available to

 $01{:}15{:}58.724 \dashrightarrow 01{:}16{:}01{.}170$  offer support to their caregivers.

NOTE Confidence: 0.97375464

 $01:16:01.170 \longrightarrow 01:16:02.470$  I use that term loosely.

NOTE Confidence: 0.97375464

01:16:02.470 --> 01:16:03.270 Some people have said, well,

NOTE Confidence: 0.97375464

 $01{:}16{:}03.270 \dashrightarrow 01{:}16{:}04.608$  I'm not actually providing the care,

NOTE Confidence: 0.97375464

 $01:16:04.610 \rightarrow 01:16:07.718$  but any family member or support person.

NOTE Confidence: 0.97375464

01:16:07.720 --> 01:16:10.128 We do have a caregiver support group

NOTE Confidence: 0.97375464

 $01:16:10.128 \longrightarrow 01:16:11.891$  that meets regularly throughout the

NOTE Confidence: 0.97375464

 $01:16:11.891 \rightarrow 01:16:14.547$  month that I often will refer our family

NOTE Confidence: 0.895100745217391

 $01:16:14.613 \rightarrow 01:16:15.579$  members to that,

NOTE Confidence: 0.895100745217391

01:16:15.580 --> 01:16:17.128 like my lung Cancer Support group,

NOTE Confidence: 0.895100745217391

01:16:17.130 --> 01:16:19.284 can be really helpful just for

NOTE Confidence: 0.895100745217391

01:16:19.284 --> 01:16:21.235 others to connect with people

NOTE Confidence: 0.895100745217391

 $01{:}16{:}21{.}235 \dashrightarrow 01{:}16{:}23{.}440$  who have shared experiences and.

NOTE Confidence: 0.895100745217391

 $01{:}16{:}23.440 \dashrightarrow 01{:}16{:}26.080$  And can you offer support around

01:16:26.080 --> 01:16:28.320 the difficulties of you know,

NOTE Confidence: 0.895100745217391

01:16:28.320 --> 01:16:30.948 bearing witness or or supporting someone

NOTE Confidence: 0.895100745217391

 $01:16:30.948 \rightarrow 01:16:34.090$  they love with a cancer diagnosis?

NOTE Confidence: 0.895100745217391

 $01:16:34.090 \rightarrow 01:16:36.006$  One piece of social work services we

NOTE Confidence: 0.895100745217391

 $01{:}16{:}36.010 \dashrightarrow 01{:}16{:}37.720$  often work with families who might

NOTE Confidence: 0.895100745217391

 $01:16:37.720 \rightarrow 01:16:39.369$  have young children in the home.

NOTE Confidence: 0.895100745217391

 $01:16:39.370 \longrightarrow 01:16:41.745$  So under the parenting at

NOTE Confidence: 0.895100745217391

 $01:16:41.745 \longrightarrow 01:16:43.645$  a challenging time program,

NOTE Confidence: 0.895100745217391

 $01{:}16{:}43.650 \dashrightarrow 01{:}16{:}46.485$  we will work with parents who are

NOTE Confidence: 0.895100745217391

 $01{:}16{:}46{.}485 \dashrightarrow 01{:}16{:}49{.}769$  facing a cancer diagnosis based on their

NOTE Confidence: 0.895100745217391

 $01{:}16{:}49{.}770 \dashrightarrow 01{:}16{:}51{.}850$  knowledge about their kids themselves.

NOTE Confidence: 0.895100745217391

 $01:16:51.850 \longrightarrow 01:16:54.559$  We work with them to really develop

NOTE Confidence: 0.895100745217391

 $01:16:54.559 \rightarrow 01:16:56.878$  an age appropriate way to help

NOTE Confidence: 0.895100745217391

 $01{:}16{:}56{.}878 \dashrightarrow 01{:}16{:}59{.}032$  them cope and help them navigate

NOTE Confidence: 0.895100745217391

 $01{:}16{:}59{.}032 \dashrightarrow 01{:}17{:}01{.}258$  their parents cancer diagnosis.

NOTE Confidence: 0.895100745217391

 $01:17:01.260 \longrightarrow 01:17:01.992$  Uhm, again,

- NOTE Confidence: 0.895100745217391
- $01:17:01.992 \longrightarrow 01:17:03.822$  more services that we offer
- NOTE Confidence: 0.895100745217391
- $01:17:03.822 \rightarrow 01:17:04.920$  are really unique,
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}04{.}920 \dashrightarrow 01{:}17{:}06{.}786$  patient and family support group that
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}06.786 \dashrightarrow 01{:}17{:}08.720$  is traditionally based out in New Haven.
- NOTE Confidence: 0.895100745217391
- $01:17:08.720 \longrightarrow 01:17:10.640$  All of our groups right now
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}10.640 \dashrightarrow 01{:}17{:}11.920$  are offered via zoom.
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}11{.}920 \dashrightarrow 01{:}17{:}13{.}966$  This patient and family Support group
- NOTE Confidence: 0.895100745217391
- 01:17:13.966 --> 01:17:16.281 in particular is kind of a hybrid
- NOTE Confidence: 0.895100745217391
- $01:17:16.281 \longrightarrow 01:17:18.346$  group that has both patients and family
- NOTE Confidence: 0.895100745217391
- $01:17:18.408 \rightarrow 01:17:20.320$  members who participate together.
- NOTE Confidence: 0.895100745217391
- 01:17:20.320 --> 01:17:21.952 Recently our psychology colleagues
- NOTE Confidence: 0.895100745217391
- 01:17:21.952 --> 01:17:23.992 also started up a cognitive
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}23.992 \dashrightarrow 01{:}17{:}25.640$  behavioral therapy skills group.
- NOTE Confidence: 0.895100745217391
- $01{:}17{:}25.640 \dashrightarrow 01{:}17{:}30.176$  This too is a five week time limited.
- NOTE Confidence: 0.895100745217391
- 01:17:30.180 --> 01:17:30.357 Group,
- NOTE Confidence: 0.895100745217391

 $01:17:30.357 \rightarrow 01:17:31.242$  I think when starting up

NOTE Confidence: 0.895100745217391

 $01{:}17{:}31{.}242 \dashrightarrow 01{:}17{:}32{.}210$  again in a couple weeks.

NOTE Confidence: 0.895100745217391

 $01:17:32.210 \longrightarrow 01:17:34.198$  So if people want to find that

NOTE Confidence: 0.895100745217391

 $01:17:34.198 \longrightarrow 01:17:35.769$  on smilers social media page,

NOTE Confidence: 0.895100745217391

 $01{:}17{:}35{.}770 \dashrightarrow 01{:}17{:}38{.}605$  this too helps patients develop

NOTE Confidence: 0.895100745217391

01:17:38.605 --> 01:17:41.440 coping skills to manage anxiety

NOTE Confidence: 0.895100745217391

 $01{:}17{:}41{.}535 \dashrightarrow 01{:}17{:}44{.}315$  and depression associated with

NOTE Confidence: 0.895100745217391

 $01:17:44.315 \longrightarrow 01:17:46.400$  their cancer diagnosis.

NOTE Confidence: 0.895100745217391

01:17:46.400 --> 01:17:46.706 Also,

NOTE Confidence: 0.895100745217391

 $01{:}17{:}46.706 \dashrightarrow 01{:}17{:}48.542$  social work of course offers short

NOTE Confidence: 0.895100745217391

 $01{:}17{:}48.542 \dashrightarrow 01{:}17{:}50.629$  term counseling and one on one work

NOTE Confidence: 0.895100745217391

 $01:17:50.629 \rightarrow 01:17:52.019$  with patients and their families.

NOTE Confidence: 0.895100745217391

 $01:17:52.020 \rightarrow 01:17:55.348$  But we also help link you to different

NOTE Confidence: 0.895100745217391

 $01{:}17{:}55{.}348 \dashrightarrow 01{:}17{:}59{.}050$  community supports for clinical support.

NOTE Confidence: 0.895100745217391

01:17:59.050 --> 01:17:59.716 Next slide,

NOTE Confidence: 0.895100745217391

 $01{:}17{:}59{.}716 \dashrightarrow 01{:}18{:}00{.}049$  please.

- NOTE Confidence: 0.78169079
- $01:18:03.900 \longrightarrow 01:18:06.230$  I'm so glad that Lisa gave her

01:18:06.230 --> 01:18:07.558 little elevator speech 'cause I

NOTE Confidence: 0.78169079

01:18:07.558 --> 01:18:09.460 know I bought mine for social work,

NOTE Confidence: 0.78169079

 $01:18:09.460 \longrightarrow 01:18:12.190$  so it's going to be tough to

NOTE Confidence: 0.78169079

 $01:18:12.190 \longrightarrow 01:18:14.000$  describe to bacco treatment program.

NOTE Confidence: 0.78169079

 $01{:}18{:}14.000 \dashrightarrow 01{:}18{:}16.144$  So I apologize for any body else is created.

NOTE Confidence: 0.78169079

 $01:18:16.150 \longrightarrow 01:18:17.310$  We owe their programs on.

NOTE Confidence: 0.78169079

 $01:18:17.310 \longrightarrow 01:18:19.734$  Here are survivorship program is really

NOTE Confidence: 0.78169079

01:18:19.734 --> 01:18:22.270 a wonderful service that we have access

NOTE Confidence: 0.78169079

 $01:18:22.270 \longrightarrow 01:18:24.691$  to here at smile is for people who

NOTE Confidence: 0.78169079

01:18:24.691 $\operatorname{-->}$ 01:18:26.887 have reached stable disease or are

NOTE Confidence: 0.78169079

 $01{:}18{:}26.887 \dashrightarrow 01{:}18{:}30.210$  no longer receiving active treatment.

NOTE Confidence: 0.78169079

01:18:30.210 --> 01:18:31.975 I think oftentimes the expectation

NOTE Confidence: 0.78169079

 $01{:}18{:}31{.}975 \dashrightarrow 01{:}18{:}33{.}740$  when some body is completed in

NOTE Confidence: 0.78169079

 $01:18:33.802 \rightarrow 01:18:35.347$  treatment course is that oh,

- $01:18:35.350 \longrightarrow 01:18:36.361$  what a relief.
- NOTE Confidence: 0.78169079
- $01:18:36.361 \longrightarrow 01:18:38.383$  I got past this really stressful

01:18:38.383 --> 01:18:40.216 time in terms of my cancer,

NOTE Confidence: 0.78169079

 $01:18:40.220 \longrightarrow 01:18:41.984$  when in fact there are some

NOTE Confidence: 0.78169079

 $01:18:41.984 \longrightarrow 01:18:43.400$  new stresses that pop up.

NOTE Confidence: 0.78169079

 $01{:}18{:}43{.}400 \dashrightarrow 01{:}18{:}44{.}924$  Once that regular surveillance

NOTE Confidence: 0.78169079

 $01{:}18{:}44{.}924 \dashrightarrow 01{:}18{:}47{.}210$  with your primary team kind of

NOTE Confidence: 0.78169079

 $01:18:47.278 \longrightarrow 01:18:49.280$  is spaced out a little bit more.

NOTE Confidence: 0.78169079

01:18:49.280 --> 01:18:51.542 For many they experience or they

NOTE Confidence: 0.78169079

01:18:51.542 --> 01:18:54.190 feel as if that safety net might fall

NOTE Confidence: 0.78169079

 $01:18:54.190 \longrightarrow 01:18:56.619$  out from under them when in fact of NOTE Confidence: 0.78169079

01:18:56.619 --> 01:18:58.607 course the oncology team is with them

NOTE Confidence: 0.78169079

01:18:58.676 --> 01:19:00.614 all along the survivorship program.

NOTE Confidence: 0.78169079

 $01:19:00.614 \rightarrow 01:19:02.486$  Also offers an interdisciplinary

NOTE Confidence: 0.78169079

 $01{:}19{:}02{.}486 \dashrightarrow 01{:}19{:}05{.}356$  approach to help navigate those special

NOTE Confidence: 0.78169079

01:19:05.356 --> 01:19:08.146 concerns that come with cancer survivorship,

01:19:08.150 --> 01:19:10.730 including again, the medical, social,

NOTE Confidence: 0.78169079

01:19:10.730 --> 01:19:13.235 and emotional pieces that might

NOTE Confidence: 0.78169079

 $01{:}19{:}13.235 \dashrightarrow 01{:}19{:}15.740$  come from the cancer treatments.

NOTE Confidence: 0.78169079

 $01:19:15.740 \longrightarrow 01:19:17.324$  Uhm, our integrative medicine

NOTE Confidence: 0.78169079

01:19:17.324 --> 01:19:19.700 program is led by Doctor Gary.

NOTE Confidence: 0.78169079

01:19:19.700 --> 01:19:21.221 So for again,

NOTE Confidence: 0.78169079

 $01{:}19{:}21{.}221 \dashrightarrow 01{:}19{:}24{.}263$  a wonderful compliment to the primary

NOTE Confidence: 0.78169079

 $01:19:24.263 \longrightarrow 01:19:26.639$  oncology care that we provide.

NOTE Confidence: 0.78169079

 $01:19:26.640 \longrightarrow 01:19:29.965$  They to really focus on the whole

NOTE Confidence: 0.78169079

01:19:29.965 --> 01:19:32.730 person and ways that you know,

NOTE Confidence: 0.78169079

01:19:32.730 --> 01:19:34.430 applying different lifestyle approaches

NOTE Confidence: 0.78169079

01:19:34.430 --> 01:19:36.496 can really again compliment and

NOTE Confidence: 0.78169079

 $01{:}19{:}36.496 \dashrightarrow 01{:}19{:}37.889$  enhance some body's cancer treatment.

NOTE Confidence: 0.78169079

 $01{:}19{:}37{.}889 \dashrightarrow 01{:}19{:}40.067$  They offer a number of different

NOTE Confidence: 0.78169079

01:19:40.067 --> 01:19:43.047 services including Yoga, Tai Chi,

01:19:43.047 --> 01:19:45.828 Reiki, massage, mindfulness.

NOTE Confidence: 0.78169079

 $01{:}19{:}45{.}828 \dashrightarrow 01{:}19{:}48{.}609$  And guided meditation.

NOTE Confidence: 0.78169079

 $01{:}19{:}48.610 \dashrightarrow 01{:}19{:}50.715$  So I'm often encouraging patients

NOTE Confidence: 0.78169079

 $01:19:50.715 \longrightarrow 01:19:53.324$  to seek out an appointment with

NOTE Confidence: 0.78169079

 $01{:}19{:}53{.}324 \dashrightarrow 01{:}19{:}55{.}116$  their service as well.

NOTE Confidence: 0.78169079

 $01{:}19{:}55{.}120 \dashrightarrow 01{:}19{:}57{.}846$  Nutrition is tricky because with a cancer

NOTE Confidence: 0.78169079

 $01{:}19{:}57.846 \dashrightarrow 01{:}20{:}00.420$  diagnosis with the treatment some selves,

NOTE Confidence: 0.78169079

 $01:20:00.420 \longrightarrow 01:20:01.985$  sometimes patients need to make

NOTE Confidence: 0.78169079

01:20:01.985 --> 01:20:04.220 adaptations to their diet or just have

NOTE Confidence: 0.78169079

 $01{:}20{:}04{.}220 \dashrightarrow 01{:}20{:}06{.}385$  changes in their appetite so we can

NOTE Confidence: 0.78169079

 $01:20:06.385 \rightarrow 01:20:08.590$  often refer when we can refer patients NOTE Confidence: 0.78169079

01:20:08.665 --> 01:20:11.191 to our nutrition services and the

NOTE Confidence: 0.78169079

01:20:11.191 --> 01:20:13.403 registered dietitians can meet with

NOTE Confidence: 0.78169079

 $01:20:13.403 \rightarrow 01:20:15.703$  patients either during their clinical

NOTE Confidence: 0.78169079

 $01:20:15.703 \rightarrow 01:20:17.925$  appointment or during their treatments.

NOTE Confidence: 0.78169079

 $01{:}20{:}17{.}925 \dashrightarrow 01{:}20{:}20{.}925$  You just have to ask the team or

- NOTE Confidence: 0.78169079
- 01:20:20.925 --> 01:20:23.808 let us know if you want to do that.
- NOTE Confidence: 0.78169079
- 01:20:23.810 --> 01:20:27.056 Palliative care UM again is a
- NOTE Confidence: 0.78169079
- $01:20:27.056 \rightarrow 01:20:30.050$  wonderful additional layer of support.
- NOTE Confidence: 0.78169079
- $01{:}20{:}30{.}050 \dashrightarrow 01{:}20{:}31{.}877$  That I think it can be important
- NOTE Confidence: 0.78169079
- $01{:}20{:}31.877 \dashrightarrow 01{:}20{:}33.979$  to start it even from the point
- NOTE Confidence: 0.78169079
- 01:20:33.979 --> 01:20:35.863 of diagnosis in terms of offering
- NOTE Confidence: 0.78169079
- $01:20:35.930 \longrightarrow 01:20:37.498$  specialized symptom management and
- NOTE Confidence: 0.78169079
- $01:20:37.498 \longrightarrow 01:20:40.235$  again looking at the whole body to
- NOTE Confidence: 0.78169079
- $01{:}20{:}40{.}235 \dashrightarrow 01{:}20{:}42{.}545$  the whole person to really support
- NOTE Confidence: 0.78169079
- 01:20:42.545 --> 01:20:43.700 quality of life.
- NOTE Confidence: 0.78169079
- 01:20:43.700 --> 01:20:46.946 Italian carry things also carries a
- NOTE Confidence: 0.78169079
- $01:20:46.946 \rightarrow 01:20:49.430$  stigma or misunderstanding about it.
- NOTE Confidence: 0.78169079
- 01:20:49.430 --> 01:20:51.495 Palliative care can be offered
- NOTE Confidence: 0.78169079
- $01{:}20{:}51{.}495 \dashrightarrow 01{:}20{:}52{.}734$  concurrently with disease,
- NOTE Confidence: 0.78169079
- $01:20:52.740 \longrightarrow 01:20:53.830$  modifying or even cure it.
- NOTE Confidence: 0.78169079

- $01:20:53.830 \longrightarrow 01:20:54.502$  If treatment,
- NOTE Confidence: 0.78169079
- 01:20:54.502 --> 01:20:54.838 again,
- NOTE Confidence: 0.78169079
- $01{:}20{:}54.838 \dashrightarrow 01{:}20{:}57.190$  it's another team that you can have
- NOTE Confidence: 0.78169079
- $01:20:57.255 \rightarrow 01:20:59.451$  access to to increase the support
- NOTE Confidence: 0.78169079
- 01:20:59.451 --> 01:21:01.588 throughout your cancer care doctor pastick,
- NOTE Confidence: 0.78169079
- 01:21:01.588 --> 01:21:03.592 you two did a great job
- NOTE Confidence: 0.78169079
- 01:21:03.592 --> 01:21:04.660 explaining pulmonary rehab.
- NOTE Confidence: 0.78169079
- $01{:}21{:}04.660 \dashrightarrow 01{:}21{:}07.047$  A number of the patients that I've
- NOTE Confidence: 0.78169079
- $01:21:07.047 \rightarrow 01:21:08.898$  worked with have anybody I've spoken
- NOTE Confidence: 0.78169079
- $01:21:08.898 \rightarrow 01:21:10.554$  to has only said really positive,
- NOTE Confidence: 0.78169079
- $01:21:10.560 \longrightarrow 01:21:11.115$  wonderful,
- NOTE Confidence: 0.78169079
- $01:21:11.115 \rightarrow 01:21:13.890$  wonderful things about their participation.
- NOTE Confidence: 0.78169079
- $01:21:13.890 \longrightarrow 01:21:18.150$  In the program that we offer and just.
- NOTE Confidence: 0.78169079
- $01:21:18.150 \longrightarrow 01:21:19.938$  They've said just what an impact
- NOTE Confidence: 0.78169079
- 01:21:19.938 --> 01:21:21.130 that's had on their
- NOTE Confidence: 0.911082449310345
- $01:21:21.193 \rightarrow 01:21:23.559$  quality of life by just providing tactics

 $01:21:23.559 \rightarrow 01:21:26.090$  or exercises they can use to really

NOTE Confidence: 0.911082449310345

 $01:21:26.090 \rightarrow 01:21:27.905$  improve their their pulmonary function.

NOTE Confidence: 0.911082449310345

01:21:27.910 --> 01:21:30.364 Lisa, as I said, you discuss

NOTE Confidence: 0.911082449310345

 $01:21:30.364 \rightarrow 01:21:32.000$  the tobacco treatment program.

NOTE Confidence: 0.911082449310345

 $01{:}21{:}32.000 \dashrightarrow 01{:}21{:}34.496$  Of course, we really want to be able

NOTE Confidence: 0.911082449310345

 $01{:}21{:}34.496 \dashrightarrow 01{:}21{:}36.937$  to maximize ones response to treatment,

NOTE Confidence: 0.911082449310345

 $01{:}21{:}36{.}940 \dashrightarrow 01{:}21{:}40{.}052$  and so by tapping into the services and

NOTE Confidence: 0.911082449310345

 $01:21:40.052 \rightarrow 01:21:42.378$  supports available for tobacco treatment,

NOTE Confidence: 0.911082449310345

 $01:21:42.380 \longrightarrow 01:21:44.774$  they'll be able to use counseling

NOTE Confidence: 0.911082449310345

01:21:44.774 --> 01:21:46.370 and perhaps some pharmacologic

NOTE Confidence: 0.911082449310345

01:21:46.434 --> 01:21:48.179 techniques to help you with.

NOTE Confidence: 0.911082449310345

 $01:21:48.180 \longrightarrow 01:21:51.669$  That to bacco addiction.

NOTE Confidence: 0.911082449310345

01:21:51.670 --> 01:21:54.290 Spiritual care, both in the

NOTE Confidence: 0.911082449310345

 $01{:}21{:}54{.}290 \dashrightarrow 01{:}21{:}56{.}386$  ambulatory and outpatient setting.

NOTE Confidence: 0.911082449310345

01:21:56.390 --> 01:21:59.862 We do have access to licensed Chaplains

01:21:59.862 --> 01:22:03.198 Board certified chaplains come from a number

NOTE Confidence: 0.911082449310345

01:22:03.198 --> 01:22:05.508 of different multi faith backgrounds,

NOTE Confidence: 0.911082449310345

 $01{:}22{:}05{.}510 \dashrightarrow 01{:}22{:}07{.}877$  and I I think of course for many people

NOTE Confidence: 0.911082449310345

 $01{:}22{:}07{.}877 \dashrightarrow 01{:}22{:}09{.}749$  their spiritual spirituality is an

NOTE Confidence: 0.911082449310345

 $01:22:09.749 \rightarrow 01:22:12.540$  important component and how they cope and

NOTE Confidence: 0.911082449310345

 $01{:}22{:}12{.}540 \dashrightarrow 01{:}22{:}14{.}590$  navigate their experience with cancer.

NOTE Confidence: 0.911082449310345

 $01:22:14.590 \longrightarrow 01:22:17.074$  So we want you to be able to access

NOTE Confidence: 0.911082449310345

 $01{:}22{:}17.074 \dashrightarrow 01{:}22{:}19.767$  that through your appointments with us.

NOTE Confidence: 0.911082449310345

 $01:22:19.770 \longrightarrow 01:22:21.760$  Our therapy is another one.

NOTE Confidence: 0.911082449310345

 $01:22:21.760 \rightarrow 01:22:23.902$  Uhm, they work very closely with

NOTE Confidence: 0.911082449310345

01:22:23.902 --> 01:22:24.616 palliative care,

NOTE Confidence: 0.911082449310345

 $01:22:24.620 \longrightarrow 01:22:26.944$  but they offer a number of different

NOTE Confidence: 0.911082449310345

 $01:22:26.944 \rightarrow 01:22:28.340$  supportive programs throughout smilow.

NOTE Confidence: 0.911082449310345

01:22:28.340 --> 01:22:29.100 And lastly,

NOTE Confidence: 0.911082449310345

 $01{:}22{:}29{.}100 \dashrightarrow 01{:}22{:}31{.}000$  we also do offer be reavement

NOTE Confidence: 0.911082449310345

 $01:22:31.000 \rightarrow 01:22:31.760$  support services,

01:22:31.760 --> 01:22:34.000 support groups and individual counseling

NOTE Confidence: 0.911082449310345

 $01{:}22{:}34.000 \dashrightarrow 01{:}22{:}36.962$  for family members who've lost a loved

NOTE Confidence: 0.911082449310345

 $01{:}22{:}36{.}962 \dashrightarrow 01{:}22{:}39{.}265$  one to cancer within the health system.

NOTE Confidence: 0.911082449310345

 $01{:}22{:}39{.}270 \dashrightarrow 01{:}22{:}40{.}650$  Next slide please.

NOTE Confidence: 0.911082449310345

01:22:40.650 --> 01:22:43.410 Oh, I got through my slides.

NOTE Confidence: 0.911082449310345

 $01:22:43.410 \longrightarrow 01:22:44.610$  That's my contact information.

NOTE Confidence: 0.911082449310345

01:22:44.610 --> 01:22:45.510 Like I said,

NOTE Confidence: 0.911082449310345

 $01:22:45.510 \longrightarrow 01:22:47.498$  I mean my hope is always to

NOTE Confidence: 0.911082449310345

 $01:22:47.498 \longrightarrow 01:22:48.770$  admit everybody working with

NOTE Confidence: 0.911082449310345

 $01:22:48.770 \longrightarrow 01:22:50.198$  the thoracic oncology team.

NOTE Confidence: 0.911082449310345

01:22:50.200 --> 01:22:51.915 Certainly if we have not met and

NOTE Confidence: 0.911082449310345

 $01{:}22{:}51{.}915 \dashrightarrow 01{:}22{:}53{.}164$  you're interested in speaking to

NOTE Confidence: 0.911082449310345

 $01{:}22{:}53.164 \dashrightarrow 01{:}22{:}54.781$  me or learning a little bit more

NOTE Confidence: 0.911082449310345

 $01{:}22{:}54{.}781 \dashrightarrow 01{:}22{:}56{.}105$  about the services that we might

NOTE Confidence: 0.911082449310345

 $01:22:56.105 \longrightarrow 01:22:57.441$  be able to work on together,

- $01:22:57.441 \longrightarrow 01:22:58.896$  please give me a call.
- NOTE Confidence: 0.903184632
- $01{:}23{:}00{.}740 \dashrightarrow 01{:}23{:}01{.}980$  Kelly, thank you so much.
- NOTE Confidence: 0.903184632
- $01:23:01.980 \rightarrow 01:23:05.160$  That was an amazing, amazing overview.
- NOTE Confidence: 0.903184632
- 01:23:05.160 01:23:08.640 We the participants here the the
- NOTE Confidence: 0.903184632
- $01:23:08.640 \longrightarrow 01:23:10.866$  providers and all the patients are so
- NOTE Confidence: 0.903184632
- 01:23:10.866 01:23:13.390 lucky to have you as part of our team.
- NOTE Confidence: 0.903184632
- $01:23:13.390 \longrightarrow 01:23:14.506$  So thank you for sharing the
- NOTE Confidence: 0.927619602
- $01:23:14.520 \longrightarrow 01:23:15.910$  best team but thank you.
- NOTE Confidence: 0.76935709125
- 01:23:17.970 $\operatorname{-->}$ 01:23:21.410 So we're we're almost out of time here,
- NOTE Confidence: 0.76935709125
- $01{:}23{:}21{.}410 \dashrightarrow 01{:}23{:}24{.}139$  and I wanted to do one last thing, which
- NOTE Confidence: 0.76935709125
- $01{:}23{:}24{.}139 \dashrightarrow 01{:}23{:}27{.}460$  is give all of the panelists a chance to.
- NOTE Confidence: 0.76935709125
- $01:23:27.460 \rightarrow 01:23:30.400$  Say one or one and or two things one is
- NOTE Confidence: 0.76935709125
- 01:23:30.475 --> 01:23:33.427 I'd love for every<br/>one to tell us what
- NOTE Confidence: 0.76935709125
- $01{:}23{:}33{.}427 \dashrightarrow 01{:}23{:}35{.}899$  they either they could tell us what
- NOTE Confidence: 0.76935709125
- $01:23:35.899 \rightarrow 01:23:38.348$  they see as the most exciting, amazing,
- NOTE Confidence: 0.76935709125
- $01:23:38.348 \longrightarrow 01:23:41.106$  wonderful advance in lung cancer in

- NOTE Confidence: 0.76935709125
- $01:23:41.106 \rightarrow 01:23:43.669$  recent years or what they they predict for
- NOTE Confidence: 0.76935709125
- $01{:}23{:}43.669 \dashrightarrow 01{:}23{:}46.176$  the future in the next couple of years.
- NOTE Confidence: 0.76935709125
- $01:23:46.180 \longrightarrow 01:23:47.116$  Or you could tell us both.
- NOTE Confidence: 0.76935709125
- $01:23:47.120 \rightarrow 01:23:51.600$  If you're feeling ambitious. Uhm?
- NOTE Confidence: 0.76935709125
- 01:23:51.600 --> 01:23:53.304 Roy, do you want to start us out?
- NOTE Confidence: 0.855029791428571
- 01:23:53.900 --> 01:23:55.748 I was worried you'd pick me first.
- NOTE Confidence: 0.869555490769231
- 01:23:55.880 --> 01:23:57.344 I could go first if you if you
- NOTE Confidence: 0.869555490769231
- $01:23:57.344 \rightarrow 01:23:58.428$  haven't thought of something yet,
- NOTE Confidence: 0.929257177142857
- $01{:}23{:}58{.}560 \dashrightarrow 01{:}24{:}00{.}429$  why don't you demonstrate how it's done?
- NOTE Confidence: 0.8528823575
- 01:24:01.450 --> 01:24:03.472 I I never thought of anything
- NOTE Confidence: 0.8528823575
- 01:24:03.472 --> 01:24:04.969 yet either, so you know,
- NOTE Confidence: 0.8528823575
- $01{:}24{:}04{.}969 \dashrightarrow 01{:}24{:}06{.}880$  I think I'll need to answer both,
- NOTE Confidence: 0.8528823575
- $01:24:06.880 \longrightarrow 01:24:08.560$  but I'll, they're sort of similar
- NOTE Confidence: 0.8528823575
- $01{:}24{:}08.560 \dashrightarrow 01{:}24{:}10.476$  and I'll also answer one of the
- NOTE Confidence: 0.8528823575
- $01{:}24{:}10.476 \dashrightarrow 01{:}24{:}11.964$  questions that was posted at the
- NOTE Confidence: 0.8528823575

 $01:24:11.964 \rightarrow 01:24:13.914$  same time like that, so you know,

NOTE Confidence: 0.8528823575

 $01:24:13.914 \longrightarrow 01:24:16.146$  I think this is part of what what

NOTE Confidence: 0.8528823575

 $01{:}24{:}16.146 \dashrightarrow 01{:}24{:}17.874$  Dan and I both talked about as well.

NOTE Confidence: 0.8528823575

 $01:24:17.880 \longrightarrow 01:24:20.218$  You know we have seen such amazing

NOTE Confidence: 0.8528823575

 $01:24:20.218 \longrightarrow 01:24:22.633$  advances in how we're able to

NOTE Confidence: 0.8528823575

01:24:22.633 --> 01:24:24.425 personalize treatment for cancer,

NOTE Confidence: 0.8528823575

 $01:24:24.430 \longrightarrow 01:24:26.026$  lots of different cancers,

NOTE Confidence: 0.8528823575

01:24:26.026 --> 01:24:28.833 but I think I'm probably most of

NOTE Confidence: 0.8528823575

 $01{:}24{:}28.833 \dashrightarrow 01{:}24{:}29.847$  all lung cancer.

NOTE Confidence: 0.8528823575

01:24:29.850 --> 01:24:31.404 You know we're able to understand

NOTE Confidence: 0.8528823575

 $01{:}24{:}31{.}404 \dashrightarrow 01{:}24{:}33{.}103$  what's happening at the level of the

NOTE Confidence: 0.8528823575

 $01:24:33.103 \rightarrow 01:24:35.018$  tumor and and really try to match that

NOTE Confidence: 0.8528823575

 $01{:}24{:}35{.}018 \dashrightarrow 01{:}24{:}37{.}247$  to the best treatment for the patient.

NOTE Confidence: 0.8528823575

 $01{:}24{:}37{.}250 \dashrightarrow 01{:}24{:}39{.}406$  And I think that is going to

NOTE Confidence: 0.8528823575

 $01:24:39.406 \longrightarrow 01:24:40.330$  expand even more.

NOTE Confidence: 0.8528823575

 $01:24:40.330 \longrightarrow 01:24:41.786$  I think in a few years I'm going

- NOTE Confidence: 0.8528823575
- $01:24:41.786 \longrightarrow 01:24:43.212$  to show another pie chart with
- NOTE Confidence: 0.8528823575
- 01:24:43.212 --> 01:24:44.477 even more pieces filled in,
- NOTE Confidence: 0.8528823575
- $01:24:44.480 \rightarrow 01:24:45.888$  and this is getting to the to answer.
- NOTE Confidence: 0.8528823575
- $01{:}24{:}45.890 \dashrightarrow 01{:}24{:}48.305$  One of the questions that was asked.
- NOTE Confidence: 0.8528823575
- $01:24:48.310 \longrightarrow 01:24:50.446$  I think some of our targeted
- NOTE Confidence: 0.8528823575
- 01:24:50.446 --> 01:24:51.870 therapies work incredibly well,
- NOTE Confidence: 0.8528823575
- $01:24:51.870 \longrightarrow 01:24:53.490$  but they are not curing cancer,
- NOTE Confidence: 0.8528823575
- $01:24:53.490 \rightarrow 01:24:55.954$  and so I think now we're really starting
- NOTE Confidence: 0.8528823575
- $01{:}24{:}55{.}954 \dashrightarrow 01{:}24{:}58{.}218$  to understand more and more about what
- NOTE Confidence: 0.8528823575
- $01:24:58.218 \rightarrow 01:24:59.817$  happens when drugs become become.
- NOTE Confidence: 0.8528823575
- $01:24:59.817 \rightarrow 01:25:01.125$  Not effective when resistance
- NOTE Confidence: 0.8528823575
- $01{:}25{:}01{.}125 \dashrightarrow 01{:}25{:}03.060$  develops and how to overcome that.
- NOTE Confidence: 0.8528823575
- $01{:}25{:}03.060 \dashrightarrow 01{:}25{:}04.754$  So that's my prediction is that that
- NOTE Confidence: 0.8528823575
- $01{:}25{:}04{.}754 \dashrightarrow 01{:}25{:}06{.}539$  pie will be filled in even more,
- NOTE Confidence: 0.8528823575
- $01{:}25{:}06{.}540 \dashrightarrow 01{:}25{:}08{.}454$  so we understand lung cancer better
- NOTE Confidence: 0.8528823575

 $01:25:08.454 \rightarrow 01:25:10.855$  and we're able to to treat that the

NOTE Confidence: 0.8528823575

 $01{:}25{:}10.855 \dashrightarrow 01{:}25{:}13.170$  cancer even at the time of resistance.

NOTE Confidence: 0.90719086

01:25:15.230 --> 01:25:15.570 OK,

NOTE Confidence: 0.93762742

 $01:25:16.620 \longrightarrow 01:25:20.448$  OK so. I think the biggest

NOTE Confidence: 0.93762742

 $01:25:20.448 \longrightarrow 01:25:22.990$  advance in lung cancer has has

NOTE Confidence: 0.93762742

 $01{:}25{:}22.990 \dashrightarrow 01{:}25{:}24.890$  been the multi modality approach.

NOTE Confidence: 0.93762742

 $01:25:24.890 \longrightarrow 01:25:26.850$  The fact that you know

NOTE Confidence: 0.93762742

 $01:25:26.850 \rightarrow 01:25:28.810$  when I was in training,

NOTE Confidence: 0.93762742

 $01{:}25{:}28{.}810 \dashrightarrow 01{:}25{:}31{.}366$  you know we we had surgery.

NOTE Confidence: 0.93762742

 $01{:}25{:}31{.}370 \dashrightarrow 01{:}25{:}32{.}718$  Of course, radiations evolved

NOTE Confidence: 0.93762742

01:25:32.718 --> 01:25:35.120 over the years as we've heard from

NOTE Confidence: 0.93762742

 $01{:}25{:}35{.}120 \dashrightarrow 01{:}25{:}37{.}046$  Henry so much more precise and

NOTE Confidence: 0.93762742

 $01{:}25{:}37.046 \dashrightarrow 01{:}25{:}38.756$  effective and now chemotherapy,

NOTE Confidence: 0.93762742

 $01{:}25{:}38.756 \dashrightarrow 01{:}25{:}40.942$  biologic and targeted the rapy all

NOTE Confidence: 0.93762742

 $01:25:40.942 \longrightarrow 01:25:42.934$  being used to get for patients.

NOTE Confidence: 0.93762742

 $01{:}25{:}42{.}940 \dashrightarrow 01{:}25{:}44{.}837$  So I I think that that's that's

- NOTE Confidence: 0.93762742
- $01:25:44.837 \rightarrow 01:25:46.100$  that's really the events.
- NOTE Confidence: 0.93762742
- $01{:}25{:}46.100 \dashrightarrow 01{:}25{:}47.844$  Every everything working together.
- NOTE Confidence: 0.93762742
- 01:25:47.844 --> 01:25:50.024 Little bit of an echo.
- NOTE Confidence: 0.93762742
- $01:25:50.030 \rightarrow 01:25:52.500$  Someone should mute the my
- NOTE Confidence: 0.93762742
- $01:25:52.500 \longrightarrow 01:25:54.476$  prediction for the future.
- NOTE Confidence: 0.9903077
- $01:25:56.840 \longrightarrow 01:25:58.950$  Is that in the future what
- NOTE Confidence: 0.9903077
- $01:25:58.950 \rightarrow 01:26:01.639$  we're going to do is right now.
- NOTE Confidence: 0.9903077
- $01:26:01.640 \longrightarrow 01:26:02.825$  We use immunotherapy,
- NOTE Confidence: 0.9903077
- $01{:}26{:}02.825 \dashrightarrow 01{:}26{:}06.352$  and it's really good for about one in five
- NOTE Confidence: 0.9903077
- $01:26:06.352 \rightarrow 01:26:09.112$  people and in the rest it's helping them,
- NOTE Confidence: 0.9903077
- $01:26:09.120 \longrightarrow 01:26:11.227$  but we feel it could do better.
- NOTE Confidence: 0.9903077
- 01:26:11.230 --> 01:26:12.136 And I think what we're going
- NOTE Confidence: 0.9903077
- $01{:}26{:}12.136 \dashrightarrow 01{:}26{:}13.040$  to do in the future.
- NOTE Confidence: 0.9903077
- 01:26:13.040 --> 01:26:14.580 And I, I, I'm hoping our group
- NOTE Confidence: 0.9903077
- $01:26:14.580 \longrightarrow 01:26:16.397$  will be in the lead in that
- NOTE Confidence: 0.9903077

 $01:26:16.397 \rightarrow 01:26:18.003$  'cause we're putting our efforts

NOTE Confidence: 0.9903077

01:26:18.003 --> 01:26:20.518 or resources the hospital Smile,

NOTE Confidence: 0.9903077

01:26:20.520 --> 01:26:21.182 Cancer Hospital,

NOTE Confidence: 0.9903077

01:26:21.182 --> 01:26:22.837 Yale Medical School is very

NOTE Confidence: 0.9903077

 $01:26:22.837 \longrightarrow 01:26:24.993$  committed is we're going to try

NOTE Confidence: 0.9903077

 $01{:}26{:}24{.}993 \dashrightarrow 01{:}26{:}26{.}097$  to personalize immunotherapy.

NOTE Confidence: 0.9903077

 $01{:}26{:}26{.}100 \dashrightarrow 01{:}26{:}27{.}280$  For that, I mean.

NOTE Confidence: 0.9903077

01:26:27.280 --> 01:26:29.390 You'll come in and we'll figure out

NOTE Confidence: 0.9903077

 $01{:}26{:}29{.}390 \dashrightarrow 01{:}26{:}31{.}606$  why the tumor is or is not responding

NOTE Confidence: 0.9903077

01:26:31.606 - 01:26:33.330 well to these immunizations,

NOTE Confidence: 0.9903077

 $01{:}26{:}33{.}330 \dashrightarrow 01{:}26{:}35{.}118$  and will put a cocktail together

NOTE Confidence: 0.9903077

 $01:26:35.118 \longrightarrow 01:26:36.668$  that's better that's going to

NOTE Confidence: 0.9903077

 $01{:}26{:}36{.}668 \dashrightarrow 01{:}26{:}38{.}248$  start with our clinical trials.

NOTE Confidence: 0.9903077

 $01:26:38.250 \longrightarrow 01:26:39.074$  But then after that,

NOTE Confidence: 0.9903077

 $01:26:39.074 \rightarrow 01:26:40.574$  we're going to try to hopefully make

NOTE Confidence: 0.9903077

 $01{:}26{:}40.574 \dashrightarrow 01{:}26{:}41.870$  those into new standards of care.

- NOTE Confidence: 0.9903077
- $01:26:41.870 \longrightarrow 01:26:43.638$  So I think that we can do better.

 $01{:}26{:}43.640 \dashrightarrow 01{:}26{:}45.332$  We're doing better already,

NOTE Confidence: 0.9903077

 $01:26:45.332 \longrightarrow 01:26:48.428$  but we want to continue to find

NOTE Confidence: 0.9903077

 $01:26:48.428 \rightarrow 01:26:50.873$  even better and more effective

NOTE Confidence: 0.9903077

 $01:26:50.873 \longrightarrow 01:26:52.340$  and safer the rapies.

NOTE Confidence: 0.84963676

01:26:55.780 --> 01:26:59.416 Mike owner, tell us your thoughts.

NOTE Confidence: 0.84963676

 $01:26:59.420 \longrightarrow 01:27:01.250$  Uhm, I don't know that

NOTE Confidence: 0.8696255575

01:27:01.260 --> 01:27:02.448 I can pinpoint one

NOTE Confidence: 0.94348274

 $01:27:02.460 \longrightarrow 01:27:04.146$  advance, but I think you know,

NOTE Confidence: 0.94348274

 $01:27:04.150 \longrightarrow 01:27:06.201$  especially what's probably the most

NOTE Confidence: 0.94348274

 $01{:}27{:}06{.}201 \dashrightarrow 01{:}27{:}08{.}818$  important to the to the patients and

NOTE Confidence: 0.94348274

 $01{:}27{:}08{.}820 \dashrightarrow 01{:}27{:}10{.}484$  and the people who are listening to this

NOTE Confidence: 0.937641723333333

 $01{:}27{:}10.500 \dashrightarrow 01{:}27{:}13.370$  is with all of these advances, not later.

NOTE Confidence: 0.909881267142857

 $01:27:13.380 \longrightarrow 01:27:14.703$  People living longer,

NOTE Confidence: 0.909881267142857

 $01:27:14.703 \rightarrow 01:27:16.467$  but they're living better.

01:27:16.470 --> 01:27:19.358 Uhm, you know, I know Dan had talked

NOTE Confidence: 0.909881267142857

 $01{:}27{:}19.358 \dashrightarrow 01{:}27{:}22.400$  about Hammer and the nail, and

NOTE Confidence: 0.77566324

 $01{:}27{:}21{.}320 \dashrightarrow 01{:}27{:}22{.}390$  I think more and more. We've

NOTE Confidence: 0.90285163

 $01{:}27{:}22.400 \dashrightarrow 01{:}27{:}24.260$  moved away from the hamburger approach.

NOTE Confidence: 0.90285163

01:27:24.260 --> 01:27:27.990 You know of toxic chemotherapy of

NOTE Confidence: 0.90285163

01:27:27.990 --> 01:27:30.760 radiating large parts of the body of,

NOTE Confidence: 0.90285163

 $01{:}27{:}30.760 \dashrightarrow 01{:}27{:}32.240$  you know, as Roy said,

NOTE Confidence: 0.90285163

01:27:32.240 --> 01:27:34.826 you know from surgery that required

NOTE Confidence: 0.90285163

 $01{:}27{:}34.826 \dashrightarrow 01{:}27{:}38.060$  major open procedures to using robots.

NOTE Confidence: 0.90285163

 $01:27:38.060 \rightarrow 01:27:40.459$  So people have recovering quicker.

NOTE Confidence: 0.90285163

 $01:27:40.460 \longrightarrow 01:27:41.660$  They're experiencing less

NOTE Confidence: 0.90285163

 $01:27:41.660 \longrightarrow 01:27:43.618$  short and long term toxicity.

NOTE Confidence: 0.90285163

 $01:27:43.620 \longrightarrow 01:27:45.163$  And with all those years

NOTE Confidence: 0.90285163

 $01:27:45.163 \longrightarrow 01:27:46.127$  that they're living longer,

NOTE Confidence: 0.90285163

 $01:27:46.130 \rightarrow 01:27:46.836$  they're living.

NOTE Confidence: 0.90285163

 $01:27:46.836 \longrightarrow 01:27:48.248$  Better and that's

- NOTE Confidence: 0.942918652
- $01:27:48.260 \longrightarrow 01:27:49.140$  what we want is we
- NOTE Confidence: 0.90796125625
- $01{:}27{:}49{.}150 \dashrightarrow 01{:}27{:}50{.}654$  want our patients to be able to enjoy
- NOTE Confidence: 0.922493985
- $01{:}27{:}50.670 \dashrightarrow 01{:}27{:}52.020$  that time as best they can.
- NOTE Confidence: 0.807114047
- 01:27:53.730 --> 01:27:56.770 Well said OK, I won't make all of you answer,
- NOTE Confidence: 0.807114047
- $01{:}27{:}56{.}770 \dashrightarrow 01{:}27{:}58{.}168$  especially since we're low on time.
- NOTE Confidence: 0.807114047
- $01{:}27{:}58{.}170 \dashrightarrow 01{:}28{:}00{.}879$  Does any body else want to give some
- NOTE Confidence: 0.807114047
- $01:28:00.879 \rightarrow 01:28:03.630$  thoughts on advances or future predictions?
- NOTE Confidence: 0.807114047
- 01:28:03.630 --> 01:28:06.184 Jenn, I just. I think the only thing
- NOTE Confidence: 0.807114047
- $01{:}28{:}06{.}184 \dashrightarrow 01{:}28{:}07{.}480$  I would add to that as a variation
- NOTE Confidence: 0.915762011
- $01:28:07.490 \longrightarrow 01:28:08.990$  on things. I really think the
- NOTE Confidence: 0.915762011
- $01{:}28{:}08{.}990 \dashrightarrow 01{:}28{:}10{.}540$  precision medicine is that it's the.
- NOTE Confidence: 0.915762011
- 01:28:10.540 --> 01:28:12.985 It's the key that's unlocking the boxes
- NOTE Confidence: 0.915762011
- $01{:}28{:}12{.}985 \dashrightarrow 01{:}28{:}15{.}970$  is that it's made cancer the rapy more
- NOTE Confidence: 0.93878295
- 01:28:15.980 --> 01:28:17.318 accessible for more
- NOTE Confidence: 0.943862471428572
- $01:28:17.330 \longrightarrow 01:28:19.382$  of my patients. So my patients
- NOTE Confidence: 0.943862471428572

 $01:28:19.382 \rightarrow 01:28:21.534$  who have other health conditions,

NOTE Confidence: 0.943862471428572

01:28:21.534 --> 01:28:24.190 particularly underlying lung disease,

NOTE Confidence: 0.943862471428572

 $01:28:24.190 \longrightarrow 01:28:25.446$  who may be older,

NOTE Confidence: 0.943862471428572

 $01:28:25.446 \rightarrow 01:28:27.710$  who may have had other therapies

NOTE Confidence: 0.943862471428572

 $01:28:27.710 \rightarrow 01:28:31.037$  already that they've moved through it.

NOTE Confidence: 0.943862471428572

01:28:31.037 --> 01:28:33.299 It's just really made it it

NOTE Confidence: 0.943862471428572

 $01:28:33.299 \longrightarrow 01:28:35.979$  made a world of possibilities.

NOTE Confidence: 0.943862471428572

01:28:35.980 --> 01:28:38.126 For them, in terms of treating

NOTE Confidence: 0.943862471428572

 $01:28:38.126 \longrightarrow 01:28:39.756$  and living with their lung

NOTE Confidence: 0.943862471428572

 $01:28:39.756 \longrightarrow 01:28:41.350$  cancer in an effective way.

NOTE Confidence: 0.8512005025

 $01{:}28{:}43.670 \dashrightarrow 01{:}28{:}44.310$  It's a great point.

NOTE Confidence: 0.89788941375

 $01:28:46.490 \rightarrow 01:28:50.034$  Right any any last comments from the panel?

NOTE Confidence: 0.89788941375

01:28:50.040 --> 01:28:51.660 And where you going, you're not

NOTE Confidence: 0.89788941375

01:28:51.660 --> 01:28:53.780 gonna give us a prediction today.

NOTE Confidence: 0.89788941375

01:28:53.780 --> 01:28:55.230 Why I think, yeah, I

NOTE Confidence: 0.68068665

 $01:28:55.640 \longrightarrow 01:28:57.120$  think they don't want so

- NOTE Confidence: 0.68068665
- $01:28:57.120 \longrightarrow 01:28:58.338$  I'm gonna hold off for now,
- NOTE Confidence: 0.68068665
- $01{:}28{:}58{.}340 \dashrightarrow 01{:}29{:}00{.}786$  but I I think the combination of SBRT
- NOTE Confidence: 0.68068665
- $01:29:00.786 \longrightarrow 01:29:02.398$  with immunotherapy another target
- NOTE Confidence: 0.68068665
- $01:29:02.398 \rightarrow 01:29:05.020$  database is really the future as well.
- NOTE Confidence: 0.886324313333333
- $01{:}29{:}05{.}050 \dashrightarrow 01{:}29{:}06{.}040$  I think that's a great point.
- NOTE Confidence: 0.886324313333333
- 01:29:06.040 --> 01:29:07.800 Besides combining drugs, it's combining
- NOTE Confidence: 0.886324313333333
- $01{:}29{:}07{.}800 \dashrightarrow 01{:}29{:}10{.}300$  the different modalities as well.
- NOTE Confidence: 0.886324313333333
- $01:29:10.300 \longrightarrow 01:29:12.819$  Great, OK, well thank you so much to
- NOTE Confidence: 0.886324313333333
- $01{:}29{:}12.819 \dashrightarrow 01{:}29{:}15.016$  all of the panelists for participating
- NOTE Confidence: 0.886324313333333
- $01:29:15.016 \rightarrow 01:29:17.722$  and giving us your amazing expert
- NOTE Confidence: 0.886324313333333
- $01:29:17.722 \longrightarrow 01:29:19.398$  insights into this disease.
- NOTE Confidence: 0.886324313333333
- $01{:}29{:}19{.}400 \dashrightarrow 01{:}29{:}21{.}430$  And of course, to all of our
- NOTE Confidence: 0.886324313333333
- 01:29:21.430 --> 01:29:22.801 participants are patients and families
- NOTE Confidence: 0.886324313333333
- $01:29:22.801 \longrightarrow 01:29:24.487$  and everyone else who are here.
- NOTE Confidence: 0.886324313333333
- $01:29:24.490 \longrightarrow 01:29:25.640$  Thank you for joining us.
- NOTE Confidence: 0.886324313333333

01:29:25.640 --> 01:29:28.430 Thank you for for listening NOTE Confidence: 0.88632431333333 01:29:28.430 --> 01:29:31.076 and asking all these wonderful NOTE Confidence: 0.88632431333333 01:29:31.076 --> 01:29:33.378 questions and see you all soon. NOTE Confidence: 0.83511905 01:29:34.140 --> 01:29:36.261 Thank you Sarah for doing a wonderful NOTE Confidence: 0.83511905 01:29:36.261 --> 01:29:39.510 job moderating. Of course, thank you. NOTE Confidence: 0.5699632

01:29:40.970 --> 01:29:42.000 Goodnight everybody.