WEBVTT

NOTE duration:"00:57:05" NOTE recognizability:0.915

NOTE language:en-us

NOTE Confidence: 0.9313316125

00:00:00.000 --> 00:00:02.675 Hello, Welcome to Smilo shares

NOTE Confidence: 0.9313316125

 $00:00:02.675 \longrightarrow 00:00:05.321$  with Primary Care. I'm Karen Brown.

NOTE Confidence: 0.9313316125

 $00:00:05.321 \dashrightarrow 00:00:08.198$  I'm an internist in North Haven and the

NOTE Confidence: 0.9313316125

 $00:00:08.198 \dashrightarrow 00:00:10.442$  Medical Director of the Primary Care

NOTE Confidence: 0.9313316125

 $00:00:10.442 \longrightarrow 00:00:13.240$  Service line of Northeast Medical Group.

NOTE Confidence: 0.9313316125

 $00:00:13.240 \longrightarrow 00:00:16.198$  And I am joined normally to

NOTE Confidence: 0.9313316125

00:00:16.198 --> 00:00:19.240 cohost this series with Ann Chang,

NOTE Confidence: 0.9313316125

00:00:19.240 --> 00:00:21.879 who is not here and Kevin Billingsley,

NOTE Confidence: 0.9313316125

 $00:00:21.880 \longrightarrow 00:00:25.560$  who's here and is the CMO of Smilo.

NOTE Confidence: 0.9313316125

 $00:00:25.560 \longrightarrow 00:00:28.218$  We will introduce our speaker shortly.

NOTE Confidence: 0.9313316125

 $00:00:28.220 \longrightarrow 00:00:29.945$  After an orientation to this

NOTE Confidence: 0.9313316125

00:00:29.945 --> 00:00:30.980 session in general,

NOTE Confidence: 0.9313316125

00:00:30.980 --> 00:00:33.164 today's topic is Melanoma.

 $00:00:33.164 \longrightarrow 00:00:37.206$  This is a monthly series designed to focus

NOTE Confidence: 0.9313316125

 $00{:}00{:}37.206 \dashrightarrow 00{:}00{:}40.220$  on primary care perspectives of cancer,

NOTE Confidence: 0.9313316125

 $00:00:40.220 \longrightarrow 00:00:44.023$  especially diagnosis and handoff where

NOTE Confidence: 0.9313316125

 $00:00:44.023 \longrightarrow 00:00:46.921$  we are involved and the designated

NOTE Confidence: 0.9313316125

00:00:46.921 --> 00:00:49.740 audience is primary care clinicians,

NOTE Confidence: 0.9313316125

00:00:49.740 --> 00:00:51.695 although I think many clinicians

NOTE Confidence: 0.9313316125

00:00:51.695 --> 00:00:53.259 can learn from this.

NOTE Confidence: 0.9313316125

 $00:00:53.260 \longrightarrow 00:00:55.885$  And we always have at least one

NOTE Confidence: 0.9313316125

 $00{:}00{:}55.885 \to 00{:}00{:}57.432$  primary care clinician along

NOTE Confidence: 0.9313316125

 $00{:}00{:}57.432 \dashrightarrow 00{:}00{:}59.780$  with SMYLO clinicians and often

NOTE Confidence: 0.9313316125

 $00:00:59.780 \longrightarrow 00:01:01.780$  focused in one geography.

NOTE Confidence: 0.9313316125

 $00{:}01{:}01.780 \dashrightarrow 00{:}01{:}04.900$  This one is is not so much focused

NOTE Confidence: 0.9313316125

 $00:01:04.900 \longrightarrow 00:01:07.817$  in one of our geographies and

NOTE Confidence: 0.9313316125

 $00:01:07.817 \longrightarrow 00:01:10.036$  we hope that this will help us

NOTE Confidence: 0.9313316125

 $00:01:10.036 \longrightarrow 00:01:12.216$  all become better at what we do.

NOTE Confidence: 0.9313316125

 $00{:}01{:}12.220 \dashrightarrow 00{:}01{:}15.140$  So we will go and we'll have a

 $00:01:15.140 \longrightarrow 00:01:18.380$  introductions and then we have

NOTE Confidence: 0.9313316125

 $00:01:18.380 \longrightarrow 00:01:20.972$  a three case presentations.

NOTE Confidence: 0.9313316125

 $00:01:20.980 \longrightarrow 00:01:22.900$  And we will learn through our

NOTE Confidence: 0.9313316125

 $00{:}01{:}22.900 \dashrightarrow 00{:}01{:}24.180$  case presentations and leave

NOTE Confidence: 0.9313316125

 $00{:}01{:}24.242 \dashrightarrow 00{:}01{:}25.898$  time for questions at the end.

NOTE Confidence: 0.935221839

00:01:29.100 --> 00:01:32.448 So at this time, I would like to introduce

NOTE Confidence: 0.935221839

00:01:32.448 --> 00:01:35.020 my NEMG primary care colleague, Dr.

NOTE Confidence: 0.935221839

00:01:35.020 --> 00:01:38.514 Flora Zarku Power Doctor.

NOTE Confidence: 0.935221839

 $00{:}01{:}38.514 \dashrightarrow 00{:}01{:}41.506$  Zarku Power is a graduate of the University

NOTE Confidence: 0.935221839

00:01:41.506 --> 00:01:44.378 of Medicine Carol Davila in Bucharest,

NOTE Confidence: 0.935221839

 $00{:}01{:}44.380 \dashrightarrow 00{:}01{:}45.980$ Romania, and she completed her

NOTE Confidence: 0.935221839

 $00{:}01{:}45.980 \dashrightarrow 00{:}01{:}48.000$  internal medicine residency in New York

NOTE Confidence: 0.935221839

 $00:01:48.000 \longrightarrow 00:01:51.090$  Presbyterian Hospital in Queens, NY.

NOTE Confidence: 0.935221839

 $00:01:51.090 \longrightarrow 00:01:53.562$  She initially joined the staff of

NOTE Confidence: 0.935221839

 $00:01:53.562 \longrightarrow 00:01:56.248$  Yellow Haven Hospital as a hospitalist

 $00:01:56.248 \longrightarrow 00:01:59.128$  before starting her practice in Milford.

NOTE Confidence: 0.935221839

 $00{:}01{:}59.130 \dashrightarrow 00{:}02{:}01.194$  She's now a practicing physician and

NOTE Confidence: 0.935221839

00:02:01.194 --> 00:02:03.209 also a managing partner of Primed,

NOTE Confidence: 0.935221839

 $00:02:03.210 \longrightarrow 00:02:05.218$  which is a PS:,

NOTE Confidence: 0.935221839

00:02:05.218 --> 00:02:07.728 A within Northeast Medical Group.

NOTE Confidence: 0.935221839

 $00:02:07.730 \dashrightarrow 00:02:10.338$  She's been an active member of the Milford

NOTE Confidence: 0.935221839

00:02:10.338 --> 00:02:12.369 and Bridgeport area medical community,

NOTE Confidence: 0.935221839

 $00:02:12.370 \longrightarrow 00:02:14.715$  and she's been on the executive medical

NOTE Confidence: 0.935221839

 $00:02:14.715 \longrightarrow 00:02:16.939$  staff committee at Bridgeport Hospital.

NOTE Confidence: 0.935221839

00:02:16.940 --> 00:02:18.944 And is completing A2 year Emerging

NOTE Confidence: 0.935221839

 $00{:}02{:}18.944 \dashrightarrow 00{:}02{:}20.280$  Leaders program through the

NOTE Confidence: 0.935221839

 $00:02:20.338 \longrightarrow 00:02:21.738$  Yale School of Management.

NOTE Confidence: 0.935221839

 $00{:}02{:}21.740 \dashrightarrow 00{:}02{:}23.834$  She's an active clinical leader in

NOTE Confidence: 0.935221839

 $00:02:23.834 \longrightarrow 00:02:25.648$  Northeast Medical Group and lends

NOTE Confidence: 0.935221839

 $00:02:25.648 \longrightarrow 00:02:27.778$  her expertise to the NEMG Primary

NOTE Confidence: 0.935221839

 $00:02:27.778 \longrightarrow 00:02:29.847$  Care Steering Committee and also the

 $00{:}02{:}29.847 \dashrightarrow 00{:}02{:}31.737$ Yale New Haven Health System Care

NOTE Confidence: 0.935221839

 $00{:}02{:}31.737 \dashrightarrow 00{:}02{:}33.976$  Signature Pathway Work Doctor Zarku

NOTE Confidence: 0.935221839

00:02:33.976 --> 00:02:36.850 Power strongly believes in a patient

NOTE Confidence: 0.935221839

 $00:02:36.936 \longrightarrow 00:02:39.516$  doctor relationship as the keystone

NOTE Confidence: 0.935221839

 $00:02:39.516 \longrightarrow 00:02:42.418$  to great health outcomes and that

NOTE Confidence: 0.935221839

00:02:42.418 --> 00:02:44.513 a relational care team approach

NOTE Confidence: 0.935221839

 $00:02:44.513 \longrightarrow 00:02:46.969$  is paramount to effective care.

NOTE Confidence: 0.935221839

 $00:02:46.970 \longrightarrow 00:02:47.260$  Kevin,

NOTE Confidence: 0.935221839

00:02:47.260 --> 00:02:49.870 I'll turn it over to you on to introduce

NOTE Confidence: 0.935221839

 $00{:}02{:}49.935 \dashrightarrow 00{:}02{:}51.849$  the members of yours Milo team.

NOTE Confidence: 0.943608066666667

 $00{:}02{:}52.930 \dashrightarrow 00{:}02{:}55.249$  Karen, thank you.

NOTE Confidence: 0.943608066666667

 $00:02:55.250 \longrightarrow 00:02:56.954$  I'll just say it's really a

NOTE Confidence: 0.943608066666667

 $00:02:56.954 \longrightarrow 00:02:58.649$  pleasure for me to be here.

NOTE Confidence: 0.943608066666667

 $00{:}02{:}58.650 \dashrightarrow 00{:}03{:}03.090$  I as you alluded to my associate Dr.

NOTE Confidence: 0.943608066666667

 $00:03:03.090 \longrightarrow 00:03:05.465$  Ann Chang generally partners with

 $00:03:05.465 \longrightarrow 00:03:07.724$  you in this wonderful venture.

NOTE Confidence: 0.943608066666667

 $00{:}03{:}07.724 \dashrightarrow 00{:}03{:}09.392$  But I'm absolutely delighted

NOTE Confidence: 0.943608066666667

 $00:03:09.392 \longrightarrow 00:03:11.450$  and honored to be here.

NOTE Confidence: 0.943608066666667

 $00:03:11.450 \longrightarrow 00:03:14.012$  I'm a surgical oncologist and I service

NOTE Confidence: 0.943608066666667

00:03:14.012 --> 00:03:16.139 the Chief Medical Officer of the.

NOTE Confidence: 0.943608066666667

00:03:16.140 --> 00:03:17.271 Smilo Cancer Hospital

NOTE Confidence: 0.943608066666667

 $00:03:17.271 \longrightarrow 00:03:18.779$  and Health Cancer Center.

NOTE Confidence: 0.943608066666667

00:03:18.780 --> 00:03:20.860 And I will say on a personal note,

NOTE Confidence: 0.943608066666667

 $00{:}03{:}20.860 --> 00{:}03{:}24.604$  I am just delighted to see

NOTE Confidence: 0.943608066666667

 $00:03:24.604 \longrightarrow 00:03:27.100$  this initiative moving forward.

NOTE Confidence: 0.943608066666667

 $00{:}03{:}27.100 \dashrightarrow 00{:}03{:}29.501$  Those of us who are oncologists and

NOTE Confidence: 0.943608066666667

 $00{:}03{:}29.501 \dashrightarrow 00{:}03{:}31.514$  are treating cancer patients regardless

NOTE Confidence: 0.943608066666667

 $00:03:31.514 \longrightarrow 00:03:34.925$  of our discipline are so indebted

NOTE Confidence: 0.943608066666667

 $00:03:34.925 \longrightarrow 00:03:39.425$  and tied to our primary care partners.

NOTE Confidence: 0.943608066666667

 $00:03:39.425 \longrightarrow 00:03:42.540$  It is really kind of the teamwork,

NOTE Confidence: 0.943608066666667

 $00:03:42.540 \longrightarrow 00:03:45.124$  the collaboration and the.

 $00:03:45.124 \longrightarrow 00:03:49.000$  The seamless flow of care between

NOTE Confidence: 0.943608066666667

 $00:03:49.000 \longrightarrow 00:03:51.472$  the primary care environment and the

NOTE Confidence: 0.943608066666667

 $00:03:51.472 \longrightarrow 00:03:53.120$  specialty environment that leads

NOTE Confidence: 0.943608066666667

00:03:53.186 --> 00:03:55.198 to great cancer care outcomes not

NOTE Confidence: 0.943608066666667

00:03:55.198 --> 00:03:57.144 only in the early diagnosis and in

NOTE Confidence: 0.943608066666667

 $00:03:57.144 \longrightarrow 00:03:59.039$  the support of the treatment phase,

NOTE Confidence: 0.943608066666667

 $00:03:59.040 \longrightarrow 00:04:00.760$  but in the survivorship phase.

NOTE Confidence: 0.943608066666667

 $00:04:00.760 \longrightarrow 00:04:04.805$  So I I think that this is really

NOTE Confidence: 0.943608066666667

 $00:04:04.805 \longrightarrow 00:04:07.280$  a valuable exercise and I'm.

NOTE Confidence: 0.943608066666667

00:04:07.280 --> 00:04:09.938 Hoping that that people are enjoying

NOTE Confidence: 0.943608066666667

00:04:09.938 --> 00:04:13.359 it and and taking a lot away from it,

NOTE Confidence: 0.943608066666667

 $00{:}04{:}13.360 \dashrightarrow 00{:}04{:}16.840$  it's it's an honor for me to introduce

NOTE Confidence: 0.943608066666667

 $00{:}04{:}16.840 \dashrightarrow 00{:}04{:}19.444$  several of my Smiley Smiley colleagues

NOTE Confidence: 0.943608066666667

 $00:04:19.444 \longrightarrow 00:04:22.262$  all of whom are esteemed experts

NOTE Confidence: 0.943608066666667

 $00:04:22.262 \longrightarrow 00:04:25.784$  in their field field and I'll I'll

00:04:25.784 --> 00:04:28.820 just start with Doctor Harriet Kluger.

NOTE Confidence: 0.943608066666667

 $00:04:28.820 \longrightarrow 00:04:31.704$  It would not be an exaggeration to

NOTE Confidence: 0.943608066666667

00:04:31.704 --> 00:04:34.716 say Doctor Kluger is a international

NOTE Confidence: 0.943608066666667

 $00:04:34.716 \longrightarrow 00:04:38.100$  authority in Melanoma and cutaneous oncology.

NOTE Confidence: 0.943608066666667

00:04:38.100 --> 00:04:40.270 She is the Harvey and Kate Cushing

NOTE Confidence: 0.943608066666667

 $00{:}04{:}40.270 \dashrightarrow 00{:}04{:}41.875$  Professor of Medicine and the

NOTE Confidence: 0.943608066666667

 $00{:}04{:}41.875 \dashrightarrow 00{:}04{:}43.415$  leader of the Melanoma program.

NOTE Confidence: 0.943608066666667

 $00:04:43.420 \longrightarrow 00:04:45.379$  Here at Smilow,

NOTE Confidence: 0.943608066666667

 $00:04:45.380 \longrightarrow 00:04:47.060$  she sees patients with both

NOTE Confidence: 0.943608066666667

 $00{:}04{:}47.060 \dashrightarrow 00{:}04{:}48.740$  Melanoma and renal cell cancer.

NOTE Confidence: 0.943608066666667

 $00{:}04{:}48.740 \dashrightarrow 00{:}04{:}51.560$  She has an extensive research portfolio

NOTE Confidence: 0.943608066666667

 $00:04:51.560 \longrightarrow 00:04:54.107$  with an interest in developing

NOTE Confidence: 0.943608066666667

 $00{:}04{:}54.107 \dashrightarrow 00{:}04{:}57.027$  new drug regimens and biomarkers.

NOTE Confidence: 0.943608066666667

 $00:04:57.030 \longrightarrow 00:04:59.270$  That are predictive of response

NOTE Confidence: 0.943608066666667

 $00:04:59.270 \longrightarrow 00:05:01.062$  to therapy and Melanoma.

NOTE Confidence: 0.943608066666667

 $00:05:01.070 \longrightarrow 00:05:03.370$  She participates in a variety

 $00:05:03.370 \longrightarrow 00:05:04.750$  of clinical trials.

NOTE Confidence: 0.943608066666667

 $00{:}05{:}04.750 \dashrightarrow 00{:}05{:}06.770$  She directs an active research

NOTE Confidence: 0.943608066666667

 $00{:}05{:}06.770 \dashrightarrow 00{:}05{:}08.790$  laboratory that studies tumor and

NOTE Confidence: 0.943608066666667

 $00:05:08.863 \longrightarrow 00:05:10.883$  immune cells from patients treated

NOTE Confidence: 0.943608066666667

 $00:05:10.883 \longrightarrow 00:05:12.903$  with these novel the rapies to

NOTE Confidence: 0.943608066666667

 $00:05:12.975 \longrightarrow 00:05:15.187$  determine mechanisms of resistance.

NOTE Confidence: 0.943608066666667

00:05:15.190 --> 00:05:16.830 Her laboratory also completes

NOTE Confidence: 0.943608066666667

 $00:05:16.830 \longrightarrow 00:05:18.880$  preclinical studies to improve treatment

NOTE Confidence: 0.943608066666667

00:05:18.880 --> 00:05:20.747 regimens for patients with Melanoma,

NOTE Confidence: 0.943608066666667

 $00:05:20.750 \longrightarrow 00:05:22.148$  renal cell cancer,

NOTE Confidence: 0.943608066666667

 $00{:}05{:}22.148 \dashrightarrow 00{:}05{:}23.546$  and brain metestes.

NOTE Confidence: 0.87704586

 $00:05:25.920 \longrightarrow 00:05:28.864$  You know Harriet is definitely our go to

NOTE Confidence: 0.87704586

 $00{:}05{:}28.864 \dashrightarrow 00{:}05{:}31.898$  expert and I think we'll find her just

NOTE Confidence: 0.87704586

 $00:05:31.898 \longrightarrow 00:05:34.640$  a fountain of knowledge in this regard.

NOTE Confidence: 0.87704586

 $00:05:34.640 \longrightarrow 00:05:37.340$  Next it's a pleasure for me to to introduce

00:05:37.340 --> 00:05:40.008 one of my surgical partners, Doctor Kelly.

NOTE Confidence: 0.87704586

 $00:05:40.008 \longrightarrow 00:05:43.080$  Olino Kelly is a W Board certified surgeon

NOTE Confidence: 0.87704586

 $00:05:43.156 \longrightarrow 00:05:44.996$  who provides patients comprehensive

NOTE Confidence: 0.87704586

 $00{:}05{:}44.996 \dashrightarrow 00{:}05{:}47.756$  surgical care for skin and soft

NOTE Confidence: 0.87704586

 $00:05:47.827 \longrightarrow 00:05:49.664$  tissue tumors including Melanoma,

NOTE Confidence: 0.87704586

00:05:49.664 --> 00:05:51.738 markle cell cancer, sarcoma,

NOTE Confidence: 0.87704586

 $00:05:51.738 \longrightarrow 00:05:55.028$  basal cell cancer and others.

NOTE Confidence: 0.87704586

 $00:05:55.030 \longrightarrow 00:05:58.070$  She's been a recipient of a number of

NOTE Confidence: 0.87704586

 $00:05:58.070 \longrightarrow 00:06:00.691$  awards including the Society Surgical

NOTE Confidence: 0.87704586

 $00:06:00.691 \longrightarrow 00:06:03.067$  Oncologist Clinical Investigator award

NOTE Confidence: 0.87704586

 $00{:}06{:}03.070 \dashrightarrow 00{:}06{:}05.800$  and she has funding through the Calabresi

NOTE Confidence: 0.87704586

 $00:06:05.800 \longrightarrow 00:06:07.795$  Immune Oncology Scholar program.

NOTE Confidence: 0.87704586

 $00:06:07.795 \longrightarrow 00:06:11.554$  She currently serves as the NCCN Non

NOTE Confidence: 0.87704586

 $00:06:11.554 \longrightarrow 00:06:14.264$  Melanoma cutaneous on the cutaneous

NOTE Confidence: 0.87704586

 $00:06:14.264 \longrightarrow 00:06:16.416$  malignancy committee and she's

NOTE Confidence: 0.87704586

00:06:16.416 --> 00:06:18.548 a great clinical surgeon.

 $00:06:18.550 \longrightarrow 00:06:20.498$  Next doctor Twee Tran.

NOTE Confidence: 0.87704586

 $00:06:20.498 \longrightarrow 00:06:24.300$  Twee is an assistant professor of Medicine.

NOTE Confidence: 0.87704586

 $00:06:24.300 \longrightarrow 00:06:26.125$  She cares for patients with

NOTE Confidence: 0.87704586

00:06:26.125 --> 00:06:28.380 Melanoma and other skin cancers at

NOTE Confidence: 0.87704586

 $00:06:28.380 \longrightarrow 00:06:30.310$  our spinal cancer hospital sites,

NOTE Confidence: 0.87704586

 $00:06:30.310 \longrightarrow 00:06:33.740$  both in New Haven and in Guilford.

NOTE Confidence: 0.87704586

 $00:06:33.740 \longrightarrow 00:06:37.159$  She is a graduate of the A/B IM Physician

NOTE Confidence: 0.87704586

 $00{:}06{:}37.159 \dashrightarrow 00{:}06{:}39.516$  Scientist Research Pathway, and Dr.

NOTE Confidence: 0.87704586

 $00{:}06{:}39.516 \dashrightarrow 00{:}06{:}43.218$  Tren is a bit of a a Yale product.

NOTE Confidence: 0.87704586

 $00{:}06{:}43.218 \operatorname{--}{>} 00{:}06{:}45.732$  She did both her internal medicine

NOTE Confidence: 0.87704586

00:06:45.732 --> 00:06:48.540 residency and her fellowship here at Yale,

NOTE Confidence: 0.87704586

 $00{:}06{:}48.540 \dashrightarrow 00{:}06{:}52.040$  although she received both of her.

NOTE Confidence: 0.87704586

 $00{:}06{:}52.040 \dashrightarrow 00{:}06{:}55.771$  Both her PhD and her MD degrees

NOTE Confidence: 0.87704586

00:06:55.771 --> 00:06:56.837 from Vanderbilt.

NOTE Confidence: 0.87704586

 $00:06:56.840 \longrightarrow 00:06:59.276$  She's also very involved in research,

 $00:06:59.280 \longrightarrow 00:07:01.380$  including novel therapeutics

NOTE Confidence: 0.87704586

 $00:07:01.380 \longrightarrow 00:07:03.480$  and drug combinations,

NOTE Confidence: 0.87704586

 $00:07:03.480 \longrightarrow 00:07:06.432$  and is a participant in the

NOTE Confidence: 0.87704586

 $00:07:06.432 \longrightarrow 00:07:08.400$  Yale skin Cancer spore.

NOTE Confidence: 0.87704586

 $00:07:08.400 \longrightarrow 00:07:10.580$  She's a principal investigator

NOTE Confidence: 0.87704586

 $00:07:10.580 \longrightarrow 00:07:12.760$  of several clinical trials.

NOTE Confidence: 0.87704586

 $00:07:12.760 \longrightarrow 00:07:15.477$  Last and certainly not least, Dr.

NOTE Confidence: 0.87704586

 $00{:}07{:}15.477 \dashrightarrow 00{:}07{:}18.462$  Jonathan Leventhal is an associate

NOTE Confidence: 0.87704586

 $00{:}07{:}18.462 \dashrightarrow 00{:}07{:}20.253$  professor of dermatology.

NOTE Confidence: 0.87704586

 $00:07:20.260 \longrightarrow 00:07:23.476$  And is the director of the

NOTE Confidence: 0.87704586

00:07:23.476 --> 00:07:25.620 SMILO Onco Dermatology Program.

NOTE Confidence: 0.87704586

 $00:07:25.620 \longrightarrow 00:07:28.088$  Doctor Leventhal received his

NOTE Confidence: 0.87704586

 $00:07:28.088 \longrightarrow 00:07:31.173$  bachelor's degree and medical degree

NOTE Confidence: 0.87704586

 $00:07:31.173 \longrightarrow 00:07:34.392$  at the NYU at NYU and then came here

NOTE Confidence: 0.87704586

00:07:34.392 --> 00:07:36.220 to Yale for additional training,

NOTE Confidence: 0.87704586

 $00{:}07{:}36.220 \dashrightarrow 00{:}07{:}39.020$  where he served as a chief resident.

00:07:39.020 --> 00:07:41.966 His specialty is in providing care

NOTE Confidence: 0.87704586

 $00{:}07{:}41.966 \dashrightarrow 00{:}07{:}44.740$  to skin cancer patients who develop

NOTE Confidence: 0.87704586

 $00:07:44.740 \longrightarrow 00:07:47.020$  cutaneous toxicities from their treatments,

NOTE Confidence: 0.87704586

 $00:07:47.020 \longrightarrow 00:07:49.912$  as well as diagnosing and treating

NOTE Confidence: 0.87704586

 $00:07:49.912 \longrightarrow 00:07:50.876$  skin cancers.

NOTE Confidence: 0.87704586

 $00:07:50.880 \longrightarrow 00:07:52.945$  Like many of the other panelists this

NOTE Confidence: 0.87704586

00:07:52.945 --> 00:07:55.348 evening, he leads clinical trials,

NOTE Confidence: 0.87704586

 $00:07:55.348 \longrightarrow 00:07:57.456$  studying new treatments for

NOTE Confidence: 0.87704586

 $00{:}07{:}57.456 \dashrightarrow 00{:}07{:}59.360$  managing dermatologic toxicities.

NOTE Confidence: 0.87704586

 $00:07:59.360 \longrightarrow 00:08:01.910$  And he's actively involved in residency

NOTE Confidence: 0.87704586

 $00:08:01.910 \longrightarrow 00:08:04.503$  in medical education as well as

NOTE Confidence: 0.87704586

 $00{:}08{:}04.503 \dashrightarrow 00{:}08{:}07.380$  serving as an editor for the textbook

NOTE Confidence: 0.87704586

 $00{:}08{:}07.380 \dashrightarrow 00{:}08{:}08.879$  self-assessment in dermatology.

NOTE Confidence: 0.87704586

 $00:08:08.880 \longrightarrow 00:08:12.186$  So do you really have an

NOTE Confidence: 0.87704586

 $00:08:12.186 \longrightarrow 00:08:14.426$  outstanding cast of experts here?

00:08:14.426 --> 00:08:16.920 And I'll turn it back to you, Karen.

NOTE Confidence: 0.95434236

 $00:08:18.320 \longrightarrow 00:08:20.520$  Great. Let's get started. Florida,

NOTE Confidence: 0.95434236

 $00:08:20.520 \longrightarrow 00:08:21.955$  you want to present the first case.

NOTE Confidence: 0.946004114285714

 $00:08:22.760 \longrightarrow 00:08:24.839$  Karen, thank you for the warm introduction.

NOTE Confidence: 0.946004114285714

 $00:08:24.840 \longrightarrow 00:08:27.558$  I want to say your work

NOTE Confidence: 0.946004114285714

 $00:08:27.558 \longrightarrow 00:08:28.917$  and really unsailable.

NOTE Confidence: 0.946004114285714

 $00{:}08{:}28.920 \dashrightarrow 00{:}08{:}30.488$  I'm probably then honored also to have

NOTE Confidence: 0.946004114285714

 $00{:}08{:}30.488 \dashrightarrow 00{:}08{:}32.972$  the support of our colleagues. It's Milo.

NOTE Confidence: 0.946004114285714

 $00{:}08{:}32.972 \dashrightarrow 00{:}08{:}37.640$  I'm going to start presenting the first

NOTE Confidence: 0.946004114285714

00:08:37.640 --> 00:08:41.168 case patient who came in reporting

NOTE Confidence: 0.946004114285714

 $00{:}08{:}41.168 \dashrightarrow 00{:}08{:}43.424$  an enlarging leg mole situation that

NOTE Confidence: 0.946004114285714

 $00:08:43.424 \longrightarrow 00:08:46.118$  we encounter in practice quite often.

NOTE Confidence: 0.946004114285714

 $00:08:46.120 \longrightarrow 00:08:48.556$  I'm sure my colleagues will recognize it.

NOTE Confidence: 0.946004114285714

 $00:08:48.560 \longrightarrow 00:08:50.728$  This is a 59 year old healthy white

NOTE Confidence: 0.946004114285714

00:08:50.728 --> 00:08:53.083 female with a past mental history

NOTE Confidence: 0.946004114285714

 $00:08:53.083 \longrightarrow 00:08:54.394$  of hypertension hyperlipidemia.

 $00:08:54.400 \longrightarrow 00:08:56.970$  She has a history of having used

NOTE Confidence: 0.946004114285714

 $00:08:56.970 \longrightarrow 00:08:59.160$  tanning beds a few decades ago.

NOTE Confidence: 0.946004114285714

00:08:59.160 --> 00:09:01.086 She wasn't seen for about 3

NOTE Confidence: 0.946004114285714

 $00:09:01.086 \longrightarrow 00:09:03.600$  years due to a COVID pandemic.

NOTE Confidence: 0.946004114285714

 $00{:}09{:}03.600 \dashrightarrow 00{:}09{:}07.479$  She reported a skin lesion about a year ago

NOTE Confidence: 0.946004114285714

00:09:07.480 --> 00:09:11.476 and notably enlarging her family history,

NOTE Confidence: 0.946004114285714

 $00:09:11.480 \longrightarrow 00:09:13.550$  is remarkable for her mother

NOTE Confidence: 0.946004114285714

 $00{:}09{:}13.550 \rightarrow 00{:}09{:}15.620$  with a history of Melanoma.

NOTE Confidence: 0.946004114285714

00:09:15.620 --> 00:09:19.064 So I just wanted one more second

NOTE Confidence: 0.946004114285714

 $00:09:19.064 \longrightarrow 00:09:20.700$  probably to take a look at the lesions,

NOTE Confidence: 0.946004114285714

 $00:09:20.700 \longrightarrow 00:09:22.145$  so my colleagues could pay

NOTE Confidence: 0.946004114285714

 $00:09:22.145 \longrightarrow 00:09:24.017$  attention to some of the features

NOTE Confidence: 0.946004114285714

 $00{:}09{:}24.017 \dashrightarrow 00{:}09{:}25.857$  that associate to this lesion.

NOTE Confidence: 0.94472622222222

 $00:09:28.300 \longrightarrow 00:09:30.757$  And we'll in a moment we'll discuss

NOTE Confidence: 0.94472622222222

 $00:09:30.757 \longrightarrow 00:09:32.675$  actually the ABCD's of recognizing

00:09:32.675 --> 00:09:34.700 the warning signs of Melanoma.

NOTE Confidence: 0.94472622222222

 $00:09:34.700 \longrightarrow 00:09:36.415$  So this would be sort of a

NOTE Confidence: 0.94472622222222

 $00:09:36.420 \longrightarrow 00:09:39.620$  a good picture to remember.

NOTE Confidence: 0.944726222222222

 $00:09:39.620 \longrightarrow 00:09:41.444$  We could move on to the next slide.

NOTE Confidence: 0.944726222222222

 $00:09:41.450 \longrightarrow 00:09:44.026$  So talking about moles and early signs

NOTE Confidence: 0.944726222222222

00:09:44.026 --> 00:09:47.249 of skin cancer, couple of specifics,

NOTE Confidence: 0.94472622222222

 $00:09:47.249 \longrightarrow 00:09:49.664$  what do we look for when we have a patient

NOTE Confidence: 0.94472622222222

 $00:09:49.664 \longrightarrow 00:09:51.850$  in front of us and we do a skin exam,

NOTE Confidence: 0.944726222222222

 $00{:}09{:}51.850 \dashrightarrow 00{:}09{:}55.364$  we're looking for anything new or changing

NOTE Confidence: 0.94472622222222

 $00:09:55.370 \longrightarrow 00:09:59.250$  on both sun exposed and sun protected areas.

NOTE Confidence: 0.94472622222222

00:09:59.250 --> 00:10:01.565 Typically Melanoma appear in women

NOTE Confidence: 0.94472622222222

 $00:10:01.565 \longrightarrow 00:10:04.633$  on the legs and number one place

NOTE Confidence: 0.94472622222222

 $00:10:04.633 \longrightarrow 00:10:07.594$  they develop men is on the trunk.

NOTE Confidence: 0.944726222222222

00:10:07.600 --> 00:10:09.800 They could arise though anywhere on the skin,

NOTE Confidence: 0.944726222222222

00:10:09.800 --> 00:10:11.800 even in the areas where sun doesn't shine,

NOTE Confidence: 0.944726222222222 00:10:11.800 --> 00:10:14.200 so beware.

00:10:14.200 --> 00:10:15.336 Generally speaking, most moles,

NOTE Confidence: 0.94472622222222

 $00{:}10{:}15.336 \dashrightarrow 00{:}10{:}17.368$  brown spots and growths on the skin

NOTE Confidence: 0.94472622222222

 $00:10:17.368 \longrightarrow 00:10:19.120$  are harmless, but not always.

NOTE Confidence: 0.8693227

 $00:10:22.040 \longrightarrow 00:10:24.864$  Here's the ABCDI was talking about.

NOTE Confidence: 0.8693227

 $00:10:24.864 \longrightarrow 00:10:26.570$  This is a simple guide to recognize

NOTE Confidence: 0.8693227

 $00:10:26.570 \longrightarrow 00:10:28.075$  the warning signs of Melanoma.

NOTE Confidence: 0.8693227

00:10:28.080 --> 00:10:31.374 A is for asymmetry, and if you draw a

NOTE Confidence: 0.8693227

00:10:31.374 --> 00:10:34.717 line through the middle of the lesion,

NOTE Confidence: 0.8693227

 $00:10:34.720 \longrightarrow 00:10:37.700$  the two halves don't match.

NOTE Confidence: 0.8693227

 $00:10:37.700 \longrightarrow 00:10:39.252$  B is for border.

NOTE Confidence: 0.8693227

 $00:10:39.252 \longrightarrow 00:10:41.580$  Typically they tend to be uneven.

NOTE Confidence: 0.8693227

 $00:10:41.580 \longrightarrow 00:10:44.016$  They may be scalloped or notched.

NOTE Confidence: 0.8693227

 $00:10:44.020 \longrightarrow 00:10:45.588$  C is for color.

NOTE Confidence: 0.8693227

NOTE Confidence: 0.8693227

 $00:10:47.940 \longrightarrow 00:10:49.722$  and melanomas may may have different

 $00:10:49.722 \longrightarrow 00:10:52.162$  shades of brown, tan, or black.

NOTE Confidence: 0.8693227

 $00:10:52.162 \longrightarrow 00:10:54.218$  D is for diameter.

NOTE Confidence: 0.8693227

 $00:10:54.220 \longrightarrow 00:10:56.868$  It is a warning sign if a lesion is larger

NOTE Confidence: 0.8693227

00:10:56.868 --> 00:11:00.132 than 6 millimeters or quarter of an inch,

NOTE Confidence: 0.8693227

 $00:11:00.140 \longrightarrow 00:11:02.250$  and any lesion that's darker

NOTE Confidence: 0.8693227

 $00:11:02.250 \longrightarrow 00:11:05.380$  than others not to be overlooked.

NOTE Confidence: 0.8693227

00:11:05.380 --> 00:11:07.936 One exception is the amylanotic melanomas,

NOTE Confidence: 0.8693227

 $00:11:07.940 \longrightarrow 00:11:10.298$  which are colorless,

NOTE Confidence: 0.8693227

00:11:10.300 --> 00:11:13.618 is for evolving any change in size,

NOTE Confidence: 0.8693227

 $00:11:13.620 \longrightarrow 00:11:16.574$  shape, color, or elevation of a spot.

NOTE Confidence: 0.8693227

 $00{:}11{:}16.580 {\:{\mbox{--}}}{\:{\mbox{--}}} 00{:}11{:}19.548$  Any new symptoms of itching, crusting,

NOTE Confidence: 0.8693227

00:11:19.548 --> 00:11:22.620 bleeding, maybe warning signs?

NOTE Confidence: 0.8693227

 $00:11:22.620 \longrightarrow 00:11:25.860$  Also, look for an ugly duckling.

NOTE Confidence: 0.8693227

 $00:11:25.860 \longrightarrow 00:11:28.260$  The strategy is based on most

NOTE Confidence: 0.8693227

 $00:11:28.260 \longrightarrow 00:11:29.860$  malls resembling one another,

NOTE Confidence: 0.8693227

 $00{:}11{:}29.860 \dashrightarrow 00{:}11{:}31.360$  while melanomas stand out

 $00:11:31.360 \longrightarrow 00:11:32.860$  like an ugly duckling.

NOTE Confidence: 0.846234485714286

00:11:39.730 --> 00:11:41.445 Jonathan, do you want to take over?

NOTE Confidence: 0.943128857142857

00:11:42.130 --> 00:11:44.048 Absolutely. It's a pleasure to be here,

NOTE Confidence: 0.943128857142857

00:11:44.050 --> 00:11:45.418 really happy to participate

NOTE Confidence: 0.943128857142857

 $00{:}11{:}45.418 \dashrightarrow 00{:}11{:}47.128$  in Smile Shares Primary care.

NOTE Confidence: 0.943128857142857

00:11:47.130 --> 00:11:49.342 So I'm going to briefly highlight some

NOTE Confidence: 0.943128857142857

 $00:11:49.342 \longrightarrow 00:11:51.807$  of the main subtypes of a Melanoma,

NOTE Confidence: 0.943128857142857

 $00:11:51.810 \longrightarrow 00:11:52.978$  so superficial spreading as

NOTE Confidence: 0.943128857142857

00:11:52.978 --> 00:11:55.090 you can see on the top left,

NOTE Confidence: 0.943128857142857

 $00:11:55.090 \longrightarrow 00:11:56.970$  these are the most common types of Melanoma.

NOTE Confidence: 0.943128857142857

 $00:11:56.970 \longrightarrow 00:11:59.362$  You can see a lot of the features

NOTE Confidence: 0.943128857142857

00:11:59.362 --> 00:12:02.059 of the Abcd's from the last slide.

NOTE Confidence: 0.943128857142857

 $00{:}12{:}02.060 \dashrightarrow 00{:}12{:}04.328$  And they tend to grow radially pretty

NOTE Confidence: 0.943128857142857

 $00:12:04.328 \longrightarrow 00:12:06.838$  slowly over the course of months to

NOTE Confidence: 0.943128857142857

 $00:12:06.838 \longrightarrow 00:12:09.040$  sometimes even years before then growing

00:12:09.109 --> 00:12:11.499 vertically and penetrating more deeply.

NOTE Confidence: 0.943128857142857

 $00:12:11.500 \longrightarrow 00:12:13.072$  Now this is in contrast to

NOTE Confidence: 0.943128857142857

 $00:12:13.072 \longrightarrow 00:12:14.700$  the nodular type of Melanoma,

NOTE Confidence: 0.943128857142857

 $00:12:14.700 \longrightarrow 00:12:16.961$  which tends to be far more aggressive

NOTE Confidence: 0.943128857142857

 $00:12:16.961 \longrightarrow 00:12:19.235$  and that these can grow quite rapidly

NOTE Confidence: 0.943128857142857

 $00:12:19.235 \longrightarrow 00:12:21.771$  and they tend to to present more deeply

NOTE Confidence: 0.943128857142857

 $00:12:21.771 \longrightarrow 00:12:23.892$  in the dermis at a higher stage.

NOTE Confidence: 0.943128857142857

 $00:12:23.900 \longrightarrow 00:12:25.180$  So these are important.

NOTE Confidence: 0.943128857142857

00:12:25.180 --> 00:12:25.820 You know,

NOTE Confidence: 0.943128857142857

00:12:25.820 --> 00:12:28.058 it's talking to patients about any

NOTE Confidence: 0.943128857142857

 $00:12:28.058 \longrightarrow 00:12:30.878$  recent change or rapidly growing skin lesion.

NOTE Confidence: 0.943128857142857

 $00:12:30.880 \longrightarrow 00:12:32.415$  The lentigo and malignant subtype

NOTE Confidence: 0.943128857142857

 $00:12:32.415 \longrightarrow 00:12:34.480$  tends to occur in elderly patients.

NOTE Confidence: 0.943128857142857

 $00:12:34.480 \longrightarrow 00:12:36.622$  Often looks like an atypical lentigo

NOTE Confidence: 0.943128857142857

 $00:12:36.622 \longrightarrow 00:12:38.919$  or a sunspot that elderly patients

NOTE Confidence: 0.943128857142857

 $00{:}12{:}38.919 \dashrightarrow 00{:}12{:}40.904$  might develop in sun exposed

 $00:12:40.904 \longrightarrow 00:12:43.359$  areas but with atypical features.

NOTE Confidence: 0.943128857142857

 $00:12:43.360 \longrightarrow 00:12:45.195$  Probably the most challenging one

NOTE Confidence: 0.943128857142857

 $00:12:45.195 \longrightarrow 00:12:47.502$  for anyone to diagnose are the

NOTE Confidence: 0.943128857142857

00:12:47.502 --> 00:12:49.118 amylonotic types of Melanoma,

NOTE Confidence: 0.943128857142857

 $00:12:49.120 \longrightarrow 00:12:51.276$  and these tend not to have pigment,

NOTE Confidence: 0.943128857142857

 $00:12:51.280 \longrightarrow 00:12:52.852$  they're often pink and.

NOTE Confidence: 0.943128857142857

00:12:52.852 --> 00:12:55.210 Patient history can be very important

NOTE Confidence: 0.943128857142857

 $00{:}12{:}55.284 \to 00{:}12{:}57.720$  here with a new amylonotic lesion

NOTE Confidence: 0.943128857142857

00:12:57.720 --> 00:12:59.344 that's either rapidly growing

NOTE Confidence: 0.943128857142857

 $00:12:59.417 \longrightarrow 00:13:01.391$  or symptomatic in some way such

NOTE Confidence: 0.943128857142857

 $00{:}13{:}01.391 \dashrightarrow 00{:}13{:}03.056$  as being painful or bleeding.

NOTE Confidence: 0.943128857142857

00:13:03.056 --> 00:13:04.786 And then finally the acryl,

NOTE Confidence: 0.943128857142857

 $00{:}13{:}04.790 \dashrightarrow 00{:}13{:}06.542$  in tigenous and subungal types

NOTE Confidence: 0.943128857142857

 $00{:}13{:}06.542 {\:\dashrightarrow\:} 00{:}13{:}08.294$  are important particularly in

NOTE Confidence: 0.943128857142857

 $00:13:08.294 \longrightarrow 00:13:10.310$  patients with darker skin types.

00:13:10.310 --> 00:13:12.526 They might be have a higher risk of

NOTE Confidence: 0.943128857142857

 $00:13:12.526 \longrightarrow 00:13:14.460$  developing this type and if that's

NOTE Confidence: 0.943128857142857

00:13:14.460 --> 00:13:16.115 why it's important when examining

NOTE Confidence: 0.943128857142857

 $00:13:16.115 \longrightarrow 00:13:18.185$  patients to look at the palms and soles.

NOTE Confidence: 0.943128857142857

 $00:13:18.190 \longrightarrow 00:13:20.250$  And regarding subungal Melanoma,

NOTE Confidence: 0.943128857142857

00:13:20.250 --> 00:13:22.825 these typically present with Melaninicia,

NOTE Confidence: 0.943128857142857

 $00:13:22.830 \longrightarrow 00:13:25.806$  which as you can see is a melanotic band

NOTE Confidence: 0.943128857142857

 $00:13:25.806 \longrightarrow 00:13:28.942$  that grows from the proxable nail upwards.

 $00:13:31.630 \longrightarrow 00:13:34.900$  I think it's important to have a

NOTE Confidence: 0.941930833333333

00:13:34.900 --> 00:13:36.910 differential diagnosis anytime

 $00{:}13{:}36.910 \dashrightarrow 00{:}13{:}39.590$  you approached pigmented lesions.

NOTE Confidence: 0.941930833333333

 $00:13:39.590 \longrightarrow 00:13:41.300$  So I highlighted here on this

NOTE Confidence: 0.941930833333333

 $00:13:41.300 \longrightarrow 00:13:43.501$  slide what I think of as as

NOTE Confidence: 0.941930833333333

 $00{:}13{:}43.501 \dashrightarrow 00{:}13{:}44.825$  the most clinically important,

NOTE Confidence: 0.941930833333333

 $00:13:44.830 \longrightarrow 00:13:47.536$  so I would say by far.

NOTE Confidence: 0.94193083333333

 $00:13:47.540 \longrightarrow 00:13:49.960$  The most common presenting diagnosis

 $00{:}13{:}49.960 \dashrightarrow 00{:}13{:}53.704$  that that comes in with concern for

NOTE Confidence: 0.941930833333333

 $00:13:53.704 \longrightarrow 00:13:56.180$  Melanoma are seborrheic keratoses,

NOTE Confidence: 0.941930833333333

 $00:13:56.180 \longrightarrow 00:13:58.574$  which are on the top left.

NOTE Confidence: 0.941930833333333

 $00:13:58.580 \longrightarrow 00:14:01.068$  These are stuck on waxy tan to brown

NOTE Confidence: 0.941930833333333

00:14:01.068 --> 00:14:03.442 or even darker brown black papules

NOTE Confidence: 0.941930833333333

 $00:14:03.442 \longrightarrow 00:14:05.950$  and plaques that tend to develop

NOTE Confidence: 0.941930833333333

 $00:14:06.023 \longrightarrow 00:14:08.219$  and patients as they get older,

NOTE Confidence: 0.941930833333333

 $00:14:08.220 \longrightarrow 00:14:10.516$  and sometimes they can be very challenging

NOTE Confidence: 0.941930833333333

00:14:10.516 --> 00:14:12.139 to distinguish from a Melanoma.

NOTE Confidence: 0.941930833333333

 $00:14:12.140 \longrightarrow 00:14:13.996$  So dermatologists use dermatoscopes.

NOTE Confidence: 0.941930833333333

 $00:14:13.996 \longrightarrow 00:14:16.316$  And if we are unsure,

NOTE Confidence: 0.941930833333333

00:14:16.320 --> 00:14:18.440 we'll perform a skin biopsy,

NOTE Confidence: 0.941930833333333

 $00:14:18.440 \longrightarrow 00:14:19.920$  certainly on the top right,

NOTE Confidence: 0.941930833333333

 $00{:}14{:}19.920 \dashrightarrow 00{:}14{:}22.344$ we always consider normal appearing nevi

NOTE Confidence: 0.94193083333333

 $00:14:22.344 \longrightarrow 00:14:25.400$  and those that are slightly dysplastic.

00:14:25.400 --> 00:14:27.878 So they're not fully normal appearing.

NOTE Confidence: 0.941930833333333

 $00:14:27.880 \longrightarrow 00:14:29.960$  They might be slightly asymmetrical,

NOTE Confidence: 0.941930833333333

 $00:14:29.960 \longrightarrow 00:14:31.124$  borders are irregular,

NOTE Confidence: 0.941930833333333

 $00:14:31.124 \longrightarrow 00:14:33.840$  but these don't meet criteria for Melanoma.

NOTE Confidence: 0.941930833333333

 $00:14:33.840 \longrightarrow 00:14:35.000$  And when these are biopsied,

NOTE Confidence: 0.941930833333333

00:14:35.000 --> 00:14:38.584 they're not Melanoma then on the bottom left.

NOTE Confidence: 0.941930833333333

 $00{:}14{:}38.590 \dashrightarrow 00{:}14{:}40.708$  Illustrates the fact that even non

NOTE Confidence: 0.941930833333333

00:14:40.708 --> 00:14:42.950 Melanoma skin cancers can be pigmented.

NOTE Confidence: 0.941930833333333

 $00:14:42.950 \longrightarrow 00:14:45.238$  So this is an example of a pigmented

NOTE Confidence: 0.941930833333333

00:14:45.238 --> 00:14:47.642 basal cell carcinoma noted as a slightly

 $00:14:47.642 \longrightarrow 00:14:50.146$  more pearly appearance to it and with

NOTE Confidence: 0.941930833333333

00:14:50.146 --> 00:14:52.156 a dermatoscope you might see other

NOTE Confidence: 0.941930833333333

 $00:14:52.156 \longrightarrow 00:14:55.350$  features of a basal cell on the the bottom.

NOTE Confidence: 0.941930833333333

 $00:14:55.350 \longrightarrow 00:14:58.584$  Middle picture is an example of vascular

NOTE Confidence: 0.941930833333333

 $00:14:58.584 \longrightarrow 00:15:02.288$  lesions such as angiokeratomas or angiomas.

NOTE Confidence: 0.941930833333333

 $00:15:02.290 \longrightarrow 00:15:03.290$  Sometimes they can have

00:15:03.290 --> 00:15:04.290 a really dark purplish,

NOTE Confidence: 0.941930833333333

 $00:15:04.290 \longrightarrow 00:15:07.244$  even blackish hue and can be challenging.

NOTE Confidence: 0.941930833333333

00:15:07.250 --> 00:15:07.874 As dermatologists,

NOTE Confidence: 0.941930833333333

 $00:15:07.874 \longrightarrow 00:15:09.746$  we can use a dermatoscope which

NOTE Confidence: 0.941930833333333

00:15:09.746 --> 00:15:12.114 you can see in the top right

NOTE Confidence: 0.941930833333333

 $00:15:12.114 \longrightarrow 00:15:13.466$  corner highlighting those vascular

NOTE Confidence: 0.941930833333333

00:15:13.466 --> 00:15:15.049 lacunae and that's reassuring.

NOTE Confidence: 0.941930833333333

 $00:15:15.050 \longrightarrow 00:15:16.502$  And then on the bottom right

NOTE Confidence: 0.941930833333333

00:15:16.502 --> 00:15:18.250 is a picture of a blue Nevis.

NOTE Confidence: 0.94193083333333

 $00{:}15{:}18.250 \dashrightarrow 00{:}15{:}22.430$  And so these moles can also appear in

NOTE Confidence: 0.941930833333333

 $00:15:22.430 \longrightarrow 00:15:25.330$  as differential diagnosis of Melanoma,

NOTE Confidence: 0.941930833333333

 $00:15:25.330 \longrightarrow 00:15:26.170$  but they are benign.

NOTE Confidence: 0.9478010325

00:15:28.530 --> 00:15:30.965 I just wanted to briefly

NOTE Confidence: 0.9478010325

 $00:15:30.965 \longrightarrow 00:15:32.426$  review the epidemiology.

NOTE Confidence: 0.9478010325

 $00:15:32.430 \longrightarrow 00:15:34.746$  Everyone here is familiar with Melanoma.

 $00{:}15{:}34.750 \dashrightarrow 00{:}15{:}37.366$  I wanted to highlight that most

NOTE Confidence: 0.9478010325

00:15:37.366 --> 00:15:39.829 cases actually occur on de Novo,

NOTE Confidence: 0.9478010325

 $00:15:39.830 \longrightarrow 00:15:41.940$  although some might develop from

NOTE Confidence: 0.9478010325

 $00:15:41.940 \longrightarrow 00:15:44.537$  a precursor lesion and these are

NOTE Confidence: 0.9478010325

00:15:44.537 --> 00:15:46.197 typically either a congenital

NOTE Confidence: 0.9478010325

 $00:15:46.197 \longrightarrow 00:15:48.406$  Nevis or an atypical Nevis that

NOTE Confidence: 0.9478010325

00:15:48.406 --> 00:15:50.470 the patient has that then changes.

NOTE Confidence: 0.9478010325

00:15:50.470 --> 00:15:52.150 It can occur in anybody,

NOTE Confidence: 0.9478010325

 $00{:}15{:}52.150 \dashrightarrow 00{:}15{:}55.035$  but tends to tends to predominant

NOTE Confidence: 0.9478010325

 $00:15:55.035 \longrightarrow 00:15:57.045$  in white men over age 50.

NOTE Confidence: 0.9478010325

 $00:15:57.050 \longrightarrow 00:15:58.802$  And then interestingly,

NOTE Confidence: 0.9478010325

00:15:58.802 --> 00:16:01.545 underage 50 women outnumber men,

NOTE Confidence: 0.9478010325

 $00:16:01.545 \longrightarrow 00:16:04.170$  likely due to tanning habits.

NOTE Confidence: 0.9478010325

 $00:16:04.170 \longrightarrow 00:16:06.530$  It also is a diagnosis of young patients.

NOTE Confidence: 0.9478010325

00:16:06.530 --> 00:16:07.994 And regarding survival,

NOTE Confidence: 0.9478010325

 $00:16:07.994 \longrightarrow 00:16:10.434$  some factors associated with poor

00:16:10.434 --> 00:16:12.930 outcomes include elderly male patients,

NOTE Confidence: 0.9478010325

00:16:12.930 --> 00:16:14.448 those who have darker skin types,

NOTE Confidence: 0.9478010325

00:16:14.450 --> 00:16:16.575 likely because of the more

NOTE Confidence: 0.9478010325

 $00:16:16.575 \longrightarrow 00:16:18.275$  aggressive biology and presentation

NOTE Confidence: 0.9478010325

00:16:18.275 --> 00:16:20.728 of the equal indigenous Melanoma,

NOTE Confidence: 0.9478010325

 $00:16:20.730 \longrightarrow 00:16:22.809$  as well as patients who are immunosuppressed.

NOTE Confidence: 0.917876799444445

00:16:25.460 --> 00:16:27.196 I very want, I very briefly wanted

NOTE Confidence: 0.917876799444445

 $00:16:27.196 \longrightarrow 00:16:28.901$  to provide an overview of the

NOTE Confidence: 0.917876799444445

 $00{:}16{:}28.901 \dashrightarrow 00{:}16{:}30.416$  main risk factors for Melanoma.

NOTE Confidence: 0.917876799444445

 $00{:}16{:}30.420 \dashrightarrow 00{:}16{:}32.765$  So like any cancer we can consider

NOTE Confidence: 0.917876799444445

 $00:16:32.765 \longrightarrow 00:16:35.352$  those that are environmental and those

NOTE Confidence: 0.917876799444445

 $00:16:35.352 \longrightarrow 00:16:38.620$  that are hereditary. Next slide.

NOTE Confidence: 0.917876799444445

 $00{:}16{:}38.620 \dashrightarrow 00{:}16{:}40.786$  So for the environmental risk factors

NOTE Confidence: 0.917876799444445

 $00:16:40.786 \longrightarrow 00:16:42.697$  it's it's really all ultraviolet

NOTE Confidence: 0.917876799444445

 $00:16:42.697 \longrightarrow 00:16:45.525$  exposure and so we know that intermittent

 $00:16:45.525 \longrightarrow 00:16:47.536$  intense sun exposure throughout life

NOTE Confidence: 0.917876799444445

 $00{:}16{:}47.536 \dashrightarrow 00{:}16{:}49.444$  and increase the risk of Melanoma.

NOTE Confidence: 0.917876799444445

 $00:16:49.450 \longrightarrow 00:16:50.514$  As well as sunburns,

NOTE Confidence: 0.917876799444445

00:16:50.514 --> 00:16:51.844 and not just childhood sunburns,

NOTE Confidence: 0.917876799444445

 $00:16:51.850 \longrightarrow 00:16:54.295$  but also sunburns that occur

NOTE Confidence: 0.917876799444445

00:16:54.295 --> 00:16:55.762 cumulative cumulatively through

NOTE Confidence: 0.917876799444445

 $00{:}16{:}55.762 \dashrightarrow 00{:}16{:}57.450$  adolescence and a dulthood.

NOTE Confidence: 0.917876799444445 00:16:57.450 --> 00:16:58.222 And finally,

NOTE Confidence: 0.917876799444445

 $00{:}16{:}58.222 \dashrightarrow 00{:}16{:}59.766$  especially in young women,

NOTE Confidence: 0.917876799444445

 $00:16:59.770 \longrightarrow 00:17:01.590$  tanning beds have been associated

NOTE Confidence: 0.917876799444445

 $00{:}17{:}01.590 \dashrightarrow 00{:}17{:}03.410$  with increased odds of Melanoma.

NOTE Confidence: 0.946291582

 $00:17:05.850 \longrightarrow 00:17:07.746$  And now I'll discuss some of

NOTE Confidence: 0.946291582

 $00:17:07.746 \longrightarrow 00:17:09.010$  the hereditary risk factors.

NOTE Confidence: 0.946291582

 $00:17:09.010 \longrightarrow 00:17:11.716$  So having decreased melanin and increased

NOTE Confidence: 0.946291582

00:17:11.716 --> 00:17:14.528 tendency to burn such as fair skin,

NOTE Confidence: 0.946291582

 $00{:}17{:}14.530 \dashrightarrow 00{:}17{:}16.090$  freckling, blonde hair, red hair,

 $00:17:16.090 \longrightarrow 00:17:19.247$  light eyes are all associated with Melanoma.

NOTE Confidence: 0.946291582

 $00{:}17{:}19.250 \dashrightarrow 00{:}17{:}20.980$  In addition, having an increased

NOTE Confidence: 0.946291582

00:17:20.980 --> 00:17:22.364 number of pigmented lesions,

NOTE Confidence: 0.946291582

 $00:17:22.370 \longrightarrow 00:17:24.086$  the important one here is having

NOTE Confidence: 0.946291582

 $00:17:24.086 \longrightarrow 00:17:26.080$  over 100 nevi that really increases

NOTE Confidence: 0.946291582

 $00:17:26.080 \longrightarrow 00:17:28.045$  the risk of developing Melanoma.

NOTE Confidence: 0.946291582

 $00:17:28.050 \longrightarrow 00:17:29.702$  And I think it's important to have

NOTE Confidence: 0.946291582

 $00:17:29.702 \longrightarrow 00:17:31.650$  an idea of these inherent risk

NOTE Confidence: 0.946291582

 $00:17:31.650 \longrightarrow 00:17:33.620$  factors because the United States

NOTE Confidence: 0.946291582

 $00{:}17{:}33.620 \dashrightarrow 00{:}17{:}35.587$  Preventative Services Task Force does

NOTE Confidence: 0.946291582

 $00:17:35.587 \longrightarrow 00:17:37.087$  not recommend screening everybody,

NOTE Confidence: 0.946291582

00:17:37.090 --> 00:17:39.202 But it's important to keep in

NOTE Confidence: 0.946291582

 $00{:}17{:}39.202 \dashrightarrow 00{:}17{:}40.953$  mind those who have phenotypic

NOTE Confidence: 0.946291582

 $00:17:40.953 \longrightarrow 00:17:43.011$  risk factors for Melanoma as well

NOTE Confidence: 0.946291582

00:17:43.011 --> 00:17:44.970 as personal or family history.

 $00:17:44.970 \longrightarrow 00:17:45.490$  Next slide.

NOTE Confidence: 0.950988001333333

00:17:47.750 --> 00:17:49.448 So having a history of skin

NOTE Confidence: 0.950988001333333

00:17:49.448 --> 00:17:51.034 cancer increases your risk of

NOTE Confidence: 0.950988001333333

00:17:51.034 --> 00:17:52.626 developing subsequent skin cancers,

NOTE Confidence: 0.950988001333333

 $00{:}17{:}52.630 \dashrightarrow 00{:}17{:}54.226$  and this is true for Melanoma.

NOTE Confidence: 0.950988001333333

00:17:54.230 --> 00:17:56.054 As well as having a first

NOTE Confidence: 0.950988001333333

 $00:17:56.054 \longrightarrow 00:17:57.270$  degree relative with Melanoma,

NOTE Confidence: 0.950988001333333

 $00:17:57.270 \longrightarrow 00:18:00.201$  there are also genetic syndromes of

NOTE Confidence: 0.950988001333333

00:18:00.201 --> 00:18:02.056 kindreds who have Melanoma passed

NOTE Confidence: 0.950988001333333

 $00:18:02.056 \longrightarrow 00:18:04.310$  on from generation to generation.

NOTE Confidence: 0.950988001333333

 $00:18:04.310 \longrightarrow 00:18:06.753$  The most important one to know about

NOTE Confidence: 0.950988001333333

00:18:06.753 --> 00:18:09.679 clinically and the most common is the

NOTE Confidence: 0.950988001333333

00:18:09.679 --> 00:18:11.939 familial atypical multiple Melanoma syndrome.

NOTE Confidence: 0.950988001333333

 $00:18:11.940 \longrightarrow 00:18:13.998$  So these patients have hundreds of

NOTE Confidence: 0.950988001333333

00:18:13.998 --> 00:18:16.179 dysplastic appearing nevi and they're at

NOTE Confidence: 0.950988001333333

 $00{:}18{:}16.179 \dashrightarrow 00{:}18{:}18.054$ increased risk of developing Melanoma,

 $00:18:18.060 \longrightarrow 00:18:19.920$  but also pancreatic cancer.

NOTE Confidence: 0.950988001333333

 $00{:}18{:}19.920 \dashrightarrow 00{:}18{:}23.780$  And I think it's important to keep in mind

NOTE Confidence: 0.950988001333333

 $00:18:23.780 \longrightarrow 00:18:27.014$  who to think about screening for genetics.

NOTE Confidence: 0.950988001333333

 $00:18:27.020 \longrightarrow 00:18:28.320$  So we shouldn't send everyone

NOTE Confidence: 0.950988001333333

 $00:18:28.320 \longrightarrow 00:18:29.620$  who has a family history.

NOTE Confidence: 0.950988001333333

00:18:29.620 --> 00:18:31.676 So you want to keep in mind patients

NOTE Confidence: 0.950988001333333

 $00:18:31.676 \longrightarrow 00:18:33.692$  who have several members on one

NOTE Confidence: 0.950988001333333

 $00{:}18{:}33.692 \dashrightarrow 00{:}18{:}36.005$  side of the family with a Melanoma

NOTE Confidence: 0.950988001333333

 $00:18:36.005 \longrightarrow 00:18:38.687$  or if a family member had more than

NOTE Confidence: 0.950988001333333

 $00{:}18{:}38.687 \dashrightarrow 00{:}18{:}40.577$  one Melanoma and in particular.

NOTE Confidence: 0.950988001333333

 $00:18:40.580 \longrightarrow 00:18:43.188$  Anyone who comes from a family that has

NOTE Confidence: 0.950988001333333

00:18:43.188 --> 00:18:45.258 both Melanoma and pancreatic cancer,

NOTE Confidence: 0.950988001333333

 $00{:}18{:}45.260 \dashrightarrow 00{:}18{:}47.900$  that should be an important clue.

NOTE Confidence: 0.950988001333333

 $00{:}18{:}47.900 \dashrightarrow 00{:}18{:}49.580$  And we have seen many patients

NOTE Confidence: 0.950988001333333

00:18:49.580 --> 00:18:51.932 who have had several skin cancers,

 $00:18:51.932 \longrightarrow 00:18:52.940$  including melanomas.

NOTE Confidence: 0.950988001333333

 $00{:}18{:}52.940 \dashrightarrow 00{:}18{:}54.410$  But you really want to think

NOTE Confidence: 0.950988001333333

 $00:18:54.410 \longrightarrow 00:18:55.978$  about those that have had over 3,

NOTE Confidence: 0.950988001333333

 $00:18:55.980 \longrightarrow 00:18:57.344$  three or more melanomas,

NOTE Confidence: 0.950988001333333

 $00:18:57.344 \longrightarrow 00:18:59.049$  especially if the first one

NOTE Confidence: 0.950988001333333

 $00:18:59.049 \longrightarrow 00:19:00.618$  happened when they were young.

NOTE Confidence: 0.950988001333333

 $00:19:00.620 \longrightarrow 00:19:01.971$  So I'm now going to turn it

NOTE Confidence: 0.950988001333333

00:19:01.971 --> 00:19:03.619 over to my wonderful colleague,

NOTE Confidence: 0.950988001333333

00:19:03.620 --> 00:19:04.721 medical oncologist Dr.

NOTE Confidence: 0.95098800133333300:19:04.721 --> 00:19:05.088 Tran.

NOTE Confidence: 0.950988001333333

00:19:05.088 --> 00:19:07.950 To discuss how do we follow patients,

NOTE Confidence: 0.950988001333333

00:19:07.950 --> 00:19:09.948 especially those with low risk melanomas,

NOTE Confidence: 0.950988001333333

 $00:19:09.950 \longrightarrow 00:19:10.190$  Dr.

NOTE Confidence: 0.950988001333333

 $00{:}19{:}10.190 --> 00{:}19{:}10.430 \ \mathrm{Tran},$ 

NOTE Confidence: 0.950988001333333

 $00{:}19{:}10.430 --> 00{:}19{:}10.670 \ thank$ 

NOTE Confidence: 0.902926978

 $00:19:11.310 \longrightarrow 00:19:12.670$  you so much, Dr. Leventhal.

 $00:19:12.670 \longrightarrow 00:19:15.365$  So we typically see all Melanoma patients

NOTE Confidence: 0.902926978

 $00:19:15.365 \longrightarrow 00:19:17.988$  and follow up in medical oncology.

NOTE Confidence: 0.902926978

 $00:19:17.990 \longrightarrow 00:19:20.237$  And so we we typically follow these

NOTE Confidence: 0.902926978

00:19:20.237 --> 00:19:22.050 individuals for at least five

NOTE Confidence: 0.902926978

 $00:19:22.050 \longrightarrow 00:19:24.005$  years after their Melanoma surgery.

NOTE Confidence: 0.902926978

00:19:24.010 --> 00:19:26.124 Presuming that it's an early stage Melanoma,

NOTE Confidence: 0.902926978

00:19:26.130 --> 00:19:27.750 prognosis is typically very

NOTE Confidence: 0.902926978

 $00:19:27.750 \longrightarrow 00:19:29.370$  good with close surveillance.

NOTE Confidence: 0.902926978

 $00:19:29.370 \longrightarrow 00:19:30.770$  And we see these individuals,

NOTE Confidence: 0.902926978

 $00:19:30.770 \longrightarrow 00:19:32.624$  depending on their stage either every

NOTE Confidence: 0.902926978

00:19:32.624 --> 00:19:35.446 six to 12 months for the next five years

NOTE Confidence: 0.902926978

 $00:19:35.446 \longrightarrow 00:19:37.363$  and then subsequently at that point

NOTE Confidence: 0.902926978

 $00{:}19{:}37.363 \dashrightarrow 00{:}19{:}39.391$  considered handing over the reins to

NOTE Confidence: 0.902926978

 $00:19:39.391 \longrightarrow 00:19:41.204$  primary care for ongoing surveillance.

NOTE Confidence: 0.902926978

 $00:19:41.204 \longrightarrow 00:19:43.189$  And every visit we check

00:19:43.189 --> 00:19:44.810 complete blood cell count,

NOTE Confidence: 0.902926978

 $00{:}19{:}44.810 \dashrightarrow 00{:}19{:}47.890$  metabolic panel and an LDH as a

NOTE Confidence: 0.902926978

 $00:19:47.890 \longrightarrow 00:19:50.910$  surrogate tumor marker that we can

NOTE Confidence: 0.902926978

 $00:19:50.910 \longrightarrow 00:19:53.490$  assess for early Melanoma recurrences.

NOTE Confidence: 0.902926978

 $00:19:53.490 \longrightarrow 00:19:55.086$  And depending on the stage as well,

NOTE Confidence: 0.902926978

 $00:19:55.090 \longrightarrow 00:19:56.850$  for these early stage individuals,

NOTE Confidence: 0.902926978

 $00{:}19{:}56.850 \dashrightarrow 00{:}19{:}58.655$  consider getting an either an

NOTE Confidence: 0.902926978

 $00:19:58.655 \longrightarrow 00:20:00.930$  annual chest X-ray or CAT scans.

NOTE Confidence: 0.902926978

 $00{:}20{:}00.930 \dashrightarrow 00{:}20{:}03.105$  I think what's really important

NOTE Confidence: 0.902926978

 $00:20:03.105 \longrightarrow 00:20:06.249$  and helpful is that if the primary

NOTE Confidence: 0.902926978

 $00{:}20{:}06.250 \dashrightarrow 00{:}20{:}08.294$  provider determines that there

NOTE Confidence: 0.902926978

00:20:08.294 --> 00:20:10.849 is any suspected new symptoms,

NOTE Confidence: 0.902926978

 $00:20:10.850 \longrightarrow 00:20:13.294$  any worrisome symptoms concerning

NOTE Confidence: 0.902926978

00:20:13.294 --> 00:20:15.127 for distant recurrence,

NOTE Confidence: 0.902926978

00:20:15.130 --> 00:20:17.623 we should always keep in mind to have a

NOTE Confidence: 0.902926978

 $00:20:17.623 \longrightarrow 00:20:19.696$  low threshold for ordering additional

 $00:20:19.696 \longrightarrow 00:20:23.000$  imaging and if possible for early diagnosis.

NOTE Confidence: 0.902926978

 $00:20:23.000 \longrightarrow 00:20:24.092$  After five years,

NOTE Confidence: 0.902926978

 $00:20:24.092 \longrightarrow 00:20:26.276$  and during that time as well,

NOTE Confidence: 0.902926978

00:20:26.280 --> 00:20:29.668 we always have to consider age appropriate

NOTE Confidence: 0.902926978

 $00:20:29.668 \longrightarrow 00:20:31.744$  cancer screening and continue full

NOTE Confidence: 0.902926978

00:20:31.744 --> 00:20:33.952 body skin checks with the dermatologist.

NOTE Confidence: 0.944027375

00:20:38.730 --> 00:20:41.530 I'll take over and I'll introduce case two.

NOTE Confidence: 0.944027375

 $00:20:41.530 \longrightarrow 00:20:44.938$  We are presented here with a 76 year

NOTE Confidence: 0.944027375

 $00:20:44.938 \longrightarrow 00:20:48.253$  old male who has a right forearm

NOTE Confidence: 0.944027375

 $00:20:48.253 \longrightarrow 00:20:52.058$  lesion noted about a year ago he denied

NOTE Confidence: 0.944027375

00:20:52.058 --> 00:20:54.482 any recent change in pigmentation of

NOTE Confidence: 0.944027375

 $00:20:54.482 \longrightarrow 00:20:56.999$  the lesion or rapid recent growth.

NOTE Confidence: 0.944027375

 $00{:}20{:}57.000 \dashrightarrow 00{:}21{:}00.176$  He underwent a shave biopsy and

NOTE Confidence: 0.944027375

 $00:21:00.176 \longrightarrow 00:21:02.480$  pathology report revealed Melanoma,

NOTE Confidence: 0.944027375

 $00:21:02.480 \longrightarrow 00:21:06.440$  breast load thickness 2.3 millimeter.

 $00:21:06.440 \longrightarrow 00:21:09.156$  He reported a history of blistering sunburns.

NOTE Confidence: 0.944027375

 $00:21:09.160 \longrightarrow 00:21:11.716$  No history of tanning, but use.

NOTE Confidence: 0.944027375

 $00:21:11.720 \longrightarrow 00:21:13.800$  He does not have a history of Melanoma.

NOTE Confidence: 0.944027375

00:21:13.800 --> 00:21:15.480 His family history is also negative

NOTE Confidence: 0.944027375

00:21:15.480 --> 00:21:17.120 for Melanoma or non Melanoma,

NOTE Confidence: 0.944027375

 $00:21:17.120 \longrightarrow 00:21:21.579$  skin cancer and he retired from finance.

NOTE Confidence: 0.944027375

 $00:21:21.580 \longrightarrow 00:21:22.885$  On physical exam,

NOTE Confidence: 0.944027375

00:21:22.885 --> 00:21:25.495 he didn't have any evidence of

NOTE Confidence: 0.944027375

 $00{:}21{:}25.495 \dashrightarrow 00{:}21{:}26.994$ lymphadenopathies and his skin exam

NOTE Confidence: 0.944027375

 $00:21:26.994 \longrightarrow 00:21:28.863$  on the biopsy site of the right

NOTE Confidence: 0.944027375

00:21:28.863 --> 00:21:30.779 forearm showed no signs of infection,

NOTE Confidence: 0.944027375

00:21:30.780 --> 00:21:32.316 no residual pigmentation,

NOTE Confidence: 0.944027375

 $00:21:32.316 \longrightarrow 00:21:36.058$  no nodularity, no satellite lesions.

NOTE Confidence: 0.944027375

 $00:21:36.060 \longrightarrow 00:21:37.779$  Next slide please.

NOTE Confidence: 0.944027375

 $00:21:37.779 \longrightarrow 00:21:39.498$  So this case,

NOTE Confidence: 0.944027375

 $00:21:39.500 \longrightarrow 00:21:41.470$  as you've heard earlier as

00:21:41.470 --> 00:21:42.258 Jonathan presented,

NOTE Confidence: 0.944027375

00:21:42.260 --> 00:21:50.140 is actually a nodular Type A lesion Melanoma,

NOTE Confidence: 0.944027375 00:21:50.140 --> 00:21:50.468 so. NOTE Confidence: 0.944027375

00:21:50.468 --> 00:21:52.764 But this type requires a wide local

NOTE Confidence: 0.944027375

 $00{:}21{:}52.764 \dashrightarrow 00{:}21{:}55.287$  excision to to treat the primary lesion.

NOTE Confidence: 0.944027375

00:21:55.290 --> 00:21:57.910 The probability of nodal

NOTE Confidence: 0.944027375

 $00:21:57.910 \longrightarrow 00:22:00.530$  micrometastasis is approximately 20%.

NOTE Confidence: 0.944027375

00:22:00.530 --> 00:22:03.770 The work up will include labs just X-ray,

NOTE Confidence: 0.944027375

 $00:22:03.770 \longrightarrow 00:22:06.122$  EKG if needed.

NOTE Confidence: 0.944027375

 $00:22:06.122 \longrightarrow 00:22:09.250$  Depending on the remainder of

NOTE Confidence: 0.944027375

00:22:09.250 --> 00:22:11.330 the history and lymphosyntography

NOTE Confidence: 0.944027375

 $00:22:11.330 \longrightarrow 00:22:13.154$  there is an indication for Sentinel

NOTE Confidence: 0.944027375

 $00{:}22{:}13.154 \dashrightarrow 00{:}22{:}14.789$  node biopsy to determine staging

NOTE Confidence: 0.944027375

 $00:22:14.789 \longrightarrow 00:22:16.249$  and future therapy decision.

NOTE Confidence: 0.944027375

 $00:22:16.250 \longrightarrow 00:22:20.506$  In this case I'll turn it on to.

 $00:22:20.510 \longrightarrow 00:22:23.870$  Our colleague to discuss further.

NOTE Confidence: 0.944027375 00:22:23.870 --> 00:22:24.030 Hi, NOTE Confidence: 0.91208729

 $00:22:24.070 \longrightarrow 00:22:25.003$  I'm Kelly Olina,

NOTE Confidence: 0.91208729

 $00:22:25.003 \longrightarrow 00:22:27.558$  one of the surgical oncologist and I have

NOTE Confidence: 0.91208729

00:22:27.558 --> 00:22:29.905 the pleasure to work with doctors Kluger,

NOTE Confidence: 0.91208729

 $00{:}22{:}29.905 \dashrightarrow 00{:}22{:}32.950$  Tran and Leventhal on an everyday basis.

NOTE Confidence: 0.91208729

 $00:22:32.950 \longrightarrow 00:22:34.742$  So you know a lot of times when

NOTE Confidence: 0.91208729

00:22:34.742 --> 00:22:36.268 the patients first come in again,

NOTE Confidence: 0.91208729

 $00:22:36.270 \longrightarrow 00:22:38.461$  they come in really scared and that's

NOTE Confidence: 0.91208729

 $00:22:38.461 \longrightarrow 00:22:40.509$  really how we meet most people.

NOTE Confidence: 0.91208729

 $00:22:40.510 \longrightarrow 00:22:42.510$  They come in very uncertain.

NOTE Confidence: 0.91208729

 $00:22:42.510 \longrightarrow 00:22:44.526$  So again part of this is also to

NOTE Confidence: 0.91208729

 $00:22:44.526 \longrightarrow 00:22:46.047$  empower the primary care doctors

NOTE Confidence: 0.91208729

 $00:22:46.047 \longrightarrow 00:22:48.287$  on the line who know these patients

NOTE Confidence: 0.91208729

 $00:22:48.351 \longrightarrow 00:22:50.463$  inside and out and you know are more.

NOTE Confidence: 0.91208729

 $00:22:50.470 \longrightarrow 00:22:51.670$  More than just their doctors,

00:22:51.670 --> 00:22:53.420 you know, I think you guys really

NOTE Confidence: 0.91208729

 $00{:}22{:}53.420 \dashrightarrow 00{:}22{:}55.535$  know the the person just as well as

NOTE Confidence: 0.91208729

00:22:55.535 --> 00:22:57.390 any doctor can know their patients.

NOTE Confidence: 0.91208729

00:22:57.390 --> 00:22:58.038 So, you know,

NOTE Confidence: 0.91208729

 $00:22:58.038 \longrightarrow 00:22:59.550$  when patients come in to see me,

NOTE Confidence: 0.91208729

 $00:22:59.550 \longrightarrow 00:23:01.190$  the first thing that we do is we,

NOTE Confidence: 0.91208729

00:23:01.190 --> 00:23:01.710 you know,

NOTE Confidence: 0.91208729

 $00:23:01.710 \longrightarrow 00:23:03.530$  we explain to them how the depth

NOTE Confidence: 0.91208729

 $00:23:03.530 \longrightarrow 00:23:05.589$  of their Melanoma really impacts.

NOTE Confidence: 0.91208729

 $00:23:05.590 \longrightarrow 00:23:06.762$  But there's certain principles

NOTE Confidence: 0.91208729

 $00:23:06.762 \longrightarrow 00:23:08.830$  that we stick to no matter what.

NOTE Confidence: 0.91208729

 $00{:}23{:}08.830 \dashrightarrow 00{:}23{:}11.224$  So we talked about removing the Melanoma.

NOTE Confidence: 0.91208729

00:23:11.230 --> 00:23:13.666 We're not just removing the skin,

NOTE Confidence: 0.91208729

00:23:13.670 --> 00:23:14.950 we're removing the skin.

NOTE Confidence: 0.91208729

 $00:23:14.950 \longrightarrow 00:23:16.870$  We remove also the fatty tissue

00:23:16.927 --> 00:23:18.892 that that carries the lymphatics

NOTE Confidence: 0.91208729

 $00{:}23{:}18.892 \dashrightarrow 00{:}23{:}20.464$  through which Melanoma cells.

NOTE Confidence: 0.91208729

 $00{:}23{:}20.470 \dashrightarrow 00{:}23{:}23.374$  Can escape and it's actually based

NOTE Confidence: 0.91208729

 $00:23:23.374 \longrightarrow 00:23:25.976$  upon doing multiple trials that have

NOTE Confidence: 0.91208729

00:23:25.976 --> 00:23:27.886 been actually honed down studying

NOTE Confidence: 0.91208729

 $00:23:27.886 \longrightarrow 00:23:30.110$  thousands of patients over the year.

NOTE Confidence: 0.91208729

00:23:30.110 --> 00:23:30.472 Interestingly,

NOTE Confidence: 0.91208729

 $00:23:30.472 \longrightarrow 00:23:33.368$  in our attempts to make sure that the

NOTE Confidence: 0.91208729

 $00:23:33.368 \longrightarrow 00:23:35.547$  surgery becomes less and less morbid,

NOTE Confidence: 0.91208729

 $00:23:35.550 \longrightarrow 00:23:37.671$  we actually are now part of an

NOTE Confidence: 0.91208729

 $00:23:37.671 \longrightarrow 00:23:39.590$  international trial called the Melmark trial.

NOTE Confidence: 0.91208729

 $00:23:39.590 \longrightarrow 00:23:41.858$  So if any of your patients are coming in

NOTE Confidence: 0.91208729

00:23:41.858 --> 00:23:44.625 to see myself or Doctor Clune in our program,

NOTE Confidence: 0.91208729

 $00:23:44.630 \longrightarrow 00:23:45.606$  you may hear this,

NOTE Confidence: 0.91208729

 $00:23:45.606 \longrightarrow 00:23:46.826$  the mention of this trial.

NOTE Confidence: 0.91208729

 $00:23:46.830 \longrightarrow 00:23:48.528$  But again we're down to taking

 $00:23:48.528 \longrightarrow 00:23:50.550$  out about 1 to 2 centimeter.

NOTE Confidence: 0.91208729

 $00:23:50.550 \longrightarrow 00:23:52.495$  And that's really directly proportional

NOTE Confidence: 0.91208729

00:23:52.495 --> 00:23:55.429 to the depth of the Melanoma next,

NOTE Confidence: 0.9201268

00:23:57.670 --> 00:24:01.944 so you know. Laura had alluded to

NOTE Confidence: 0.9201268

 $00:24:01.944 \longrightarrow 00:24:04.272$  in this patient, you know we would

NOTE Confidence: 0.9201268

00:24:04.272 --> 00:24:05.937 strongly recommend you know this

NOTE Confidence: 0.9201268

00:24:05.937 --> 00:24:08.018 patient within the criterion of who

NOTE Confidence: 0.9201268

 $00:24:08.018 \longrightarrow 00:24:10.060$  benefits from having a Sentinel node.

NOTE Confidence: 0.9201268

 $00{:}24{:}10.060 \dashrightarrow 00{:}24{:}12.153$  And again in these patients we do

NOTE Confidence: 0.9201268

 $00:24:12.153 \longrightarrow 00:24:14.675$  a full lymph node exam and when we

NOTE Confidence: 0.9201268

00:24:14.675 --> 00:24:16.820 do not detect any palpable disease,

NOTE Confidence: 0.9201268

 $00:24:16.820 \longrightarrow 00:24:20.020$  we then say do they have microscopic disease.

NOTE Confidence: 0.9201268

 $00{:}24{:}20.020 \dashrightarrow 00{:}24{:}22.116$  Now just with any test that we would

NOTE Confidence: 0.9201268

00:24:22.116 --> 00:24:23.931 order if the patient isn't medically

NOTE Confidence: 0.9201268

 $00:24:23.931 \longrightarrow 00:24:27.016$  fit or if we're not going to act upon

00:24:27.016 --> 00:24:28.580 the additional staging information,

NOTE Confidence: 0.9201268

 $00{:}24{:}28.580 \dashrightarrow 00{:}24{:}30.020$  I would never recommend that we

NOTE Confidence: 0.9201268

 $00:24:30.020 \longrightarrow 00:24:30.740$  do a procedure.

NOTE Confidence: 0.9201268

 $00:24:30.740 \longrightarrow 00:24:32.225$  Unless we're going to do

NOTE Confidence: 0.9201268

 $00:24:32.225 \longrightarrow 00:24:33.413$  something with that result.

NOTE Confidence: 0.9201268

00:24:33.420 --> 00:24:35.723 So for patients who have no high

NOTE Confidence: 0.9201268

 $00:24:35.723 \longrightarrow 00:24:37.962$  risk features in a thin Melanoma

NOTE Confidence: 0.9201268

 $00:24:37.962 \longrightarrow 00:24:39.534$  less than .8 millimeters,

NOTE Confidence: 0.9201268

 $00{:}24{:}39.540 \dashrightarrow 00{:}24{:}41.382$  their lymph node risk is actually

NOTE Confidence: 0.9201268

 $00:24:41.382 \longrightarrow 00:24:43.658$  lower than the risk of the procedure.

NOTE Confidence: 0.9201268

 $00:24:43.660 \longrightarrow 00:24:47.098$  So we don't usually offer it in that setting.

NOTE Confidence: 0.9201268

00:24:47.100 --> 00:24:48.960 There's a newer indication of these

NOTE Confidence: 0.9201268

 $00{:}24{:}48.960 \dashrightarrow 00{:}24{:}51.272$  in between .8 and 1 millimeter where

NOTE Confidence: 0.9201268

 $00:24:51.272 \longrightarrow 00:24:53.300$  we begin to have that discussion.

NOTE Confidence: 0.9201268

00:24:53.300 --> 00:24:56.216 But again, this continues to be a Gray area,

NOTE Confidence: 0.9201268

 $00:24:56.220 \longrightarrow 00:24:58.280$  the 1 to 4 millimeter.

 $00:24:58.280 \longrightarrow 00:24:59.911$  Range and even I would say the

NOTE Confidence: 0.9201268

00:24:59.911 --> 00:25:01.240 greater than 4 millimeter,

NOTE Confidence: 0.9201268

00:25:01.240 --> 00:25:02.890 I really do push patients because

NOTE Confidence: 0.9201268

 $00:25:02.890 \longrightarrow 00:25:05.085$  I do feel this information is

NOTE Confidence: 0.9201268

 $00:25:05.085 \longrightarrow 00:25:06.117$  incredibly important.

NOTE Confidence: 0.9201268

00:25:06.120 --> 00:25:07.565 There's some nomograms that you

NOTE Confidence: 0.9201268

 $00:25:07.565 \longrightarrow 00:25:09.323$  can direct your patients to or

NOTE Confidence: 0.9201268

 $00{:}25{:}09.323 \dashrightarrow 00{:}25{:}10.877$  look up yourself Out of curiosity,

NOTE Confidence: 0.9201268

 $00:25:10.880 \longrightarrow 00:25:12.275$  one more mimics the population

NOTE Confidence: 0.9201268

 $00{:}25{:}12.275 \dashrightarrow 00{:}25{:}14.035$  we see in Connecticut and that

NOTE Confidence: 0.9201268

 $00:25:14.035 \longrightarrow 00:25:15.580$  was developed from Memorial Sloan

NOTE Confidence: 0.9201268

 $00{:}25{:}15.580 \dashrightarrow 00{:}25{:}17.519$  Kettering is now almost 20 years old.

NOTE Confidence: 0.9201268

 $00{:}25{:}17.520 \dashrightarrow 00{:}25{:}19.281$  The other one is from Australia, however.

NOTE Confidence: 0.9201268

 $00{:}25{:}19.281 \dashrightarrow 00{:}25{:}21.207$  Melanoma in Australia is a little

NOTE Confidence: 0.9201268

 $00:25:21.207 \longrightarrow 00:25:22.967$  bit different than what we see

00:25:22.967 --> 00:25:23.959 in the United States,

NOTE Confidence: 0.9201268

 $00:25:23.960 \longrightarrow 00:25:25.778$  so again I usually have people

NOTE Confidence: 0.9201268

 $00:25:25.778 \longrightarrow 00:25:27.400$  take a look at both,

NOTE Confidence: 0.9201268

 $00:25:27.400 \longrightarrow 00:25:29.710$  but it gives them kind of an

NOTE Confidence: 0.9201268

 $00:25:29.710 \longrightarrow 00:25:31.730$  idea where their risk is next.

NOTE Confidence: 0.9201268

 $00:25:31.730 \longrightarrow 00:25:33.170$  When we talk about what a

NOTE Confidence: 0.9201268

 $00:25:33.170 \longrightarrow 00:25:34.130$  central node biopsy is,

NOTE Confidence: 0.9201268

 $00:25:34.130 \longrightarrow 00:25:35.938$  again some principles really

NOTE Confidence: 0.9201268

 $00{:}25{:}35.938 \dashrightarrow 00{:}25{:}38.650$  overlap with that of breast cancer.

NOTE Confidence: 0.9201268

00:25:38.650 --> 00:25:41.930 However, each one of us is completely unique.

NOTE Confidence: 0.9201268

 $00{:}25{:}41.930 \dashrightarrow 00{:}25{:}43.288$  And I tell patients all the time,

NOTE Confidence: 0.9201268

00:25:43.290 --> 00:25:44.326 if you don't know where you're going,

NOTE Confidence: 0.9201268

 $00:25:44.330 \longrightarrow 00:25:45.485$  you need a map to get there.

NOTE Confidence: 0.9201268

 $00:25:45.490 \longrightarrow 00:25:47.686$  So that's what the lymphocentigraphy is.

NOTE Confidence: 0.9201268

 $00:25:47.690 \longrightarrow 00:25:49.250$  So we inject 2 dyes,

NOTE Confidence: 0.9201268

 $00:25:49.250 \longrightarrow 00:25:50.858$  one's a blue dye and the other one

 $00:25:50.858 \longrightarrow 00:25:52.568$  has a little bit of technetium.

NOTE Confidence: 0.9201268

 $00:25:52.570 \longrightarrow 00:25:54.712$  So it's got a little bit of

NOTE Confidence: 0.9201268

00:25:54.712 --> 00:25:55.948 radioactivity that's completely saved

NOTE Confidence: 0.9201268

 $00:25:55.948 \longrightarrow 00:25:57.803$  out of the system within six hours.

NOTE Confidence: 0.9201268

 $00:25:57.810 \longrightarrow 00:25:59.642$  And what that does is it tells me

NOTE Confidence: 0.9201268

 $00:25:59.642 \longrightarrow 00:26:01.385$  which nodal station to look for, so.

NOTE Confidence: 0.9201268

 $00:26:01.385 \longrightarrow 00:26:02.030$  In this case,

NOTE Confidence: 0.9201268

 $00:26:02.030 \longrightarrow 00:26:03.849$  it's right in the middle of the belly.

NOTE Confidence: 0.9201268

00:26:03.850 --> 00:26:04.520 And again,

NOTE Confidence: 0.9201268

 $00:26:04.520 \longrightarrow 00:26:05.860$  because we're looking for

NOTE Confidence: 0.9201268

00:26:05.860 --> 00:26:06.530 microscopic disease,

NOTE Confidence: 0.9201268

 $00:26:06.530 \longrightarrow 00:26:08.250$  we have to figure out where to go.

NOTE Confidence: 0.9201268

 $00{:}26{:}08.250 \dashrightarrow 00{:}26{:}09.866$  And then what we do in the operating

NOTE Confidence: 0.9201268

00:26:09.866 --> 00:26:11.606 room is we have a little handheld

NOTE Confidence: 0.9201268

00:26:11.606 --> 00:26:12.891 Geiger counter and that really

 $00:26:12.945 \longrightarrow 00:26:14.561$  helps me hone in on which of the

NOTE Confidence: 0.9201268

 $00{:}26{:}14.561 \dashrightarrow 00{:}26{:}18.490$  lymph nodes to remove next and

NOTE Confidence: 0.9201268

 $00:26:18.490 \longrightarrow 00:26:22.170$  why is that so important click.

NOTE Confidence: 0.9201268

 $00:26:22.170 \longrightarrow 00:26:24.802$  That's because it is still

NOTE Confidence: 0.9201268

 $00:26:24.802 \longrightarrow 00:26:27.592$  our best prognostic value in.

NOTE Confidence: 0.9201268

 $00{:}26{:}27.600 \dashrightarrow 00{:}26{:}29.520$  Looking at recurrence and death from

NOTE Confidence: 0.9201268

 $00:26:29.520 \longrightarrow 00:26:32.027$  Melanoma and this was one of the most

NOTE Confidence: 0.9201268

 $00{:}26{:}32.027 \dashrightarrow 00{:}26{:}33.487$  remarkable trials that's been done

NOTE Confidence: 0.9201268

 $00{:}26{:}33.487 \dashrightarrow 00{:}26{:}35.720$  in the field of surgery for Melanoma.

NOTE Confidence: 0.9201268

00:26:35.720 --> 00:26:37.995 So even though it's an additional surgery,

NOTE Confidence: 0.9355531336

 $00:26:38.000 \longrightarrow 00:26:40.142$  it gives us still more valuable

NOTE Confidence: 0.9355531336

 $00:26:40.142 \longrightarrow 00:26:42.727$  information than that of some of these

NOTE Confidence: 0.9355531336

 $00:26:42.727 \longrightarrow 00:26:44.905$  gene expression profile arrays that you

NOTE Confidence: 0.9355531336

 $00:26:44.905 \longrightarrow 00:26:49.350$  may also have patients come in with next.

NOTE Confidence: 0.9355531336

00:26:49.350 --> 00:26:51.465 And we used to actually take out all of

NOTE Confidence: 0.9355531336

 $00:26:51.465 \longrightarrow 00:26:53.745$  the lymph nodes when we had patients who

 $00:26:53.745 \longrightarrow 00:26:55.750$  would even have microscopic disease.

NOTE Confidence: 0.9355531336

 $00:26:55.750 \longrightarrow 00:26:57.310$  However, there were two trials,

NOTE Confidence: 0.9355531336

 $00:26:57.310 \longrightarrow 00:27:00.068$  one in Germany and 1 multicenter in

NOTE Confidence: 0.9355531336

00:27:00.068 --> 00:27:02.668 the United States that showed that

NOTE Confidence: 0.9355531336

 $00:27:02.668 \longrightarrow 00:27:04.898$  doing this additional surgery did

NOTE Confidence: 0.9355531336

00:27:04.898 --> 00:27:07.802 not improve a patient's survival

NOTE Confidence: 0.9355531336

 $00:27:07.802 \longrightarrow 00:27:10.867$  specifically with their Melanoma survival.

NOTE Confidence: 0.9355531336

 $00:27:10.870 \longrightarrow 00:27:13.276$  So what we do is we.

NOTE Confidence: 0.9355531336

00:27:13.280 --> 00:27:15.079 We remove lymph nodes only if someone

NOTE Confidence: 0.9355531336

 $00{:}27{:}15.079 \longrightarrow 00{:}27{:}16.991$  comes in and we can actually feel

NOTE Confidence: 0.9355531336

 $00:27:16.991 \longrightarrow 00:27:18.623$  the lymph nodes and then there's

NOTE Confidence: 0.9355531336

 $00{:}27{:}18.680 \dashrightarrow 00{:}27{:}20.120$  some more selection criterion that

NOTE Confidence: 0.9355531336

 $00{:}27{:}20.120 \dashrightarrow 00{:}27{:}22.398$  would be a little bit more unusual.

NOTE Confidence: 0.9355531336

00:27:22.398 --> 00:27:23.236 And again,

NOTE Confidence: 0.9355531336

 $00:27:23.236 \longrightarrow 00:27:25.750$  the important thing is we actually

 $00:27:25.827 \longrightarrow 00:27:27.959$  now have effective treatments.

NOTE Confidence: 0.9355531336

 $00:27:27.960 \longrightarrow 00:27:30.560$  So I'll next slide,

NOTE Confidence: 0.9355531336

 $00:27:30.560 \longrightarrow 00:27:32.765$  so Doctor Tran will talk a little

NOTE Confidence: 0.9355531336

 $00:27:32.765 \longrightarrow 00:27:34.986$  bit about this about what we

NOTE Confidence: 0.9355531336

00:27:34.986 --> 00:27:36.598 call adjuvant immune therapy,

NOTE Confidence: 0.9355531336

 $00:27:36.600 \longrightarrow 00:27:37.890$  which is a conversation that

NOTE Confidence: 0.9355531336

 $00:27:37.890 \longrightarrow 00:27:39.480$  many of our patients now have.

NOTE Confidence: 0.878759514285714

00:27:42.200 --> 00:27:44.517 So as Doctor Alina had already discussed,

NOTE Confidence: 0.878759514285714

00:27:44.520 --> 00:27:48.003 one of the key decisions here is you know

NOTE Confidence: 0.878759514285714

 $00:27:48.003 \longrightarrow 00:27:51.396$  whether to pursue Sentinel lymph node biopsy.

NOTE Confidence: 0.878759514285714

 $00:27:51.400 \longrightarrow 00:27:53.830$  And so my next part is kind of talking

NOTE Confidence: 0.878759514285714

 $00:27:53.830 \longrightarrow 00:27:56.697$  about what how can we move the needle

NOTE Confidence: 0.878759514285714

 $00{:}27{:}56.697 \dashrightarrow 00{:}27{:}58.485$  further decrease recurrence risk in

NOTE Confidence: 0.878759514285714

00:27:58.485 --> 00:28:00.718 these patients who may have a positive

NOTE Confidence: 0.878759514285714

00:28:00.718 --> 00:28:02.988 lymph node or otherwise thickened

NOTE Confidence: 0.878759514285714

 $00:28:02.988 \longrightarrow 00:28:05.423$  melanomas or ulcerated melanomas which

 $00:28:05.423 \longrightarrow 00:28:07.970$  have a higher risk for recurrence.

NOTE Confidence: 0.878759514285714

 $00{:}28{:}07.970 \dashrightarrow 00{:}28{:}10.530$  And so this this chart just kind of

NOTE Confidence: 0.878759514285714

 $00:28:10.530 \longrightarrow 00:28:12.837$  displays for the five year Melanoma

NOTE Confidence: 0.878759514285714

00:28:12.837 --> 00:28:15.237 specific survival for the higher risk

NOTE Confidence: 0.878759514285714

 $00{:}28{:}15.303 \dashrightarrow 00{:}28{:}17.911$  stage twos which are included two B's and

NOTE Confidence: 0.878759514285714

 $00:28:17.911 \longrightarrow 00:28:20.684$  two C's as well as the stage 3 melanomas.

NOTE Confidence: 0.878759514285714

 $00:28:20.690 \longrightarrow 00:28:23.705$  And as you can see there are actually some

NOTE Confidence: 0.878759514285714

 $00{:}28{:}23.705 \dashrightarrow 00{:}28{:}26.407$  subsets of stage 3 melanomas that do much

NOTE Confidence: 0.878759514285714

 $00{:}28{:}26.407 \dashrightarrow 00{:}28{:}29.410$  better than the higher risk stage two events.

NOTE Confidence: 0.878759514285714

 $00:28:29.410 \longrightarrow 00:28:31.450$  So for stage 3A melanomas,

NOTE Confidence: 0.878759514285714

 $00:28:31.450 \longrightarrow 00:28:33.438$  the five year Melanoma

NOTE Confidence: 0.878759514285714

 $00:28:33.438 \longrightarrow 00:28:35.277$  specific survival is 93%.

NOTE Confidence: 0.878759514285714

 $00{:}28{:}35.277 \dashrightarrow 00{:}28{:}38.400$  And so compare that to a stage 2C where

NOTE Confidence: 0.878759514285714

 $00:28:38.486 \longrightarrow 00:28:41.752$  the where that survival decreases to 82%.

NOTE Confidence: 0.878759514285714

 $00:28:41.752 \longrightarrow 00:28:43.862$  So when you talk about

00:28:43.862 --> 00:28:45.128 adjuvant immune therapy,

NOTE Confidence: 0.878759514285714

 $00:28:45.130 \longrightarrow 00:28:47.434$  we're always talking about one additional

NOTE Confidence: 0.878759514285714

 $00:28:47.434 \longrightarrow 00:28:50.177$  year of some sort of systemic treatment

NOTE Confidence: 0.878759514285714

00:28:50.177 --> 00:28:52.823 either in the form of immune therapy

NOTE Confidence: 0.878759514285714

 $00:28:52.891 \longrightarrow 00:28:55.994$  or targeted therapy with the goal of

NOTE Confidence: 0.878759514285714

00:28:55.994 --> 00:28:58.324 trying to decrease recurrence risk.

NOTE Confidence: 0.878759514285714

 $00:28:58.330 \longrightarrow 00:29:00.351$  So in terms of adjuvant, oh,

NOTE Confidence: 0.878759514285714

00:29:00.351 --> 00:29:02.738 I'm sorry, if you could go back.

NOTE Confidence: 0.878759514285714

 $00:29:02.740 \longrightarrow 00:29:05.134$  In terms of adjuvant immune therapy options,

NOTE Confidence: 0.878759514285714

 $00:29:05.140 \longrightarrow 00:29:07.018$  there are two FDA approved drugs,

NOTE Confidence: 0.878759514285714

 $00{:}29{:}07.020 \dashrightarrow 00{:}29{:}09.155$ temporalismab also known as Keytruda

NOTE Confidence: 0.878759514285714

00:29:09.155 --> 00:29:12.178 which is given every three to six weeks

NOTE Confidence: 0.878759514285714

 $00{:}29{:}12.180 \dashrightarrow 00{:}29{:}14.884$ versus new volume M also known as Opdiva

NOTE Confidence: 0.878759514285714

 $00:29:14.884 \longrightarrow 00:29:17.700$  which is given every two to four weeks.

NOTE Confidence: 0.878759514285714

00:29:17.700 --> 00:29:20.180 Again these are all intravenous,

NOTE Confidence: 0.878759514285714

 $00:29:20.180 \longrightarrow 00:29:22.568$  they have similar side effect profiles

 $00:29:22.568 \longrightarrow 00:29:25.310$  and they both target the PD1 protein.

NOTE Confidence: 0.878759514285714

 $00:29:25.310 \longrightarrow 00:29:27.610$  To help stimulate the immune

NOTE Confidence: 0.878759514285714

 $00{:}29{:}27.610 \dashrightarrow 00{:}29{:}28.990$ response against Melanoma.

NOTE Confidence: 0.878759514285714

 $00:29:28.990 \longrightarrow 00:29:32.554$  Both of these drugs are considered

NOTE Confidence: 0.878759514285714

 $00{:}29{:}32.554 \dashrightarrow 00{:}29{:}34.880$  interchangeable in stage 2 Melanoma and

NOTE Confidence: 0.878759514285714

 $00:29:34.880 \longrightarrow 00:29:38.428$  as well as stage 3 melanomas In general,

NOTE Confidence: 0.878759514285714

 $00:29:38.430 \longrightarrow 00:29:41.787$  it's been known to have a decrease of 40%.

NOTE Confidence: 0.878759514285714

 $00:29:41.790 \longrightarrow 00:29:43.070$  In terms of the recurrence,

NOTE Confidence: 0.878759514285714

00:29:43.070 --> 00:29:46.526 however, there is no impact upon

NOTE Confidence: 0.878759514285714

 $00:29:46.526 \longrightarrow 00:29:48.830$  improving survival to date.

NOTE Confidence: 0.878759514285714 00:29:48.830 --> 00:29:50.790 Next slide. NOTE Confidence: 0.878759514285714

 $00:29:50.790 \longrightarrow 00:29:53.250$  As an alternative to immune therapy

NOTE Confidence: 0.878759514285714

00:29:53.250 --> 00:29:56.030 for individuals with a B RAF mutation,

NOTE Confidence: 0.878759514285714

 $00:29:56.030 \longrightarrow 00:29:59.550$  mainly V600E or V600K mutations,

NOTE Confidence: 0.878759514285714

 $00:29:59.550 \longrightarrow 00:30:01.660$  which are present in about

00:30:01.660 --> 00:30:03.348 half of cutaneous melanomas,

NOTE Confidence: 0.878759514285714

 $00{:}30{:}03.350 \dashrightarrow 00{:}30{:}06.030$  there is additional alternative

NOTE Confidence: 0.878759514285714

 $00:30:06.030 \longrightarrow 00:30:08.830$  adjuvant therapy in the form of B,

NOTE Confidence: 0.878759514285714

00:30:08.830 --> 00:30:10.286 RAF and MECH inhibitors,

NOTE Confidence: 0.878759514285714

 $00:30:10.286 \longrightarrow 00:30:12.106$  so drabrafnib and tremet NIB,

NOTE Confidence: 0.878759514285714

 $00:30:12.110 \longrightarrow 00:30:14.710$  which are both oral medications.

NOTE Confidence: 0.878759514285714

 $00:30:14.710 \longrightarrow 00:30:17.830$  Either given BID or daily respectively.

NOTE Confidence: 0.878759514285714

 $00:30:17.830 \longrightarrow 00:30:19.785$  And these medications are approved

NOTE Confidence: 0.878759514285714

 $00{:}30{:}19.785 --> 00{:}30{:}22.070$  not in the stage 22 setting,

NOTE Confidence: 0.878759514285714

 $00:30:22.070 \longrightarrow 00:30:25.384$  but in the stage 3 setting for individuals

NOTE Confidence: 0.878759514285714

 $00:30:25.384 \longrightarrow 00:30:28.269$  with lymph node positive Melanoma,

NOTE Confidence: 0.878759514285714

 $00:30:28.270 \longrightarrow 00:30:30.050$  where it's been shown to

NOTE Confidence: 0.878759514285714

 $00:30:30.050 \longrightarrow 00:30:31.830$  reduce recurrence risk by half.

NOTE Confidence: 0.878759514285714

 $00{:}30{:}31.830 --> 00{:}30{:}33.690$  But unlike immune the rapy,

NOTE Confidence: 0.878759514285714

 $00:30:33.690 \longrightarrow 00:30:36.015$  it has been demonstrated to

NOTE Confidence: 0.878759514285714

 $00{:}30{:}36.015 \dashrightarrow 00{:}30{:}38.470$  impact overall survival as well.

 $00:30:38.470 \longrightarrow 00:30:40.790$  Next.

NOTE Confidence: 0.878759514285714

 $00:30:40.790 \longrightarrow 00:30:42.330$  So for these individuals

NOTE Confidence: 0.878759514285714

 $00:30:42.330 \longrightarrow 00:30:43.870$  with higher risk melanomas,

NOTE Confidence: 0.878759514285714

 $00:30:43.870 \longrightarrow 00:30:45.486$  we typically again follow

NOTE Confidence: 0.878759514285714

 $00:30:45.486 \longrightarrow 00:30:47.506$  them closely for five years,

NOTE Confidence: 0.878759514285714

 $00:30:47.510 \longrightarrow 00:30:49.010$  but because of our higher

NOTE Confidence: 0.878759514285714

 $00:30:49.010 \longrightarrow 00:30:49.910$  risk for recurrences,

NOTE Confidence: 0.878759514285714

 $00{:}30{:}49.910 \dashrightarrow 00{:}30{:}53.441$  we see them more frequently and we also

NOTE Confidence: 0.878759514285714

 $00{:}30{:}53.441 \dashrightarrow 00{:}30{:}55.463$  do imaging more frequently as well.

NOTE Confidence: 0.878759514285714

 $00:30:55.470 \dashrightarrow 00:30:57.105$  And these imaging can typically

NOTE Confidence: 0.878759514285714

00:30:57.105 --> 00:30:59.429 include a CAT scan of the chest,

NOTE Confidence: 0.878759514285714 00:30:59.430 --> 00:30:59.788 abdomen,

NOTE Confidence: 0.878759514285714

00:30:59.788 --> 00:31:00.146 pelvis.

NOTE Confidence: 0.878759514285714

 $00{:}31{:}00.146 \dashrightarrow 00{:}31{:}02.652$  And I think the main point very

NOTE Confidence: 0.878759514285714

 $00{:}31{:}02.652 \dashrightarrow 00{:}31{:}04.362$  similar to early stage melanomas

 $00:31:04.362 \longrightarrow 00:31:06.282$  is that as a primary care

NOTE Confidence: 0.93252186952381

 $00:31:06.349 \longrightarrow 00:31:07.820$  physician, it's always.

NOTE Confidence: 0.93252186952381

 $00:31:07.820 \longrightarrow 00:31:09.895$  Very helpful to screen these

NOTE Confidence: 0.93252186952381

00:31:09.895 --> 00:31:12.500 patients for any atypical symptoms,

NOTE Confidence: 0.93252186952381

 $00:31:12.500 \longrightarrow 00:31:14.552$  red new red flag symptoms because

NOTE Confidence: 0.93252186952381

 $00:31:14.552 \longrightarrow 00:31:16.900$  again if we can detect these,

NOTE Confidence: 0.93252186952381

 $00:31:16.900 \longrightarrow 00:31:19.696$  if we can diagnose these earlier

NOTE Confidence: 0.93252186952381

 $00:31:19.700 \longrightarrow 00:31:21.965$  outcomes are much better potentially

NOTE Confidence: 0.93252186952381

00:31:21.965 --> 00:31:23.777 if it's localized recurrences,

NOTE Confidence: 0.93252186952381

 $00:31:23.780 \longrightarrow 00:31:26.405$  they can still undergo A

NOTE Confidence: 0.93252186952381

 $00{:}31{:}26.405 \dashrightarrow 00{:}31{:}27.980$  potentially curative resection.

NOTE Confidence: 0.93252186952381

 $00{:}31{:}27.980 \dashrightarrow 00{:}31{:}29.780$  The most important thing even after

NOTE Confidence: 0.93252186952381

 $00:31:29.780 \longrightarrow 00:31:31.837$  five years is that these individuals

NOTE Confidence: 0.93252186952381

 $00:31:31.837 \longrightarrow 00:31:34.237$  still see the dermatologist still have

NOTE Confidence: 0.93252186952381

 $00:31:34.237 \longrightarrow 00:31:36.039$  age appropriate cancer screening.

NOTE Confidence: 0.93252186952381

 $00:31:36.040 \longrightarrow 00:31:38.440$  And while we only see these individuals

 $00:31:38.440 \longrightarrow 00:31:41.560$  for five years in medical oncology,

NOTE Confidence: 0.93252186952381

 $00:31:41.560 \longrightarrow 00:31:43.618$  it's so important to keep a

NOTE Confidence: 0.93252186952381

00:31:43.618 --> 00:31:44.990 low threshold for additional

NOTE Confidence: 0.93252186952381

 $00:31:45.058 \longrightarrow 00:31:46.960$  work up if there's any concern.

NOTE Confidence: 0.93252186952381

 $00:31:46.960 \longrightarrow 00:31:49.008$  And so the graph at the bottom here

NOTE Confidence: 0.93252186952381

 $00:31:49.008 \longrightarrow 00:31:51.556$  is just a representative graph from

NOTE Confidence: 0.93252186952381

00:31:51.556 --> 00:31:54.101 the adjuvant trials of Jabrachno

NOTE Confidence: 0.93252186952381

00:31:54.101 --> 00:31:56.586 Ventremett showing that at 60 months

NOTE Confidence: 0.93252186952381

 $00:31:56.586 \longrightarrow 00:31:58.920$  which is equivalent to five years

NOTE Confidence: 0.93252186952381

 $00{:}31{:}58.920 \dashrightarrow 00{:}32{:}00.852$  although the recurrences plateau.

NOTE Confidence: 0.93252186952381

 $00:32:00.852 \longrightarrow 00:32:03.750$  There is still a few recurrences

NOTE Confidence: 0.93252186952381

 $00:32:03.823 \longrightarrow 00:32:06.499$  afterwards and so even despite completing

NOTE Confidence: 0.93252186952381

 $00{:}32{:}06.499 \dashrightarrow 00{:}32{:}09.968$ 5 years without any recurrence of disease,

NOTE Confidence: 0.93252186952381

 $00:32:09.970 \longrightarrow 00:32:12.028$  there's still a possibility and so that

NOTE Confidence: 0.93252186952381

00:32:12.028 --> 00:32:14.770 has to be something that is factored in,

 $00:32:14.770 \longrightarrow 00:32:16.118$  particularly if a patient

NOTE Confidence: 0.93252186952381

00:32:16.118 --> 00:32:17.129 develops new symptoms,

NOTE Confidence: 0.93252186952381

 $00:32:17.130 \longrightarrow 00:32:20.410$  New lymph adenopathy next.

NOTE Confidence: 0.919378585

 $00:32:22.570 \longrightarrow 00:32:24.442$  So when we talk about individuals

NOTE Confidence: 0.919378585

 $00:32:24.442 \longrightarrow 00:32:25.690$  with high risk disease,

NOTE Confidence: 0.919378585

 $00:32:25.690 \longrightarrow 00:32:27.490$  adjuvant therapy isn't the

NOTE Confidence: 0.919378585

 $00:32:27.490 \longrightarrow 00:32:29.290$  correct answer for everyone.

NOTE Confidence: 0.919378585

 $00:32:29.290 \longrightarrow 00:32:32.110$  We have to individualize the and

NOTE Confidence: 0.919378585

 $00:32:32.110 \longrightarrow 00:32:34.569$  personalize these decisions based on age,

NOTE Confidence: 0.919378585

00:32:34.570 --> 00:32:37.290 comorbidities, what stage they are,

NOTE Confidence: 0.919378585

 $00:32:37.290 \longrightarrow 00:32:40.138$  going back to the fact that some stage

NOTE Confidence: 0.919378585

 $00:32:40.138 \longrightarrow 00:32:43.329$  threes act even better than some stage twos.

NOTE Confidence: 0.919378585

 $00{:}32{:}43.330 \dashrightarrow 00{:}32{:}45.742$  Also the risk of toxicities as

NOTE Confidence: 0.919378585

00:32:45.742 --> 00:32:47.915 well immune therapies can often

NOTE Confidence: 0.919378585

00:32:47.915 --> 00:32:50.365 times lead to permanent toxicities,

NOTE Confidence: 0.919378585

 $00:32:50.370 \longrightarrow 00:32:52.666$  endocrinopathies that require lifelong

 $00:32:52.666 \longrightarrow 00:32:55.536$  hormone replacement or steroid replacement

NOTE Confidence: 0.919378585

 $00{:}32{:}55.536 \dashrightarrow 00{:}32{:}58.108$  for example versus reversible toxicities,

NOTE Confidence: 0.919378585

 $00:32:58.108 \longrightarrow 00:33:02.172$  more so in the case of oral targeted

NOTE Confidence: 0.919378585

 $00:33:02.172 \longrightarrow 00:33:05.610$  therapies with B raft neck inhibitors.

NOTE Confidence: 0.919378585

 $00:33:05.610 \longrightarrow 00:33:08.364$  We also have to factor in quality of life

NOTE Confidence: 0.919378585

 $00:33:08.364 \longrightarrow 00:33:11.320$  as well with some of these side effects.

NOTE Confidence: 0.919378585

 $00:33:11.320 \longrightarrow 00:33:13.651$  And then whether or not all of this is

NOTE Confidence: 0.919378585

00:33:13.651 --> 00:33:15.878 and what we're doing makes any impact

NOTE Confidence: 0.919378585

00:33:15.878 --> 00:33:17.676 in terms of how long people live,

NOTE Confidence: 0.919378585

 $00{:}33{:}17.680 \dashrightarrow 00{:}33{:}20.600$  which is our ultimate endpoint.

NOTE Confidence: 0.919378585

 $00{:}33{:}20.600 \dashrightarrow 00{:}33{:}23.025$  We have some interesting upcoming

NOTE Confidence: 0.919378585

 $00{:}33{:}23.025 \dashrightarrow 00{:}33{:}25.512$  clinical trials here that many of

NOTE Confidence: 0.919378585

 $00{:}33{:}25.512 \dashrightarrow 00{:}33{:}27.920$  you might have heard in the news.

NOTE Confidence: 0.919378585

 $00:33:27.920 \longrightarrow 00:33:30.111$  We will be opening the phase three

NOTE Confidence: 0.919378585

 $00:33:30.111 \longrightarrow 00:33:32.279$  portion of our personalized mRNA

 $00:33:32.279 \longrightarrow 00:33:34.673$  vaccine for Merck in combination with

NOTE Confidence: 0.919378585

 $00{:}33{:}34.673 \dashrightarrow 00{:}33{:}36.853$  pembrolizumab that has been shown to

NOTE Confidence: 0.919378585

 $00{:}33{:}36.853 \dashrightarrow 00{:}33{:}38.920$  reduce further the recurrence risk.

NOTE Confidence: 0.88092785

 $00:33:41.110 \longrightarrow 00:33:43.830$  In high risk melanomas.

NOTE Confidence: 0.88092785

 $00:33:43.830 \longrightarrow 00:33:45.350$  And so that it will be something that

NOTE Confidence: 0.88092785

 $00:33:45.350 \longrightarrow 00:33:47.187$  would be opening up in the next few months.

NOTE Confidence: 0.88092785

 $00:33:47.190 \longrightarrow 00:33:49.040$  And we also have additional

NOTE Confidence: 0.88092785

 $00:33:49.040 \longrightarrow 00:33:50.520$  trials of antitigit antibodies

NOTE Confidence: 0.88092785

 $00{:}33{:}50.520 \dashrightarrow 00{:}33{:}52.706$  in the adjuvant setting as well.

NOTE Confidence: 0.88092785

 $00:33:52.710 \longrightarrow 00:33:55.350$  So really potentially interesting clinical

NOTE Confidence: 0.88092785

 $00{:}33{:}55.350 \dashrightarrow 00{:}33{:}59.110$  trials coming down the pipeline. Next

NOTE Confidence: 0.943913018181818

 $00:34:01.230 \longrightarrow 00:34:03.510$  I'll take over from here and

NOTE Confidence: 0.943913018181818

 $00{:}34{:}03.510 \dashrightarrow 00{:}34{:}05.460$  we'll talk about another case.

NOTE Confidence: 0.943913018181818

 $00:34:05.460 \longrightarrow 00:34:07.693$  This is a 73 year old male

NOTE Confidence: 0.943913018181818

 $00:34:07.693 \longrightarrow 00:34:10.341$  presented who with a left sided

NOTE Confidence: 0.943913018181818

 $00:34:10.341 \longrightarrow 00:34:11.419$  cervical lymphadenopathy.

 $00:34:11.420 \longrightarrow 00:34:14.380$  A CAT scan of the neck was ordered

NOTE Confidence: 0.943913018181818

 $00:34:14.380 \longrightarrow 00:34:18.016$  to further work this up and it

NOTE Confidence: 0.943913018181818

 $00:34:18.016 \longrightarrow 00:34:20.683$  showed 4 enlarged centrally necrotic

NOTE Confidence: 0.943913018181818

 $00:34:20.683 \longrightarrow 00:34:23.059$  lymphadenopathies lymph nodes.

NOTE Confidence: 0.943913018181818

00:34:23.060 --> 00:34:25.580 Biopsy of the left scalp lesion

NOTE Confidence: 0.943913018181818

 $00:34:25.580 \longrightarrow 00:34:28.740$  revealed a Melanoma.

NOTE Confidence: 0.943913018181818

00:34:28.740 --> 00:34:30.232 An ultrasound guided biopsy

NOTE Confidence: 0.943913018181818

 $00:34:30.232 \longrightarrow 00:34:32.470$  of the left cervical node was

NOTE Confidence: 0.943913018181818

 $00:34:32.539 \longrightarrow 00:34:34.699$  positive for metastatic Melanoma.

NOTE Confidence: 0.943913018181818

 $00{:}34{:}34.700 \dashrightarrow 00{:}34{:}36.535$  He subsequently underwent white local

NOTE Confidence: 0.943913018181818

 $00{:}34{:}36.535 \dashrightarrow 00{:}34{:}38.718$  excision of the left parietal scalp

NOTE Confidence: 0.943913018181818

 $00:34:38.718 \longrightarrow 00:34:41.228$  lesion and the patch revealed metanoma

NOTE Confidence: 0.943913018181818

 $00{:}34{:}41.228 \dashrightarrow 00{:}34{:}46.016$  and cyto and scar with negative margins.

NOTE Confidence: 0.943913018181818

 $00{:}34{:}46.020 {\:{\circ}{\circ}{\circ}}>00{:}34{:}48.372$  Left neck lymph nodes were excised

NOTE Confidence: 0.943913018181818

 $00:34:48.372 \longrightarrow 00:34:51.561$  and three out of 10 are positive

00:34:51.561 --> 00:34:53.100 for metastatic Melanoma.

NOTE Confidence: 0.943913018181818

 $00:34:53.100 \longrightarrow 00:34:56.639$  Next line he subsequently presented

NOTE Confidence: 0.943913018181818

00:34:56.639 --> 00:34:59.725 to ER with generalized abdominal pain,

NOTE Confidence: 0.943913018181818 00:34:59.725 --> 00:35:00.200 nausea, NOTE Confidence: 0.943913018181818

 $00:35:00.200 \longrightarrow 00:35:03.050$  vomiting and diarrhea for three days.

NOTE Confidence: 0.943913018181818

 $00{:}35{:}03.050 \dashrightarrow 00{:}35{:}04.730$  The CT of the other men and

NOTE Confidence: 0.943913018181818

 $00:35:04.730 \longrightarrow 00:35:06.090$  pelvis show liver metastasis,

NOTE Confidence: 0.943913018181818

 $00:35:06.090 \longrightarrow 00:35:08.402$  peritoneal carcinomatosis and bowel

NOTE Confidence: 0.943913018181818

 $00{:}35{:}08.402 \dashrightarrow 00{:}35{:}10.136$  obstruction with antisusception

NOTE Confidence: 0.943913018181818

 $00:35:10.136 \longrightarrow 00:35:13.490$  and mass of the transition point.

NOTE Confidence: 0.943913018181818

 $00:35:13.490 \longrightarrow 00:35:17.000$  He underwent surgery ilial bowel resuction

NOTE Confidence: 0.943913018181818

 $00:35:17.000 \longrightarrow 00:35:20.450$  of metastatic Melanoma and anastomosis.

NOTE Confidence: 0.943913018181818

 $00:35:20.450 \longrightarrow 00:35:22.469$  Subsequently he developed

NOTE Confidence: 0.943913018181818

 $00:35:22.469 \longrightarrow 00:35:24.488$  symptoms of dizziness.

NOTE Confidence: 0.943913018181818

 $00:35:24.490 \longrightarrow 00:35:26.690$  MRI of the brain performed

NOTE Confidence: 0.943913018181818

 $00:35:26.690 \longrightarrow 00:35:29.155$  showed 49 to predatorial and

 $00:35:29.155 \longrightarrow 00:35:31.127$  14 in predatorial lesions.

NOTE Confidence: 0.823007833333333

 $00:35:33.860 \longrightarrow 00:35:34.499$  Next time I'll

NOTE Confidence: 0.93824082

 $00:35:37.060 \longrightarrow 00:35:38.100$  turn it to my colleague.

NOTE Confidence: 0.9503169

 $00:35:39.220 \longrightarrow 00:35:41.825$  Thank you, Flora. So when we

NOTE Confidence: 0.9503169

 $00:35:41.825 \longrightarrow 00:35:43.653$  talk about metastatic Melanoma,

NOTE Confidence: 0.915252465714286

00:35:43.660 --> 00:35:46.579 people generally feel, oh, it's stage 4,

NOTE Confidence: 0.915252465714286

 $00:35:46.580 \longrightarrow 00:35:48.112$  it's a terrible prognosis.

NOTE Confidence: 0.915252465714286

 $00:35:48.112 \dashrightarrow 00:35:50.860$  We're actually within the last 20 years,

NOTE Confidence: 0.915252465714286

 $00:35:50.860 \longrightarrow 00:35:53.674$  we've had a lot of new targeted

NOTE Confidence: 0.915252465714286

00:35:53.674 --> 00:35:55.702 therapies and immune therapy

NOTE Confidence: 0.915252465714286

 $00:35:55.702 \longrightarrow 00:35:58.571$  combinations that have sort of changed

NOTE Confidence: 0.915252465714286

 $00:35:58.571 \longrightarrow 00:36:01.252$  the paradigm for how we think about.

NOTE Confidence: 0.915252465714286

00:36:01.260 --> 00:36:03.690 Stage 4 disease, historically 5

NOTE Confidence: 0.915252465714286

 $00{:}36{:}03.690 \dashrightarrow 00{:}36{:}06.780$  year survival has been very dismal,

NOTE Confidence: 0.915252465714286

 $00:36:06.780 \longrightarrow 00:36:10.049$  but that is ongoing in terms of

 $00:36:10.049 \longrightarrow 00:36:12.979$  improvements within the last few decades.

NOTE Confidence: 0.915252465714286

 $00{:}36{:}12.980 \dashrightarrow 00{:}36{:}16.283$  So in the middle here we have sort of

NOTE Confidence: 0.915252465714286

 $00:36:16.283 \longrightarrow 00:36:20.056$  an outline of the recent drug approvals

NOTE Confidence: 0.915252465714286

00:36:20.060 --> 00:36:22.900 that include now immune therapy,

NOTE Confidence: 0.915252465714286

 $00:36:22.900 \longrightarrow 00:36:25.900$  combinations of immune therapy in the

NOTE Confidence: 0.915252465714286

 $00:36:25.900 \longrightarrow 00:36:28.560$  systemic setting for metastatic disease.

NOTE Confidence: 0.915252465714286

 $00:36:28.560 \longrightarrow 00:36:30.786$  Which is which are all labeled

NOTE Confidence: 0.915252465714286

 $00:36:30.786 \longrightarrow 00:36:33.040$  above the timeline bar there.

NOTE Confidence: 0.915252465714286

 $00:36:33.040 \longrightarrow 00:36:36.262$  And to even add on to this and give

NOTE Confidence: 0.915252465714286

00:36:36.262 --> 00:36:39.444 give a quick update within the last

NOTE Confidence: 0.915252465714286

 $00:36:39.444 \longrightarrow 00:36:41.554$  year two additional new treatments

NOTE Confidence: 0.915252465714286

 $00:36:41.554 \longrightarrow 00:36:44.160$  were are also approved as well.

NOTE Confidence: 0.915252465714286

 $00{:}36{:}44.160 \dashrightarrow 00{:}36{:}46.920$  So when we talk about metastatic

NOTE Confidence: 0.915252465714286

 $00:36:46.920 \longrightarrow 00:36:48.760$  Melanoma combinations of the

NOTE Confidence: 0.915252465714286

00:36:48.841 --> 00:36:52.147 Lumumab and Volumeab are now having

NOTE Confidence: 0.915252465714286

 $00{:}36{:}52.147 \dashrightarrow 00{:}36{:}53.800$  demonstrated objective responses

 $00:36:53.800 \longrightarrow 00:36:56.688$  rate response rates of around 58%.

NOTE Confidence: 0.915252465714286

 $00:36:56.688 \longrightarrow 00:36:58.032$  Which is astounding.

NOTE Confidence: 0.915252465714286

 $00:36:58.032 \longrightarrow 00:37:00.272$  So this means patients that

NOTE Confidence: 0.915252465714286

 $00:37:00.272 \longrightarrow 00:37:02.555$  respond have stable disease or

NOTE Confidence: 0.915252465714286

 $00:37:02.555 \longrightarrow 00:37:04.622$  even complete responses as well.

NOTE Confidence: 0.915252465714286

 $00:37:04.622 \longrightarrow 00:37:06.592$  There are multiple treatment options

NOTE Confidence: 0.915252465714286

 $00:37:06.592 \longrightarrow 00:37:09.318$  that we can try for these individuals,

NOTE Confidence: 0.915252465714286

 $00{:}37{:}09.320 \dashrightarrow 00{:}37{:}12.484$  some of them more tailored to certain

NOTE Confidence: 0.915252465714286

 $00:37:12.484 \longrightarrow 00:37:15.639$  subtypes of Melanoma such as UVL melanomas,

NOTE Confidence: 0.915252465714286

 $00{:}37{:}15.640 --> 00{:}37{:}16.926 \ \mathrm{but \ overall},$ 

NOTE Confidence: 0.915252465714286

 $00:37:16.926 \longrightarrow 00:37:21.427$  really kind of changing the paradigm here.

NOTE Confidence: 0.915252465714286

 $00:37:21.430 \longrightarrow 00:37:23.308$  When we talk about immune therapy,

NOTE Confidence: 0.915252465714286

 $00:37:23.310 \longrightarrow 00:37:26.430$  which is intravenous versus targeted therapy,

NOTE Confidence: 0.915252465714286

 $00:37:26.430 \longrightarrow 00:37:27.540$  which is oral,

NOTE Confidence: 0.915252465714286

 $00:37:27.540 \longrightarrow 00:37:29.760$  really the individuals that can only

 $00:37:29.760 \longrightarrow 00:37:32.076$  benefit from the targeted therapies are

NOTE Confidence: 0.915252465714286

 $00:37:32.076 \longrightarrow 00:37:35.030$  the ones with activating the graph mutations.

NOTE Confidence: 0.915252465714286

 $00:37:35.030 \longrightarrow 00:37:37.352$  And so that's only a smaller

NOTE Confidence: 0.915252465714286

 $00:37:37.352 \longrightarrow 00:37:38.513$  subset of individuals.

NOTE Confidence: 0.915252465714286

 $00:37:38.520 \longrightarrow 00:37:41.152$  And when we talk about sort of what

NOTE Confidence: 0.915252465714286

 $00:37:41.152 \dashrightarrow 00:37:43.613$  is the correct sequence of the rapies,

NOTE Confidence: 0.915252465714286

 $00{:}37{:}43.613 \dashrightarrow 00{:}37{:}45.959$  this is has been recently addressed

NOTE Confidence: 0.915252465714286

00:37:45.959 --> 00:37:48.620 in the DREAM SEEK trial and we now

NOTE Confidence: 0.915252465714286

 $00:37:48.620 \longrightarrow 00:37:50.270$  know that frontline immune therapy

NOTE Confidence: 0.915252465714286

 $00:37:50.270 \longrightarrow 00:37:52.620$  is superior to targeted therapy in

NOTE Confidence: 0.915252465714286

 $00{:}37{:}52.620 \dashrightarrow 00{:}37{:}54.775$  terms of multiple factors including

NOTE Confidence: 0.915252465714286

 $00:37:54.775 \longrightarrow 00:37:55.637$  overall survival,

NOTE Confidence: 0.915252465714286

 $00:37:55.640 \longrightarrow 00:37:57.780$  progression free survival and the

NOTE Confidence: 0.915252465714286

00:37:57.780 --> 00:37:59.920 duration of response to treatment

NOTE Confidence: 0.91525246571428600:37:59.992 --> 00:38:00.440 as well

NOTE Confidence: 0.9402536

 $00:38:02.600 \longrightarrow 00:38:06.440$  next so. Immune therapy can

 $00:38:06.440 \longrightarrow 00:38:08.000$  cause multiple different types

NOTE Confidence: 0.9402536

00:38:08.000 --> 00:38:09.870 of immune related toxicities,

NOTE Confidence: 0.94629164

 $00:38:09.870 \longrightarrow 00:38:11.214$  which my colleague Dr.

NOTE Confidence: 0.94629164

00:38:11.214 --> 00:38:13.230 Kluger will detail for us now.

NOTE Confidence: 0.9402536

00:38:14.550 --> 00:38:16.374 Thank you Doctor Tran.

NOTE Confidence: 0.9402536

 $00:38:16.374 \longrightarrow 00:38:18.062$  So everything comes with

NOTE Confidence: 0.9402536

 $00:38:18.062 \longrightarrow 00:38:19.190$  the price unfortunately.

NOTE Confidence: 0.9402536

 $00:38:19.190 \longrightarrow 00:38:20.828$  So these immune therapies are wonderful

NOTE Confidence: 0.9402536

 $00:38:20.828 \longrightarrow 00:38:23.149$  in that not only do they induce response,

NOTE Confidence: 0.9402536

 $00:38:23.150 \longrightarrow 00:38:25.362$  but these response can be these responses

NOTE Confidence: 0.9402536

 $00:38:25.362 \dashrightarrow 00:38:28.008$  can be durable and last for many, many years.

NOTE Confidence: 0.9402536

00:38:28.008 --> 00:38:29.862 We have many patients who are

NOTE Confidence: 0.9402536

 $00:38:29.862 \longrightarrow 00:38:32.525$  alive and well over a decade after

NOTE Confidence: 0.9402536

 $00:38:32.525 \longrightarrow 00:38:33.710$  stopping the immunotherapy.

NOTE Confidence: 0.9402536

 $00:38:33.710 \longrightarrow 00:38:35.270$  The other advantage to the immuno?

00:38:35.270 --> 00:38:36.866 Therapies that you can treat for a

NOTE Confidence: 0.9402536

 $00{:}38{:}36.866 \dashrightarrow 00{:}38{:}38.428$  certain period of time and then stop,

NOTE Confidence: 0.9402536

00:38:38.430 --> 00:38:40.950 they're not on continuous therapy,

NOTE Confidence: 0.9402536

 $00:38:40.950 \longrightarrow 00:38:43.223$  but the the price to pay is the

NOTE Confidence: 0.9402536

 $00:38:43.223 \longrightarrow 00:38:44.510$  immune related adverse events.

NOTE Confidence: 0.9402536

 $00{:}38{:}44.510 \dashrightarrow 00{:}38{:}46.540$  So if you think about the mechanism

NOTE Confidence: 0.9402536

 $00:38:46.540 \longrightarrow 00:38:48.109$  by which these drugs work,

NOTE Confidence: 0.9402536

 $00:38:48.110 \longrightarrow 00:38:49.530$  it's not really specifically

NOTE Confidence: 0.9402536

 $00{:}38{:}49.530 \dashrightarrow 00{:}38{:}50.950$  targeting the cancer cells.

NOTE Confidence: 0.9402536

 $00:38:50.950 \longrightarrow 00:38:52.650$  So we stimulate the immune

NOTE Confidence: 0.9402536

00:38:52.650 --> 00:38:54.350 system in a nonspecific way,

NOTE Confidence: 0.9402536

 $00:38:54.350 \longrightarrow 00:38:57.423$  but we also have T cells that

NOTE Confidence: 0.9402536

 $00:38:57.423 \longrightarrow 00:38:59.339$  recognize our normal organs

NOTE Confidence: 0.9402536

 $00{:}38{:}59.339 \dashrightarrow 00{:}39{:}01.899$  that are that are quiescent.

NOTE Confidence: 0.9402536

 $00:39:01.900 \longrightarrow 00:39:03.616$  By various mechanisms and they are,

NOTE Confidence: 0.9402536

00:39:03.620 --> 00:39:06.176 they remain that way during our

 $00:39:06.180 \longrightarrow 00:39:08.268$  our lifetime but they live

NOTE Confidence: 0.9402536

 $00:39:08.268 \longrightarrow 00:39:10.100$  there as resident memory cells.

NOTE Confidence: 0.9402536

 $00:39:10.100 \longrightarrow 00:39:12.230$  So these these cells actually live

NOTE Confidence: 0.9402536

 $00:39:12.230 \longrightarrow 00:39:14.498$  in almost all organs in our body.

NOTE Confidence: 0.9402536

 $00:39{:}14.500 \dashrightarrow 00{:}39{:}16.271$  And when we inhibit the breaks on

NOTE Confidence: 0.9402536

 $00:39:16.271 \longrightarrow 00:39:17.529$  these cells with immunotherapies

NOTE Confidence: 0.9402536

 $00:39:17.529 \longrightarrow 00:39:18.858$  that we administer,

NOTE Confidence: 0.9402536

 $00:39:18.860 \longrightarrow 00:39:20.785$  you then can get inflammation

NOTE Confidence: 0.9402536

 $00:39:20.785 \longrightarrow 00:39:23.460$  in almost any organ in the body.

NOTE Confidence: 0.9402536

 $00:39:23.460 \dashrightarrow 00:39:27.135$  The common ones are the hormonal

NOTE Confidence: 0.9402536

 $00:39:27.135 \longrightarrow 00:39:28.565$  side effects,

NOTE Confidence: 0.9402536

 $00:39:28.565 \longrightarrow 00:39:31.425$  colitis and respiratory problems.

NOTE Confidence: 0.9402536

 $00{:}39{:}31.430 \dashrightarrow 00{:}39{:}33.782$  Now some of them are quite

NOTE Confidence: 0.9402536

 $00:39:33.782 \longrightarrow 00:39:35.725$  reversible with very responsive to

NOTE Confidence: 0.9402536

00:39:35.725 --> 00:39:37.510 immune to to immune suppression,

 $00:39:37.510 \longrightarrow 00:39:39.360$  specifically steroids and sometimes they

NOTE Confidence: 0.9402536

 $00{:}39{:}39{:}39{:}360 \dashrightarrow 00{:}39{:}41.587$  resolve quite quickly when we give steroids,

NOTE Confidence: 0.9402536

00:39:41.590 --> 00:39:43.002 others may remain permanent.

NOTE Confidence: 0.9402536

 $00:39:43.002 \longrightarrow 00:39:45.664$  So for reasons that we still don't

NOTE Confidence: 0.9402536

 $00:39:45.664 \longrightarrow 00:39:47.564$  quite understand the endocrine

NOTE Confidence: 0.9402536

 $00:39:47.564 \longrightarrow 00:39:49.464$  toxicities are never reversible.

NOTE Confidence: 0.9402536

 $00{:}39{:}49.470 \dashrightarrow 00{:}39{:}51.020$  Diabetes or type one diabetes

NOTE Confidence: 0.9402536

 $00:39:51.020 \longrightarrow 00:39:51.950$  can be fulminant,

NOTE Confidence: 0.9402536

00:39:51.950 --> 00:39:53.108 it's quite rare,

NOTE Confidence: 0.9402536

00:39:53.108 --> 00:39:56.325 less than 1% but very difficult to control

NOTE Confidence: 0.9402536

 $00{:}39{:}56.325 \dashrightarrow 00{:}39{:}58.870$  and certainly a life altering event.

NOTE Confidence: 0.9402536

 $00:39:58.870 \longrightarrow 00:40:02.390$  Hyperpituitism occurs in around 15%,

NOTE Confidence: 0.9402536

 $00:40:02.390 \longrightarrow 00:40:04.868$  that's one 5% of our patients.

NOTE Confidence: 0.9402536

 $00:40:04.870 \longrightarrow 00:40:06.406$  And if you think about a patient who

NOTE Confidence: 0.9402536

00:40:06.406 --> 00:40:07.908 might be cured with surgery alone,

NOTE Confidence: 0.9402536

 $00:40:07.910 \longrightarrow 00:40:10.440$  receiving immunotherapy in the adjuvant

 $00:40:10.440 \longrightarrow 00:40:12.561$  setting causing pituitary insufficiency

NOTE Confidence: 0.9402536

 $00:40:12.561 \longrightarrow 00:40:15.246$  as a lifelong toxicity certainly

NOTE Confidence: 0.9402536

 $00:40:15.246 \longrightarrow 00:40:18.188$  can affect them for decades to come.

NOTE Confidence: 0.9402536

00:40:18.190 --> 00:40:20.158 And these patients are at risk when they

NOTE Confidence: 0.9402536

 $00:40:20.158 \longrightarrow 00:40:22.189$  when they get sepsis or undergo surgery.

NOTE Confidence: 0.9402536

00:40:22.190 --> 00:40:24.430 So if you have any of those in your practice,

NOTE Confidence: 0.9402536

00:40:24.430 --> 00:40:26.510 please keep in mind that they need stress,

NOTE Confidence: 0.9402536

 $00:40:26.510 \longrightarrow 00:40:29.667$  those steroids if they ever get sick.

NOTE Confidence: 0.9402536

 $00{:}40{:}29.670 \longrightarrow 00{:}40{:}32.430$  Sometimes the neurotoxicities and the

NOTE Confidence: 0.9402536

 $00{:}40{:}32.430 \dashrightarrow 00{:}40{:}35.190$  cardiac toxicities are also irreversible.

NOTE Confidence: 0.9402536

 $00{:}40{:}35.190 \dashrightarrow 00{:}40{:}37.002$  The death rate from the immunotherapy

NOTE Confidence: 0.9402536

 $00:40:37.002 \longrightarrow 00:40:39.030$  is quite a bit less than 1%,

NOTE Confidence: 0.9402536

 $00{:}40{:}39.030 \dashrightarrow 00{:}40{:}41.060$  but sadly we've all had a death

NOTE Confidence: 0.9402536

00:40:41.060 --> 00:40:42.933 and it's something that does occur

NOTE Confidence: 0.9402536

 $00:40:42.933 \longrightarrow 00:40:44.823$  regardless of how careful we are.

 $00:40:44.830 \longrightarrow 00:40:46.685$  The other problem that we have is

NOTE Confidence: 0.9402536

00:40:46.685 --> 00:40:48.898 that we have no means by which we

NOTE Confidence: 0.9402536

00:40:48.898 --> 00:40:50.670 can predict who's going to develop

NOTE Confidence: 0.9402536

 $00:40:50.670 \longrightarrow 00:40:52.450$  the toxicities and who won't.

NOTE Confidence: 0.9402536

 $00:40:52.450 \longrightarrow 00:40:54.896$  There are a number of immune

NOTE Confidence: 0.9402536

 $00:40:54.896 \longrightarrow 00:40:57.126$  suppression approaches that we use.

NOTE Confidence: 0.9402536

00:40:57.130 --> 00:40:59.392 They listed over here on the

NOTE Confidence: 0.9402536

 $00:40:59.392 \longrightarrow 00:41:00.518$  right primarily steroids,

NOTE Confidence: 0.9402536

 $00{:}41{:}00.518 \dashrightarrow 00{:}41{:}03.136$  but I think this field is undergoing

NOTE Confidence: 0.9402536

 $00:41:03.136 \longrightarrow 00:41:04.928$  rapid evolution and I believe that

NOTE Confidence: 0.9402536

 $00{:}41{:}04.928 --> 00{:}41{:}07.603$  in the next 5 to 10 years we'll be

NOTE Confidence: 0.9402536

 $00{:}41{:}07.603 \dashrightarrow 00{:}41{:}09.481$  using an array of different immune

NOTE Confidence: 0.9402536

 $00:41:09.490 \longrightarrow 00:41:13.426$  suppressants that might be more specific.

NOTE Confidence: 0.9402536

 $00:41:13.430 \longrightarrow 00:41:15.800$  To the the resident memory cells

NOTE Confidence: 0.9402536

 $00:41:15.800 \longrightarrow 00:41:17.380$  rather than the anti

NOTE Confidence: 0.923261784615385

 $00:41:17.458 \longrightarrow 00:41:18.949$  cancer immune cells.

 $00:41:18.950 \longrightarrow 00:41:21.892$  So more to come on that as we go as

NOTE Confidence: 0.923261784615385

 $00:41:21.892 \longrightarrow 00:41:24.664$  we proceed into the next decade.

NOTE Confidence: 0.923261784615385

 $00:41:24.670 \longrightarrow 00:41:25.402$  Next slide please.

NOTE Confidence: 0.923261784615385

 $00:41:25.402 \longrightarrow 00:41:27.110$  So the next question is what do

NOTE Confidence: 0.923261784615385

00:41:27.161 --> 00:41:29.177 we do about patients who have

NOTE Confidence: 0.923261784615385

00:41:29.177 --> 00:41:30.185 underlying autoimmune disorders.

NOTE Confidence: 0.923261784615385

00:41:30.190 --> 00:41:32.430 So I think all primary care folks

NOTE Confidence: 0.923261784615385

00:41:32.430 --> 00:41:34.508 have many patients in their practice

NOTE Confidence: 0.923261784615385

00:41:34.510 --> 00:41:36.346 who carry a diagnosis of RA,

NOTE Confidence: 0.923261784615385

 $00{:}41{:}36.350 \dashrightarrow 00{:}41{:}38.750$  Polymyalgia, Rheumatica and the like.

NOTE Confidence: 0.923261784615385

 $00:41:38.750 \longrightarrow 00:41:40.470$  And I think that sometimes

NOTE Confidence: 0.923261784615385

 $00:41:40.470 \longrightarrow 00:41:42.190$  these diagnosis were made many,

NOTE Confidence: 0.923261784615385

00:41:42.190 --> 00:41:43.855 many years ago,

NOTE Confidence: 0.923261784615385

 $00:41:43.855 \longrightarrow 00:41:47.392$  disease can possibly burn out with time.

NOTE Confidence: 0.923261784615385

 $00:41:47.392 \longrightarrow 00:41:50.059$  But we have been successful in treating

 $00:41:50.059 \longrightarrow 00:41:53.148$  some of these patients with immune therapy.

NOTE Confidence: 0.923261784615385

 $00{:}41{:}53.150 \dashrightarrow 00{:}41{:}55.102$  It's it's challenging often

NOTE Confidence: 0.923261784615385

 $00:41:55.102 \longrightarrow 00:41:57.542$  we need to pay extra,

NOTE Confidence: 0.923261784615385

 $00:41:57.550 \longrightarrow 00:42:00.028$  extra attention to these folks but

NOTE Confidence: 0.923261784615385

 $00:42:00.028 \longrightarrow 00:42:02.899$  certainly if they have an underlying

NOTE Confidence: 0.923261784615385

 $00:42:02.899 \longrightarrow 00:42:05.749$  autoimmunity that's not life threatening,

NOTE Confidence: 0.923261784615385

 $00:42:05.750 \longrightarrow 00:42:08.510$  the immunotherapy can be administered.

NOTE Confidence: 0.92326178461538500:42:08.510 --> 00:42:09.116 Quite safely.

NOTE Confidence: 0.923261784615385

00:42:09.116 --> 00:42:11.237 I do specifically want to draw your

NOTE Confidence: 0.923261784615385

00:42:11.237 --> 00:42:12.681 attention to inflammatory bowel

NOTE Confidence: 0.923261784615385

00:42:12.681 --> 00:42:14.121 disease because it's increasing

NOTE Confidence: 0.923261784615385

 $00:42:14.121 \longrightarrow 00:42:16.401$  in incidence and that is actually

NOTE Confidence: 0.923261784615385

 $00:42:16.401 \longrightarrow 00:42:18.306$  particularly challenging for us because

NOTE Confidence: 0.923261784615385

00:42:18.306 --> 00:42:20.382 patients actually can die of bowel

NOTE Confidence: 0.923261784615385

 $00:42:20.382 \longrightarrow 00:42:22.022$  perforation if we're not careful.

NOTE Confidence: 0.923261784615385

 $00:42:22.030 \longrightarrow 00:42:23.507$  It doesn't mean we can't do it.

 $00:42:23.510 \longrightarrow 00:42:25.897$  We can give therapies that are active

NOTE Confidence: 0.923261784615385

 $00:42:25.897 \longrightarrow 00:42:27.916$  specifically in the bowel such as

NOTE Confidence: 0.923261784615385

 $00{:}42{:}27.916 \longrightarrow 00{:}42{:}29.782$  veto lizumab and sometimes we are

NOTE Confidence: 0.923261784615385

 $00:42:29.782 \longrightarrow 00:42:31.772$  very successful with that and can

NOTE Confidence: 0.923261784615385

 $00:42:31.772 \longrightarrow 00:42:35.230$  induce a long term cancer remission.

NOTE Confidence: 0.923261784615385

00:42:35.230 --> 00:42:37.390 Next slide please. Thank you.

NOTE Confidence: 0.923261784615385

00:42:37.390 --> 00:42:41.590 So lastly, but certainly not least,

NOTE Confidence: 0.923261784615385

 $00:42:41.590 \longrightarrow 00:42:43.030$  brain metastases in Melanoma

NOTE Confidence: 0.923261784615385

 $00:42:43.030 \longrightarrow 00:42:45.190$  is a big problem for us.

NOTE Confidence: 0.923261784615385

00:42:45.190 --> 00:42:47.320 Approximately half of our patients

NOTE Confidence: 0.923261784615385

 $00{:}42{:}47.320 \dashrightarrow 00{:}42{:}49.450$  who have metastatic disease develop

NOTE Confidence: 0.923261784615385

 $00:42:49.515 \longrightarrow 00:42:51.769$  brain metastases at some point in the

NOTE Confidence: 0.923261784615385

 $00{:}42{:}51.769 \dashrightarrow 00{:}42{:}54.151$  course of their illness and they can

NOTE Confidence: 0.923261784615385

 $00:42:54.151 \longrightarrow 00:42:55.686$  sometimes present with brain metastases

NOTE Confidence: 0.923261784615385

 $00:42:55.686 \longrightarrow 00:42:58.068$  as the first site of metastatic disease.

 $00:42:58.070 \longrightarrow 00:43:00.046$  So they'll present with.

NOTE Confidence: 0.923261784615385

00:43:00.046 --> 00:43:01.154 Headaches, neurologic problems,

NOTE Confidence: 0.923261784615385 00:43:01.154 --> 00:43:01.768 et cetera. NOTE Confidence: 0.923261784615385

 $00:43:01.768 \longrightarrow 00:43:03.966$  The tip off is that the headache

NOTE Confidence: 0.923261784615385

 $00:43:03.966 \longrightarrow 00:43:05.736$  is worse when they lie down.

NOTE Confidence: 0.923261784615385

 $00:43:05.740 \longrightarrow 00:43:09.178$  It gets better over the course of the day.

NOTE Confidence: 0.923261784615385

 $00:43:09.180 \longrightarrow 00:43:10.368$  The headaches can be

NOTE Confidence: 0.923261784615385

 $00:43:10.368 \longrightarrow 00:43:11.853$  severe as the tumor grows.

NOTE Confidence: 0.923261784615385

00:43:11.860 --> 00:43:14.920 One can have a Mass Effect

NOTE Confidence: 0.923261784615385

 $00:43:14.920 \longrightarrow 00:43:16.220$  midline shift and the

NOTE Confidence: 0.9402536

 $00:43:16.220 \longrightarrow 00:43:18.340$  one thing that Melanoma

NOTE Confidence: 0.92919901

 $00:43:18.340 \longrightarrow 00:43:20.368$  brain metastases.

NOTE Confidence: 0.92919901

00:43:20.368 --> 00:43:24.430 Unfortunately, do is is hemorrhage.

NOTE Confidence: 0.92919901

 $00:43:24.430 \longrightarrow 00:43:26.810$  So other than many other tumor types,

NOTE Confidence: 0.92919901

 $00:43:26.810 \longrightarrow 00:43:28.328$  these are more prone to hemorrhage.

NOTE Confidence: 0.92919901

00:43:28.330 --> 00:43:30.794 And there's a lot of Peri lesional

 $00:43:30.794 \longrightarrow 00:43:32.450$  edema around these lesions,

NOTE Confidence: 0.92919901

 $00{:}43{:}32.450 \dashrightarrow 00{:}43{:}34.410$  possibly more than in other tumor types.

NOTE Confidence: 0.92919901

 $00:43:34.410 \longrightarrow 00:43:36.423$  And it's the edema itself that can

NOTE Confidence: 0.92919901

 $00:43:36.423 \longrightarrow 00:43:38.815$  actually cause problems and actually

NOTE Confidence: 0.92919901

 $00:43:38.815 \longrightarrow 00:43:41.160$  Doctor Tran has done a lot of.

NOTE Confidence: 0.92919901

 $00{:}43{:}41.160 \dashrightarrow 00{:}43{:}44.358$  Research on this topic in particular,

NOTE Confidence: 0.92919901

 $00:43:44.360 \longrightarrow 00:43:46.400$  there are better treatments available.

NOTE Confidence: 0.92919901

00:43:46.400 --> 00:43:48.260 We've got effective systemic

NOTE Confidence: 0.92919901

 $00{:}43{:}48.260 \dashrightarrow 00{:}43{:}50.120$  the rapies for brain metastases.

NOTE Confidence: 0.92919901

00:43:50.120 --> 00:43:52.120 We believe that immune therapies,

NOTE Confidence: 0.92919901

 $00:43:52.120 \longrightarrow 00:43:52.960$  when they work in the body,

NOTE Confidence: 0.92919901

 $00:43:52.960 \longrightarrow 00:43:54.517$  they're going to work in the brain as well.

NOTE Confidence: 0.92919901

 $00:43:54.520 \longrightarrow 00:43:57.432$  But sometimes we have complications such as

NOTE Confidence: 0.92919901

 $00:43:57.432 \longrightarrow 00:44:00.300$  the edema and resultant symptoms from that.

NOTE Confidence: 0.92919901

 $00:44:00.300 \longrightarrow 00:44:02.325$  These lesions can be Gamma

00:44:02.325 --> 00:44:04.310 Knife with radiation therapy,

NOTE Confidence: 0.92919901

 $00:44:04.310 \longrightarrow 00:44:06.734$  or they can simply be treated

NOTE Confidence: 0.92919901

 $00:44:06.734 \longrightarrow 00:44:07.946$  with systemic therapy.

NOTE Confidence: 0.92919901

 $00:44:07.950 \longrightarrow 00:44:09.505$  We tailor individual treatment plans

NOTE Confidence: 0.92919901

 $00:44:09.505 \longrightarrow 00:44:11.450$  to all of these patients because

NOTE Confidence: 0.92919901

 $00:44:11.450 \longrightarrow 00:44:13.110$  brain metastases are not alike.

NOTE Confidence: 0.92919901

00:44:13.110 --> 00:44:15.147 Some patients may have one big one,

NOTE Confidence: 0.92919901

 $00:44:15.150 \longrightarrow 00:44:15.843$  while others, well,

NOTE Confidence: 0.92919901

 $00:44:15.843 \longrightarrow 00:44:17.229$  they can have many small ones.

NOTE Confidence: 0.92919901

00:44:17.230 --> 00:44:19.122 Some have hemorrhagic lesions,

NOTE Confidence: 0.92919901

 $00:44:19.122 \longrightarrow 00:44:23.864$  some have lesions that cause a lot of edema.

NOTE Confidence: 0.92919901

 $00:44:23.870 \longrightarrow 00:44:26.206$  So this arena as well is an area

NOTE Confidence: 0.92919901

 $00:44:26.206 \longrightarrow 00:44:28.628$  of very active research at Yale.

NOTE Confidence: 0.9352219

00:44:30.730 --> 00:44:32.410 I'm going to turn it back to

NOTE Confidence: 0.9352219

 $00:44:32.410 \longrightarrow 00:44:34.654$  Doctor Tran to talk about the

NOTE Confidence: 0.9352219

 $00:44:34.654 \longrightarrow 00:44:36.209$  conclusions and the major takeaways.

00:44:38.650 --> 00:44:40.530 So I think Doctor Kluwe,

NOTE Confidence: 0.87098536

 $00{:}44{:}40.530 \dashrightarrow 00{:}44{:}44.254$  you highlighted on a lot of these

NOTE Confidence: 0.87098536

00:44:44.254 --> 00:44:46.468 and very important side effects

NOTE Confidence: 0.87098536

00:44:46.468 --> 00:44:48.631 that it would be important for our

NOTE Confidence: 0.87098536

 $00:44:48.631 \longrightarrow 00:44:50.687$  primary care colleagues to know about.

NOTE Confidence: 0.87098536

 $00:44:50.690 \longrightarrow 00:44:53.270$  We are typically very aggressive about

NOTE Confidence: 0.87098536

 $00:44:53.270 \longrightarrow 00:44:54.990$  treating these individuals metastatic

NOTE Confidence: 0.87098536

 $00{:}44{:}55.053 \dashrightarrow 00{:}44{:}56.809$  Melanoma with immune the rapies.

NOTE Confidence: 0.87098536

 $00:44:56.810 \longrightarrow 00:44:58.880$  Sometimes we do seem like we

NOTE Confidence: 0.87098536

 $00:44:58.880 \longrightarrow 00:45:00.730$  push them to be able to receive.

NOTE Confidence: 0.87098536

 $00{:}45{:}00.730 \dashrightarrow 00{:}45{:}02.925$  Their treatments only because we

NOTE Confidence: 0.87098536

 $00:45:02.925 \longrightarrow 00:45:06.040$  know based on experience that if if

NOTE Confidence: 0.87098536

 $00{:}45{:}06.040 \dashrightarrow 00{:}45{:}08.584$  they're able to attain a response

NOTE Confidence: 0.87098536

 $00:45:08.584 \longrightarrow 00:45:10.442$  with immunotherapies that response

NOTE Confidence: 0.87098536

 $00:45:10.442 \longrightarrow 00:45:12.767$  can be profound and longlasting.

 $00:45:12.770 \longrightarrow 00:45:14.610$  But unfortunately what happens during

NOTE Confidence: 0.87098536

 $00{:}45{:}14.610 \dashrightarrow 00{:}45{:}16.882$  the course of the this treatment

NOTE Confidence: 0.87098536

 $00{:}45{:}16.882 \dashrightarrow 00{:}45{:}19.278$  is a lot of lifelong toxicities can

NOTE Confidence: 0.87098536

00:45:19.278 --> 00:45:21.314 develop which we need our primary

NOTE Confidence: 0.87098536

 $00:45:21.314 \longrightarrow 00:45:23.156$  care colleagues to be aware of

NOTE Confidence: 0.87098536

 $00:45:23.156 \longrightarrow 00:45:25.514$  and to have a low threshold about

NOTE Confidence: 0.87098536

 $00:45:25.514 \longrightarrow 00:45:28.058$  helping us to Co manage them.

NOTE Confidence: 0.87098536

 $00:45:28.060 \longrightarrow 00:45:30.145$  So things like adrenal insufficiency

NOTE Confidence: 0.87098536

 $00{:}45{:}30.145 {\: -->\:} 00{:}45{:}32.230$  in patients who are presenting

NOTE Confidence: 0.87098536

 $00:45:32.295 \longrightarrow 00:45:33.539$  with a Uri symptoms,

NOTE Confidence: 0.87098536

 $00:45:33.540 \longrightarrow 00:45:34.660$  they need to be stressed,

NOTE Confidence: 0.87098536

 $00:45:34.660 \longrightarrow 00:45:37.012$  dosed and sometimes we can avert

NOTE Confidence: 0.87098536

 $00:45:37.012 \longrightarrow 00:45:39.439$  hospital admissions if the patient and

NOTE Confidence: 0.87098536

 $00{:}45{:}39.439 \to 00{:}45{:}41.791$  the primary care physician are aware

NOTE Confidence: 0.87098536

 $00:45:41.791 \longrightarrow 00:45:44.193$  that tunes to this potential side

NOTE Confidence: 0.87098536

 $00:45:44.193 \longrightarrow 00:45:47.499$  effect also and as Doctor Kluber alluded to,

 $00{:}45{:}47.500 \dashrightarrow 00{:}45{:}48.745$ you know diabetes.

NOTE Confidence: 0.87098536

 $00:45:48.745 \longrightarrow 00:45:51.235$  These type one diabetes that can

NOTE Confidence: 0.87098536

 $00:45:51.235 \longrightarrow 00:45:54.675$  develop on immune therapy are very life

NOTE Confidence: 0.87098536

 $00:45:54.675 \longrightarrow 00:45:56.643$  changing and require multidisciplinary

NOTE Confidence: 0.87098536

 $00{:}45{:}56.719 \dashrightarrow 00{:}45{:}58.869$  care with endocrinology and primary

NOTE Confidence: 0.87098536

 $00:45:58.869 \longrightarrow 00:46:01.430$  care to help manage thyroiditis is

NOTE Confidence: 0.87098536

 $00:46:01.430 \longrightarrow 00:46:04.199$  sometimes one of the side effects that

NOTE Confidence: 0.87098536

 $00{:}46{:}04.199 \dashrightarrow 00{:}46{:}06.377$  we can see that perceives hypothyroidism

NOTE Confidence: 0.87098536

00:46:06.377 --> 00:46:08.554 in these patients depending on how

NOTE Confidence: 0.87098536

 $00:46:08.554 \longrightarrow 00:46:11.064$  frequently we check the the TSH levels.

NOTE Confidence: 0.87098536

 $00{:}46{:}11.064 \dashrightarrow 00{:}46{:}14.198$  I think one of the also the important.

NOTE Confidence: 0.87098536

 $00:46:14.198 \longrightarrow 00:46:17.614$  Facts that as a primary care physician,

NOTE Confidence: 0.87098536

 $00{:}46{:}17.620 \dashrightarrow 00{:}46{:}19.452$  if you have a patient that you know

NOTE Confidence: 0.87098536

00:46:19.452 --> 00:46:21.529 who is on immune therapy presenting

NOTE Confidence: 0.87098536

 $00:46:21.529 \longrightarrow 00:46:22.699$  with extreme fatigue,

 $00:46:22.700 \longrightarrow 00:46:25.282$  one check for the endocrine potential

NOTE Confidence: 0.87098536

00:46:25.282 --> 00:46:27.956 side effects but also make sure that

NOTE Confidence: 0.87098536

 $00:46:27.956 \longrightarrow 00:46:30.300$  they aren't having myocarditis too.

NOTE Confidence: 0.87098536

00:46:30.300 --> 00:46:33.700 If you know or you suspect our toxicity,

NOTE Confidence: 0.87098536

 $00:46:33.700 \longrightarrow 00:46:34.940$  please let us know.

NOTE Confidence: 0.87098536

00:46:34.940 --> 00:46:38.140 Reach out to us, we're happy to be involved.

NOTE Confidence: 0.87098536

00:46:38.140 --> 00:46:40.708 We don't expect primary care to

NOTE Confidence: 0.87098536

00:46:40.708 --> 00:46:42.420 manage the toxicities acutely,

NOTE Confidence: 0.87098536

00:46:42.420 --> 00:46:46.060 but just letting us know how helps

NOTE Confidence: 0.87098536

 $00:46:46.060 \longrightarrow 00:46:48.260$  us to determine what treatment,

NOTE Confidence: 0.87098536

00:46:48.260 --> 00:46:49.076 you know,

NOTE Confidence: 0.87098536

 $00:46:49.076 \longrightarrow 00:46:51.116$  is indicated for the individual

NOTE Confidence: 0.87098536

 $00:46:51.116 \longrightarrow 00:46:52.340$  toxicities at hand.

NOTE Confidence: 0.87098536

 $00:46:52.340 \longrightarrow 00:46:54.628$  And a lot of the times even though

NOTE Confidence: 0.87098536

00:46:54.628 --> 00:46:56.418 patients may develop a toxicity,

NOTE Confidence: 0.87098536

 $00{:}46{:}56.420 \dashrightarrow 00{:}46{:}58.849$  it's actually might be a good sign

 $00:46:58.849 \longrightarrow 00:47:01.286$  that maybe their immune system is

NOTE Confidence: 0.87098536

 $00{:}47{:}01.286 \dashrightarrow 00{:}47{:}03.496$  being activated and potentially will

NOTE Confidence: 0.87098536

 $00:47:03.496 \longrightarrow 00:47:06.020$  produce the anti Melanoma response.

NOTE Confidence: 0.87098536

 $00:47:06.020 \longrightarrow 00:47:08.580$  So we've seen correlations between

NOTE Confidence: 0.87098536

 $00:47:08.580 \longrightarrow 00:47:11.140$  very severe toxicity toxicities and

NOTE Confidence: 0.87098536

 $00{:}47{:}11.222 \to 00{:}47{:}13.856$  very good responses in our patients.

NOTE Confidence: 0.87098536

 $00:47:13.860 \longrightarrow 00:47:16.020$  So in terms of treatment assessments,

NOTE Confidence: 0.87098536

 $00:47:16.020 \longrightarrow 00:47:18.540$  so going back to the case in hand,

NOTE Confidence: 0.87098536

 $00{:}47{:}18.540 \dashrightarrow 00{:}47{:}20.820$  this gentleman who Doctor Lena and

NOTE Confidence: 0.87098536

 $00{:}47{:}20.820 \to 00{:}47{:}22.999$  I treated with metastatic Melanoma.

NOTE Confidence: 0.87098536

 $00:47:22.999 \longrightarrow 00:47:25.837$  He was treated with a combination

NOTE Confidence: 0.87098536

00:47:25.837 --> 00:47:28.070 of ipilumab and uvalumab.

NOTE Confidence: 0.87098536

 $00{:}47{:}28.070 \dashrightarrow 00{:}47{:}30.350$  And after the first four cycles,

NOTE Confidence: 0.87098536

 $00:47:30.350 \longrightarrow 00:47:32.030$  so looking at his scans,

NOTE Confidence: 0.87098536

 $00:47:32.030 \longrightarrow 00:47:34.448$  pretreatment on the left and then

 $00:47:34.448 \longrightarrow 00:47:36.630$  on treatment after four cycles,

NOTE Confidence: 0.87098536

 $00{:}47{:}36.630 \dashrightarrow 00{:}47{:}38.740$  there is a dramatic improvement

NOTE Confidence: 0.87098536

 $00:47:38.740 \longrightarrow 00:47:40.998$  in disease tumor burden both in

NOTE Confidence: 0.87098536

 $00:47:40.998 \longrightarrow 00:47:43.110$  the brain and in the body.

NOTE Confidence: 0.87098536

00:47:43.110 --> 00:47:45.182 Typically with immune therapies

NOTE Confidence: 0.87098536

 $00:47:45.182 \longrightarrow 00:47:47.254$  these responses are concordant

NOTE Confidence: 0.87098536

 $00:47:47.254 \longrightarrow 00:47:49.633$  because these are known to be

NOTE Confidence: 0.87098536

 $00{:}47{:}49.633 \dashrightarrow 00{:}47{:}51.608$  brain active treatments as well.

NOTE Confidence: 0.87098536

00:47:51.608 --> 00:47:52.946 Early on though,

NOTE Confidence: 0.87098536

 $00:47:52.950 \longrightarrow 00:47:55.086$  if you do happen to come across a

NOTE Confidence: 0.87098536

 $00{:}47{:}55.086 \dashrightarrow 00{:}47{:}57.467$  scan for a patient on immune therapy,

NOTE Confidence: 0.885067921538462

 $00:47:57.470 \longrightarrow 00:47:59.695$  just be wary that pseudoprogression

NOTE Confidence: 0.885067921538462

 $00:47:59.695 \longrightarrow 00:48:02.659$  can exist in these patients on early

NOTE Confidence: 0.885067921538462

 $00:48:02.659 \longrightarrow 00:48:05.015$  scans whereby the tumors may look

NOTE Confidence: 0.885067921538462

00:48:05.015 --> 00:48:07.682 bigger on imaging, but actually not

NOTE Confidence: 0.885067921538462

 $00{:}48{:}07.682 \dashrightarrow 00{:}48{:}10.586$  be a full real tumor progression,

00:48:10.590 --> 00:48:12.702 but actually just radiographing

NOTE Confidence: 0.885067921538462

 $00:48:12.702 \longrightarrow 00:48:14.814$  enlargement from the infiltration

NOTE Confidence: 0.885067921538462

 $00:48:14.814 \longrightarrow 00:48:16.820$  of activated immune cells.

NOTE Confidence: 0.885067921538462

 $00:48:16.820 \longrightarrow 00:48:19.325$  Clinically, we can sometimes determine

NOTE Confidence: 0.885067921538462

 $00:48:19.325 \longrightarrow 00:48:21.329$  pseudo progression because the

NOTE Confidence: 0.885067921538462

00:48:21.329 --> 00:48:23.458 patient otherwise is doing well,

NOTE Confidence: 0.885067921538462

 $00:48:23.460 \longrightarrow 00:48:26.978$  they don't have any symptoms and if the

NOTE Confidence: 0.885067921538462

 $00{:}48{:}26.978 \dashrightarrow 00{:}48{:}30.014$  degree of enhancement is not significant,

NOTE Confidence: 0.885067921538462

 $00:48:30.020 \longrightarrow 00:48:32.534$  then sometimes we will push these

NOTE Confidence: 0.885067921538462

 $00:48:32.534 \longrightarrow 00:48:34.210$  patients continue treatment and

NOTE Confidence: 0.885067921538462

 $00:48:34.282 \longrightarrow 00:48:36.296$  then confirm with restaging later

NOTE Confidence: 0.885067921538462

00:48:36.296 --> 00:48:39.502 on whether or not they had pseudo

NOTE Confidence: 0.885067921538462

 $00{:}48{:}39.502 \dashrightarrow 00{:}48{:}41.538$  progression or true progression.

NOTE Confidence: 0.885067921538462

 $00:48:41.540 \longrightarrow 00:48:45.980$  So patients are able to eventually.

NOTE Confidence: 0.885067921538462

 $00:48:45.980 \longrightarrow 00:48:48.170$  In a subset of folks obtain

 $00:48:48.170 \longrightarrow 00:48:48.900$  complete responses,

NOTE Confidence: 0.885067921538462

 $00:48:48.900 \longrightarrow 00:48:51.520$  basically almost a curative response

NOTE Confidence: 0.885067921538462

00:48:51.520 --> 00:48:54.140 to their systemic immune therapy

NOTE Confidence: 0.885067921538462

 $00:48:54.140 \longrightarrow 00:48:56.090$  and sometimes patients are able to

NOTE Confidence: 0.885067921538462

 $00:48:56.090 \longrightarrow 00:48:57.980$  stop and have ongoing responses

NOTE Confidence: 0.9402536

 $00:48:59.660 \longrightarrow 00:49:03.525$  next. So just to close out the

NOTE Confidence: 0.9402536

00:49:03.525 --> 00:49:05.310 take away points from today's

NOTE Confidence: 0.862933094444445

 $00:49:05.380 \longrightarrow 00:49:07.232$  presentation is you know

NOTE Confidence: 0.862933094444445

 $00:49:07.232 \longrightarrow 00:49:09.084$  early detection is critical.

NOTE Confidence: 0.862933094444445

 $00:49:09.090 \longrightarrow 00:49:10.836$  And that's where you know all

NOTE Confidence: 0.862933094444445

 $00{:}49{:}10.836 \dashrightarrow 00{:}49{:}12.810$  hands on deck are appreciated,

NOTE Confidence: 0.862933094444445

00:49:12.810 --> 00:49:15.070 primary care's involvement and

NOTE Confidence: 0.862933094444445

00:49:15.070 --> 00:49:16.765 doing ongoing surveillance,

NOTE Confidence: 0.862933094444445

 $00:49:16.770 \longrightarrow 00:49:18.210$  looking at the scar,

NOTE Confidence: 0.862933094444445

00:49:18.210 --> 00:49:20.010 checking the patient's lymph nodes,

NOTE Confidence: 0.862933094444445

 $00:49:20.010 \longrightarrow 00:49:23.568$  assessing for any unusual atypical symptoms.

 $00:49:23.570 \longrightarrow 00:49:26.072$  Because early detection is always important

NOTE Confidence: 0.862933094444445

 $00:49:26.072 \longrightarrow 00:49:28.969$  in terms of improving ultimate outcomes,

NOTE Confidence: 0.862933094444445

 $00:49:28.970 \longrightarrow 00:49:31.035$  and everyone plays a role

NOTE Confidence: 0.862933094444445

 $00:49:31.035 \longrightarrow 00:49:32.274$  in the surveillance.

NOTE Confidence: 0.862933094444445

 $00:49:32.280 \longrightarrow 00:49:35.800$  It's a truly multidisciplinary,

NOTE Confidence: 0.862933094444445

 $00:49:35.800 \longrightarrow 00:49:39.568$  multiexpertise kind of approach here.

NOTE Confidence: 0.862933094444445

 $00:49:39.568 \longrightarrow 00:49:41.824$  So aggressive upfront Melanoma

NOTE Confidence: 0.862933094444445

 $00:49:41.824 \longrightarrow 00:49:43.516$  management and treatment,

NOTE Confidence: 0.862933094444445

 $00:49:43.520 \longrightarrow 00:49:44.740$  as we always said,

NOTE Confidence: 0.862933094444445

 $00:49:44.740 \longrightarrow 00:49:46.570$  leads to improve outcomes not only

NOTE Confidence: 0.862933094444445

 $00:49:46.630 \longrightarrow 00:49:49.129$  for the patient but also to help

NOTE Confidence: 0.862933094444445

 $00{:}49{:}49.129 \dashrightarrow 00{:}49{:}50.719$  minimize potential toxicities as well.

NOTE Confidence: 0.937067243333334

 $00{:}49{:}53.210 \dashrightarrow 00{:}49{:}54.830$  Fortunately, we've lucky enough to

NOTE Confidence: 0.937067243333334

 $00{:}49{:}54.830 \dashrightarrow 00{:}49{:}56.893$  work in a field where the rapeutics

NOTE Confidence: 0.937067243333334

00:49:56.893 --> 00:49:58.778 are always improving and we've

00:49:58.778 --> 00:50:01.334 been at the forefront of helping to

NOTE Confidence: 0.937067243333334

 $00:50:01.334 \longrightarrow 00:50:03.314$  push that boundary forward with the

NOTE Confidence: 0.937067243333334

 $00:50:03.314 \longrightarrow 00:50:05.690$  ongoing clinical trials here at Yale.

NOTE Confidence: 0.937067243333334

 $00:50:05.690 \longrightarrow 00:50:08.056$  And the number of patients that are

NOTE Confidence: 0.937067243333334

 $00:50:08.056 \longrightarrow 00:50:10.903$  living with a history of Melanoma is ever

NOTE Confidence: 0.937067243333334

00:50:10.903 --> 00:50:13.699 growing and we owe that and thanks to.

NOTE Confidence: 0.937067243333334

 $00:50:13.700 \longrightarrow 00:50:16.829$  The drugs but also the close corroboration

NOTE Confidence: 0.937067243333334

 $00:50:16.829 \longrightarrow 00:50:19.492$  that we have between or specialty

NOTE Confidence: 0.937067243333334

 $00:50:19.492 \longrightarrow 00:50:21.508$  with in Melanoma but also with

NOTE Confidence: 0.937067243333334

 $00:50:21.508 \longrightarrow 00:50:23.380$  ongoing primary care physicians too.

NOTE Confidence: 0.953671466666667

 $00{:}50{:}26.260 {\:\dashrightarrow\:} 00{:}50{:}29.780$  That was absolutely terrific.

NOTE Confidence: 0.953671466666667

 $00:50:29.780 \longrightarrow 00:50:33.940$  Thank you for all of that.

NOTE Confidence: 0.953671466666667

 $00:50:33.940 \longrightarrow 00:50:36.910$  Those who are watching please

NOTE Confidence: 0.953671466666667

00:50:36.910 --> 00:50:40.316 submit questions using the Q&A

NOTE Confidence: 0.953671466666667

 $00:50:40.316 \longrightarrow 00:50:42.668$  because we we do have some time.

NOTE Confidence: 0.953671466666667

00:50:42.670 --> 00:50:45.015 Left over and you know I just

00:50:45.015 --> 00:50:47.837 have to say as a mature primary

NOTE Confidence: 0.953671466666667

 $00:50:47.837 \longrightarrow 00:50:50.435$  care physician that the change in

NOTE Confidence: 0.953671466666667

00:50:50.521 --> 00:50:52.513 prognosis for advanced Melanoma

NOTE Confidence: 0.953671466666667

 $00:50:52.513 \longrightarrow 00:50:55.501$  is one of the most miraculous

NOTE Confidence: 0.953671466666667

 $00:50:55.510 \longrightarrow 00:50:57.270$  things I've witnessed clinically.

NOTE Confidence: 0.953671466666667

00:50:57.270 --> 00:51:00.781 So it is amazing and it it's just

NOTE Confidence: 0.953671466666667

00:51:00.781 --> 00:51:03.539 nice to hear that whole kind of

NOTE Confidence: 0.953671466666667

 $00{:}51{:}03.539 \dashrightarrow 00{:}51{:}05.198$  evolution outlined although not

NOTE Confidence: 0.953671466666667

 $00{:}51{:}05.198 \dashrightarrow 00{:}51{:}07.470$  without a price as we as we've heard.

NOTE Confidence: 0.93824092

 $00:51:09.860 \longrightarrow 00:51:11.420$  As we wait for some questions to come

NOTE Confidence: 0.93824092

00:51:11.420 --> 00:51:13.060 in and and those who are watching,

NOTE Confidence: 0.93824092

00:51:13.060 --> 00:51:16.020 please do submit questions.

NOTE Confidence: 0.93824092

00:51:16.020 --> 00:51:17.900 Flora, do you have additional

NOTE Confidence: 0.93824092

 $00:51:17.900 \longrightarrow 00:51:19.780$  questions for our Smilo panelists?

NOTE Confidence: 0.9402536

 $00:51:21.060 \longrightarrow 00:51:24.300$  So sure, a basic question.

 $00:51:24.300 \longrightarrow 00:51:26.204$  When we are dealing with a patient in

NOTE Confidence: 0.9402536

 $00{:}51{:}26.204 {\:{\circ}{\circ}{\circ}}>00{:}51{:}28.018$  the office who we suspected toxicity,

NOTE Confidence: 0.9402536

 $00:51:28.020 \longrightarrow 00:51:29.772$  what's the shortcut?

NOTE Confidence: 0.9402536

 $00:51:29.772 \longrightarrow 00:51:32.540$  What's the the easiest way and

NOTE Confidence: 0.9402536

 $00:51:32.540 \longrightarrow 00:51:34.940$  fastest way as well most effective

NOTE Confidence: 0.9402536

 $00:51:35.017 \longrightarrow 00:51:37.048$  to get in touch with with the

NOTE Confidence: 0.9402536

 $00:51:37.048 \longrightarrow 00:51:38.418$  team caring for this patient.

NOTE Confidence: 0.917282112857143

 $00:51:40.160 \longrightarrow 00:51:42.757$  So we have one phone number that's

NOTE Confidence: 0.93285812

 $00:51:45.480 \longrightarrow 00:51:46.224$  to 203-200-6622.

NOTE Confidence: 0.93285812

00:51:46.224 --> 00:51:49.200 We make sure that all patients who start

NOTE Confidence: 0.93285812

 $00{:}51{:}49.265 {\:{\mbox{--}}}{>} 00{:}51{:}51.677$  immunotherapy put that on speed dial.

NOTE Confidence: 0.93285812

 $00:51:51.680 \longrightarrow 00:51:54.208$  Someone answers that phone

NOTE Confidence: 0.93285812

 $00:51:54.208 \longrightarrow 00:51:55.686 \ 24/7 \ during work hours.$ 

NOTE Confidence: 0.93285812

 $00:51:55.686 \longrightarrow 00:51:58.080$  They can send a message in my chart.

NOTE Confidence: 0.93285812

00:51:58.080 --> 00:52:00.075 It goes straight to our nursing pool,

NOTE Confidence: 0.93285812

 $00:52:00.080 \longrightarrow 00:52:01.520$  but depending on the urgency,

 $00:52:01.520 \longrightarrow 00:52:02.800$  they may decide to call.

NOTE Confidence: 0.90142358

 $00:52:04.830 \longrightarrow 00:52:06.270$  And whether they seen in Guildford

NOTE Confidence: 0.90142358

00:52:06.270 --> 00:52:08.250 or in New Haven, they the phone

NOTE Confidence: 0.90142358

 $00:52:08.250 \longrightarrow 00:52:10.290$  calls for urgent issues such as

NOTE Confidence: 0.90142358

 $00{:}52{:}10.290 \dashrightarrow 00{:}52{:}12.427$  that would come into New Haven.

NOTE Confidence: 0.9402536

 $00:52:14.230 \longrightarrow 00:52:14.510$  Thank you.

NOTE Confidence: 0.915773785714286

 $00:52:16.750 \longrightarrow 00:52:18.990$  And I'll just add on to that.

NOTE Confidence: 0.915773785714286

 $00:52:18.990 \dashrightarrow 00:52:21.348$  When we have somebody, you know,

NOTE Confidence: 0.915773785714286

 $00{:}52{:}21.350 \dashrightarrow 00{:}52{:}23.464$  with a skin lesion in primary care,

NOTE Confidence: 0.915773785714286

 $00:52:23.470 \longrightarrow 00:52:25.395$  we have ones that are like we

NOTE Confidence: 0.915773785714286

 $00:52:25.395 \longrightarrow 00:52:27.105$  can't really tell you it's normal.

NOTE Confidence: 0.915773785714286

 $00:52:27.110 \longrightarrow 00:52:28.710$  And then we have ones that like look

NOTE Confidence: 0.915773785714286

 $00{:}52{:}28.710 \dashrightarrow 00{:}52{:}30.380$  like they might be a problem and then

NOTE Confidence: 0.915773785714286

 $00:52:30.380 \longrightarrow 00:52:32.030$  they have ones that that scream at us.

NOTE Confidence: 0.915773785714286

 $00:52:32.030 \longrightarrow 00:52:34.466$  This person absolutely needs this remove.

00:52:34.470 --> 00:52:37.630 Right away and delaying care is not good.

NOTE Confidence: 0.915773785714286

 $00:52:37.630 \longrightarrow 00:52:40.790$  You know within the kind of Yale system,

NOTE Confidence: 0.915773785714286

 $00:52:40.790 \longrightarrow 00:52:43.006$  what are some of the most efficient ways

NOTE Confidence: 0.915773785714286

 $00:52:43.006 \longrightarrow 00:52:45.279$  that we can kind of help to navigate

NOTE Confidence: 0.915773785714286

 $00:52:45.279 \longrightarrow 00:52:47.309$  and and refer those type of people.

NOTE Confidence: 0.931867433333333

 $00:52:49.000 \longrightarrow 00:52:50.440$  Sure. I can take this one.

NOTE Confidence: 0.931867433333333

 $00:52:50.440 \longrightarrow 00:52:53.352$  Well, I think you know we have many

NOTE Confidence: 0.931867433333333

 $00:52:53.352 \longrightarrow 00:52:54.666$  dermatology services outpatient

NOTE Confidence: 0.931867433333333

 $00{:}52{:}54.666 \dashrightarrow 00{:}52{:}57.031$  all all throughout New Haven

NOTE Confidence: 0.931867433333333

00:52:57.031 --> 00:52:59.320 and Brantford and Middlebury.

NOTE Confidence: 0.931867433333333

 $00:52:59.320 \dashrightarrow 00:53:01.315$  I think putting in an urgent referral.

NOTE Confidence: 0.931867433333333

 $00{:}53{:}01.320 \to 00{:}53{:}03.208$  I think what what often helps is calling

NOTE Confidence: 0.931867433333333

 $00:53:03.208 \longrightarrow 00:53:05.078$  the office also just to leave a message.

NOTE Confidence: 0.9318674333333333

00:53:05.080 --> 00:53:06.718 We're really worried about this one.

NOTE Confidence: 0.931867433333333

00:53:06.720 --> 00:53:08.610 A lot of primary care doctors will

NOTE Confidence: 0.931867433333333

 $00{:}53{:}08.610 \dashrightarrow 00{:}53{:}10.927$  send me an epic and basket message.

00:53:10.930 --> 00:53:11.938 Can you please get this patient

NOTE Confidence: 0.931867433333333

 $00:53:11.938 \longrightarrow 00:53:13.170$  in soon with you or a colleague,

NOTE Confidence: 0.931867433333333

 $00:53:13.170 \longrightarrow 00:53:14.568$  We're really worried about this one.

NOTE Confidence: 0.931867433333333

 $00:53:14.570 \longrightarrow 00:53:17.243$  I think that sort of triage is is helpful.

NOTE Confidence: 0.931867433333333

 $00{:}53{:}17.250 \dashrightarrow 00{:}53{:}19.380$  We also have telemedicine to

NOTE Confidence: 0.931867433333333

 $00:53:19.380 \longrightarrow 00:53:21.084$  look for urgent lesions,

NOTE Confidence: 0.931867433333333

00:53:21.090 --> 00:53:24.024 but I'm I'm more of a proponent of seeing

NOTE Confidence: 0.931867433333333

 $00:53:24.024 \longrightarrow 00:53:27.328$  the the patient in in person to examine it.

NOTE Confidence: 0.931867433333333

 $00:53:27.328 \longrightarrow 00:53:30.410$  So we can use a dermatoscope and biopsy

NOTE Confidence: 0.861544826666667

 $00:53:31.850 \longrightarrow 00:53:34.680$  and then doctors are power

NOTE Confidence: 0.861544826666667

 $00:53:34.680 \longrightarrow 00:53:37.050$  actually alerted me as to these.

NOTE Confidence: 0.861544826666667

 $00:53:37.050 \longrightarrow 00:53:38.805$  Little things I I use them in the garden.

NOTE Confidence: 0.861544826666667

 $00{:}53{:}38.810 \dashrightarrow 00{:}53{:}40.718$  When I see a weed or something that I

NOTE Confidence: 0.861544826666667

 $00:53:40.718 \longrightarrow 00:53:42.708$  think might be a weed or maybe the plant

NOTE Confidence: 0.861544826666667

00:53:42.708 --> 00:53:44.529 I planted last year and forgot about,

 $00:53:44.530 \longrightarrow 00:53:47.002$  I I use this identify thing and it

NOTE Confidence: 0.861544826666667

 $00{:}53{:}47.002 \dashrightarrow 00{:}53{:}49.568$  tells me exactly what the plant is.

NOTE Confidence: 0.861544826666667

 $00:53:49.570 \longrightarrow 00:53:51.370$  Is there a software that can help us?

NOTE Confidence: 0.933544666666667

 $00:53:52.450 \longrightarrow 00:53:54.506$  You know, there's a lot of new

NOTE Confidence: 0.933544666666667

 $00:53:54.506 \longrightarrow 00:53:56.490$  technology and iPhone apps.

NOTE Confidence: 0.933544666666667

 $00:53:56.490 \longrightarrow 00:53:58.982$  I think a lot of these aren't

NOTE Confidence: 0.933544666666667

 $00{:}53{:}58.982 \dashrightarrow 00{:}54{:}01.424$  really validated and I don't think

NOTE Confidence: 0.933544666666667

 $00:54:01.424 \longrightarrow 00:54:04.028$  anything beats right now seeing a

NOTE Confidence: 0.933544666666667

00:54:04.028 --> 00:54:05.890 dermatologist for any evaluation,

NOTE Confidence: 0.933544666666667

 $00.54.05.890 \longrightarrow 00.54.07.620$  maybe 1. Technology,

NOTE Confidence: 0.943608066666667

 $00{:}54{:}08.940 --> 00{:}54{:}10.818$  we'll get there.

NOTE Confidence: 0.943608066666667

 $00{:}54{:}10.820 \dashrightarrow 00{:}54{:}13.780$  So immunotherapy first, technology second.

NOTE Confidence: 0.943608066666667

 $00:54:13.780 \longrightarrow 00:54:15.691$  So we do have a couple of

NOTE Confidence: 0.943608066666667

 $00:54:15.691 \longrightarrow 00:54:17.060$  questions that have come in.

NOTE Confidence: 0.943608066666667

00:54:17.060 --> 00:54:20.716 So Shepherd, Stone has or Stone Shepherd

NOTE Confidence: 0.943608066666667

 $00{:}54{:}20.716 \dashrightarrow 00{:}54{:}23.804$  I'm not sure has asked when should a

 $00:54:23.804 \longrightarrow 00:54:26.188$  PCP perform biopsy and when they when

NOTE Confidence: 0.943608066666667

 $00{:}54{:}26.188 \dashrightarrow 00{:}54{:}28.060$  should they refer to a dermatologist.

NOTE Confidence: 0.943608066666667

00:54:28.060 --> 00:54:30.380 Now not all of our Pcp's do biopsy,

NOTE Confidence: 0.943608066666667

 $00:54:30.380 \longrightarrow 00:54:33.068$  but if it's within the skill set what,

NOTE Confidence: 0.943608066666667

 $00:54:33.068 \longrightarrow 00:54:34.380$  what do you think

NOTE Confidence: 0.6005868

 $00:54:35.620 \longrightarrow 00:54:37.740$  so? I'm aware that you know,

NOTE Confidence: 0.6005868

00:54:37.740 --> 00:54:38.778 primary care physicians,

NOTE Confidence: 0.6005868

00:54:38.778 --> 00:54:40.854 certainly you know some do biopsy.

NOTE Confidence: 0.6005868

00:54:40.860 --> 00:54:42.948 I think if you're going to

NOTE Confidence: 0.6005868

 $00:54:42.948 \longrightarrow 00:54:44.340$  biopsy a pigmented lesion,

NOTE Confidence: 0.6005868

 $00{:}54{:}44{.}340 \dashrightarrow 00{:}54{:}46.832$  it's really important to to be sure

NOTE Confidence: 0.6005868

 $00:54:46.832 \longrightarrow 00:54:49.134$  that that you sample the lesion

NOTE Confidence: 0.6005868

 $00:54:49.134 \longrightarrow 00:54:51.444$  in its entirety because if you

NOTE Confidence: 0.6005868

00:54:51.444 --> 00:54:54.015 only sample a small portion of it,

NOTE Confidence: 0.6005868

00:54:54.020 --> 00:54:55.780 you might miss the Melanoma.

 $00:54:55.780 \longrightarrow 00:54:57.676$  Further, if it is a Melanoma

NOTE Confidence: 0.6005868

 $00{:}54{:}57.676 \dashrightarrow 00{:}54{:}58.940$  but you transect it,

NOTE Confidence: 0.6005868

 $00:54:58.940 \longrightarrow 00:55:01.736$  you really won't have an accurate

NOTE Confidence: 0.6005868

00:55:01.736 --> 00:55:04.969 stage of the true Breslow depth.

NOTE Confidence: 0.6005868

 $00:55:04.970 \longrightarrow 00:55:06.748$  I would say if it's something that

NOTE Confidence: 0.6005868

 $00:55:06.748 \longrightarrow 00:55:08.253$  you've been trained in and and

NOTE Confidence: 0.6005868

00:55:08.253 --> 00:55:09.714 you're capable of doing do so.

NOTE Confidence: 0.6005868

 $00:55:09.714 \longrightarrow 00:55:10.530$  But in general,

NOTE Confidence: 0.6005868

 $00:55:10.530 \longrightarrow 00:55:12.602$  you know this is kind of what bread

NOTE Confidence: 0.6005868

00:55:12.602 --> 00:55:14.488 and butter dermatology is and we're

NOTE Confidence: 0.6005868

 $00{:}55{:}14.488 \to 00{:}55{:}16.450$  very happy to see those patients.

NOTE Confidence: 0.92518968

 $00:55:18.370 \longrightarrow 00:55:20.850$  And another question from Dr.

NOTE Confidence: 0.92518968

 $00:55:20.850 \longrightarrow 00:55:23.710$  Allard, what are your Melanoma

NOTE Confidence: 0.92518968

 $00:55:23.710 \longrightarrow 00:55:25.998$  screening recommendations by age

NOTE Confidence: 0.92518968

 $00:55:25.998 \longrightarrow 00:55:29.024$  despite the USPTF not recommending

NOTE Confidence: 0.92518968

 $00:55:29.024 \longrightarrow 00:55:30.570$  annual screening? Another

 $00:55:30.570 \longrightarrow 00:55:31.425$  really good question.

NOTE Confidence: 0.93857646

 $00:55:31.425 \longrightarrow 00:55:34.089$  I think a lot of it comes to those

NOTE Confidence: 0.93857646

 $00:55:34.089 \longrightarrow 00:55:35.907$  risk factors that I alluded to.

NOTE Confidence: 0.93857646

00:55:35.910 --> 00:55:38.654 I don't think somebody who has few

NOTE Confidence: 0.93857646

 $00:55:38.654 \longrightarrow 00:55:41.210$  nevi darker skin, no personal or

NOTE Confidence: 0.93857646

 $00:55:41.210 \longrightarrow 00:55:44.430$  family history needs to to be screened.

NOTE Confidence: 0.93857646

00:55:44.430 --> 00:55:47.206 If you see someone even at a young

NOTE Confidence: 0.93857646

00:55:47.206 --> 00:55:50.306 age who has a strong family history,

NOTE Confidence: 0.93857646

 $00:55:50.310 \longrightarrow 00:55:52.529$  has a lot of nevi and in

NOTE Confidence: 0.93857646

 $00:55:52.529 \longrightarrow 00:55:54.950$  particular has a lesion of concern,

NOTE Confidence: 0.93857646

00:55:54.950 --> 00:55:56.110 I think that's the key.

NOTE Confidence: 0.93857646

 $00:55:56.110 \longrightarrow 00:55:57.748$  If there's a lesion of concern,

NOTE Confidence: 0.93857646

 $00:55:57.750 \longrightarrow 00:56:00.366$  that's an automatic should be evaluated.

NOTE Confidence: 0.93857646

 $00:56:00.370 \longrightarrow 00:56:02.162$  Those screening guidelines don't

NOTE Confidence: 0.93857646

 $00:56:02.162 \longrightarrow 00:56:04.402$  apply to a concerning lesion.

00:56:04.410 --> 00:56:06.132 I think if it's a young child

NOTE Confidence: 0.93857646

 $00{:}56{:}06.132 \dashrightarrow 00{:}56{:}07.968$  who may be has a parent or grant,

NOTE Confidence: 0.93857646

 $00{:}56{:}07.970 \dashrightarrow 00{:}56{:}09.400$ you know, with Melanoma but

NOTE Confidence: 0.93857646

00:56:09.400 --> 00:56:11.250 certainly is a primary care doctor,

NOTE Confidence: 0.93857646

 $00:56:11.250 \longrightarrow 00:56:12.850$  you don't see anything concerning.

NOTE Confidence: 0.93857646

00:56:12.850 --> 00:56:14.770 I don't think it's urgent to

NOTE Confidence: 0.93857646

 $00:56:14.770 \longrightarrow 00:56:16.610$  have that that child screened

NOTE Confidence: 0.936899133333334

 $00:56:20.770 \longrightarrow 00:56:24.546$  well. That's the end of our questions that

NOTE Confidence: 0.936899133333334

 $00:56:24.546 \longrightarrow 00:56:28.494$  have come in and also the end of our hour.

NOTE Confidence: 0.936899133333334

00:56:28.500 --> 00:56:30.140 So again, I, you know,

NOTE Confidence: 0.936899133333334

 $00:56:30.140 \longrightarrow 00:56:33.020$  each of you spent time to prepare for this.

NOTE Confidence: 0.936899133333334

 $00:56:33.020 \longrightarrow 00:56:35.548$  It was just so well delivered and full

NOTE Confidence: 0.936899133333334

 $00:56:35.548 \longrightarrow 00:56:37.616$  of information that I think is really,

NOTE Confidence: 0.9368991333333334

 $00:56:37.620 \longrightarrow 00:56:41.213$  really helpful. So these connections,

NOTE Confidence: 0.936899133333334

 $00:56:41.213 \longrightarrow 00:56:43.497$  these moments are valuable

NOTE Confidence: 0.936899133333334

 $00:56:43.500 \longrightarrow 00:56:44.977$  and and I thank you for that.

 $00:56:44.980 \longrightarrow 00:56:47.284$  And I thank you to those who took time

NOTE Confidence: 0.936899133333334

00:56:47.284 --> 00:56:50.340 to listen despite a like very bad,

NOTE Confidence: 0.936899133333334

 $00:56:50.340 \longrightarrow 00:56:53.448$  awful, horrible IT day here at the

NOTE Confidence: 0.936899133333334

 $00:56:53.448 \longrightarrow 00:56:55.684$  health system because we know it

NOTE Confidence: 0.936899133333334

 $00{:}56{:}55.684 \dashrightarrow 00{:}56{:}57.700$  took special effort to get here.

NOTE Confidence: 0.936899133333334

 $00{:}56{:}57.700 \dashrightarrow 00{:}56{:}59.590$  And encourage your friends to watch the

NOTE Confidence: 0.9368991333333334

 $00:56:59.590 \longrightarrow 00:57:01.460$  recording, which we'll also send out.

NOTE Confidence: 0.936899133333334

 $00:57:01.460 \longrightarrow 00:57:05.000$  Good. Thank you all.