WEBVTT

00:00:00.160 --> 00:00:01.920 Funding for Yale Cancer Answers

NOTE Confidence: 0.9338553

00:00:01.920 --> 00:00:03.679 is provided by Smilow Cancer

NOTE Confidence: 0.9338553

00:00:03.679 --> 00:00:04.180 Hospital.

NOTE Confidence: 0.9436277

00:00:06.080 --> 00:00:08.000 Welcome to Yale Cancer Answers

NOTE Confidence: 0.9436277

00:00:08.000 --> 00:00:08.960 with the director of

NOTE Confidence: 0.9436277

00:00:08.960 --> 00:00:10.639 Yale Cancer Center, Doctor Eric

NOTE Confidence: 0.9436277

00:00:10.639 --> 00:00:11.139 Winer.

NOTE Confidence: 0.9857887

00:00:11.679 --> 00:00:13.735 Yale Cancer Answers features conversations

NOTE Confidence: 0.9857887

00:00:13.955 --> 00:00:15.875 with oncologists and specialists who

NOTE Confidence: 0.9857887

00:00:15.875 --> 00:00:16.755 are on the forefront of

NOTE Confidence: 0.9857887

00:00:16.755 --> 00:00:18.055 the battle to fight cancer.

NOTE Confidence: 0.91413724

00:00:18.595 --> 00:00:19.895 This week, it's a conversation

NOTE Confidence: 0.91413724

00:00:19.954 --> 00:00:21.795 about clinical trials with doctor

NOTE Confidence: 0.91413724

00:00:21.795 --> 00:00:23.575 Ian Krop and Alyssa Gateman.

NOTE Confidence: 0.9604995

00:00:23.954 --> 00:00:25.314 Doctor Krop is a professor

NOTE Confidence: 0.9604995

00:00:25.314 --> 00:00:27.015 of internal medicine and medical

NOTE Confidence: 0.9604995

00:00:27.090 --> 00:00:28.450 oncology at the Yale School

NOTE Confidence: 0.9604995

00:00:28.450 --> 00:00:30.370 of Medicine, and Alyssa Gateman

NOTE Confidence: 0.9604995

00:00:30.370 --> 00:00:31.730 is the executive director of

NOTE Confidence: 0.9604995

00:00:31.730 --> 00:00:33.250 the clinical trials office at

NOTE Confidence: 0.9604995

00:00:33.250 --> 00:00:35.250 Yale Cancer Center. Here's

NOTE Confidence: 0.9604995

00:00:35.250 --> 00:00:36.070 doctor Winer.

00:00:37.650 --> 00:00:39.489 Let's just begin talking

NOTE Confidence: 0.99547505

00:00:39.489 --> 00:00:40.610 a little bit about each

NOTE Confidence: 0.99547505

00:00:40.610 --> 00:00:42.165 of you and how you

NOTE Confidence: 0.99547505

00:00:42.165 --> 00:00:44.325 got interested in this line

NOTE Confidence: 0.99547505

00:00:44.325 --> 00:00:45.065 of work.

NOTE Confidence: 0.9374024

00:00:45.445 --> 00:00:47.045 Alyssa, how'd you wind

NOTE Confidence: 0.9374024

00:00:47.045 --> 00:00:48.905 up working in clinical trials?

NOTE Confidence: 0.9977444

00:00:49.445 --> 00:00:50.425 Thank you, Eric.

NOTE Confidence: 0.9993561

00:00:51.284 --> 00:00:53.225 I fell into clinical trials

NOTE Confidence: 0.9993561

00:00:53.284 --> 00:00:54.985 about twenty five years ago.

NOTE Confidence: 0.99866873

00:00:56.190 --> 00:00:57.390 The first part of

NOTE Confidence: 0.99866873

00:00:57.390 --> 00:00:58.670 my career, I was working

NOTE Confidence: 0.99866873

00:00:58.670 --> 00:00:59.570 with investigators

NOTE Confidence: 0.9805025

00:00:59.950 --> 00:01:01.310 on studies that they developed

NOTE Confidence: 0.9805025

00:01:01.310 --> 00:01:02.510 themselves and really on the

NOTE Confidence: 0.9805025

00:01:02.510 --> 00:01:03.950 data side. But for the

NOTE Confidence: 0.9805025

00:01:03.950 --> 00:01:05.470 majority of my career, I

NOTE Confidence: 0.9805025

00:01:05.470 --> 00:01:07.650 have been working in quality

NOTE Confidence: 0.9759346

00:01:08.535 --> 00:01:11.035 and compliance, really ensuring that

NOTE Confidence: 0.9759346

00:01:11.175 --> 00:01:13.575 our patients that

NOTE Confidence: 0.9759346

00:01:13.575 --> 00:01:15.275 are participating in research studies

NOTE Confidence: 0.9979876

00:01:16.215 --> 00:01:17.035 are protected,

NOTE Confidence: 0.97948104

00:01:17.895 --> 00:01:19.495 that they have been provided informed

NOTE Confidence: 0.97948104

00:01:19.495 --> 00:01:20.935 consent, and that the data

NOTE Confidence: 0.97948104

00:01:20.935 --> 00:01:21.834 that they're providing

NOTE Confidence: 0.9149741

00:01:22.535 --> 00:01:23.940 to lead to new treatments

NOTE Confidence: 0.9149741

00:01:23.940 --> 00:01:26.200 is actually collected and credible data.

NOTE Confidence: 0.98416317

00:01:26.979 --> 00:01:28.180 A few years ago, as

NOTE Confidence: 0.98416317

00:01:28.180 --> 00:01:29.560 you know, I transitioned

NOTE Confidence: 0.98416317

00:01:29.619 --> 00:01:31.220 now over more to operations

NOTE Confidence: 0.98416317

00:01:31.220 --> 00:01:31.959 and administration.

00:01:34.340 --> 00:01:35.540 But one of the passions I

NOTE Confidence: 0.9777122

00:01:35.540 --> 00:01:36.920 have is really educating

NOTE Confidence: 0.998185

00:01:38.225 --> 00:01:40.385 new clinical research professionals and

NOTE Confidence: 0.998185

00:01:40.385 --> 00:01:41.765 making everyone aware

NOTE Confidence: 0.9712658

00:01:42.305 --> 00:01:44.065 as they're trying to go

NOTE Confidence: 0.9712658

00:01:44.065 --> 00:01:45.505 through their professions and look

NOTE Confidence: 0.9712658

00:01:45.505 --> 00:01:46.785 at what their career options

NOTE Confidence: 0.9712658

00:01:46.785 --> 00:01:48.385 are of the options of being

NOTE Confidence: 0.9712658

00:01:48.385 --> 00:01:49.925 a clinical research professional.

NOTE Confidence: 0.9205787

00:01:53.549 --> 00:01:53.950 An Ian, wha

NOTE Confidence: 0.99763554

00:01:54.350 --> 00:01:56.049 got you into this?

NOTE Confidence: 0.9761274

00:01:56.509 --> 00:01:57.570 You are also

NOTE Confidence: 0.961665

00:01:59.070 --> 00:02:01.090 a clinician and a researcher.

00:02:04.110 --> 00:02:05.390 What made you interested in

NOTE Confidence: 0.9714222

00:02:05.390 --> 00:02:07.950 cancer, and what got you

NOTE Confidence: 0.9714222

00:02:07.950 --> 00:02:09.645 involved in clinical

NOTE Confidence: 0.9580774

00:02:10.185 --> 00:02:11.544 trials?

NOTE Confidence: 0.9580774

00:02:11.544 --> 00:02:13.705 Personally I didn't fall into clinical trials.

NOTE Confidence: 0.9580774

00:02:13.705 --> 00:02:15.005 I think I more gradually

NOTE Confidence: 0.9580774

00:02:15.145 --> 00:02:15.645 crawled into this area.

00:02:18.665 --> 00:02:19.405 I was originally

NOTE Confidence: 0.81746006

00:02:19.865 --> 00:02:20.445 a laboratory

NOTE Confidence: 0.9914715

00:02:20.905 --> 00:02:22.764 researcher trying to understand

NOTE Confidence: 0.9962656

00:02:24.150 --> 00:02:26.470 what causes cancer, what causes

NOTE Confidence: 0.9962656

00:02:26.470 --> 00:02:28.410 cancer to become resistant

NOTE Confidence: 0.87780493

00:02:28.710 --> 00:02:29.610 to our treatments.

NOTE Confidence: 0.9804672

00:02:30.950 --> 00:02:32.650 But over time, I

NOTE Confidence: 0.986159

00:02:33.510 --> 00:02:35.610 wanted to more directly

NOTE Confidence: 0.91597015

00:02:37.575 --> 00:02:40.055 impact patients and have

NOTE Confidence: 0.91597015

00:02:40.055 --> 00:02:41.435 the research

NOTE Confidence: 0.98882186

00:02:42.375 --> 00:02:44.474 help patients directly rather than

NOTE Confidence: 0.98882186

00:02:44.534 --> 00:02:46.394 the gradual process of laboratory

NOTE Confidence: 0.98882186

00:02:46.454 --> 00:02:47.915 research. So I started doing

NOTE Confidence: 0.98882186

00:02:48.135 --> 00:02:49.034 more and more

NOTE Confidence: 0.98496026

00:02:49.540 --> 00:02:51.380 clinical trials, testing new drugs

NOTE Confidence: 0.98496026

00:02:51.380 --> 00:02:52.040 to help

NOTE Confidence: 0.49567562

00:02:52.419 --> 00:02:52.919 patients

NOTE Confidence: 0.85047966

00:02:53.300 --> 00:02:54.840 with breast cancer, and

NOTE Confidence: 0.921671

00:02:55.300 --> 00:02:56.280 that just became

NOTE Confidence: 0.9031857

00:02:58.340 --> 00:02:59.800 such an exciting field.

NOTE Confidence: 0.90097797

00:03:01.220 --> 00:03:02.660 I couldn't leave it until

NOTE Confidence: 0.90097797

00:03:02.660 --> 00:03:03.780 it became my full time

NOTE Confidence: 0.90097797

00:03:03.780 --> 00:03:05.215 job, roughly twenty

NOTE Confidence: 0.90097797

00:03:05.215 --> 00:03:06.255 years ago and have

NOTE Confidence: 0.90097797

00:03:06.255 --> 00:03:07.935 continued to do that moving

NOTE Confidence: 0.90097797

00:03:07.935 --> 00:03:08.435 from Boston

00:03:09.695 --> 00:03:10.915 now here to Yale,

NOTE Confidence: 0.9873828

00:03:11.455 --> 00:03:12.255 two and a half years

NOTE Confidence: 0.9873828

00:03:12.255 --> 00:03:12.755 ago.

NOTE Confidence: 0.93390566

00:03:13.775 --> 00:03:16.195 Well, clinical trials are obviously

NOTE Confidence: 0.93390566

00:03:16.335 --> 00:03:17.100 very important

NOTE Confidence: 0.9995887

00:03:17.580 --> 00:03:19.280 because there is no scientific

NOTE Confidence: 0.9995887

00:03:19.500 --> 00:03:21.280 discovery that goes from

NOTE Confidence: 0.8665339

00:03:21.820 --> 00:03:22.720 some scientist's

NOTE Confidence: 0.9990682

00:03:23.100 --> 00:03:23.600 lab

NOTE Confidence: 0.9991005

00:03:23.980 --> 00:03:25.760 to the pharmacy

NOTE Confidence: 0.9749114

00:03:26.060 --> 00:03:28.220 shelf without a clinical trials

NOTE Confidence: 0.9749114

00:03:28.220 --> 00:03:28.720 component

NOTE Confidence: 0.99978447

00:03:29.020 --> 00:03:29.680 in between.

NOTE Confidence: 0.99913996

00:03:30.405 --> 00:03:31.465 With that said,

NOTE Confidence: 0.9528574

00:03:32.325 --> 00:03:34.185 what's involved for a patient

NOTE Confidence: 0.9528574

00:03:34.484 --> 00:03:36.344 in joining a clinical trial?

NOTE Confidence: 0.9528574

00:03:36.484 --> 00:03:37.605 It's a great question

00:03:39.444 --> 00:03:40.885 because it's not

NOTE Confidence: 0.9393154

00:03:40.885 --> 00:03:42.564 something that you necessarily are

NOTE Confidence: 0.9393154

00:03:42.564 --> 00:03:44.424 gonna know unless you've

NOTE Confidence: 0.9976406

00:03:44.885 --> 00:03:45.625 been involved.

NOTE Confidence: 0.99944705

00:03:46.890 --> 00:03:47.849 I don't think many of the

00:03:48.969 --> 00:03:50.730 medicine shows on TV really

NOTE Confidence: 0.98359734

00:03:50.730 --> 00:03:51.469 talk about

NOTE Confidence: 0.80240375

00:03:51.930 --> 00:03:53.390 clinical trials, so

NOTE Confidence: 0.8929451

00:03:54.170 --> 00:03:55.150 happy to explain.

NOTE Confidence: 0.9105365

00:03:57.209 --> 00:03:58.430 For most patients,

NOTE Confidence: 0.9966083

00:04:00.705 --> 00:04:01.905 getting involved in a clinical

NOTE Confidence: 0.9966083

00:04:01.905 --> 00:04:02.885 trial starts

NOTE Confidence: 0.99789995

00:04:03.345 --> 00:04:04.645 in their discussions

NOTE Confidence: 0.96676046

00:04:05.025 --> 00:04:07.285 with their healthcare provider about

NOTE Confidence: 0.98328257

00:04:08.065 --> 00:04:09.585 what treatments makes sense for

NOTE Confidence: 0.98328257

00:04:09.585 --> 00:04:10.085 them,

NOTE Confidence: 0.97260106

00:04:11.105 --> 00:04:12.305 as in the next step

00:04:14.880 --> 00:04:15.860 of their journey.

NOTE Confidence: 0.9938961

00:04:16.640 --> 00:04:17.460 And we

NOTE Confidence: 0.96522224

00:04:17.839 --> 00:04:19.760 really feel strongly that a

NOTE Confidence: 0.96522224

00:04:19.760 --> 00:04:22.180 clinical trial is part of the

00:04:25.279 --> 00:04:27.600 overall treatment options available to

NOTE Confidence: 0.96444315

00:04:27.600 --> 00:04:28.100 patients.

NOTE Confidence: 0.8678507

00:04:28.544 --> 00:04:29.764 And so when

NOTE Confidence: 0.9143383

00:04:30.305 --> 00:04:31.685 a patient is deciding

NOTE Confidence: 0.9288332

00:04:32.145 --> 00:04:33.904 on what treatment option to

NOTE Confidence: 0.9288332

00:04:33.904 --> 00:04:34.404 take,

NOTE Confidence: 0.803671

00:04:35.425 --> 00:04:36.164 the providers

NOTE Confidence: 0.9977292

00:04:36.625 --> 00:04:37.525 provide that

NOTE Confidence: 0.9541569

00:04:37.904 --> 00:04:39.585 treatment, a clinical trial option,

NOTE Confidence: 0.9541569

00:04:39.585 --> 00:04:40.705 as well as what we

NOTE Confidence: 0.9541569

00:04:40.705 --> 00:04:41.985 call standard of care, the

NOTE Confidence: 0.9541569

00:04:41.985 --> 00:04:42.964 FDA approved

NOTE Confidence: 0.9024917

00:04:43.425 --> 00:04:43.925 options.

NOTE Confidence: 0.99843353

00:04:47.960 --> 00:04:49.560 If the trial is of interest

NOTE Confidence: 0.99843353

00:04:49.560 --> 00:04:50.380 to the patient,

NOTE Confidence: 0.9592752

00:04:51.240 --> 00:04:52.600 we then go into more

NOTE Confidence: 0.9592752

00:04:52.600 --> 00:04:53.100 detail about

NOTE Confidence: 0.99450916

00:04:53.800 --> 00:04:54.300 about

NOTE Confidence: 0.9602803

00:04:54.600 --> 00:04:56.139 what's involved with the trial.

00:04:58.014 --> 00:04:59.055 We go over what's called

NOTE Confidence: 0.9500608

00:04:59.055 --> 00:05:00.974 the informed consent document that

NOTE Confidence: 0.9500608

00:05:00.974 --> 00:05:02.815 Alyssa mentioned earlier, which is

NOTE Confidence: 0.9500608

00:05:02.815 --> 00:05:03.315 basically

NOTE Confidence: 0.96490777

00:05:04.735 --> 00:05:06.574 a very in-depth description of

NOTE Confidence: 0.96490777

00:05:06.574 --> 00:05:08.514 what's involved in the trial,

NOTE Confidence: 0.95575184

00:05:08.895 --> 00:05:11.460 both what procedures and steps

NOTE Confidence: 0.95575184

00:05:11.620 --> 00:05:13.300 and visits are required, but

NOTE Confidence: 0.95575184

00:05:13.300 --> 00:05:15.139 also most importantly the rationale

NOTE Confidence: 0.95575184

00:05:15.139 --> 00:05:16.900 for the and the

NOTE Confidence: 0.95575184

00:05:16.900 --> 00:05:18.919 potential benefits and the potential

NOTE Confidence: 0.95575184

00:05:18.979 --> 00:05:19.479 risks.

00:05:22.099 --> 00:05:23.880 After the patients read that

00:05:25.964 --> 00:05:27.004 and talk with their family

NOTE Confidence: 0.956421

00:05:27.004 --> 00:05:28.125 and talk with their provider,

NOTE Confidence: 0.956421

00:05:28.125 --> 00:05:29.504 if they decide they are

NOTE Confidence: 0.9571903

00:05:30.284 --> 00:05:31.404 wanting to participate in the

NOTE Confidence: 0.9571903

00:05:31.404 --> 00:05:32.525 trial, they would then sign

NOTE Confidence: 0.9571903

00:05:32.525 --> 00:05:34.064 the consent.

NOTE Confidence: 0.9609086

00:05:34.365 --> 00:05:36.224 Then we would as a team,

NOTE Confidence: 0.99457014

00:05:38.080 --> 00:05:39.460 make sure that the patient

NOTE Confidence: 0.99457014

00:05:39.760 --> 00:05:41.060 meets what's called the eligibility

NOTE Confidence: 0.99457014

00:05:41.360 --> 00:05:42.400 of the trial, which is

NOTE Confidence: 0.99457014

00:05:42.400 --> 00:05:43.220 all the

NOTE Confidence: 0.98711336

00:05:43.680 --> 00:05:44.180 criteria

NOTE Confidence: 0.8576824

00:05:44.640 --> 00:05:45.620 that the patients,

NOTE Confidence: 0.8616182

00:05:46.640 --> 00:05:48.720 who the physicians who design

NOTE Confidence: 0.8616182

00:05:48.720 --> 00:05:49.380 the trial,

NOTE Confidence: 0.9767453

00:05:49.680 --> 00:05:51.220 feel are important from

NOTE Confidence: 0.9697919

00:05:52.315 --> 00:05:54.075 both the question that's

NOTE Confidence: 0.9697919

00:05:54.075 --> 00:05:55.115 being answered as well as

NOTE Confidence: 0.9697919

00:05:55.115 --> 00:05:56.575 the safety for the patients

NOTE Confidence: 0.9697919

00:05:56.794 --> 00:05:57.675 that they need to meet

NOTE Confidence: 0.9697919

00:05:57.675 --> 00:05:59.675 those criteria to be eligible

NOTE Confidence: 0.9697919

00:05:59.675 --> 00:06:01.035 for the trial. If they

NOTE Confidence: 0.9697919

00:06:01.035 --> 00:06:02.335 are found to be eligible,

NOTE Confidence: 0.9697919

00:06:02.555 --> 00:06:04.095 then they go ahead and

NOTE Confidence: 0.9594536

00:06:05.770 --> 00:06:07.230 start the trial

NOTE Confidence: 0.9474217

00:06:07.930 --> 00:06:09.530 and continue on the trial

NOTE Confidence: 0.9474217

00:06:09.530 --> 00:06:10.830 as part of their

NOTE Confidence: 0.9946352

00:06:11.210 --> 00:06:12.590 treatment. So it's not

NOTE Confidence: 0.9187726

00:06:14.650 --> 00:06:16.330 oftentimes in addition to their

NOTE Confidence: 0.9187726

00:06:16.330 --> 00:06:17.310 treatment,

NOTE Confidence: 0.9978033

00:06:18.085 --> 00:06:19.125 that's going to be their

NOTE Confidence: 0.9978033

00:06:19.125 --> 00:06:20.245 treatment for the

NOTE Confidence: 0.9978033

00:06:20.245 --> 00:06:21.205 period of time that they're

NOTE Confidence: 0.9978033

00:06:21.205 --> 00:06:21.944 on the trial.

NOTE Confidence: 0.94088525

00:06:22.724 --> 00:06:23.305 Alyssa, maybe

NOTE Confidence: 0.9976727

00:06:24.245 --> 00:06:25.845 you can comment on this.

NOTE Confidence: 0.99825776

00:06:26.485 --> 00:06:27.944 It seems to me that

NOTE Confidence: 0.99973345

00:06:28.324 --> 00:06:29.705 people who have cancer

NOTE Confidence: 0.99937814

00:06:30.720 --> 00:06:32.580 are often in a vulnerable

NOTE Confidence: 0.99937814

00:06:32.800 --> 00:06:33.300 position.

NOTE Confidence: 0.9863518

00:06:33.680 --> 00:06:35.539 They are frightened.

NOTE Confidence: 0.9528373

00:06:36.400 --> 00:06:38.979 They sometimes, if newly diagnosed,

NOTE Confidence: 0.9528373

00:06:39.199 --> 00:06:40.500 are just overwhelmed

NOTE Confidence: 0.8423269

00:06:41.039 --> 00:06:41.779 by information.

NOTE Confidence: 0.99069977

00:06:42.904 --> 00:06:44.664 And making a decision about

NOTE Confidence: 0.99069977

00:06:44.664 --> 00:06:46.444 participating in a clinical trial

NOTE Confidence: 0.95086926

00:06:47.464 --> 00:06:49.245 can be tough, and

NOTE Confidence: 0.9993519

00:06:49.625 --> 00:06:51.164 you could also imagine

NOTE Confidence: 0.9618727

00:06:51.544 --> 00:06:53.005 that patients at times

NOTE Confidence: 0.99970907

00:06:54.920 --> 00:06:57.339 might feel pressured by

NOTE Confidence: 0.94818634

00:06:58.279 --> 00:07:00.060 someone, a family member,

NOTE Confidence: 0.8870873

00:07:00.920 --> 00:07:02.380 hopefully not a doctor,

NOTE Confidence: 0.9472304

00:07:02.839 --> 00:07:04.200 but someone to participate in

NOTE Confidence: 0.9472304

00:07:04.200 --> 00:07:05.480 the trial. How do we

NOTE Confidence: 0.9472304

00:07:05.480 --> 00:07:07.320 protect people from that sort

NOTE Confidence: 0.9472304

00:07:07.320 --> 00:07:07.904 of thing?

NOTE Confidence: 0.9936327

00:07:08.865 --> 00:07:10.305 Yeah. So I think, Eric,

NOTE Confidence: 0.97779834

00:07:11.185 --> 00:07:12.465 it is, as you said,

NOTE Confidence: 0.97779834

00:07:12.465 --> 00:07:13.505 a scary time a lot

NOTE Confidence: 0.97779834

00:07:13.505 --> 00:07:14.565 of times

NOTE Confidence: 0.9436357

00:07:15.264 --> 00:07:17.365 especially in oncology.

NOTE Confidence: 0.99914587

00:07:18.544 --> 00:07:19.845 There's a lot of information

NOTE Confidence: 0.99914587

00:07:19.905 --> 00:07:21.605 coming at them. I think

NOTE Confidence: 0.9849116

00:07:22.310 --> 00:07:23.350 we wanna make sure that

NOTE Confidence: 0.9849116

00:07:23.350 --> 00:07:25.110 our patients feel empowered to

NOTE Confidence: 0.9849116

00:07:25.110 --> 00:07:26.390 be able to ask questions

NOTE Confidence: 0.9849116

00:07:26.390 --> 00:07:28.010 of both of their providers,

NOTE Confidence: 0.9849116

00:07:28.070 --> 00:07:29.350 and, also, we have clinical

NOTE Confidence: 0.9849116

00:07:29.350 --> 00:07:31.690 trial office coordinators and nurses

NOTE Confidence: 0.9922327

00:07:32.070 --> 00:07:33.450 that are there for additional

NOTE Confidence: 0.9922327

00:07:33.510 --> 00:07:34.730 questions and logistics.

NOTE Confidence: 0.96900606

00:07:35.350 --> 00:07:36.470 But we also have

NOTE Confidence: 0.9944151

00:07:37.794 --> 00:07:39.235 patients whose rights are

NOTE Confidence: 0.9944151

00:07:39.235 --> 00:07:41.555 protected. So any clinical research

NOTE Confidence: 0.9944151

00:07:41.555 --> 00:07:42.055 trial

NOTE Confidence: 0.92878044

00:07:42.675 --> 00:07:44.675 that's ongoing, as Ian had

NOTE Confidence: 0.92878044

00:07:44.675 --> 00:07:46.534 mentioned, there's the informed consent.

NOTE Confidence: 0.9963853

00:07:47.155 --> 00:07:48.935 That informed consent is reviewed

NOTE Confidence: 0.9963853

00:07:48.995 --> 00:07:49.955 by what we call an

NOTE Confidence: 0.9963853

00:07:49.955 --> 00:07:51.574 institutional review board

NOTE Confidence: 0.99908984

00:07:51.910 --> 00:07:54.170 that reviews things for ethical

NOTE Confidence: 0.90119004

00:07:54.550 --> 00:07:55.990 reasons, but then also really

NOTE Confidence: 0.90119004

00:07:55.990 --> 00:07:57.030 make sure it

NOTE Confidence: 0.9870738

00:07:57.510 --> 00:07:58.170 accurately

NOTE Confidence: 0.9399963

00:07:58.950 --> 00:08:00.790 captures the information of that

NOTE Confidence: 0.9399963

00:08:00.790 --> 00:08:01.830 trial so they do have

NOTE Confidence: 0.9399963

00:08:01.830 --> 00:08:03.450 the information to take home.

NOTE Confidence: 0.99406713

00:08:04.310 --> 00:08:05.670 And it's really in the

NOTE Confidence: 0.99406713

00:08:05.670 --> 00:08:07.105 patient's rights to have that

NOTE Confidence: 0.99406713

00:08:07.105 --> 00:08:08.544 informed consent and all their

NOTE Confidence: 0.99406713

00:08:08.544 --> 00:08:09.605 questions answered.

NOTE Confidence: 0.917397

00:08:10.305 --> 00:08:11.185 So it should be a

NOTE Confidence: 0.917397

00:08:11.185 --> 00:08:12.785 process. It's not a, this

NOTE Confidence: 0.917397

00:08:12.785 --> 00:08:13.985 is presented to you and they need a

NOTE Confidence: 0.917397

00:08:13.985 --> 00:08:15.025 yes or no right away.

NOTE Confidence: 0.9527923

00:08:17.745 --> 00:08:18.785 You can take that back,

NOTE Confidence: 0.9527923

00:08:18.785 --> 00:08:19.905 take it to your

NOTE Confidence: 0.9527923

00:08:19.905 --> 00:08:21.205 family, friends, trusted

NOTE Confidence: 0.94271696

00:08:23.580 --> 00:08:24.620 folks to be able to

00:08:26.220 --> 00:08:27.820 get their questions answered and really

NOTE Confidence: 0.94271696

00:08:27.820 --> 00:08:28.560 be thoughtful

NOTE Confidence: 0.9996711

00:08:29.020 --> 00:08:30.640 as part of that process.

NOTE Confidence: 0.90628725

00:08:31.420 --> 00:08:33.500 Also, after joining in a

NOTE Confidence: 0.90628725

00:08:33.500 --> 00:08:35.179 clinical trial, if you agree

NOTE Confidence: 0.90628725

00:08:35.179 --> 00:08:35.840 to participate,

NOTE Confidence: 0.9678163

00:08:36.455 --> 00:08:37.735 it is in that

NOTE Confidence: 0.9678163

00:08:37.735 --> 00:08:40.075 patient rights to withdraw

NOTE Confidence: 0.9678163

00:08:40.135 --> 00:08:41.035 at any time,

NOTE Confidence: 0.9681556

00:08:41.495 --> 00:08:42.715 and to have that discussion.

NOTE Confidence: 0.9681556

00:08:42.855 --> 00:08:44.715 And that won't impact future

NOTE Confidence: 0.9681556

00:08:44.775 --> 00:08:45.275 decisions,

NOTE Confidence: 0.99286747

00:08:46.615 --> 00:08:48.475 with that ability to withdraw.

NOTE Confidence: 0.99616486

00:08:49.015 --> 00:08:50.295 You know, I often tell

NOTE Confidence: 0.99616486

00:08:50.295 --> 00:08:50.795 patients

NOTE Confidence: 0.9997252

00:08:51.929 --> 00:08:53.389 that the clinical trials

NOTE Confidence: 0.9868078

00:08:53.769 --> 00:08:55.449 that we have are not

NOTE Confidence: 0.9868078

00:08:55.449 --> 00:08:57.389 clinical trials that some doctor

NOTE Confidence: 0.9985709

00:08:57.850 --> 00:08:59.069 or other researcher

NOTE Confidence: 0.9584073

00:08:59.850 --> 00:09:01.370 dreamt up some night and

NOTE Confidence: 0.9584073

00:09:01.370 --> 00:09:02.649 then put on paper the

NOTE Confidence: 0.9584073

00:09:02.649 --> 00:09:04.250 next morning and offered to

NOTE Confidence: 0.9584073

00:09:04.250 --> 00:09:06.395 patients the next day, that

NOTE Confidence: 0.9978162

00:09:07.735 --> 00:09:08.635 these are

NOTE Confidence: 0.99965894

00:09:09.255 --> 00:09:11.115 ideas that have been developed

NOTE Confidence: 0.9808057

00:09:11.495 --> 00:09:13.255 and have been reviewed and

NOTE Confidence: 0.9808057

00:09:13.255 --> 00:09:15.515 reviewed and reviewed by multiple

NOTE Confidence: 0.9808057

00:09:15.575 --> 00:09:16.554 groups of people,

NOTE Confidence: 0.9951396

00:09:17.895 --> 00:09:19.815 sometimes on a national level,

NOTE Confidence: 0.9951396

00:09:19.815 --> 00:09:20.315 sometimes on a

00:09:21.850 --> 00:09:23.610 local level, but in all

NOTE Confidence: 0.98028874

00:09:23.610 --> 00:09:25.470 cases, they are very carefully

NOTE Confidence: 0.98028874

00:09:25.610 --> 00:09:26.110 vetted.

NOTE Confidence: 0.88264865

00:09:27.210 --> 00:09:28.350 What kind of review

NOTE Confidence: 0.99183136

00:09:28.730 --> 00:09:29.230 process

NOTE Confidence: 0.9996573

00:09:30.170 --> 00:09:31.070 goes on

NOTE Confidence: 0.9996517

00:09:31.929 --> 00:09:32.429 locally

NOTE Confidence: 0.99900764

00:09:32.809 --> 00:09:33.850 when we have a

NOTE Confidence: 0.99900764

00:09:33.850 --> 00:09:34.830 clinical trial?

NOTE Confidence: 0.95065063

00:09:35.635 --> 00:09:36.675 Yeah. So I think

NOTE Confidence: 0.95065063

00:09:36.675 --> 00:09:37.554 that's a very

NOTE Confidence: 0.95065063

00:09:37.554 --> 00:09:38.274 good point.

00:09:41.235 --> 00:09:42.355 It is quite a

NOTE Confidence: 0.97525823

00:09:42.355 --> 00:09:44.515 thorough vetting process. There are

NOTE Confidence: 0.97525823

00:09:44.515 --> 00:09:45.654 multiple committees,

NOTE Confidence: 0.99908805

00:09:46.274 --> 00:09:46.774 both

NOTE Confidence: 0.93576807

00:09:47.154 --> 00:09:48.515 committees made up of the

NOTE Confidence: 0.93576807

00:09:48.515 --> 00:09:49.654 experts of

NOTE Confidence: 0.9749439

00:09:51.600 --> 00:09:53.440 the cancer type that's

NOTE Confidence: 0.9749439

00:09:53.440 --> 00:09:55.120 being evaluated in the clinical

NOTE Confidence: 0.9749439

00:09:55.120 --> 00:09:55.620 trial,

NOTE Confidence: 0.99973273

00:09:56.720 --> 00:09:57.460 as well

NOTE Confidence: 0.95499676

00:09:58.160 --> 00:09:59.679 as experts in a number

NOTE Confidence: 0.95499676

00:09:59.679 --> 00:10:00.880 of other fields such as

NOTE Confidence: 0.95499676

00:10:00.880 --> 00:10:02.020 statistics and

NOTE Confidence: 0.97861034

00:10:04.925 --> 00:10:06.285 logistics of the trial to

NOTE Confidence: 0.97861034

00:10:06.285 --> 00:10:07.345 make sure it's feasible.

NOTE Confidence: 0.98276967

00:10:08.365 --> 00:10:09.825 And then you have, as

NOTE Confidence: 0.9665048

00:10:10.285 --> 00:10:12.684 Alyssa mentioned, the Institutional Review

NOTE Confidence: 0.9665048

00:10:12.684 --> 00:10:14.304 Board, which is looking more

NOTE Confidence: 0.9665048

00:10:14.445 --> 00:10:15.964 at the ethics of the

NOTE Confidence: 0.9665048

00:10:15.964 --> 00:10:17.404 study and making sure patients

NOTE Confidence: 0.9665048

00:10:17.404 --> 00:10:18.925 are fully educated about the

NOTE Confidence: 0.9665048

00:10:18.925 --> 00:10:19.425 trial.

NOTE Confidence: 0.923151

00:10:19.880 --> 00:10:21.580 And that consists of both

NOTE Confidence: 0.923151

00:10:21.880 --> 00:10:22.860 medical professionals,

NOTE Confidence: 0.760525

00:10:23.480 --> 00:10:24.540 research professionals,

NOTE Confidence: 0.9992771

00:10:24.840 --> 00:10:25.660 and community

NOTE Confidence: 0.70931333

00:10:26.920 --> 00:10:27.420 representatives to fully

00:10:31.160 --> 00:10:31.980 have the perspective

NOTE Confidence: 0.9875342

00:10:32.684 --> 00:10:34.684 of our community involved in

NOTE Confidence: 0.9875342

00:10:34.684 --> 00:10:35.965 deciding whether a trial is

NOTE Confidence: 0.9875342

00:10:35.965 --> 00:10:37.565 appropriate to move forward.

NOTE Confidence: 0.9875342

00:10:37.565 --> 00:10:38.365 And all of those things are

NOTE Confidence: 0.9875342

00:10:38.365 --> 00:10:40.285 done both to protect the

NOTE Confidence: 0.9875342

00:10:40.285 --> 00:10:41.804 patient, but also to make

NOTE Confidence: 0.9875342

00:10:41.804 --> 00:10:42.845 sure that the trial is

NOTE Confidence: 0.9875342

00:10:42.845 --> 00:10:43.885 being done in a way

NOTE Confidence: 0.9875342

00:10:43.885 --> 00:10:44.385 that's

NOTE Confidence: 0.9847637

00:10:45.420 --> 00:10:47.260 optimally designed to be able

NOTE Confidence: 0.9847637

00:10:47.260 --> 00:10:48.480 to answer the question

NOTE Confidence: 0.93470746

00:10:49.020 --> 00:10:50.380 that's being asked, because

NOTE Confidence: 0.93470746

00:10:50.380 --> 00:10:51.740 we're asking patients

NOTE Confidence: 0.93470746

00:10:51.740 --> 00:10:52.780 to give up of their

NOTE Confidence: 0.93470746

00:10:52.780 --> 00:10:53.280 time

NOTE Confidence: 0.87861234

00:10:54.620 --> 00:10:56.000 to participate in the trial.

NOTE Confidence: 0.9751266

00:10:56.540 --> 00:10:57.840 Trials are very expensive.

NOTE Confidence: 0.93849236

00:10:58.460 --> 00:11:00.195 So there's a lot that

NOTE Confidence: 0.93849236

00:11:00.195 --> 00:11:01.315 is involved in the trial.

NOTE Confidence: 0.93849236

00:11:01.315 --> 00:11:01.955 And so we at the

NOTE Confidence: 0.93849236

00:11:01.955 --> 00:11:02.995 end, we really wanna make

NOTE Confidence: 0.93849236

00:11:02.995 --> 00:11:04.215 sure that we're definitively

NOTE Confidence: 0.88303894

00:11:04.755 --> 00:11:05.255 answering

NOTE Confidence: 0.9864379

00:11:05.715 --> 00:11:07.155 an important question to be

NOTE Confidence: 0.9864379

00:11:07.155 --> 00:11:07.895 able to

NOTE Confidence: 0.99857545

00:11:08.355 --> 00:11:09.875 help our patients moving forward

NOTE Confidence: 0.99857545

00:11:09.875 --> 00:11:11.795 and improve the treatment for

NOTE Confidence: 0.99857545

00:11:11.795 --> 00:11:12.390 the next

NOTE Confidence: 0.98537755

00:11:13.429 --> 00:11:14.570 generation of patients.

NOTE Confidence: 0.97381073

00:11:15.510 --> 00:11:16.010 Now

NOTE Confidence: 0.9699914

00:11:16.390 --> 00:11:17.750 we know that there are

NOTE Confidence: 0.9699914

00:11:17.750 --> 00:11:19.270 many different kinds of trials,

NOTE Confidence: 0.9699914

00:11:19.270 --> 00:11:20.390 and there are trials that

NOTE Confidence: 0.9699914

00:11:20.390 --> 00:11:21.450 go from being

NOTE Confidence: 0.99845546

00:11:21.910 --> 00:11:23.290 somewhat more investigational

NOTE Confidence: 0.99621713

00:11:23.750 --> 00:11:24.970 to somewhat

NOTE Confidence: 0.98057985

00:11:26.625 --> 00:11:28.625 more like standard treatment where

NOTE Confidence: 0.98057985

00:11:28.625 --> 00:11:30.384 we're just bearing one small

NOTE Confidence: 0.98057985

00:11:30.384 --> 00:11:31.745 component to try to see

NOTE Confidence: 0.98057985

00:11:31.745 --> 00:11:33.264 if we can make a

NOTE Confidence: 0.98057985

00:11:33.264 --> 00:11:35.524 treatment a little less toxic

NOTE Confidence: 0.98057985

00:11:35.665 --> 00:11:36.945 or a little bit more

NOTE Confidence: 0.98057985

00:11:36.945 --> 00:11:37.445 effective.

NOTE Confidence: 0.9900139

00:11:38.370 --> 00:11:39.570 So we often refer to

NOTE Confidence: 0.9900139

00:11:39.570 --> 00:11:40.929 these as phase one and

NOTE Confidence: 0.9900139

00:11:40.929 --> 00:11:42.290 phase two and phase three

NOTE Confidence: 0.9900139

00:11:42.290 --> 00:11:42.790 trials.

NOTE Confidence: 0.9996282

00:11:43.170 --> 00:11:44.130 Could you tell us a

NOTE Confidence: 0.9996282

00:11:44.130 --> 00:11:45.110 little bit about

NOTE Confidence: 0.99962175

00:11:45.490 --> 00:11:46.630 what each of those

NOTE Confidence: 0.93595594

00:11:47.890 --> 00:11:49.970 consists of?

NOTE Confidence: 0.93595594

00:11:49.970 --> 00:11:50.690 In a very

NOTE Confidence: 0.93595594

00:11:50.690 --> 00:11:51.590 concise way,

NOTE Confidence: 0.9680412

00:11:52.554 --> 00:11:53.995 the first trial

NOTE Confidence: 0.9680412

00:11:53.995 --> 00:11:55.515 is a phase one trial

NOTE Confidence: 0.9680412

00:11:55.515 --> 00:11:57.595 where we're initially looking at

NOTE Confidence: 0.9680412

00:11:57.595 --> 00:11:58.475 a drug for the first

NOTE Confidence: 0.9680412

00:11:58.475 --> 00:12:00.095 time in patients and that's

NOTE Confidence: 0.9680412

00:12:00.235 --> 00:12:01.675 purely just making sure that

NOTE Confidence: 0.9680412

00:12:01.675 --> 00:12:02.635 it's safe to give the

NOTE Confidence: 0.9680412

00:12:02.635 --> 00:12:04.050 drug and that we figure

NOTE Confidence: 0.9680412

00:12:04.050 --> 00:12:05.090 out what the right dose is.

00:12:06.050 --> 00:12:07.410 That's a small trial with

NOTE Confidence: 0.9680412

00:12:07.410 --> 00:12:09.170 generally maybe only twenty or

NOTE Confidence: 0.9680412

00:12:09.170 --> 00:12:09.990 thirty patients.

NOTE Confidence: 0.95550406

00:12:11.010 --> 00:12:12.130 And if I can

NOTE Confidence: 0.95550406

00:12:12.130 --> 00:12:13.330 just interrupt and to be

NOTE Confidence: 0.95550406

00:12:13.330 --> 00:12:14.929 clear, that's the endpoint of

NOTE Confidence: 0.95550406

00:12:14.929 --> 00:12:16.290 the trial, although when a

NOTE Confidence: 0.95550406

00:12:16.290 --> 00:12:17.970 doctor is treating a patient,

NOTE Confidence: 0.95550406

00:12:17.970 --> 00:12:19.170 it's with the hope that

NOTE Confidence: 0.95550406

00:12:19.170 --> 00:12:20.605 that drug will help someone.

NOTE Confidence: 0.97756857

00:12:20.985 --> 00:12:22.504 That is correct.

NOTE Confidence: 0.97756857

00:12:22.504 --> 00:12:23.785 And that is also looked

NOTE Confidence: 0.97756857

00:12:23.785 --> 00:12:24.824 at in the trial. But

NOTE Confidence: 0.97756857

00:12:24.824 --> 00:12:26.264 as you said, the

NOTE Confidence: 0.97756857

00:12:26.264 --> 00:12:28.264 primary purpose is to just

NOTE Confidence: 0.97756857

00:12:28.264 --> 00:12:29.545 establish the safety and the

NOTE Confidence: 0.97756857

00:12:29.545 --> 00:12:30.285 right dose.

NOTE Confidence: 0.97939473

00:12:30.665 --> 00:12:32.125 Nowadays, because our

NOTE Confidence: 0.9994972

00:12:32.459 --> 00:12:33.439 drugs are so

NOTE Confidence: 0.9739999

00:12:34.059 --> 00:12:35.420 sophisticated, as soon as they

NOTE Confidence: 0.9739999

00:12:35.420 --> 00:12:36.459 come out of the lab,

NOTE Confidence: 0.9739999

00:12:36.459 --> 00:12:38.139 oftentimes, we actually see, you

NOTE Confidence: 0.9739999

00:12:38.139 --> 00:12:39.179 know, a great deal of

NOTE Confidence: 0.9739999

00:12:39.579 --> 00:12:41.179 effectiveness in that even in

NOTE Confidence: 0.9739999

00:12:41.179 --> 00:12:42.079 that first trial.

NOTE Confidence: 0.9379518

00:12:43.259 --> 00:12:44.459 And in a phase two

NOTE Confidence: 0.9379518

00:12:44.459 --> 00:12:44.959 trial?

NOTE Confidence: 0.98543406

00:12:46.095 --> 00:12:47.215 So a phase two trial

NOTE Confidence: 0.98543406

00:12:47.215 --> 00:12:48.575 is a slightly larger trial

NOTE Confidence: 0.98543406

00:12:48.575 --> 00:12:49.855 where we're now really trying

NOTE Confidence: 0.98543406

00:12:49.855 --> 00:12:51.535 to focus on how effective

NOTE Confidence: 0.98543406

00:12:51.535 --> 00:12:52.675 that drug is,

NOTE Confidence: 0.93772733

00:12:53.295 --> 00:12:55.315 for that particular patient population.

NOTE Confidence: 0.97796357

00:12:55.855 --> 00:12:57.455 And then if it shows

NOTE Confidence: 0.97796357

00:12:57.455 --> 00:12:58.110 to be

NOTE Confidence: 0.99959046

00:12:58.589 --> 00:12:59.089 effective

NOTE Confidence: 0.941303

00:12:59.550 --> 00:13:00.910 and promising, it then moves

NOTE Confidence: 0.941303

00:13:00.910 --> 00:13:02.110 to a phase three trial

NOTE Confidence: 0.941303

00:13:02.110 --> 00:13:03.950 where that trial drug is

NOTE Confidence: 0.941303

00:13:03.950 --> 00:13:04.769 being compared

NOTE Confidence: 0.9952408

00:13:05.470 --> 00:13:06.750 to the current standard of

NOTE Confidence: 0.9952408

00:13:06.750 --> 00:13:07.950 care to see which one

NOTE Confidence: 0.9952408

00:13:07.950 --> 00:13:09.730 actually is more effective.

NOTE Confidence: 0.99707586

00:13:10.829 --> 00:13:12.610 Well, that is very helpful.

NOTE Confidence: 0.98564875

00:13:13.505 --> 00:13:15.105 We're gonna just take a

NOTE Confidence: 0.98564875

00:13:15.105 --> 00:13:16.625 very brief break, and we'll

NOTE Confidence: 0.98564875

00:13:16.625 --> 00:13:18.165 be back with our guests

NOTE Confidence: 0.80775195

00:13:19.105 --> 00:13:21.125 Alyssa Gateman and Ian Krop

NOTE Confidence: 0.80775195

00:13:21.184 --> 00:13:22.725 in just a minute.

NOTE Confidence: 0.9568745

00:13:23.184 --> 00:13:24.865 Funding for Yale Cancer Answers

NOTE Confidence: 0.9568745

00:13:24.865 --> 00:13:26.804 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.9748314

00:13:27.200 --> 00:13:28.800 where the Lung Cancer Screening

NOTE Confidence: 0.9748314

00:13:28.800 --> 00:13:30.480 Program provides screening to those

NOTE Confidence: 0.9748314

00:13:30.480 --> 00:13:31.940 at risk for lung cancer

NOTE Confidence: 0.9748314

00:13:32.080 --> 00:13:32.980 and individualized

NOTE Confidence: 0.96851003

00:13:33.440 --> 00:13:34.660 state of the art evaluation

NOTE Confidence: 0.96851003

00:13:34.800 --> 00:13:35.860 of lung nodules.

NOTE Confidence: 0.9715599

00:13:36.320 --> 00:13:38.020 To learn more, visit smilowcancerhospital

NOTE Confidence: 0.9954567

00:13:38.960 --> 00:13:39.779 dot org.

NOTE Confidence: 0.9800803

00:13:41.485 --> 00:13:42.765 Over two hundred and thirty

NOTE Confidence: 0.9800803

00:13:42.765 --> 00:13:44.625 thousand Americans will be diagnosed

NOTE Confidence: 0.9800803

00:13:44.684 --> 00:13:46.445 with lung cancer this year,

NOTE Confidence: 0.9800803

00:13:46.445 --> 00:13:47.965 and in Connecticut alone, there

NOTE Confidence: 0.9800803

00:13:47.965 --> 00:13:49.245 will be over twenty seven

NOTE Confidence: 0.9800803

00:13:49.245 --> 00:13:50.385 hundred new cases.

NOTE Confidence: 0.9751513

00:13:50.845 --> 00:13:52.125 More than eighty five percent

NOTE Confidence: 0.9751513

00:13:52.125 --> 00:13:54.045 of lung cancer diagnoses are

NOTE Confidence: 0.9751513

00:13:54.045 --> 00:13:55.184 related to smoking,

NOTE Confidence: 0.9844599

00:13:55.629 --> 00:13:57.470 and quitting, even after decades

NOTE Confidence: 0.9844599

00:13:57.470 --> 00:13:59.389 of use can significantly reduce

NOTE Confidence: 0.9844599

00:13:59.389 --> 00:14:00.910 your risk of developing lung

NOTE Confidence: 0.9844599

00:14:00.910 --> 00:14:01.410 cancer.

NOTE Confidence: 0.966442

00:14:01.949 --> 00:14:03.389 Each day, patients with lung

NOTE Confidence: 0.966442

00:14:03.389 --> 00:14:05.309 cancer are surviving thanks to

NOTE Confidence: 0.966442

00:14:05.309 --> 00:14:07.230 increased access to advanced therapies

NOTE Confidence: 0.966442

00:14:07.230 --> 00:14:08.689 and specialized care.

NOTE Confidence: 0.9969157

00:14:09.065 --> 00:14:10.745 New treatment options and surgical

NOTE Confidence: 0.9969157

00:14:10.745 --> 00:14:12.345 techniques are giving lung cancer

NOTE Confidence: 0.9969157

00:14:12.345 --> 00:14:13.625 survivors more hope than they

NOTE Confidence: 0.9969157

00:14:13.625 --> 00:14:14.765 have ever had before.

NOTE Confidence: 0.9818846

00:14:15.385 --> 00:14:17.225 Clinical trials are currently underway

NOTE Confidence: 0.9818846

00:14:17.225 --> 00:14:19.865 at federally designated comprehensive cancer

NOTE Confidence: 0.9818846

00:14:19.865 --> 00:14:20.365 centers

NOTE Confidence: 0.8968569

00:14:20.760 --> 00:14:22.120 such as the battle two

NOTE Confidence: 0.8968569

00:14:22.120 --> 00:14:23.640 trial at Yale Cancer Center

NOTE Confidence: 0.8968569

00:14:23.640 --> 00:14:25.260 and Smilow Cancer Hospital,

NOTE Confidence: 0.9912487

00:14:25.800 --> 00:14:26.840 to learn if a drug

NOTE Confidence: 0.9912487

00:14:26.840 --> 00:14:28.600 or combination of drugs based

NOTE Confidence: 0.9912487

00:14:28.600 --> 00:14:29.900 on personal biomarkers

NOTE Confidence: 0.9938679

00:14:30.280 --> 00:14:31.720 can help to control non

NOTE Confidence: 0.9938679

00:14:31.720 --> 00:14:33.180 small cell lung cancer.

NOTE Confidence: 0.98914665

00:14:33.665 --> 00:14:35.345 More information is available at

NOTE Confidence: 0.98914665

00:14:35.345 --> 00:14:37.125 yale cancer center dot org.

NOTE Confidence: 0.98914665

00:14:37.345 --> 00:14:39.024 You're listening to Connecticut Public

NOTE Confidence: 0.98914665

00:14:39.024 --> 00:14:39.524 Radio.

NOTE Confidence: 0.95389307

00:14:40.464 --> 00:14:42.064 Good evening again. This is

NOTE Confidence: 0.95389307

00:14:42.064 --> 00:14:43.985 Eric Winer. I'm the director

NOTE Confidence: 0.95389307

00:14:43.985 --> 00:14:45.764 of Yale Cancer Center,

NOTE Confidence: 0.95389307

00:14:45.904 --> 00:14:48.630 and I'm here tonight on

NOTE Confidence: 0.95389307

00:14:48.790 --> 00:14:50.470 Yale Cancer Answers with my

NOTE Confidence: 0.95389307

00:14:50.470 --> 00:14:50.970 guests

NOTE Confidence: 0.6716644

00:14:51.350 --> 00:14:52.810 doctor Ian Krop

NOTE Confidence: 0.9574543

00:14:53.830 --> 00:14:55.350 who is the director of

NOTE Confidence: 0.9574543

00:14:55.350 --> 00:14:56.710 the clinical trials office, and

NOTE Confidence: 0.9574543

00:14:56.710 --> 00:14:58.550 Alyssa Gateman, the executive director

NOTE Confidence: 0.9574543

00:14:58.550 --> 00:15:00.250 of the clinical trials office.

NOTE Confidence: 0.9547268

00:15:02.175 --> 00:15:03.455 Alyssa, maybe I can start

NOTE Confidence: 0.9547268

00:15:03.455 --> 00:15:04.195 with you.

NOTE Confidence: 0.91524994

00:15:06.735 --> 00:15:08.115 Why is it important

NOTE Confidence: 0.99986494

00:15:09.375 --> 00:15:09.875 that

NOTE Confidence: 0.99855673

00:15:10.495 --> 00:15:12.255 we include a diverse group

NOTE Confidence: 0.99855673

00:15:12.255 --> 00:15:14.115 of people in clinical trials?

NOTE Confidence: 0.99855673

00:15:14.255 --> 00:15:15.375 I think there's been a

NOTE Confidence: 0.99855673

00:15:15.375 --> 00:15:16.995 tendency in years past

NOTE Confidence: 0.98766166

00:15:17.600 --> 00:15:19.520 for our clinical trials population

NOTE Confidence: 0.98766166

00:15:19.520 --> 00:15:20.980 to look a little homogeneous,

NOTE Confidence: 0.98411775

00:15:21.440 --> 00:15:23.040 and we're all worried about

NOTE Confidence: 0.98411775

00:15:23.040 --> 00:15:24.320 that. And we wanna make

NOTE Confidence: 0.98411775

00:15:24.320 --> 00:15:26.720 sure that that's something that

NOTE Confidence: 0.98411775

00:15:26.720 --> 00:15:28.020 that doesn't continue.

00:15:30.715 --> 00:15:31.535 So diversity

NOTE Confidence: 0.99895394

00:15:31.915 --> 00:15:33.435 and inclusion in our clinical

NOTE Confidence: 0.99895394

00:15:33.435 --> 00:15:35.595 trials is extremely important. At

NOTE Confidence: 0.99895394

00:15:35.595 --> 00:15:36.575 the end of the day,

NOTE Confidence: 0.99895394

00:15:36.715 --> 00:15:38.015 our clinical research

NOTE Confidence: 0.997103

00:15:39.115 --> 00:15:40.475 is putting new products and

NOTE Confidence: 0.997103

00:15:40.475 --> 00:15:42.715 new treatments out for the

NOTE Confidence: 0.997103

00:15:42.715 --> 00:15:44.395 population. So what we're really

NOTE Confidence: 0.997103

00:15:44.395 --> 00:15:45.615 looking for is

NOTE Confidence: 0.99919826

00:15:46.050 --> 00:15:46.550 generalizability

NOTE Confidence: 0.99962026

00:15:47.010 --> 00:15:48.310 of research results.

NOTE Confidence: 0.9991372

00:15:48.850 --> 00:15:49.990 If we have a homogeneous

NOTE Confidence: 0.99948287

00:15:50.529 --> 00:15:51.029 population,

NOTE Confidence: 0.9888104

00:15:51.730 --> 00:15:53.170 we only really get answers

NOTE Confidence: 0.9888104

00:15:53.170 --> 00:15:54.930 on that population on how

NOTE Confidence: 0.9888104

00:15:54.930 --> 00:15:56.130 it works. And there are

NOTE Confidence: 0.9888104

00:15:56.130 --> 00:15:58.310 differences. There's differences between genders.

NOTE Confidence: 0.9986214

00:15:58.775 --> 00:16:00.695 There's differences between ages. There's

NOTE Confidence: 0.9986214

00:16:00.695 --> 00:16:02.855 differences between racial and ethnic

NOTE Confidence: 0.9986214

00:16:02.855 --> 00:16:03.355 groups.

NOTE Confidence: 0.9879118

00:16:03.735 --> 00:16:06.135 So ensuring that the entire

NOTE Confidence: 0.9879118

00:16:06.135 --> 00:16:07.735 population that's going to be

NOTE Confidence: 0.9879118

00:16:07.735 --> 00:16:09.515 treated with that product potentially

NOTE Confidence: 0.987437

00:16:10.215 --> 00:16:11.895 is included in those research

NOTE Confidence: 0.987437

00:16:11.895 --> 00:16:12.395 studies,

NOTE Confidence: 0.9970601

00:16:13.220 --> 00:16:14.660 is really important so that

NOTE Confidence: 0.9970601

00:16:14.660 --> 00:16:16.100 we can understand all the

NOTE Confidence: 0.9970601

00:16:16.100 --> 00:16:18.259 different potential side effects and

NOTE Confidence: 0.9970601

00:16:18.259 --> 00:16:20.100 the different effectiveness

NOTE Confidence: 0.9970601

00:16:20.100 --> 00:16:21.720 for those patients that ultimately

NOTE Confidence: 0.9970601

00:16:21.860 --> 00:16:23.399 may be receiving those therapies.

NOTE Confidence: 0.99935955

00:16:24.500 --> 00:16:25.000 And

NOTE Confidence: 0.9941098

00:16:25.625 --> 00:16:27.464 we and others have pushed

NOTE Confidence: 0.9941098

00:16:27.464 --> 00:16:28.925 very hard to

NOTE Confidence: 0.9997336

00:16:29.385 --> 00:16:30.605 make sure that

NOTE Confidence: 0.9844002

00:16:30.985 --> 00:16:33.065 our clinical trials do include

NOTE Confidence: 0.9844002

00:16:33.065 --> 00:16:34.585 a diverse group of patients.

NOTE Confidence: 0.9844002

00:16:34.585 --> 00:16:36.265 And, of course, there have been

00:16:37.145 --> 00:16:39.245 research findings over the past

NOTE Confidence: 0.99946713

00:16:39.430 --> 00:16:41.110 couple of decades that have

NOTE Confidence: 0.99946713

00:16:41.110 --> 00:16:42.010 shown that

NOTE Confidence: 0.98827463

00:16:42.470 --> 00:16:44.390 many people who are from

NOTE Confidence: 0.98827463

00:16:44.390 --> 00:16:46.470 underrepresented backgrounds just don't get

NOTE Confidence: 0.98827463

00:16:46.470 --> 00:16:48.310 offered clinical trials as often

NOTE Confidence: 0.98827463

00:16:48.310 --> 00:16:49.670 as others, and so

NOTE Confidence: 0.98827463

00:16:49.670 --> 00:16:51.270 we really try to do

NOTE Confidence: 0.98827463

00:16:51.270 --> 00:16:52.710 that as do people around

NOTE Confidence: 0.98827463

00:16:52.710 --> 00:16:53.370 the country.

NOTE Confidence: 0.99483067

00:16:54.605 --> 00:16:55.885 I wanna move on to

NOTE Confidence: 0.99483067

00:16:55.885 --> 00:16:57.265 talk for a minute about

NOTE Confidence: 0.99483067

00:16:57.405 --> 00:16:59.185 myths about clinical trials.

00:17:02.765 --> 00:17:03.265 Ian,

NOTE Confidence: 0.9970736

00:17:03.885 --> 00:17:05.585 I'm sure you've had patients

NOTE Confidence: 0.9970736

00:17:05.805 --> 00:17:07.244 say to you over the

NOTE Confidence: 0.9970736

00:17:07.244 --> 00:17:07.744 years,

NOTE Confidence: 0.89651275

00:17:08.859 --> 00:17:09.919 doctor Krop,

NOTE Confidence: 0.9949833

00:17:10.380 --> 00:17:11.679 don't you just wanna

NOTE Confidence: 0.9856518

00:17:11.980 --> 00:17:13.740 use me as a guinea

NOTE Confidence: 0.9856518

00:17:13.740 --> 00:17:14.240 pig?

NOTE Confidence: 0.9973546

00:17:14.859 --> 00:17:15.359 And

NOTE Confidence: 0.99549836

00:17:16.460 --> 00:17:17.580 how do you answer that

NOTE Confidence: 0.99549836

00:17:17.580 --> 00:17:18.080 question?

00:17:22.115 --> 00:17:23.335 I think that's an important

NOTE Confidence: 0.95179313

00:17:23.635 --> 00:17:25.255 point to clarify

NOTE Confidence: 0.95179313

00:17:25.395 --> 00:17:26.515 because there is that myth

NOTE Confidence: 0.95179313

00:17:26.515 --> 00:17:27.255 out there.

NOTE Confidence: 0.9585145

00:17:28.035 --> 00:17:29.715 And I think as Alyssa very

00:17:35.010 --> 00:17:37.330 eloquently stated, how important it is for

NOTE Confidence: 0.8655472

00:17:41.890 --> 00:17:43.250 anybody on a trial

NOTE Confidence: 0.8655472

00:17:43.250 --> 00:17:44.630 that their rights are protected

NOTE Confidence: 0.8655472

00:17:44.770 --> 00:17:46.455 and that the safety

NOTE Confidence: 0.94272494

00:17:47.015 --> 00:17:48.635 of them is paramount

NOTE Confidence: 0.94272494

00:17:48.695 --> 00:17:50.375 and an enormous amount

NOTE Confidence: 0.94272494

00:17:50.375 --> 00:17:51.894 of work goes into making

NOTE Confidence: 0.94272494

00:17:51.894 --> 00:17:53.174 sure that is actually

NOTE Confidence: 0.94272494

00:17:53.174 --> 00:17:53.835 the case.

NOTE Confidence: 0.9188552

00:17:55.095 --> 00:17:56.154 But, you know,

NOTE Confidence: 0.90994895

00:17:56.534 --> 00:17:57.414 again, I think a

NOTE Confidence: 0.90994895

00:17:57.414 --> 00:17:58.394 clinical trial,

NOTE Confidence: 0.8469146

00:17:59.609 --> 00:18:00.109 particularly

NOTE Confidence: 0.9872157

00:18:02.250 --> 00:18:03.470 in this day and age,

NOTE Confidence: 0.94671667

00:18:04.490 --> 00:18:06.270 is the way to get

NOTE Confidence: 0.9661524

00:18:07.050 --> 00:18:08.570 access to the

NOTE Confidence: 0.9661524

00:18:08.570 --> 00:18:10.030 most cutting edge treatments,

00:18:13.450 --> 00:18:14.109 and I think

NOTE Confidence: 0.98514795

00:18:14.425 --> 00:18:15.965 those of us

NOTE Confidence: 0.9793781

00:18:16.505 --> 00:18:17.785 at Yale Cancer Center

NOTE Confidence: 0.9793781

00:18:17.785 --> 00:18:19.385 feel that a clinical trial

NOTE Confidence: 0.9793781

00:18:19.385 --> 00:18:21.085 is really part of

00:18:23.785 --> 00:18:25.885 top quality

NOTE Confidence: 0.9701948

00:18:26.744 --> 00:18:28.045 cancer care now,

NOTE Confidence: 0.9723955

00:18:29.010 --> 00:18:30.609 having access to clinical trials

NOTE Confidence: 0.9723955

00:18:30.609 --> 00:18:31.430 is really

NOTE Confidence: 0.8201409

00:18:31.970 --> 00:18:32.470 critical,

NOTE Confidence: 0.98120844

00:18:33.890 --> 00:18:34.630 for that.

00:18:36.450 --> 00:18:37.330 And getting back to

NOTE Confidence: 0.98812723

00:18:37.330 --> 00:18:38.690 your previous question about the

NOTE Confidence: 0.98812723

00:18:38.690 --> 00:18:39.890 need to make sure that

NOTE Confidence: 0.98812723

00:18:39.890 --> 00:18:41.270 we have a diverse population,

NOTE Confidence: 0.97982585

00:18:41.570 --> 00:18:42.645 I think not only do

NOTE Confidence: 0.97982585

00:18:42.645 --> 00:18:43.685 we need a diverse population

NOTE Confidence: 0.97982585

00:18:43.685 --> 00:18:44.805 in our clinical trials so

NOTE Confidence: 0.97982585

00:18:44.805 --> 00:18:45.845 that we can make sure

NOTE Confidence: 0.97982585

00:18:45.845 --> 00:18:47.285 that the results we get

NOTE Confidence: 0.97982585

00:18:47.285 --> 00:18:49.625 are applicable to all groups,

NOTE Confidence: 0.9993297

00:18:50.405 --> 00:18:51.705 I think it's also

NOTE Confidence: 0.9572502

00:18:52.405 --> 00:18:54.085 a disparities issue. I think

NOTE Confidence: 0.9572502

00:18:54.085 --> 00:18:55.525 if people don't have

NOTE Confidence: 0.9572502

00:18:55.525 --> 00:18:56.505 access to

NOTE Confidence: 0.9898226

00:18:56.830 --> 00:18:57.810 clinical trials,

NOTE Confidence: 0.9932828

00:18:58.590 --> 00:18:59.890 where they're being seen,

NOTE Confidence: 0.99952394

00:19:00.350 --> 00:19:01.890 they don't have access to

NOTE Confidence: 0.87884665

00:19:02.910 --> 00:19:04.350 to the optimal care.

NOTE Confidence: 0.87884665

00:19:04.350 --> 00:19:05.550 And I think that's

NOTE Confidence: 0.87884665

00:19:05.550 --> 00:19:06.910 another reason why

NOTE Confidence: 0.986191

00:19:07.310 --> 00:19:08.510 at Yale Cancer Center we try to

00:19:09.150 --> 00:19:10.270 make sure we have access

NOTE Confidence: 0.986191

00:19:10.270 --> 00:19:11.390 to clinical trials for our

NOTE Confidence: 0.986191

00:19:11.390 --> 00:19:12.925 patients across all

NOTE Confidence: 0.986191

00:19:12.925 --> 00:19:14.525 of our sites

NOTE Confidence: 0.986191

00:19:14.525 --> 00:19:15.425 across Connecticut.

NOTE Confidence: 0.9642289

00:19:16.445 --> 00:19:18.865 And while there are obviously

NOTE Confidence: 0.9642289

00:19:18.925 --> 00:19:19.744 no guarantees

NOTE Confidence: 0.98820686

00:19:20.045 --> 00:19:21.805 when someone receives a standard

NOTE Confidence: 0.98820686

00:19:21.805 --> 00:19:22.865 treatment or

NOTE Confidence: 0.9567893

00:19:23.244 --> 00:19:24.465 when they're on a clinical

NOTE Confidence: 0.9567893

00:19:24.525 --> 00:19:25.025 trial, the

00:19:26.685 --> 00:19:27.905 hope when people

NOTE Confidence: 0.9973848

00:19:28.420 --> 00:19:30.180 develop clinical trials is that

NOTE Confidence: 0.9973848

00:19:30.180 --> 00:19:31.859 the treatment is actually going

NOTE Confidence: 0.9973848

00:19:31.859 --> 00:19:33.140 to be better in one

NOTE Confidence: 0.9973848

00:19:33.140 --> 00:19:34.040 way or another.

NOTE Confidence: 0.9993789

00:19:34.580 --> 00:19:36.520 We don't go into clinical

NOTE Confidence: 0.9993789

00:19:36.580 --> 00:19:37.080 trials

NOTE Confidence: 0.96400315

00:19:37.780 --> 00:19:38.280 intending

NOTE Confidence: 0.9873894

00:19:38.740 --> 00:19:40.020 to come up with a

NOTE Confidence: 0.9873894

00:19:40.020 --> 00:19:42.115 worse result, and it doesn't

NOTE Confidence: 0.9873894

00:19:42.115 --> 00:19:42.615 happen

NOTE Confidence: 0.97819155

00:19:42.915 --> 00:19:45.315 very often. Although, again, there

NOTE Confidence: 0.97819155

00:19:45.315 --> 00:19:47.575 can be no guarantees.

NOTE Confidence: 0.99867314

00:19:49.955 --> 00:19:51.315 Can you give us some

NOTE Confidence: 0.99867314

00:19:51.315 --> 00:19:51.815 examples

NOTE Confidence: 0.9866709

00:19:52.915 --> 00:19:54.695 of some of the breakthroughs

NOTE Confidence: 0.9866709

00:19:54.835 --> 00:19:56.250 we've seen in the last

NOTE Confidence: 0.9866709

00:19:56.330 --> 00:19:57.550 five to ten years,

NOTE Confidence: 0.85240024

00:19:58.090 --> 00:19:58.590 and,

NOTE Confidence: 0.9996465

00:19:59.930 --> 00:20:00.910 there are many

NOTE Confidence: 0.98959285

00:20:01.369 --> 00:20:02.650 that have come about as

NOTE Confidence: 0.98959285

00:20:02.650 --> 00:20:04.190 a result of clinical trials.

NOTE Confidence: 0.9648676

00:20:06.090 --> 00:20:06.890 Yeah. I would

NOTE Confidence: 0.9648676

00:20:06.890 --> 00:20:08.730 argue that essentially all of

NOTE Confidence: 0.9648676

00:20:08.730 --> 00:20:10.490 the breakthroughs that have happened

NOTE Confidence: 0.9648676

00:20:10.490 --> 00:20:11.535 in the last five or

NOTE Confidence: 0.9648676

00:20:11.615 --> 00:20:12.435 ten years

NOTE Confidence: 0.97531337

00:20:13.775 --> 00:20:15.055 are as a result of

NOTE Confidence: 0.97531337

00:20:15.055 --> 00:20:16.575 clinical trials. As you said

NOTE Confidence: 0.97531337

00:20:16.575 --> 00:20:18.335 in the introduction, a

00:20:19.455 --> 00:20:20.734 drug doesn't go from the

NOTE Confidence: 0.9993417

00:20:20.734 --> 00:20:21.234 laboratory

NOTE Confidence: 0.92389125

00:20:21.535 --> 00:20:22.595 to the pharmacy.

NOTE Confidence: 0.99900275

00:20:23.295 --> 00:20:24.835 It only gets to

NOTE Confidence: 0.9974779

00:20:25.369 --> 00:20:26.810 a place where patients can

NOTE Confidence: 0.9974779

00:20:26.810 --> 00:20:28.430 access it through clinical trials.

NOTE Confidence: 0.8011331

00:20:29.530 --> 00:20:30.030 And,

NOTE Confidence: 0.99062717

00:20:30.570 --> 00:20:31.230 you know,

NOTE Confidence: 0.92045903

00:20:32.650 --> 00:20:33.850 twenty years ago when I

NOTE Confidence: 0.92045903

00:20:33.850 --> 00:20:35.450 started in this field, or

NOTE Confidence: 0.92045903

00:20:35.450 --> 00:20:37.050 actually, now it's twenty five

NOTE Confidence: 0.92045903

00:20:37.050 --> 00:20:37.790 years ago,

NOTE Confidence: 0.9658357

00:20:38.330 --> 00:20:39.070 time flies,

NOTE Confidence: 0.982862

00:20:39.530 --> 00:20:40.830 you know, we were

NOTE Confidence: 0.89103204

00:20:41.984 --> 00:20:43.605 in breast cancer, for example,

NOTE Confidence: 0.88428974

00:20:43.984 --> 00:20:45.285 in almost all cancers,

NOTE Confidence: 0.95960337

00:20:46.385 --> 00:20:48.145 the treatments available were essentially

NOTE Confidence: 0.95960337

00:20:48.145 --> 00:20:48.885 all chemotherapy.

NOTE Confidence: 0.96695894

00:20:49.505 --> 00:20:51.425 And chemotherapy can be effective

NOTE Confidence: 0.96695894

00:20:51.425 --> 00:20:53.045 in cancer, but

NOTE Confidence: 0.9866152

00:20:54.545 --> 00:20:55.925 it has a

NOTE Confidence: 0.9967856

00:20:57.149 --> 00:20:58.590 substantial risk of side effects

NOTE Confidence: 0.9967856

00:20:58.590 --> 00:21:00.049 in many patients because

NOTE Confidence: 0.9995937

00:21:00.350 --> 00:21:01.090 the chemotherapy

NOTE Confidence: 0.99848557

00:21:01.789 --> 00:21:03.169 isn't very good at distinguishing

NOTE Confidence: 0.99841034

00:21:03.789 --> 00:21:04.289 between

NOTE Confidence: 0.9990595

00:21:04.590 --> 00:21:06.049 the cancer itself

NOTE Confidence: 0.9514488

00:21:06.350 --> 00:21:08.805 and a patient's normal cells.

NOTE Confidence: 0.9514488

00:21:08.885 --> 00:21:10.085 It can definitely kill cancer

NOTE Confidence: 0.9514488

00:21:10.085 --> 00:21:11.525 cells but also can damage

NOTE Confidence: 0.9514488

00:21:11.525 --> 00:21:12.725 normal cells and that's where

NOTE Confidence: 0.9514488

00:21:12.725 --> 00:21:14.105 the side effects come from.

NOTE Confidence: 0.9514488

00:21:14.244 --> 00:21:15.845 And the revolution in cancer

NOTE Confidence: 0.9514488

00:21:15.845 --> 00:21:17.125 care in general has come

NOTE Confidence: 0.9514488

00:21:17.125 --> 00:21:18.105 about because

NOTE Confidence: 0.9913765

00:21:19.525 --> 00:21:20.025 we've

NOTE Confidence: 0.9702222

00:21:21.059 --> 00:21:23.240 changed our treatment paradigm in

NOTE Confidence: 0.9702222

00:21:23.380 --> 00:21:24.919 many, if not most cases,

NOTE Confidence: 0.99935645

00:21:25.539 --> 00:21:26.200 to drugs

NOTE Confidence: 0.9962115

00:21:26.500 --> 00:21:28.600 that target something that's specific

NOTE Confidence: 0.9407549

00:21:29.139 --> 00:21:30.580 within the cancer cell that's

NOTE Confidence: 0.9407549

00:21:30.580 --> 00:21:31.080 not

NOTE Confidence: 0.9683622

00:21:31.380 --> 00:21:33.059 present in the normal cell.

NOTE Confidence: 0.9683622

00:21:33.059 --> 00:21:34.500 So this so called targeted

NOTE Confidence: 0.9683622

00:21:34.500 --> 00:21:36.279 therapy, which is targeting what's

NOTE Confidence: 0.9800839

00:21:36.585 --> 00:21:38.284 specifically driving the cancer,

NOTE Confidence: 0.99829626

00:21:38.664 --> 00:21:40.505 tends to have substantially fewer

NOTE Confidence: 0.99829626

00:21:40.505 --> 00:21:41.725 side effects because

NOTE Confidence: 0.974271

00:21:42.105 --> 00:21:43.725 it is more targeted directly,

NOTE Confidence: 0.9988011

00:21:44.184 --> 00:21:44.924 and specifically

NOTE Confidence: 0.9836527

00:21:45.385 --> 00:21:46.605 at the cancer cells.

NOTE Confidence: 0.97076136

00:21:47.065 --> 00:21:48.825 And so that's the major

NOTE Confidence: 0.97076136

00:21:48.825 --> 00:21:49.325 breakthrough

NOTE Confidence: 0.9748029

00:21:49.945 --> 00:21:51.145 that's happened over the last

NOTE Confidence: 0.9748029

00:21:51.145 --> 00:21:52.799 ten to twenty years And

NOTE Confidence: 0.9748029

00:21:52.799 --> 00:21:54.240 that's all come

NOTE Confidence: 0.9748029

00:21:54.240 --> 00:21:56.740 about both from tremendous laboratory

NOTE Confidence: 0.9748029

00:21:56.880 --> 00:21:58.159 research as well as all

NOTE Confidence: 0.9748029

00:21:58.159 --> 00:21:59.519 the clinical trials that have

NOTE Confidence: 0.9748029

00:21:59.519 --> 00:22:00.019 been

NOTE Confidence: 0.997381

00:22:00.480 --> 00:22:03.200 required to translate those discoveries

NOTE Confidence: 0.997381

00:22:03.200 --> 00:22:04.659 in the laboratory into

NOTE Confidence: 0.77009463

00:22:04.960 --> 00:22:05.460 actual

NOTE Confidence: 0.96032023

00:22:06.385 --> 00:22:08.065 drugs available for patients.

NOTE Confidence: 0.96032023

00:22:08.065 --> 00:22:09.025 Ssome of the

NOTE Confidence: 0.96032023

00:22:09.025 --> 00:22:10.725 big ones that have happened

NOTE Confidence: 0.8465558

00:22:11.184 --> 00:22:11.684 are

NOTE Confidence: 0.9328459

00:22:13.984 --> 00:22:15.605 immune therapies, which

NOTE Confidence: 0.7754909

00:22:16.065 --> 00:22:16.565 enable

NOTE Confidence: 0.9865275

00:22:16.945 --> 00:22:18.945 the patient's own immune system

NOTE Confidence: 0.9865275

00:22:18.945 --> 00:22:20.790 to rise up and attack

NOTE Confidence: 0.9865275

00:22:20.869 --> 00:22:22.490 the cancer, and that's revolutionized

NOTE Confidence: 0.9865275

00:22:22.710 --> 00:22:23.369 the care

NOTE Confidence: 0.92887837

00:22:23.670 --> 00:22:24.330 of many

NOTE Confidence: 0.92922044

00:22:25.109 --> 00:22:26.650 cancers, including melanoma and

00:22:28.550 --> 00:22:30.310 lung cancer and kidney cancer

NOTE Confidence: 0.9137522

00:22:30.310 --> 00:22:31.990 and essentially all cancers are

NOTE Confidence: 0.9137522

00:22:31.990 --> 00:22:32.490 now

NOTE Confidence: 0.9414273

00:22:33.030 --> 00:22:34.810 involved with using

NOTE Confidence: 0.8145731

00:22:35.190 --> 00:22:35.690 immunotherapy.

NOTE Confidence: 0.98462045

00:22:36.695 --> 00:22:37.494 And then we have a

NOTE Confidence: 0.98462045

00:22:37.494 --> 00:22:38.635 host of oral

NOTE Confidence: 0.9804158

00:22:39.415 --> 00:22:41.835 pills that target specific mutations

NOTE Confidence: 0.9804158

00:22:41.895 --> 00:22:42.875 within the cancer,

NOTE Confidence: 0.9968079

00:22:43.494 --> 00:22:44.315 that have

NOTE Confidence: 0.8876131

00:22:44.695 --> 00:22:46.635 had huge benefits in specific

NOTE Confidence: 0.96281886

00:22:47.175 --> 00:22:49.175 types of lung cancer, breast

NOTE Confidence: 0.96281886

00:22:49.175 --> 00:22:49.675 cancer,

NOTE Confidence: 0.9992003

00:22:50.140 --> 00:22:50.960 prostate cancer,

NOTE Confidence: 0.7724323

00:22:51.820 --> 00:22:52.559 and many others.

NOTE Confidence: 0.94128907

00:22:53.820 --> 00:22:54.859 And then one thing that

NOTE Confidence: 0.94128907

00:22:54.859 --> 00:22:55.980 I personally have been working

NOTE Confidence: 0.94128907

00:22:55.980 --> 00:22:57.500 on and now many of

NOTE Confidence: 0.94128907

00:22:57.500 --> 00:22:59.359 us are working on are

NOTE Confidence: 0.94128907

00:22:59.500 --> 00:23:00.780 a whole new class of

NOTE Confidence: 0.94128907

00:23:00.780 --> 00:23:01.679 drug which

NOTE Confidence: 0.9975788

00:23:01.980 --> 00:23:02.799 goes by

NOTE Confidence: 0.97958857

00:23:03.225 --> 00:23:04.665 the scientific name of an

NOTE Confidence: 0.97958857

00:23:04.665 --> 00:23:06.684 antibody drug conjugate. But essentially,

NOTE Confidence: 0.97958857

00:23:06.744 --> 00:23:07.244 it's

NOTE Confidence: 0.9327483

00:23:07.705 --> 00:23:08.845 a way to

NOTE Confidence: 0.9955394

00:23:09.945 --> 00:23:11.645 specifically deliver chemotherapy

NOTE Confidence: 0.99571234

00:23:12.025 --> 00:23:14.025 right to the cancer cell

NOTE Confidence: 0.99571234

00:23:14.025 --> 00:23:15.005 using new

NOTE Confidence: 0.9392344

00:23:15.350 --> 00:23:17.510 antibody technologies and that makes

NOTE Confidence: 0.9392344

00:23:17.510 --> 00:23:19.030 the chemotherapy much more like

NOTE Confidence: 0.9392344

00:23:19.030 --> 00:23:20.230 a guided missile or a

NOTE Confidence: 0.9392344

00:23:20.230 --> 00:23:22.170 smart bomb rather than

NOTE Confidence: 0.9568553

00:23:25.030 --> 00:23:26.230 a chemical that just goes

NOTE Confidence: 0.9568553

00:23:26.230 --> 00:23:27.910 everywhere and damages both normal

NOTE Confidence: 0.9568553

00:23:27.910 --> 00:23:29.750 tissue and cancer. So all

NOTE Confidence: 0.9568553

00:23:29.750 --> 00:23:30.405 of these

NOTE Confidence: 0.95820284

00:23:31.605 --> 00:23:33.445 whole classes of drugs are

NOTE Confidence: 0.95820284

00:23:33.445 --> 00:23:33.945 new

NOTE Confidence: 0.9995553

00:23:34.565 --> 00:23:35.065 and

NOTE Confidence: 0.9854685

00:23:35.685 --> 00:23:37.045 only are possible and are

NOTE Confidence: 0.9854685

00:23:37.045 --> 00:23:38.905 only available to patients because

NOTE Confidence: 0.9854685

00:23:39.045 --> 00:23:39.545 of

NOTE Confidence: 0.9346293

00:23:40.165 --> 00:23:41.765 all of the patients that

NOTE Confidence: 0.9346293

00:23:41.765 --> 00:23:43.730 have, you know, courageously

NOTE Confidence: 0.9441949

00:23:44.190 --> 00:23:44.690 elected

NOTE Confidence: 0.98227483

00:23:45.470 --> 00:23:46.590 to go on to clinical

NOTE Confidence: 0.98227483

00:23:46.590 --> 00:23:47.090 trials

NOTE Confidence: 0.980295

00:23:47.869 --> 00:23:49.070 over the last twenty years,

NOTE Confidence: 0.980295

00:23:49.309 --> 00:23:50.690 to demonstrate how

NOTE Confidence: 0.97878075

00:23:51.390 --> 00:23:52.350 much of

NOTE Confidence: 0.97878075

00:23:52.350 --> 00:23:53.390 a breakthrough all of these

NOTE Confidence: 0.97878075

00:23:53.390 --> 00:23:55.410 drugs were, and they're now

NOTE Confidence: 0.97878075

00:23:55.470 --> 00:23:56.530 standard of care.

NOTE Confidence: 0.94758254

00:23:57.165 --> 00:23:58.945 It's remarkable.

NOTE Confidence: 0.918697

00:23:59.725 --> 00:24:00.225 Alyssa,

NOTE Confidence: 0.9983378

00:24:00.685 --> 00:24:02.205 is it more work for

NOTE Confidence: 0.9983378

00:24:02.205 --> 00:24:03.244 somebody to be on a

NOTE Confidence: 0.9983378

00:24:03.244 --> 00:24:04.305 clinical trial?

NOTE Confidence: 0.9992022

00:24:05.485 --> 00:24:07.405 Does it require more

NOTE Confidence: 0.9992022

00:24:07.405 --> 00:24:09.425 visits to the clinic? Does

NOTE Confidence: 0.9992022

00:24:09.485 --> 00:24:10.145 it require

NOTE Confidence: 0.9843078

00:24:11.160 --> 00:24:12.140 added expense,

NOTE Confidence: 0.99858505

00:24:12.520 --> 00:24:14.540 added time from family members?

NOTE Confidence: 0.95510226

00:24:16.280 --> 00:24:17.720 That's a great question, Eric.

NOTE Confidence: 0.95510226

00:24:17.720 --> 00:24:19.640 And I think sometimes, yes.

NOTE Confidence: 0.95510226

00:24:19.640 --> 00:24:21.340 The answer is yes. However,

NOTE Confidence: 0.99862134

00:24:21.960 --> 00:24:22.619 I think the

00:24:24.680 --> 00:24:25.900 access to trials

NOTE Confidence: 0.9861762

00:24:26.865 --> 00:24:28.645 is important as far as

NOTE Confidence: 0.9861762

00:24:28.785 --> 00:24:30.625 there's also more oversight.

NOTE Confidence: 0.97790897

00:24:32.225 --> 00:24:34.145 So the fact that

NOTE Confidence: 0.97790897

00:24:34.465 --> 00:24:35.205 a patient

NOTE Confidence: 0.9998988

00:24:36.305 --> 00:24:38.244 is very closely tracked

NOTE Confidence: 0.99732274

00:24:38.650 --> 00:24:40.330 in research studies. There are

NOTE Confidence: 0.99732274

00:24:40.330 --> 00:24:41.850 some studies that may require

NOTE Confidence: 0.99732274

00:24:41.850 --> 00:24:43.290 a few additional visits. I

NOTE Confidence: 0.99732274

00:24:43.290 --> 00:24:44.750 think we talked about earlier

NOTE Confidence: 0.9790184

00:24:45.050 --> 00:24:46.830 the different phases of trials,

NOTE Confidence: 0.9801085

00:24:47.850 --> 00:24:49.770 and some trials do have

NOTE Confidence: 0.9801085

00:24:49.770 --> 00:24:51.309 more requirements, especially

NOTE Confidence: 0.99831146

00:24:52.105 --> 00:24:53.385 when they're being tested for

NOTE Confidence: 0.99831146

00:24:53.385 --> 00:24:54.505 safety. So there may be

NOTE Confidence: 0.99831146

00:24:54.505 --> 00:24:56.825 more visits required to ensure

NOTE Confidence: 0.99831146

00:24:56.825 --> 00:24:58.024 the safety of those

NOTE Confidence: 0.99831146

00:24:58.024 --> 00:24:59.325 patients that are participating.

NOTE Confidence: 0.9982929

00:25:00.825 --> 00:25:01.725 For expenses,

NOTE Confidence: 0.9914081

00:25:03.144 --> 00:25:04.664 there are really two types

NOTE Confidence: 0.9914081

00:25:04.664 --> 00:25:06.424 of costs associated with clinical

NOTE Confidence: 0.9914081

00:25:06.424 --> 00:25:08.970 trials. There's routine medical costs.

NOTE Confidence: 0.9914081

00:25:08.970 --> 00:25:10.170 Those are no different than

NOTE Confidence: 0.9914081

00:25:10.170 --> 00:25:11.390 the standard of care.

NOTE Confidence: 0.9464741

00:25:11.690 --> 00:25:13.710 And then, typically, research costs

NOTE Confidence: 0.99346626

00:25:14.410 --> 00:25:16.110 are covered

NOTE Confidence: 0.99887383

00:25:16.730 --> 00:25:18.010 by the sponsor, by the

NOTE Confidence: 0.99887383

00:25:18.010 --> 00:25:19.390 industry, by the funder,

NOTE Confidence: 0.96537775

00:25:19.770 --> 00:25:22.190 whoever is supporting that clinical

NOTE Confidence: 0.96537775

00:25:22.250 --> 00:25:22.750 trial.

NOTE Confidence: 0.91110057

00:25:23.225 --> 00:25:24.765 We also try to offset

NOTE Confidence: 0.91110057

00:25:24.825 --> 00:25:25.325 through

NOTE Confidence: 0.99826366

00:25:26.265 --> 00:25:27.405 stipends or reimbursements

NOTE Confidence: 0.9915498

00:25:27.785 --> 00:25:29.005 as much as we can

NOTE Confidence: 0.9915498

00:25:29.145 --> 00:25:30.045 for additional

NOTE Confidence: 0.9652422

00:25:30.425 --> 00:25:32.425 transportation or additional needs that

NOTE Confidence: 0.9652422

00:25:32.425 --> 00:25:33.705 might to be able to

NOTE Confidence: 0.9652422

00:25:33.705 --> 00:25:35.305 provide the access to

NOTE Confidence: 0.9652422

00:25:35.625 --> 00:25:37.244 our patients to those trials.

00:25:39.059 --> 00:25:40.820 Some trials do require more

NOTE Confidence: 0.9987057

00:25:40.820 --> 00:25:42.419 than standard of care. Some

NOTE Confidence: 0.9987057

00:25:42.419 --> 00:25:43.700 are actually in line with

NOTE Confidence: 0.9987057

00:25:43.700 --> 00:25:44.919 the standard of care

NOTE Confidence: 0.9887579

00:25:45.220 --> 00:25:46.980 visits and would

NOTE Confidence: 0.9887579

00:25:46.980 --> 00:25:48.419 not require much more time

NOTE Confidence: 0.9887579

00:25:48.419 --> 00:25:49.159 and effort.

NOTE Confidence: 0.973058

00:25:50.019 --> 00:25:51.059 And I would just

NOTE Confidence: 0.973058

00:25:51.059 --> 00:25:52.755 add that, you know, while

NOTE Confidence: 0.973058

00:25:52.755 --> 00:25:53.955 there may be some additional

NOTE Confidence: 0.973058

00:25:53.955 --> 00:25:55.315 visits involved in a clinical

NOTE Confidence: 0.973058

00:25:55.315 --> 00:25:56.615 trial in some situations,

NOTE Confidence: 0.97836787

00:25:57.155 --> 00:25:58.994 there's also more team members

NOTE Confidence: 0.97836787

00:25:58.994 --> 00:26:00.355 involved in doing the

NOTE Confidence: 0.97836787

00:26:00.355 --> 00:26:02.055 monitoring that Alyssa was mentioning.

NOTE Confidence: 0.9950308

00:26:02.835 --> 00:26:03.955 So when a patient's on

NOTE Confidence: 0.9950308

00:26:03.955 --> 00:26:04.915 a trial, they have a

NOTE Confidence: 0.9950308

00:26:04.915 --> 00:26:05.975 bigger care team

NOTE Confidence: 0.98013526

00:26:07.690 --> 00:26:08.910 available to them,

NOTE Confidence: 0.99927294

00:26:09.450 --> 00:26:10.190 more nurses

NOTE Confidence: 0.97939295

00:26:10.970 --> 00:26:13.210 and research coordinators who can

NOTE Confidence: 0.97939295

00:26:13.210 --> 00:26:15.230 provide assistance and answer questions

NOTE Confidence: 0.97939295

00:26:15.290 --> 00:26:16.510 and be more available

NOTE Confidence: 0.94093573

00:26:17.130 --> 00:26:18.410 quickly if a patient has

NOTE Confidence: 0.94093573

00:26:18.410 --> 00:26:20.385 questions. So it's kind of

NOTE Confidence: 0.94093573

00:26:20.385 --> 00:26:21.505 an added benefit to being

NOTE Confidence: 0.94093573

00:26:21.505 --> 00:26:22.465 on a trial is that there's

00:26:23.505 --> 00:26:25.685 this bigger team around to

NOTE Confidence: 0.99101466

00:26:25.744 --> 00:26:27.425 support the patient,

NOTE Confidence: 0.98523426

00:26:27.905 --> 00:26:29.045 while they're on the study.

NOTE Confidence: 0.98675156

00:26:29.665 --> 00:26:31.665 So as we begin to

NOTE Confidence: 0.98675156

00:26:31.665 --> 00:26:33.185 wind up, I'm gonna ask

NOTE Confidence: 0.98675156

00:26:33.185 --> 00:26:34.165 one more question,

NOTE Confidence: 0.94373745

00:26:34.545 --> 00:26:35.205 which is,

NOTE Confidence: 0.83772

00:26:37.640 --> 00:26:38.140 imagine

NOTE Confidence: 0.9780569

00:26:39.240 --> 00:26:41.560 you're doing a phase three

NOTE Confidence: 0.9780569

00:26:41.560 --> 00:26:42.920 trial, so this is a

NOTE Confidence: 0.9780569

00:26:42.920 --> 00:26:45.400 randomized trial comparing two different

NOTE Confidence: 0.9780569

00:26:45.400 --> 00:26:45.900 treatments.

NOTE Confidence: 0.9918668

00:26:46.920 --> 00:26:48.680 And at some point in

NOTE Confidence: 0.9918668

00:26:48.680 --> 00:26:50.945 time, because these trials are

NOTE Confidence: 0.9918668

00:26:51.005 --> 00:26:52.145 monitored carefully,

NOTE Confidence: 0.99935144

00:26:52.765 --> 00:26:53.905 it becomes clear

NOTE Confidence: 0.9993099

00:26:54.525 --> 00:26:56.605 that one treatment is better

NOTE Confidence: 0.9993099

00:26:56.605 --> 00:26:57.505 than the other.

NOTE Confidence: 0.9688785

00:26:58.205 --> 00:26:59.984 How was the decision made

NOTE Confidence: 0.9688785

00:27:00.125 --> 00:27:01.984 to make that information available

NOTE Confidence: 0.9688785

00:27:02.045 --> 00:27:04.109 to patients and potentially to

NOTE Confidence: 0.9688785

00:27:04.429 --> 00:27:06.270 provide that new treatment to

NOTE Confidence: 0.9688785

00:27:06.270 --> 00:27:06.770 patients?

NOTE Confidence: 0.9430887

00:27:08.990 --> 00:27:10.690 So each trial

NOTE Confidence: 0.98671025

00:27:12.510 --> 00:27:13.010 has

NOTE Confidence: 0.9927272

00:27:13.790 --> 00:27:15.250 what's called a data safety

NOTE Confidence: 0.9927272

00:27:15.309 --> 00:27:15.809 monitoring

NOTE Confidence: 0.97522575

00:27:16.494 --> 00:27:18.174 committee. So a group of

NOTE Confidence: 0.97522575

00:27:18.174 --> 00:27:18.674 independent,

NOTE Confidence: 0.997257

00:27:19.774 --> 00:27:21.075 physicians and statisticians

NOTE Confidence: 0.9849237

00:27:21.534 --> 00:27:22.755 who follow

NOTE Confidence: 0.98476124

00:27:23.135 --> 00:27:24.434 the course of the trial,

NOTE Confidence: 0.97559667

00:27:25.054 --> 00:27:25.875 very closely

NOTE Confidence: 0.924176

00:27:26.975 --> 00:27:27.934 as it goes on in a phase

00:27:29.149 --> 00:27:30.529 III trial like you're mentioning

NOTE Confidence: 0.8748367

00:27:30.909 --> 00:27:32.429 can go on for multiple

NOTE Confidence: 0.8748367

00:27:32.429 --> 00:27:32.929 years.

NOTE Confidence: 0.64624316

00:27:33.389 --> 00:27:34.210 And this

NOTE Confidence: 0.7244377

00:27:34.909 --> 00:27:35.409 committee

NOTE Confidence: 0.9699218

00:27:36.109 --> 00:27:37.389 looks at those kinds of

NOTE Confidence: 0.9699218

00:27:37.389 --> 00:27:38.929 results that you're talking about

NOTE Confidence: 0.9699218

00:27:39.149 --> 00:27:41.630 on a regular continuous basis.

NOTE Confidence: 0.9699218

00:27:41.630 --> 00:27:42.769 And if they see

NOTE Confidence: 0.9065597

00:27:43.595 --> 00:27:44.575 a clear winner

NOTE Confidence: 0.97797054

00:27:45.115 --> 00:27:46.715 in a trial like that,

NOTE Confidence: 0.97797054

00:27:46.715 --> 00:27:48.155 they have the authority to

NOTE Confidence: 0.97797054

00:27:48.155 --> 00:27:49.595 stop the trial at that

NOTE Confidence: 0.97797054

00:27:49.595 --> 00:27:50.095 point.

NOTE Confidence: 0.7142397

00:27:51.035 --> 00:27:51.535 And

NOTE Confidence: 0.9629955

00:27:51.835 --> 00:27:53.115 depending on the situation, if

NOTE Confidence: 0.9629955

00:27:53.115 --> 00:27:54.075 they feel like it's in

NOTE Confidence: 0.9629955

00:27:54.075 --> 00:27:54.895 the best interests

NOTE Confidence: 0.9764802

00:27:55.275 --> 00:27:56.255 of the participants,

NOTE Confidence: 0.9965006

00:27:57.755 --> 00:27:58.494 can then

NOTE Confidence: 0.99840707

00:27:58.980 --> 00:28:00.820 allow the patients who were

NOTE Confidence: 0.99840707

00:28:00.820 --> 00:28:01.320 on

NOTE Confidence: 0.99932647

00:28:01.700 --> 00:28:02.200 the

NOTE Confidence: 0.94707394

00:28:02.580 --> 00:28:03.480 standard drug

NOTE Confidence: 0.84016013

00:28:04.260 --> 00:28:04.760 that

NOTE Confidence: 0.9954236

00:28:05.380 --> 00:28:06.680 turned out not to be

NOTE Confidence: 0.9748661

00:28:07.859 --> 00:28:08.820 the best one, that the

NOTE Confidence: 0.9748661

00:28:08.820 --> 00:28:11.080 newer drug was clearly better,

NOTE Confidence: 0.9748661

00:28:11.220 --> 00:28:12.760 they have the authority to

NOTE Confidence: 0.9611021

00:28:13.774 --> 00:28:15.455 mandate that the patients who

NOTE Confidence: 0.9611021

00:28:15.455 --> 00:28:16.734 who were not receiving

NOTE Confidence: 0.9611021

00:28:16.734 --> 00:28:17.934 the newer drug can then

NOTE Confidence: 0.9611021

00:28:17.934 --> 00:28:19.475 switch over, we call crossover,

NOTE Confidence: 0.9920464

00:28:20.335 --> 00:28:21.615 to the newer drug

NOTE Confidence: 0.9920464

00:28:21.615 --> 00:28:23.135 to get access

NOTE Confidence: 0.9920464

00:28:23.135 --> 00:28:23.774 to that

NOTE Confidence: 0.9893907

00:28:24.255 --> 00:28:26.414 superior therapy right away rather

NOTE Confidence: 0.9893907

00:28:26.414 --> 00:28:27.455 than have to wait for

NOTE Confidence: 0.9893907

00:28:27.455 --> 00:28:28.494 the drug to get approved

NOTE Confidence: 0.9893907

00:28:28.494 --> 00:28:29.315 by the FDA.

NOTE Confidence: 0.9396399

00:28:30.070 --> 00:28:31.510 Doctor Ian Krop is a

NOTE Confidence: 0.9396399

00:28:31.510 --> 00:28:33.110 professor of internal medicine and

NOTE Confidence: 0.9396399

00:28:33.110 --> 00:28:34.710 medical oncology at the Yale

NOTE Confidence: 0.9396399

00:28:34.710 --> 00:28:36.470 School of Medicine, and Alyssa

NOTE Confidence: 0.9396399

00:28:36.470 --> 00:28:38.070 Gateman is the executive director

NOTE Confidence: 0.9396399

00:28:38.070 --> 00:28:39.510 of the clinical trials office

NOTE Confidence: 0.9396399

00:28:39.510 --> 00:28:40.970 at Yale Cancer Center.

NOTE Confidence: 0.96354944

00:28:41.350 --> 00:28:42.550 If you have questions, the

NOTE Confidence: 0.96354944

00:28:42.550 --> 00:28:43.610 address is canceranswers

NOTE Confidence: 0.98192585

00:28:43.955 --> 00:28:44.995 answers at yale dot e

NOTE Confidence: 0.98192585

00:28:44.995 --> 00:28:46.515 d u, and past editions

NOTE Confidence: 0.98192585

00:28:46.515 --> 00:28:47.875 of the program are available

NOTE Confidence: 0.98192585

00:28:47.875 --> 00:28:49.395 in audio and written form

NOTE Confidence: 0.98192585

00:28:49.395 --> 00:28:50.755 at yale cancer center dot

NOTE Confidence: 0.98192585

00:28:50.755 --> 00:28:52.275 org. We hope you'll join

NOTE Confidence: 0.98192585

00:28:52.275 --> 00:28:53.395 us next time to learn

NOTE Confidence: 0.98192585

00:28:53.395 --> 00:28:54.515 more about the fight against

NOTE Confidence: 0.98192585

00:28:54.515 --> 00:28:56.595 cancer. Funding for Yale Cancer

NOTE Confidence: 0.98192585

00:28:56.595 --> 00:28:58.195 Answers is provided by Smilow

NOTE Confidence: 0.98192585

00:28:58.195 --> 00:28:59.095 Cancer Hospital.