

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 --> 00:00:05.321 with Primary Care. I'm Karen Brown.

NOTE Confidence: 0.9313316125

00:00:05.321 --> 00:00:08.198 I'm an internist in North Haven and the

NOTE Confidence: 0.9313316125

00:00:08.198 --> 00:00:10.442 Medical Director of the Primary Care

NOTE Confidence: 0.9313316125

00:00:10.442 --> 00:00:13.240 Service line of Northeast Medical Group.

NOTE Confidence: 0.9313316125

00:00:13.240 --> 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 --> 00:00:25.560 who's here and is the CMO of Smilo.

NOTE Confidence: 0.9313316125

00:00:25.560 --> 00:00:28.218 We will introduce our speaker shortly.

NOTE Confidence: 0.9313316125

00:00:28.220 --> 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.

NOTE Confidence: 0.9313316125

00:00:33.164 --> 00:00:37.206 This is a monthly series designed to focus  
NOTE Confidence: 0.9313316125

00:00:37.206 --> 00:00:40.220 on primary care perspectives of cancer,  
NOTE Confidence: 0.9313316125

00:00:40.220 --> 00:00:44.023 especially diagnosis and handoff where  
NOTE Confidence: 0.9313316125

00:00:44.023 --> 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 --> 00:00:55.885 And we always have at least one  
NOTE Confidence: 0.9313316125

00:00:55.885 --> 00:00:57.432 primary care clinician along  
NOTE Confidence: 0.9313316125

00:00:57.432 --> 00:00:59.780 with SMYLO clinicians and often  
NOTE Confidence: 0.9313316125

00:00:59.780 --> 00:01:01.780 focused in one geography.  
NOTE Confidence: 0.9313316125

00:01:01.780 --> 00:01:04.900 This one is is not so much focused  
NOTE Confidence: 0.9313316125

00:01:04.900 --> 00:01:07.817 in one of our geographies and  
NOTE Confidence: 0.9313316125

00:01:07.817 --> 00:01:10.036 we hope that this will help us  
NOTE Confidence: 0.9313316125

00:01:10.036 --> 00:01:12.216 all become better at what we do.  
NOTE Confidence: 0.9313316125

00:01:12.220 --> 00:01:15.140 So we will go and we'll have a

NOTE Confidence: 0.9313316125

00:01:15.140 --> 00:01:18.380 introductions and then we have

NOTE Confidence: 0.9313316125

00:01:18.380 --> 00:01:20.972 a three case presentations.

NOTE Confidence: 0.9313316125

00:01:20.980 --> 00:01:22.900 And we will learn through our

NOTE Confidence: 0.9313316125

00:01:22.900 --> 00:01:24.180 case presentations and leave

NOTE Confidence: 0.9313316125

00:01:24.242 --> 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 --> 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 --> 00:01:45.980 Romania, and she completed her

NOTE Confidence: 0.935221839

00:01:45.980 --> 00:01:48.000 internal medicine residency in New York

NOTE Confidence: 0.935221839

00:01:48.000 --> 00:01:51.090 Presbyterian Hospital in Queens, NY.

NOTE Confidence: 0.935221839

00:01:51.090 --> 00:01:53.562 She initially joined the staff of

NOTE Confidence: 0.935221839

00:01:53.562 --> 00:01:56.248 Yellow Haven Hospital as a hospitalist

NOTE Confidence: 0.935221839

00:01:56.248 --> 00:01:59.128 before starting her practice in Milford.  
NOTE Confidence: 0.935221839

00:01:59.130 --> 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 --> 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 --> 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 --> 00:02:14.715 and she's been on the executive medical  
NOTE Confidence: 0.935221839

00:02:14.715 --> 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 --> 00:02:20.280 Leaders program through the  
NOTE Confidence: 0.935221839

00:02:20.338 --> 00:02:21.738 Yale School of Management.  
NOTE Confidence: 0.935221839

00:02:21.740 --> 00:02:23.834 She's an active clinical leader in  
NOTE Confidence: 0.935221839

00:02:23.834 --> 00:02:25.648 Northeast Medical Group and lends  
NOTE Confidence: 0.935221839

00:02:25.648 --> 00:02:27.778 her expertise to the NEMG Primary  
NOTE Confidence: 0.935221839

00:02:27.778 --> 00:02:29.847 Care Steering Committee and also the

NOTE Confidence: 0.935221839

00:02:29.847 --> 00:02:31.737 Yale New Haven Health System Care

NOTE Confidence: 0.935221839

00:02:31.737 --> 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 --> 00:02:39.516 doctor relationship as the keystone

NOTE Confidence: 0.935221839

00:02:39.516 --> 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 --> 00:02:46.969 is paramount to effective care.

NOTE Confidence: 0.935221839

00:02:46.970 --> 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 --> 00:02:51.849 the members of yours Milo team.

NOTE Confidence: 0.943608066666667

00:02:52.930 --> 00:02:55.249 Karen, thank you.

NOTE Confidence: 0.943608066666667

00:02:55.250 --> 00:02:56.954 I'll just say it's really a

NOTE Confidence: 0.943608066666667

00:02:56.954 --> 00:02:58.649 pleasure for me to be here.

NOTE Confidence: 0.943608066666667

00:02:58.650 --> 00:03:03.090 I as you alluded to my associate Dr.

NOTE Confidence: 0.943608066666667

00:03:03.090 --> 00:03:05.465 Ann Chang generally partners with

NOTE Confidence: 0.943608066666667

00:03:05.465 --> 00:03:07.724 you in this wonderful venture.  
NOTE Confidence: 0.943608066666667

00:03:07.724 --> 00:03:09.392 But I'm absolutely delighted  
NOTE Confidence: 0.943608066666667

00:03:09.392 --> 00:03:11.450 and honored to be here.  
NOTE Confidence: 0.943608066666667

00:03:11.450 --> 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 --> 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 --> 00:03:27.100 this initiative moving forward.  
NOTE Confidence: 0.943608066666667

00:03:27.100 --> 00:03:29.501 Those of us who are oncologists and  
NOTE Confidence: 0.943608066666667

00:03:29.501 --> 00:03:31.514 are treating cancer patients regardless  
NOTE Confidence: 0.943608066666667

00:03:31.514 --> 00:03:34.925 of our discipline are so indebted  
NOTE Confidence: 0.943608066666667

00:03:34.925 --> 00:03:39.425 and tied to our primary care partners.  
NOTE Confidence: 0.943608066666667

00:03:39.425 --> 00:03:42.540 It is really kind of the teamwork,  
NOTE Confidence: 0.943608066666667

00:03:42.540 --> 00:03:45.124 the collaboration and the.

NOTE Confidence: 0.943608066666667  
00:03:45.124 --> 00:03:49.000 The seamless flow of care between  
NOTE Confidence: 0.943608066666667  
00:03:49.000 --> 00:03:51.472 the primary care environment and the  
NOTE Confidence: 0.943608066666667  
00:03:51.472 --> 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 --> 00:03:59.039 the support of the treatment phase,  
NOTE Confidence: 0.943608066666667  
00:03:59.040 --> 00:04:00.760 but in the survivorship phase.  
NOTE Confidence: 0.943608066666667  
00:04:00.760 --> 00:04:04.805 So I I think that this is really  
NOTE Confidence: 0.943608066666667  
00:04:04.805 --> 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 --> 00:04:16.840 it's it's an honor for me to introduce  
NOTE Confidence: 0.943608066666667  
00:04:16.840 --> 00:04:19.444 several of my Smiley Smiley colleagues  
NOTE Confidence: 0.943608066666667  
00:04:19.444 --> 00:04:22.262 all of whom are esteemed experts  
NOTE Confidence: 0.943608066666667  
00:04:22.262 --> 00:04:25.784 in their field field and I'll I'll  
NOTE Confidence: 0.943608066666667

00:04:25.784 --> 00:04:28.820 just start with Doctor Harriet Kluger.  
NOTE Confidence: 0.943608066666667

00:04:28.820 --> 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 --> 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 --> 00:04:41.875 Professor of Medicine and the  
NOTE Confidence: 0.943608066666667

00:04:41.875 --> 00:04:43.415 leader of the Melanoma program.  
NOTE Confidence: 0.943608066666667

00:04:43.420 --> 00:04:45.379 Here at Smilow,  
NOTE Confidence: 0.943608066666667

00:04:45.380 --> 00:04:47.060 she sees patients with both  
NOTE Confidence: 0.943608066666667

00:04:47.060 --> 00:04:48.740 Melanoma and renal cell cancer.  
NOTE Confidence: 0.943608066666667

00:04:48.740 --> 00:04:51.560 She has an extensive research portfolio  
NOTE Confidence: 0.943608066666667

00:04:51.560 --> 00:04:54.107 with an interest in developing  
NOTE Confidence: 0.943608066666667

00:04:54.107 --> 00:04:57.027 new drug regimens and biomarkers.  
NOTE Confidence: 0.943608066666667

00:04:57.030 --> 00:04:59.270 That are predictive of response  
NOTE Confidence: 0.943608066666667

00:04:59.270 --> 00:05:01.062 to therapy and Melanoma.  
NOTE Confidence: 0.943608066666667

00:05:01.070 --> 00:05:03.370 She participates in a variety



NOTE Confidence: 0.943608066666667  
00:05:03.370 --> 00:05:04.750 of clinical trials.  
NOTE Confidence: 0.943608066666667  
00:05:04.750 --> 00:05:06.770 She directs an active research  
NOTE Confidence: 0.943608066666667  
00:05:06.770 --> 00:05:08.790 laboratory that studies tumor and  
NOTE Confidence: 0.943608066666667  
00:05:08.863 --> 00:05:10.883 immune cells from patients treated  
NOTE Confidence: 0.943608066666667  
00:05:10.883 --> 00:05:12.903 with these novel therapies to  
NOTE Confidence: 0.943608066666667  
00:05:12.975 --> 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 --> 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 --> 00:05:22.148 renal cell cancer,  
NOTE Confidence: 0.943608066666667  
00:05:22.148 --> 00:05:23.546 and brain metestes.  
NOTE Confidence: 0.87704586  
00:05:25.920 --> 00:05:28.864 You know Harriet is definitely our go to  
NOTE Confidence: 0.87704586  
00:05:28.864 --> 00:05:31.898 expert and I think we'll find her just  
NOTE Confidence: 0.87704586  
00:05:31.898 --> 00:05:34.640 a fountain of knowledge in this regard.  
NOTE Confidence: 0.87704586  
00:05:34.640 --> 00:05:37.340 Next it's a pleasure for me to to introduce  
NOTE Confidence: 0.87704586

00:05:37.340 --> 00:05:40.008 one of my surgical partners, Doctor Kelly.  
NOTE Confidence: 0.87704586

00:05:40.008 --> 00:05:43.080 Olin Kelly is a W Board certified surgeon  
NOTE Confidence: 0.87704586

00:05:43.156 --> 00:05:44.996 who provides patients comprehensive  
NOTE Confidence: 0.87704586

00:05:44.996 --> 00:05:47.756 surgical care for skin and soft  
NOTE Confidence: 0.87704586

00:05:47.827 --> 00:05:49.664 tissue tumors including Melanoma,  
NOTE Confidence: 0.87704586

00:05:49.664 --> 00:05:51.738 Merkel cell cancer, sarcoma,  
NOTE Confidence: 0.87704586

00:05:51.738 --> 00:05:55.028 basal cell cancer and others.  
NOTE Confidence: 0.87704586

00:05:55.030 --> 00:05:58.070 She's been a recipient of a number of  
NOTE Confidence: 0.87704586

00:05:58.070 --> 00:06:00.691 awards including the Society Surgical  
NOTE Confidence: 0.87704586

00:06:00.691 --> 00:06:03.067 Oncologist Clinical Investigator award  
NOTE Confidence: 0.87704586

00:06:03.070 --> 00:06:05.800 and she has funding through the Calabresi  
NOTE Confidence: 0.87704586

00:06:05.800 --> 00:06:07.795 Immune Oncology Scholar program.  
NOTE Confidence: 0.87704586

00:06:07.795 --> 00:06:11.554 She currently serves as the NCCN Non  
NOTE Confidence: 0.87704586

00:06:11.554 --> 00:06:14.264 Melanoma cutaneous on the cutaneous  
NOTE Confidence: 0.87704586

00:06:14.264 --> 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.

NOTE Confidence: 0.87704586

00:06:18.550 --> 00:06:20.498 Next doctor Twee Tran.

NOTE Confidence: 0.87704586

00:06:20.498 --> 00:06:24.300 Twee is an assistant professor of Medicine.

NOTE Confidence: 0.87704586

00:06:24.300 --> 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 --> 00:06:30.310 our spinal cancer hospital sites,

NOTE Confidence: 0.87704586

00:06:30.310 --> 00:06:33.740 both in New Haven and in Guilford.

NOTE Confidence: 0.87704586

00:06:33.740 --> 00:06:37.159 She is a graduate of the A/B IM Physician

NOTE Confidence: 0.87704586

00:06:37.159 --> 00:06:39.516 Scientist Research Pathway, and Dr.

NOTE Confidence: 0.87704586

00:06:39.516 --> 00:06:43.218 Tren is a bit of a a Yale product.

NOTE Confidence: 0.87704586

00:06:43.218 --> 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 --> 00:06:52.040 although she received both of her.

NOTE Confidence: 0.87704586

00:06:52.040 --> 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 --> 00:06:59.276 She's also very involved in research,

NOTE Confidence: 0.87704586

00:06:59.280 --> 00:07:01.380 including novel therapeutics  
NOTE Confidence: 0.87704586

00:07:01.380 --> 00:07:03.480 and drug combinations,  
NOTE Confidence: 0.87704586

00:07:03.480 --> 00:07:06.432 and is a participant in the  
NOTE Confidence: 0.87704586

00:07:06.432 --> 00:07:08.400 Yale skin Cancer spore.  
NOTE Confidence: 0.87704586

00:07:08.400 --> 00:07:10.580 She's a principal investigator  
NOTE Confidence: 0.87704586

00:07:10.580 --> 00:07:12.760 of several clinical trials.  
NOTE Confidence: 0.87704586

00:07:12.760 --> 00:07:15.477 Last and certainly not least, Dr.  
NOTE Confidence: 0.87704586

00:07:15.477 --> 00:07:18.462 Jonathan Leventhal is an associate  
NOTE Confidence: 0.87704586

00:07:18.462 --> 00:07:20.253 professor of dermatology.  
NOTE Confidence: 0.87704586

00:07:20.260 --> 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 --> 00:07:28.088 Doctor Leventhal received his  
NOTE Confidence: 0.87704586

00:07:28.088 --> 00:07:31.173 bachelor's degree and medical degree  
NOTE Confidence: 0.87704586

00:07:31.173 --> 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 --> 00:07:39.020 where he served as a chief resident.

NOTE Confidence: 0.87704586

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

NOTE Confidence: 0.87704586

00:07:41.966 --> 00:07:44.740 to skin cancer patients who develop

NOTE Confidence: 0.87704586

00:07:44.740 --> 00:07:47.020 cutaneous toxicities from their treatments,

NOTE Confidence: 0.87704586

00:07:47.020 --> 00:07:49.912 as well as diagnosing and treating

NOTE Confidence: 0.87704586

00:07:49.912 --> 00:07:50.876 skin cancers.

NOTE Confidence: 0.87704586

00:07:50.880 --> 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 --> 00:07:57.456 studying new treatments for

NOTE Confidence: 0.87704586

00:07:57.456 --> 00:07:59.360 managing dermatologic toxicities.

NOTE Confidence: 0.87704586

00:07:59.360 --> 00:08:01.910 And he's actively involved in residency

NOTE Confidence: 0.87704586

00:08:01.910 --> 00:08:04.503 in medical education as well as

NOTE Confidence: 0.87704586

00:08:04.503 --> 00:08:07.380 serving as an editor for the textbook

NOTE Confidence: 0.87704586

00:08:07.380 --> 00:08:08.879 self-assessment in dermatology.

NOTE Confidence: 0.87704586

00:08:08.880 --> 00:08:12.186 So do you really have an

NOTE Confidence: 0.87704586

00:08:12.186 --> 00:08:14.426 outstanding cast of experts here?

NOTE Confidence: 0.87704586

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 --> 00:08:20.520 Great. Let's get started. Florida,  
NOTE Confidence: 0.95434236

00:08:20.520 --> 00:08:21.955 you want to present the first case.  
NOTE Confidence: 0.946004114285714

00:08:22.760 --> 00:08:24.839 Karen, thank you for the warm introduction.  
NOTE Confidence: 0.946004114285714

00:08:24.840 --> 00:08:27.558 I want to say your work  
NOTE Confidence: 0.946004114285714

00:08:27.558 --> 00:08:28.917 and really unsailable.  
NOTE Confidence: 0.946004114285714

00:08:28.920 --> 00:08:30.488 I'm probably then honored also to have  
NOTE Confidence: 0.946004114285714

00:08:30.488 --> 00:08:32.972 the support of our colleagues. It's Milo.  
NOTE Confidence: 0.946004114285714

00:08:32.972 --> 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 --> 00:08:43.424 an enlarging leg mole situation that  
NOTE Confidence: 0.946004114285714

00:08:43.424 --> 00:08:46.118 we encounter in practice quite often.  
NOTE Confidence: 0.946004114285714

00:08:46.120 --> 00:08:48.556 I'm sure my colleagues will recognize it.  
NOTE Confidence: 0.946004114285714

00:08:48.560 --> 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 --> 00:08:54.394 of hypertension hyperlipidemia.

NOTE Confidence: 0.946004114285714  
00:08:54.400 --> 00:08:56.970 She has a history of having used  
NOTE Confidence: 0.946004114285714  
00:08:56.970 --> 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 --> 00:09:03.600 years due to a COVID pandemic.  
NOTE Confidence: 0.946004114285714  
00:09:03.600 --> 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 --> 00:09:13.550 is remarkable for her mother  
NOTE Confidence: 0.946004114285714  
00:09:13.550 --> 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 --> 00:09:20.700 probably to take a look at the lesions,  
NOTE Confidence: 0.946004114285714  
00:09:20.700 --> 00:09:22.145 so my colleagues could pay  
NOTE Confidence: 0.946004114285714  
00:09:22.145 --> 00:09:24.017 attention to some of the features  
NOTE Confidence: 0.946004114285714  
00:09:24.017 --> 00:09:25.857 that associate to this lesion.  
NOTE Confidence: 0.944726222222222  
00:09:28.300 --> 00:09:30.757 And we'll in a moment we'll discuss  
NOTE Confidence: 0.944726222222222  
00:09:30.757 --> 00:09:32.675 actually the ABCD's of recognizing  
NOTE Confidence: 0.944726222222222

00:09:32.675 --> 00:09:34.700 the warning signs of Melanoma.  
NOTE Confidence: 0.9447262222222222

00:09:34.700 --> 00:09:36.415 So this would be sort of a  
NOTE Confidence: 0.9447262222222222

00:09:36.420 --> 00:09:39.620 a good picture to remember.  
NOTE Confidence: 0.9447262222222222

00:09:39.620 --> 00:09:41.444 We could move on to the next slide.  
NOTE Confidence: 0.9447262222222222

00:09:41.450 --> 00:09:44.026 So talking about moles and early signs  
NOTE Confidence: 0.9447262222222222

00:09:44.026 --> 00:09:47.249 of skin cancer, couple of specifics,  
NOTE Confidence: 0.9447262222222222

00:09:47.249 --> 00:09:49.664 what do we look for when we have a patient  
NOTE Confidence: 0.9447262222222222

00:09:49.664 --> 00:09:51.850 in front of us and we do a skin exam,  
NOTE Confidence: 0.9447262222222222

00:09:51.850 --> 00:09:55.364 we're looking for anything new or changing  
NOTE Confidence: 0.9447262222222222

00:09:55.370 --> 00:09:59.250 on both sun exposed and sun protected areas.  
NOTE Confidence: 0.9447262222222222

00:09:59.250 --> 00:10:01.565 Typically Melanoma appear in women  
NOTE Confidence: 0.9447262222222222

00:10:01.565 --> 00:10:04.633 on the legs and number one place  
NOTE Confidence: 0.9447262222222222

00:10:04.633 --> 00:10:07.594 they develop men is on the trunk.  
NOTE Confidence: 0.9447262222222222

00:10:07.600 --> 00:10:09.800 They could arise though anywhere on the skin,  
NOTE Confidence: 0.9447262222222222

00:10:09.800 --> 00:10:11.800 even in the areas where sun doesn't shine,  
NOTE Confidence: 0.9447262222222222

00:10:11.800 --> 00:10:14.200 so beware.



NOTE Confidence: 0.9447262222222222

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

NOTE Confidence: 0.9447262222222222

00:10:15.336 --> 00:10:17.368 brown spots and growths on the skin

NOTE Confidence: 0.9447262222222222

00:10:17.368 --> 00:10:19.120 are harmless, but not always.

NOTE Confidence: 0.8693227

00:10:22.040 --> 00:10:24.864 Here's the ABCDI was talking about.

NOTE Confidence: 0.8693227

00:10:24.864 --> 00:10:26.570 This is a simple guide to recognize

NOTE Confidence: 0.8693227

00:10:26.570 --> 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 --> 00:10:37.700 the two halves don't match.

NOTE Confidence: 0.8693227

00:10:37.700 --> 00:10:39.252 B is for border.

NOTE Confidence: 0.8693227

00:10:39.252 --> 00:10:41.580 Typically they tend to be uneven.

NOTE Confidence: 0.8693227

00:10:41.580 --> 00:10:44.016 They may be scalloped or notched.

NOTE Confidence: 0.8693227

00:10:44.020 --> 00:10:45.588 C is for color.

NOTE Confidence: 0.8693227

00:10:45.588 --> 00:10:47.940 Multiple colors are a warning sign

NOTE Confidence: 0.8693227

00:10:47.940 --> 00:10:49.722 and melanomas may may have different

NOTE Confidence: 0.8693227

00:10:49.722 --> 00:10:52.162 shades of brown, tan, or black.  
NOTE Confidence: 0.8693227

00:10:52.162 --> 00:10:54.218 D is for diameter.  
NOTE Confidence: 0.8693227

00:10:54.220 --> 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 --> 00:11:02.250 and any lesion that's darker  
NOTE Confidence: 0.8693227

00:11:02.250 --> 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 amelanotic melanomas,  
NOTE Confidence: 0.8693227

00:11:07.940 --> 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 --> 00:11:16.574 shape, color, or elevation of a spot.  
NOTE Confidence: 0.8693227

00:11:16.580 --> 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 --> 00:11:25.860 Also, look for an ugly duckling.  
NOTE Confidence: 0.8693227

00:11:25.860 --> 00:11:28.260 The strategy is based on most  
NOTE Confidence: 0.8693227

00:11:28.260 --> 00:11:29.860 moles resembling one another,  
NOTE Confidence: 0.8693227

00:11:29.860 --> 00:11:31.360 while melanomas stand out

NOTE Confidence: 0.8693227

00:11:31.360 --> 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 --> 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 --> 00:11:51.807 of the main subtypes of a Melanoma,

NOTE Confidence: 0.943128857142857

00:11:51.810 --> 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 --> 00:11:56.970 these are the most common types of Melanoma.

NOTE Confidence: 0.943128857142857

00:11:56.970 --> 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 --> 00:12:04.328 And they tend to grow radially pretty

NOTE Confidence: 0.943128857142857

00:12:04.328 --> 00:12:06.838 slowly over the course of months to

NOTE Confidence: 0.943128857142857

00:12:06.838 --> 00:12:09.040 sometimes even years before then growing

NOTE Confidence: 0.943128857142857

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

NOTE Confidence: 0.943128857142857

00:12:11.500 --> 00:12:13.072 Now this is in contrast to

NOTE Confidence: 0.943128857142857

00:12:13.072 --> 00:12:14.700 the nodular type of Melanoma,

NOTE Confidence: 0.943128857142857

00:12:14.700 --> 00:12:16.961 which tends to be far more aggressive

NOTE Confidence: 0.943128857142857

00:12:16.961 --> 00:12:19.235 and that these can grow quite rapidly

NOTE Confidence: 0.943128857142857

00:12:19.235 --> 00:12:21.771 and they tend to to present more deeply

NOTE Confidence: 0.943128857142857

00:12:21.771 --> 00:12:23.892 in the dermis at a higher stage.

NOTE Confidence: 0.943128857142857

00:12:23.900 --> 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 --> 00:12:30.878 recent change or rapidly growing skin lesion.

NOTE Confidence: 0.943128857142857

00:12:30.880 --> 00:12:32.415 The lentigo and malignant subtype

NOTE Confidence: 0.943128857142857

00:12:32.415 --> 00:12:34.480 tends to occur in elderly patients.

NOTE Confidence: 0.943128857142857

00:12:34.480 --> 00:12:36.622 Often looks like an atypical lentigo

NOTE Confidence: 0.943128857142857

00:12:36.622 --> 00:12:38.919 or a sunspot that elderly patients

NOTE Confidence: 0.943128857142857

00:12:38.919 --> 00:12:40.904 might develop in sun exposed

NOTE Confidence: 0.943128857142857

00:12:40.904 --> 00:12:43.359 areas but with atypical features.

NOTE Confidence: 0.943128857142857

00:12:43.360 --> 00:12:45.195 Probably the most challenging one

NOTE Confidence: 0.943128857142857

00:12:45.195 --> 00:12:47.502 for anyone to diagnose are the

NOTE Confidence: 0.943128857142857

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

NOTE Confidence: 0.943128857142857

00:12:49.120 --> 00:12:51.276 and these tend not to have pigment,

NOTE Confidence: 0.943128857142857

00:12:51.280 --> 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 --> 00:12:57.720 here with a new amyloidotic 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 --> 00:13:01.391 or symptomatic in some way such

NOTE Confidence: 0.943128857142857

00:13:01.391 --> 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 acral,

NOTE Confidence: 0.943128857142857

00:13:04.790 --> 00:13:06.542 lentiginous and subungual types

NOTE Confidence: 0.943128857142857

00:13:06.542 --> 00:13:08.294 are important particularly in

NOTE Confidence: 0.943128857142857

00:13:08.294 --> 00:13:10.310 patients with darker skin types.

NOTE Confidence: 0.943128857142857

00:13:10.310 --> 00:13:12.526 They might be have a higher risk of  
NOTE Confidence: 0.943128857142857

00:13:12.526 --> 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 --> 00:13:18.185 patients to look at the palms and soles.  
NOTE Confidence: 0.943128857142857

00:13:18.190 --> 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 --> 00:13:25.806 which as you can see is a melanotic band  
NOTE Confidence: 0.943128857142857

00:13:25.806 --> 00:13:28.942 that grows from the proxable nail upwards.  
NOTE Confidence: 0.9419308333333333

00:13:31.630 --> 00:13:34.900 I think it's important to have a  
NOTE Confidence: 0.9419308333333333

00:13:34.900 --> 00:13:36.910 differential diagnosis anytime  
NOTE Confidence: 0.9419308333333333

00:13:36.910 --> 00:13:39.590 you approached pigmented lesions.  
NOTE Confidence: 0.9419308333333333

00:13:39.590 --> 00:13:41.300 So I highlighted here on this  
NOTE Confidence: 0.9419308333333333

00:13:41.300 --> 00:13:43.501 slide what I think of as as  
NOTE Confidence: 0.9419308333333333

00:13:43.501 --> 00:13:44.825 the most clinically important,  
NOTE Confidence: 0.9419308333333333

00:13:44.830 --> 00:13:47.536 so I would say by far.  
NOTE Confidence: 0.9419308333333333

00:13:47.540 --> 00:13:49.960 The most common presenting diagnosis

NOTE Confidence: 0.9419308333333333  
00:13:49.960 --> 00:13:53.704 that that comes in with concern for  
NOTE Confidence: 0.9419308333333333  
00:13:53.704 --> 00:13:56.180 Melanoma are seborrheic keratoses,  
NOTE Confidence: 0.9419308333333333  
00:13:56.180 --> 00:13:58.574 which are on the the top left.  
NOTE Confidence: 0.9419308333333333  
00:13:58.580 --> 00:14:01.068 These are stuck on waxy tan to brown  
NOTE Confidence: 0.9419308333333333  
00:14:01.068 --> 00:14:03.442 or even darker brown black papules  
NOTE Confidence: 0.9419308333333333  
00:14:03.442 --> 00:14:05.950 and plaques that tend to develop  
NOTE Confidence: 0.9419308333333333  
00:14:06.023 --> 00:14:08.219 and patients as they get older,  
NOTE Confidence: 0.9419308333333333  
00:14:08.220 --> 00:14:10.516 and sometimes they can be very challenging  
NOTE Confidence: 0.9419308333333333  
00:14:10.516 --> 00:14:12.139 to distinguish from a Melanoma.  
NOTE Confidence: 0.9419308333333333  
00:14:12.140 --> 00:14:13.996 So dermatologists use dermatoscopes.  
NOTE Confidence: 0.9419308333333333  
00:14:13.996 --> 00:14:16.316 And if we are unsure,  
NOTE Confidence: 0.9419308333333333  
00:14:16.320 --> 00:14:18.440 we'll perform a skin biopsy,  
NOTE Confidence: 0.9419308333333333  
00:14:18.440 --> 00:14:19.920 certainly on the top right,  
NOTE Confidence: 0.9419308333333333  
00:14:19.920 --> 00:14:22.344 we always consider normal appearing nevi  
NOTE Confidence: 0.9419308333333333  
00:14:22.344 --> 00:14:25.400 and those that are slightly dysplastic.  
NOTE Confidence: 0.9419308333333333

00:14:25.400 --> 00:14:27.878 So they're not fully normal appearing.  
NOTE Confidence: 0.9419308333333333

00:14:27.880 --> 00:14:29.960 They might be slightly asymmetrical,  
NOTE Confidence: 0.9419308333333333

00:14:29.960 --> 00:14:31.124 borders are irregular,  
NOTE Confidence: 0.9419308333333333

00:14:31.124 --> 00:14:33.840 but these don't meet criteria for Melanoma.  
NOTE Confidence: 0.9419308333333333

00:14:33.840 --> 00:14:35.000 And when these are biopsied,  
NOTE Confidence: 0.9419308333333333

00:14:35.000 --> 00:14:38.584 they're not Melanoma then on the bottom left.  
NOTE Confidence: 0.9419308333333333

00:14:38.590 --> 00:14:40.708 Illustrates the fact that even non  
NOTE Confidence: 0.9419308333333333

00:14:40.708 --> 00:14:42.950 Melanoma skin cancers can be pigmented.  
NOTE Confidence: 0.9419308333333333

00:14:42.950 --> 00:14:45.238 So this is an example of a pigmented  
NOTE Confidence: 0.9419308333333333

00:14:45.238 --> 00:14:47.642 basal cell carcinoma noted as a slightly  
NOTE Confidence: 0.9419308333333333

00:14:47.642 --> 00:14:50.146 more pearly appearance to it and with  
NOTE Confidence: 0.9419308333333333

00:14:50.146 --> 00:14:52.156 a dermatoscope you might see other  
NOTE Confidence: 0.9419308333333333

00:14:52.156 --> 00:14:55.350 features of a basal cell on the the bottom.  
NOTE Confidence: 0.9419308333333333

00:14:55.350 --> 00:14:58.584 Middle picture is an example of vascular  
NOTE Confidence: 0.9419308333333333

00:14:58.584 --> 00:15:02.288 lesions such as angiokeratomas or angiomas.  
NOTE Confidence: 0.9419308333333333

00:15:02.290 --> 00:15:03.290 Sometimes they can have



NOTE Confidence: 0.9419308333333333  
00:15:03.290 --> 00:15:04.290 a really dark purplish,  
NOTE Confidence: 0.9419308333333333  
00:15:04.290 --> 00:15:07.244 even blackish hue and can be challenging.  
NOTE Confidence: 0.9419308333333333  
00:15:07.250 --> 00:15:07.874 As dermatologists,  
NOTE Confidence: 0.9419308333333333  
00:15:07.874 --> 00:15:09.746 we can use a dermatoscope which  
NOTE Confidence: 0.9419308333333333  
00:15:09.746 --> 00:15:12.114 you can see in the top right  
NOTE Confidence: 0.9419308333333333  
00:15:12.114 --> 00:15:13.466 corner highlighting those vascular  
NOTE Confidence: 0.9419308333333333  
00:15:13.466 --> 00:15:15.049 lacunae and that's reassuring.  
NOTE Confidence: 0.9419308333333333  
00:15:15.050 --> 00:15:16.502 And then on the bottom right  
NOTE Confidence: 0.9419308333333333  
00:15:16.502 --> 00:15:18.250 is a picture of a blue Nevis.  
NOTE Confidence: 0.9419308333333333  
00:15:18.250 --> 00:15:22.430 And so these moles can also appear in  
NOTE Confidence: 0.9419308333333333  
00:15:22.430 --> 00:15:25.330 as differential diagnosis of Melanoma,  
NOTE Confidence: 0.9419308333333333  
00:15:25.330 --> 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 --> 00:15:32.426 review the epidemiology.  
NOTE Confidence: 0.9478010325  
00:15:32.430 --> 00:15:34.746 Everyone here is familiar with Melanoma.  
NOTE Confidence: 0.9478010325

00:15:34.750 --> 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 --> 00:15:41.940 although some might develop from  
NOTE Confidence: 0.9478010325

00:15:41.940 --> 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 --> 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 --> 00:15:55.035 but tends to tends to predominant  
NOTE Confidence: 0.9478010325

00:15:55.035 --> 00:15:57.045 in white men over age 50.  
NOTE Confidence: 0.9478010325

00:15:57.050 --> 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 --> 00:16:04.170 likely due to tanning habits.  
NOTE Confidence: 0.9478010325

00:16:04.170 --> 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 --> 00:16:10.434 some factors associated with poor

NOTE Confidence: 0.9478010325

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 --> 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 --> 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 --> 00:16:28.901 to provide an overview of the

NOTE Confidence: 0.917876799444445

00:16:28.901 --> 00:16:30.416 main risk factors for Melanoma.

NOTE Confidence: 0.917876799444445

00:16:30.420 --> 00:16:32.765 So like any cancer we can consider

NOTE Confidence: 0.917876799444445

00:16:32.765 --> 00:16:35.352 those that are environmental and those

NOTE Confidence: 0.917876799444445

00:16:35.352 --> 00:16:38.620 that are hereditary. Next slide.

NOTE Confidence: 0.917876799444445

00:16:38.620 --> 00:16:40.786 So for the environmental risk factors

NOTE Confidence: 0.917876799444445

00:16:40.786 --> 00:16:42.697 it's it's really all ultraviolet

NOTE Confidence: 0.917876799444445

00:16:42.697 --> 00:16:45.525 exposure and so we know that intermittent

NOTE Confidence: 0.917876799444445

00:16:45.525 --> 00:16:47.536 intense sun exposure throughout life  
NOTE Confidence: 0.917876799444445

00:16:47.536 --> 00:16:49.444 and increase the risk of Melanoma.  
NOTE Confidence: 0.917876799444445

00:16:49.450 --> 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 --> 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 --> 00:16:57.450 adolescence and adulthood.  
NOTE Confidence: 0.917876799444445

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

00:16:58.222 --> 00:16:59.766 especially in young women,  
NOTE Confidence: 0.917876799444445

00:16:59.770 --> 00:17:01.590 tanning beds have been associated  
NOTE Confidence: 0.917876799444445

00:17:01.590 --> 00:17:03.410 with increased odds of Melanoma.  
NOTE Confidence: 0.946291582

00:17:05.850 --> 00:17:07.746 And now I'll discuss some of  
NOTE Confidence: 0.946291582

00:17:07.746 --> 00:17:09.010 the hereditary risk factors.  
NOTE Confidence: 0.946291582

00:17:09.010 --> 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 --> 00:17:16.090 freckling, blonde hair, red hair,

NOTE Confidence: 0.946291582

00:17:16.090 --> 00:17:19.247 light eyes are all associated with Melanoma.

NOTE Confidence: 0.946291582

00:17:19.250 --> 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 --> 00:17:24.086 the important one here is having

NOTE Confidence: 0.946291582

00:17:24.086 --> 00:17:26.080 over 100 nevi that really increases

NOTE Confidence: 0.946291582

00:17:26.080 --> 00:17:28.045 the risk of developing Melanoma.

NOTE Confidence: 0.946291582

00:17:28.050 --> 00:17:29.702 And I think it's important to have

NOTE Confidence: 0.946291582

00:17:29.702 --> 00:17:31.650 an idea of these inherent risk

NOTE Confidence: 0.946291582

00:17:31.650 --> 00:17:33.620 factors because the United States

NOTE Confidence: 0.946291582

00:17:33.620 --> 00:17:35.587 Preventative Services Task Force does

NOTE Confidence: 0.946291582

00:17:35.587 --> 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 --> 00:17:40.953 mind those who have phenotypic

NOTE Confidence: 0.946291582

00:17:40.953 --> 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.

NOTE Confidence: 0.946291582

00:17:44.970 --> 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 --> 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 --> 00:17:57.270 degree relative with Melanoma,  
NOTE Confidence: 0.950988001333333  
00:17:57.270 --> 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 --> 00:18:04.310 on from generation to generation.  
NOTE Confidence: 0.950988001333333  
00:18:04.310 --> 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 --> 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 --> 00:18:18.054 increased risk of developing Melanoma,

NOTE Confidence: 0.950988001333333  
00:18:18.060 --> 00:18:19.920 but also pancreatic cancer.  
NOTE Confidence: 0.950988001333333  
00:18:19.920 --> 00:18:23.780 And I think it's important to keep in mind  
NOTE Confidence: 0.950988001333333  
00:18:23.780 --> 00:18:27.014 who to think about screening for genetics.  
NOTE Confidence: 0.950988001333333  
00:18:27.020 --> 00:18:28.320 So we shouldn't send everyone  
NOTE Confidence: 0.950988001333333  
00:18:28.320 --> 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 --> 00:18:33.692 who have several members on one  
NOTE Confidence: 0.950988001333333  
00:18:33.692 --> 00:18:36.005 side of the family with a Melanoma  
NOTE Confidence: 0.950988001333333  
00:18:36.005 --> 00:18:38.687 or if a family member had more than  
NOTE Confidence: 0.950988001333333  
00:18:38.687 --> 00:18:40.577 one Melanoma and in particular.  
NOTE Confidence: 0.950988001333333  
00:18:40.580 --> 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 --> 00:18:47.900 that should be an important clue.  
NOTE Confidence: 0.950988001333333  
00:18:47.900 --> 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,  
NOTE Confidence: 0.950988001333333

00:18:51.932 --> 00:18:52.940 including melanomas.  
NOTE Confidence: 0.950988001333333  
00:18:52.940 --> 00:18:54.410 But you really want to think  
NOTE Confidence: 0.950988001333333  
00:18:54.410 --> 00:18:55.978 about those that have had over 3,  
NOTE Confidence: 0.950988001333333  
00:18:55.980 --> 00:18:57.344 three or more melanomas,  
NOTE Confidence: 0.950988001333333  
00:18:57.344 --> 00:18:59.049 especially if the first one  
NOTE Confidence: 0.950988001333333  
00:18:59.049 --> 00:19:00.618 happened when they were young.  
NOTE Confidence: 0.950988001333333  
00:19:00.620 --> 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: 0.950988001333333  
00:19:04.721 --> 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 --> 00:19:10.190 Dr.  
NOTE Confidence: 0.950988001333333  
00:19:10.190 --> 00:19:10.430 Tran,  
NOTE Confidence: 0.950988001333333  
00:19:10.430 --> 00:19:10.670 thank  
NOTE Confidence: 0.902926978  
00:19:11.310 --> 00:19:12.670 you so much, Dr. Leventhal.



NOTE Confidence: 0.902926978

00:19:12.670 --> 00:19:15.365 So we typically see all Melanoma patients

NOTE Confidence: 0.902926978

00:19:15.365 --> 00:19:17.988 and follow up in medical oncology.

NOTE Confidence: 0.902926978

00:19:17.990 --> 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 --> 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 --> 00:19:29.370 good with close surveillance.

NOTE Confidence: 0.902926978

00:19:29.370 --> 00:19:30.770 And we see these individuals,

NOTE Confidence: 0.902926978

00:19:30.770 --> 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 --> 00:19:37.363 and then subsequently at that point

NOTE Confidence: 0.902926978

00:19:37.363 --> 00:19:39.391 considered handing over the reins to

NOTE Confidence: 0.902926978

00:19:39.391 --> 00:19:41.204 primary care for ongoing surveillance.

NOTE Confidence: 0.902926978

00:19:41.204 --> 00:19:43.189 And every visit we check

NOTE Confidence: 0.902926978

00:19:43.189 --> 00:19:44.810 complete blood cell count,  
NOTE Confidence: 0.902926978

00:19:44.810 --> 00:19:47.890 metabolic panel and an LDH as a  
NOTE Confidence: 0.902926978

00:19:47.890 --> 00:19:50.910 surrogate tumor marker that we can  
NOTE Confidence: 0.902926978

00:19:50.910 --> 00:19:53.490 assess for early Melanoma recurrences.  
NOTE Confidence: 0.902926978

00:19:53.490 --> 00:19:55.086 And depending on the stage as well,  
NOTE Confidence: 0.902926978

00:19:55.090 --> 00:19:56.850 for these early stage individuals,  
NOTE Confidence: 0.902926978

00:19:56.850 --> 00:19:58.655 consider getting an either an  
NOTE Confidence: 0.902926978

00:19:58.655 --> 00:20:00.930 annual chest X-ray or CAT scans.  
NOTE Confidence: 0.902926978

00:20:00.930 --> 00:20:03.105 I think what's really important  
NOTE Confidence: 0.902926978

00:20:03.105 --> 00:20:06.249 and helpful is that if the primary  
NOTE Confidence: 0.902926978

00:20:06.250 --> 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 --> 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 --> 00:20:19.696 low threshold for ordering additional

NOTE Confidence: 0.902926978

00:20:19.696 --> 00:20:23.000 imaging and if possible for early diagnosis.

NOTE Confidence: 0.902926978

00:20:23.000 --> 00:20:24.092 After five years,

NOTE Confidence: 0.902926978

00:20:24.092 --> 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 --> 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 --> 00:20:44.938 We are presented here with a 76 year

NOTE Confidence: 0.944027375

00:20:44.938 --> 00:20:48.253 old male who has a right forearm

NOTE Confidence: 0.944027375

00:20:48.253 --> 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 --> 00:20:56.999 the lesion or rapid recent growth.

NOTE Confidence: 0.944027375

00:20:57.000 --> 00:21:00.176 He underwent a shave biopsy and

NOTE Confidence: 0.944027375

00:21:00.176 --> 00:21:02.480 pathology report revealed Melanoma,

NOTE Confidence: 0.944027375

00:21:02.480 --> 00:21:06.440 breast load thickness 2.3 millimeter.

NOTE Confidence: 0.944027375

00:21:06.440 --> 00:21:09.156 He reported a history of blistering sunburns.

NOTE Confidence: 0.944027375

00:21:09.160 --> 00:21:11.716 No history of tanning, but use.

NOTE Confidence: 0.944027375

00:21:11.720 --> 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 --> 00:21:21.579 skin cancer and he retired from finance.

NOTE Confidence: 0.944027375

00:21:21.580 --> 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 --> 00:21:26.994 lymphadenopathies and his skin exam

NOTE Confidence: 0.944027375

00:21:26.994 --> 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 --> 00:21:36.058 no nodularity, no satellite lesions.

NOTE Confidence: 0.944027375

00:21:36.060 --> 00:21:37.779 Next slide please.

NOTE Confidence: 0.944027375

00:21:37.779 --> 00:21:39.498 So this case,

NOTE Confidence: 0.944027375

00:21:39.500 --> 00:21:41.470 as you've heard earlier as

NOTE Confidence: 0.944027375

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 --> 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 --> 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 --> 00:22:06.122 EKG if needed.

NOTE Confidence: 0.944027375

00:22:06.122 --> 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 --> 00:22:13.154 there is an indication for Sentinel

NOTE Confidence: 0.944027375

00:22:13.154 --> 00:22:14.789 node biopsy to determine staging

NOTE Confidence: 0.944027375

00:22:14.789 --> 00:22:16.249 and future therapy decision.

NOTE Confidence: 0.944027375

00:22:16.250 --> 00:22:20.506 In this case I'll turn it on to.

NOTE Confidence: 0.944027375

00:22:20.510 --> 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 --> 00:22:25.003 I'm Kelly Olina,  
NOTE Confidence: 0.91208729

00:22:25.003 --> 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 --> 00:22:32.950 Tran and Leventhal on an everyday basis.  
NOTE Confidence: 0.91208729

00:22:32.950 --> 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 --> 00:22:38.461 they come in really scared and that's  
NOTE Confidence: 0.91208729

00:22:38.461 --> 00:22:40.509 really how we meet most people.  
NOTE Confidence: 0.91208729

00:22:40.510 --> 00:22:42.510 They come in very uncertain.  
NOTE Confidence: 0.91208729

00:22:42.510 --> 00:22:44.526 So again part of this is also to  
NOTE Confidence: 0.91208729

00:22:44.526 --> 00:22:46.047 empower the primary care doctors  
NOTE Confidence: 0.91208729

00:22:46.047 --> 00:22:48.287 on the line who know these patients  
NOTE Confidence: 0.91208729

00:22:48.351 --> 00:22:50.463 inside and out and you know are more.  
NOTE Confidence: 0.91208729

00:22:50.470 --> 00:22:51.670 More than just their doctors,

NOTE Confidence: 0.91208729

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

NOTE Confidence: 0.91208729

00:22:53.420 --> 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 --> 00:22:59.550 when patients come in to see me,

NOTE Confidence: 0.91208729

00:22:59.550 --> 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 --> 00:23:03.530 we explain to them how the depth

NOTE Confidence: 0.91208729

00:23:03.530 --> 00:23:05.589 of their Melanoma really impacts.

NOTE Confidence: 0.91208729

00:23:05.590 --> 00:23:06.762 But there's certain principles

NOTE Confidence: 0.91208729

00:23:06.762 --> 00:23:08.830 that we stick to no matter what.

NOTE Confidence: 0.91208729

00:23:08.830 --> 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 --> 00:23:16.870 We remove also the fatty tissue

NOTE Confidence: 0.91208729

00:23:16.927 --> 00:23:18.892 that that carries the lymphatics  
NOTE Confidence: 0.91208729

00:23:18.892 --> 00:23:20.464 through which Melanoma cells.  
NOTE Confidence: 0.91208729

00:23:20.470 --> 00:23:23.374 Can escape and it's actually based  
NOTE Confidence: 0.91208729

00:23:23.374 --> 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 --> 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 --> 00:23:33.368 in our attempts to make sure that the  
NOTE Confidence: 0.91208729

00:23:33.368 --> 00:23:35.547 surgery becomes less and less morbid,  
NOTE Confidence: 0.91208729

00:23:35.550 --> 00:23:37.671 we actually are now part of an  
NOTE Confidence: 0.91208729

00:23:37.671 --> 00:23:39.590 international trial called the Melmark trial.  
NOTE Confidence: 0.91208729

00:23:39.590 --> 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 --> 00:23:45.606 you may hear this,  
NOTE Confidence: 0.91208729

00:23:45.606 --> 00:23:46.826 the mention of this trial.  
NOTE Confidence: 0.91208729

00:23:46.830 --> 00:23:48.528 But again we're down to taking



NOTE Confidence: 0.91208729

00:23:48.528 --> 00:23:50.550 out about 1 to 2 centimeter.

NOTE Confidence: 0.91208729

00:23:50.550 --> 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 --> 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 --> 00:24:10.060 benefits from having a Sentinel node.

NOTE Confidence: 0.9201268

00:24:10.060 --> 00:24:12.153 And again in these patients we do

NOTE Confidence: 0.9201268

00:24:12.153 --> 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 --> 00:24:20.020 we then say do they have microscopic disease.

NOTE Confidence: 0.9201268

00:24:20.020 --> 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 --> 00:24:27.016 fit or if we're not going to act upon

NOTE Confidence: 0.9201268

00:24:27.016 --> 00:24:28.580 the additional staging information,  
NOTE Confidence: 0.9201268

00:24:28.580 --> 00:24:30.020 I would never recommend that we  
NOTE Confidence: 0.9201268

00:24:30.020 --> 00:24:30.740 do a procedure.  
NOTE Confidence: 0.9201268

00:24:30.740 --> 00:24:32.225 Unless we're going to do  
NOTE Confidence: 0.9201268

00:24:32.225 --> 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 --> 00:24:37.962 risk features in a thin Melanoma  
NOTE Confidence: 0.9201268

00:24:37.962 --> 00:24:39.534 less than .8 millimeters,  
NOTE Confidence: 0.9201268

00:24:39.540 --> 00:24:41.382 their lymph node risk is actually  
NOTE Confidence: 0.9201268

00:24:41.382 --> 00:24:43.658 lower than the risk of the procedure.  
NOTE Confidence: 0.9201268

00:24:43.660 --> 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 --> 00:24:51.272 in between .8 and 1 millimeter where  
NOTE Confidence: 0.9201268

00:24:51.272 --> 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 --> 00:24:58.280 the 1 to 4 millimeter.

NOTE Confidence: 0.9201268

00:24:58.280 --> 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 --> 00:25:05.085 I do feel this information is

NOTE Confidence: 0.9201268

00:25:05.085 --> 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 --> 00:25:09.323 can direct your patients to or

NOTE Confidence: 0.9201268

00:25:09.323 --> 00:25:10.877 look up yourself Out of curiosity,

NOTE Confidence: 0.9201268

00:25:10.880 --> 00:25:12.275 one more mimics the population

NOTE Confidence: 0.9201268

00:25:12.275 --> 00:25:14.035 we see in Connecticut and that

NOTE Confidence: 0.9201268

00:25:14.035 --> 00:25:15.580 was developed from Memorial Sloan

NOTE Confidence: 0.9201268

00:25:15.580 --> 00:25:17.519 Kettering is now almost 20 years old.

NOTE Confidence: 0.9201268

00:25:17.520 --> 00:25:19.281 The other one is from Australia, however.

NOTE Confidence: 0.9201268

00:25:19.281 --> 00:25:21.207 Melanoma in Australia is a little

NOTE Confidence: 0.9201268

00:25:21.207 --> 00:25:22.967 bit different than what we see

NOTE Confidence: 0.9201268

00:25:22.967 --> 00:25:23.959 in the United States,  
NOTE Confidence: 0.9201268

00:25:23.960 --> 00:25:25.778 so again I usually have people  
NOTE Confidence: 0.9201268

00:25:25.778 --> 00:25:27.400 take a look at both,  
NOTE Confidence: 0.9201268

00:25:27.400 --> 00:25:29.710 but it gives them kind of an  
NOTE Confidence: 0.9201268

00:25:29.710 --> 00:25:31.730 idea where their risk is next.  
NOTE Confidence: 0.9201268

00:25:31.730 --> 00:25:33.170 When we talk about what a  
NOTE Confidence: 0.9201268

00:25:33.170 --> 00:25:34.130 central node biopsy is,  
NOTE Confidence: 0.9201268

00:25:34.130 --> 00:25:35.938 again some principles really  
NOTE Confidence: 0.9201268

00:25:35.938 --> 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 --> 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 --> 00:25:45.485 you need a map to get there.  
NOTE Confidence: 0.9201268

00:25:45.490 --> 00:25:47.686 So that's what the lymphocentigraphy is.  
NOTE Confidence: 0.9201268

00:25:47.690 --> 00:25:49.250 So we inject 2 dyes,  
NOTE Confidence: 0.9201268

00:25:49.250 --> 00:25:50.858 one's a blue dye and the other one

NOTE Confidence: 0.9201268

00:25:50.858 --> 00:25:52.568 has a little bit of technetium.

NOTE Confidence: 0.9201268

00:25:52.570 --> 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 --> 00:25:57.803 out of the system within six hours.

NOTE Confidence: 0.9201268

00:25:57.810 --> 00:25:59.642 And what that does is it tells me

NOTE Confidence: 0.9201268

00:25:59.642 --> 00:26:01.385 which nodal station to look for, so.

NOTE Confidence: 0.9201268

00:26:01.385 --> 00:26:02.030 In this case,

NOTE Confidence: 0.9201268

00:26:02.030 --> 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 --> 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 --> 00:26:08.250 we have to figure out where to go.

NOTE Confidence: 0.9201268

00:26:08.250 --> 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

NOTE Confidence: 0.9201268

00:26:12.945 --> 00:26:14.561 helps me hone in on which of the  
NOTE Confidence: 0.9201268

00:26:14.561 --> 00:26:18.490 lymph nodes to remove next and  
NOTE Confidence: 0.9201268

00:26:18.490 --> 00:26:22.170 why is that so important click.  
NOTE Confidence: 0.9201268

00:26:22.170 --> 00:26:24.802 That's because it is still  
NOTE Confidence: 0.9201268

00:26:24.802 --> 00:26:27.592 our best prognostic value in.  
NOTE Confidence: 0.9201268

00:26:27.600 --> 00:26:29.520 Looking at recurrence and death from  
NOTE Confidence: 0.9201268

00:26:29.520 --> 00:26:32.027 Melanoma and this was one of the most  
NOTE Confidence: 0.9201268

00:26:32.027 --> 00:26:33.487 remarkable trials that's been done  
NOTE Confidence: 0.9201268

00:26:33.487 --> 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 --> 00:26:40.142 it gives us still more valuable  
NOTE Confidence: 0.9355531336

00:26:40.142 --> 00:26:42.727 information than that of some of these  
NOTE Confidence: 0.9355531336

00:26:42.727 --> 00:26:44.905 gene expression profile arrays that you  
NOTE Confidence: 0.9355531336

00:26:44.905 --> 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 --> 00:26:53.745 the lymph nodes when we had patients who

NOTE Confidence: 0.9355531336

00:26:53.745 --> 00:26:55.750 would even have microscopic disease.

NOTE Confidence: 0.9355531336

00:26:55.750 --> 00:26:57.310 However, there were two trials,

NOTE Confidence: 0.9355531336

00:26:57.310 --> 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 --> 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 --> 00:27:10.867 specifically with their Melanoma survival.

NOTE Confidence: 0.9355531336

00:27:10.870 --> 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 --> 00:27:16.991 comes in and we can actually feel

NOTE Confidence: 0.9355531336

00:27:16.991 --> 00:27:18.623 the lymph nodes and then there's

NOTE Confidence: 0.9355531336

00:27:18.680 --> 00:27:20.120 some more selection criterion that

NOTE Confidence: 0.9355531336

00:27:20.120 --> 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 --> 00:27:25.750 the important thing is we actually

NOTE Confidence: 0.9355531336

00:27:25.827 --> 00:27:27.959 now have effective treatments.  
NOTE Confidence: 0.9355531336

00:27:27.960 --> 00:27:30.560 So I'll next slide,  
NOTE Confidence: 0.9355531336

00:27:30.560 --> 00:27:32.765 so Doctor Tran will talk a little  
NOTE Confidence: 0.9355531336

00:27:32.765 --> 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 --> 00:27:37.890 which is a conversation that  
NOTE Confidence: 0.9355531336

00:27:37.890 --> 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 --> 00:27:51.396 whether to pursue Sentinel lymph node biopsy.  
NOTE Confidence: 0.878759514285714

00:27:51.400 --> 00:27:53.830 And so my next part is kind of talking  
NOTE Confidence: 0.878759514285714

00:27:53.830 --> 00:27:56.697 about what how can we move the needle  
NOTE Confidence: 0.878759514285714

00:27:56.697 --> 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 --> 00:28:05.423 melanomas or ulcerated melanomas which



NOTE Confidence: 0.878759514285714

00:28:05.423 --> 00:28:07.970 have a higher risk for recurrence.

NOTE Confidence: 0.878759514285714

00:28:07.970 --> 00:28:10.530 And so this this chart just kind of

NOTE Confidence: 0.878759514285714

00:28:10.530 --> 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 --> 00:28:17.911 stage twos which are included two B's and

NOTE Confidence: 0.878759514285714

00:28:17.911 --> 00:28:20.684 two C's as well as the stage 3 melanomas.

NOTE Confidence: 0.878759514285714

00:28:20.690 --> 00:28:23.705 And as you can see there are actually some

NOTE Confidence: 0.878759514285714

00:28:23.705 --> 00:28:26.407 subsets of stage 3 melanomas that do much

NOTE Confidence: 0.878759514285714

00:28:26.407 --> 00:28:29.410 better than the higher risk stage two events.

NOTE Confidence: 0.878759514285714

00:28:29.410 --> 00:28:31.450 So for stage 3A melanomas,

NOTE Confidence: 0.878759514285714

00:28:31.450 --> 00:28:33.438 the five year Melanoma

NOTE Confidence: 0.878759514285714

00:28:33.438 --> 00:28:35.277 specific survival is 93%.

NOTE Confidence: 0.878759514285714

00:28:35.277 --> 00:28:38.400 And so compare that to a stage 2C where

NOTE Confidence: 0.878759514285714

00:28:38.486 --> 00:28:41.752 the where that survival decreases to 82%.

NOTE Confidence: 0.878759514285714

00:28:41.752 --> 00:28:43.862 So when you talk about

NOTE Confidence: 0.878759514285714

00:28:43.862 --> 00:28:45.128 adjuvant immune therapy,  
NOTE Confidence: 0.878759514285714

00:28:45.130 --> 00:28:47.434 we're always talking about one additional  
NOTE Confidence: 0.878759514285714

00:28:47.434 --> 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 --> 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 --> 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 --> 00:29:05.134 In terms of adjuvant immune therapy options,  
NOTE Confidence: 0.878759514285714

00:29:05.140 --> 00:29:07.018 there are two FDA approved drugs,  
NOTE Confidence: 0.878759514285714

00:29:07.020 --> 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 --> 00:29:14.884 versus new volume M also known as Opdiva  
NOTE Confidence: 0.878759514285714

00:29:14.884 --> 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 --> 00:29:22.568 they have similar side effect profiles

NOTE Confidence: 0.878759514285714  
00:29:22.568 --> 00:29:25.310 and they both target the PD1 protein.  
NOTE Confidence: 0.878759514285714  
00:29:25.310 --> 00:29:27.610 To help stimulate the immune  
NOTE Confidence: 0.878759514285714  
00:29:27.610 --> 00:29:28.990 response against Melanoma.  
NOTE Confidence: 0.878759514285714  
00:29:28.990 --> 00:29:32.554 Both of these drugs are considered  
NOTE Confidence: 0.878759514285714  
00:29:32.554 --> 00:29:34.880 interchangeable in stage 2 Melanoma and  
NOTE Confidence: 0.878759514285714  
00:29:34.880 --> 00:29:38.428 as well as stage 3 melanomas In general,  
NOTE Confidence: 0.878759514285714  
00:29:38.430 --> 00:29:41.787 it's been known to have a decrease of 40%.  
NOTE Confidence: 0.878759514285714  
00:29:41.790 --> 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 --> 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 --> 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 --> 00:29:59.550 mainly V600E or V600K mutations,  
NOTE Confidence: 0.878759514285714  
00:29:59.550 --> 00:30:01.660 which are present in about  
NOTE Confidence: 0.878759514285714

00:30:01.660 --> 00:30:03.348 half of cutaneous melanomas,  
NOTE Confidence: 0.878759514285714

00:30:03.350 --> 00:30:06.030 there is additional alternative  
NOTE Confidence: 0.878759514285714

00:30:06.030 --> 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 --> 00:30:12.106 so drabrafnib and tremet NIB,  
NOTE Confidence: 0.878759514285714

00:30:12.110 --> 00:30:14.710 which are both oral medications.  
NOTE Confidence: 0.878759514285714

00:30:14.710 --> 00:30:17.830 Either given BID or daily respectively.  
NOTE Confidence: 0.878759514285714

00:30:17.830 --> 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 2 setting,  
NOTE Confidence: 0.878759514285714

00:30:22.070 --> 00:30:25.384 but in the stage 3 setting for individuals  
NOTE Confidence: 0.878759514285714

00:30:25.384 --> 00:30:28.269 with lymph node positive Melanoma,  
NOTE Confidence: 0.878759514285714

00:30:28.270 --> 00:30:30.050 where it's been shown to  
NOTE Confidence: 0.878759514285714

00:30:30.050 --> 00:30:31.830 reduce recurrence risk by half.  
NOTE Confidence: 0.878759514285714

00:30:31.830 --> 00:30:33.690 But unlike immune therapy,  
NOTE Confidence: 0.878759514285714

00:30:33.690 --> 00:30:36.015 it has been demonstrated to  
NOTE Confidence: 0.878759514285714

00:30:36.015 --> 00:30:38.470 impact overall survival as well.

NOTE Confidence: 0.878759514285714  
00:30:38.470 --> 00:30:40.790 Next.  
NOTE Confidence: 0.878759514285714  
00:30:40.790 --> 00:30:42.330 So for these individuals  
NOTE Confidence: 0.878759514285714  
00:30:42.330 --> 00:30:43.870 with higher risk melanomas,  
NOTE Confidence: 0.878759514285714  
00:30:43.870 --> 00:30:45.486 we typically again follow  
NOTE Confidence: 0.878759514285714  
00:30:45.486 --> 00:30:47.506 them closely for five years,  
NOTE Confidence: 0.878759514285714  
00:30:47.510 --> 00:30:49.010 but because of our higher  
NOTE Confidence: 0.878759514285714  
00:30:49.010 --> 00:30:49.910 risk for recurrences,  
NOTE Confidence: 0.878759514285714  
00:30:49.910 --> 00:30:53.441 we see them more frequently and we also  
NOTE Confidence: 0.878759514285714  
00:30:53.441 --> 00:30:55.463 do imaging more frequently as well.  
NOTE Confidence: 0.878759514285714  
00:30:55.470 --> 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 --> 00:31:02.652 And I think the main point very  
NOTE Confidence: 0.878759514285714  
00:31:02.652 --> 00:31:04.362 similar to early stage melanomas  
NOTE Confidence: 0.878759514285714

00:31:04.362 --> 00:31:06.282 is that as a primary care  
NOTE Confidence: 0.93252186952381

00:31:06.349 --> 00:31:07.820 physician, it's always.  
NOTE Confidence: 0.93252186952381

00:31:07.820 --> 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 --> 00:31:14.552 red new red flag symptoms because  
NOTE Confidence: 0.93252186952381

00:31:14.552 --> 00:31:16.900 again if we can detect these,  
NOTE Confidence: 0.93252186952381

00:31:16.900 --> 00:31:19.696 if we can diagnose these earlier  
NOTE Confidence: 0.93252186952381

00:31:19.700 --> 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 --> 00:31:26.405 they can still undergo A  
NOTE Confidence: 0.93252186952381

00:31:26.405 --> 00:31:27.980 potentially curative resection.  
NOTE Confidence: 0.93252186952381

00:31:27.980 --> 00:31:29.780 The most important thing even after  
NOTE Confidence: 0.93252186952381

00:31:29.780 --> 00:31:31.837 five years is that these individuals  
NOTE Confidence: 0.93252186952381

00:31:31.837 --> 00:31:34.237 still see the dermatologist still have  
NOTE Confidence: 0.93252186952381

00:31:34.237 --> 00:31:36.039 age appropriate cancer screening.  
NOTE Confidence: 0.93252186952381

00:31:36.040 --> 00:31:38.440 And while we only see these individuals

NOTE Confidence: 0.93252186952381

00:31:38.440 --> 00:31:41.560 for five years in medical oncology,

NOTE Confidence: 0.93252186952381

00:31:41.560 --> 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 --> 00:31:46.960 work up if there's any concern.

NOTE Confidence: 0.93252186952381

00:31:46.960 --> 00:31:49.008 And so the graph at the bottom here

NOTE Confidence: 0.93252186952381

00:31:49.008 --> 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 Jbrachno

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 --> 00:31:58.920 which is equivalent to five years

NOTE Confidence: 0.93252186952381

00:31:58.920 --> 00:32:00.852 although the recurrences plateau.

NOTE Confidence: 0.93252186952381

00:32:00.852 --> 00:32:03.750 There is still a few recurrences

NOTE Confidence: 0.93252186952381

00:32:03.823 --> 00:32:06.499 afterwards and so even despite completing

NOTE Confidence: 0.93252186952381

00:32:06.499 --> 00:32:09.968 5 years without any recurrence of disease,

NOTE Confidence: 0.93252186952381

00:32:09.970 --> 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,

NOTE Confidence: 0.93252186952381

00:32:14.770 --> 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 --> 00:32:20.410 New lymph adenopathy next.  
NOTE Confidence: 0.919378585

00:32:22.570 --> 00:32:24.442 So when we talk about individuals  
NOTE Confidence: 0.919378585

00:32:24.442 --> 00:32:25.690 with high risk disease,  
NOTE Confidence: 0.919378585

00:32:25.690 --> 00:32:27.490 adjuvant therapy isn't the  
NOTE Confidence: 0.919378585

00:32:27.490 --> 00:32:29.290 correct answer for everyone.  
NOTE Confidence: 0.919378585

00:32:29.290 --> 00:32:32.110 We have to individualize the and  
NOTE Confidence: 0.919378585

00:32:32.110 --> 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 --> 00:32:40.138 going back to the fact that some stage  
NOTE Confidence: 0.919378585

00:32:40.138 --> 00:32:43.329 threes act even better than some stage twos.  
NOTE Confidence: 0.919378585

00:32:43.330 --> 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 --> 00:32:52.666 endocrinopathies that require lifelong



NOTE Confidence: 0.919378585

00:32:52.666 --> 00:32:55.536 hormone replacement or steroid replacement

NOTE Confidence: 0.919378585

00:32:55.536 --> 00:32:58.108 for example versus reversible toxicities,

NOTE Confidence: 0.919378585

00:32:58.108 --> 00:33:02.172 more so in the case of oral targeted

NOTE Confidence: 0.919378585

00:33:02.172 --> 00:33:05.610 therapies with B raft neck inhibitors.

NOTE Confidence: 0.919378585

00:33:05.610 --> 00:33:08.364 We also have to factor in quality of life

NOTE Confidence: 0.919378585

00:33:08.364 --> 00:33:11.320 as well with some of these side effects.

NOTE Confidence: 0.919378585

00:33:11.320 --> 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 --> 00:33:20.600 which is our ultimate endpoint.

NOTE Confidence: 0.919378585

00:33:20.600 --> 00:33:23.025 We have some interesting upcoming

NOTE Confidence: 0.919378585

00:33:23.025 --> 00:33:25.512 clinical trials here that many of

NOTE Confidence: 0.919378585

00:33:25.512 --> 00:33:27.920 you might have heard in the news.

NOTE Confidence: 0.919378585

00:33:27.920 --> 00:33:30.111 We will be opening the phase three

NOTE Confidence: 0.919378585

00:33:30.111 --> 00:33:32.279 portion of our personalized mRNA

NOTE Confidence: 0.919378585

00:33:32.279 --> 00:33:34.673 vaccine for Merck in combination with  
NOTE Confidence: 0.919378585

00:33:34.673 --> 00:33:36.853 pembrolizumab that has been shown to  
NOTE Confidence: 0.919378585

00:33:36.853 --> 00:33:38.920 reduce further the recurrence risk.  
NOTE Confidence: 0.88092785

00:33:41.110 --> 00:33:43.830 In high risk melanomas.  
NOTE Confidence: 0.88092785

00:33:43.830 --> 00:33:45.350 And so that it will be something that  
NOTE Confidence: 0.88092785

00:33:45.350 --> 00:33:47.187 would be opening up in the next few months.  
NOTE Confidence: 0.88092785

00:33:47.190 --> 00:33:49.040 And we also have additional  
NOTE Confidence: 0.88092785

00:33:49.040 --> 00:33:50.520 trials of antitigit antibodies  
NOTE Confidence: 0.88092785

00:33:50.520 --> 00:33:52.706 in the adjuvant setting as well.  
NOTE Confidence: 0.88092785

00:33:52.710 --> 00:33:55.350 So really potentially interesting clinical  
NOTE Confidence: 0.88092785

00:33:55.350 --> 00:33:59.110 trials coming down the pipeline. Next  
NOTE Confidence: 0.943913018181818

00:34:01.230 --> 00:34:03.510 I'll take over from here and  
NOTE Confidence: 0.943913018181818

00:34:03.510 --> 00:34:05.460 we'll talk about another case.  
NOTE Confidence: 0.943913018181818

00:34:05.460 --> 00:34:07.693 This is a 73 year old male  
NOTE Confidence: 0.943913018181818

00:34:07.693 --> 00:34:10.341 presented who with a left sided  
NOTE Confidence: 0.943913018181818

00:34:10.341 --> 00:34:11.419 cervical lymphadenopathy.

NOTE Confidence: 0.943913018181818

00:34:11.420 --> 00:34:14.380 A CAT scan of the neck was ordered

NOTE Confidence: 0.943913018181818

00:34:14.380 --> 00:34:18.016 to further work this up and it

NOTE Confidence: 0.943913018181818

00:34:18.016 --> 00:34:20.683 showed 4 enlarged centrally necrotic

NOTE Confidence: 0.943913018181818

00:34:20.683 --> 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 --> 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 --> 00:34:32.470 of the left cervical node was

NOTE Confidence: 0.943913018181818

00:34:32.539 --> 00:34:34.699 positive for metastatic Melanoma.

NOTE Confidence: 0.943913018181818

00:34:34.700 --> 00:34:36.535 He subsequently underwent white local

NOTE Confidence: 0.943913018181818

00:34:36.535 --> 00:34:38.718 excision of the left parietal scalp

NOTE Confidence: 0.943913018181818

00:34:38.718 --> 00:34:41.228 lesion and the patch revealed melanoma

NOTE Confidence: 0.943913018181818

00:34:41.228 --> 00:34:46.016 and cyto and scar with negative margins.

NOTE Confidence: 0.943913018181818

00:34:46.020 --> 00:34:48.372 Left neck lymph nodes were excised

NOTE Confidence: 0.943913018181818

00:34:48.372 --> 00:34:51.561 and three out of 10 are positive

NOTE Confidence: 0.943913018181818

00:34:51.561 --> 00:34:53.100 for metastatic Melanoma.  
NOTE Confidence: 0.943913018181818

00:34:53.100 --> 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 --> 00:35:03.050 vomiting and diarrhea for three days.  
NOTE Confidence: 0.943913018181818

00:35:03.050 --> 00:35:04.730 The CT of the other men and  
NOTE Confidence: 0.943913018181818

00:35:04.730 --> 00:35:06.090 pelvis show liver metastasis,  
NOTE Confidence: 0.943913018181818

00:35:06.090 --> 00:35:08.402 peritoneal carcinomatosis and bowel  
NOTE Confidence: 0.943913018181818

00:35:08.402 --> 00:35:10.136 obstruction with antisusception  
NOTE Confidence: 0.943913018181818

00:35:10.136 --> 00:35:13.490 and mass of the transition point.  
NOTE Confidence: 0.943913018181818

00:35:13.490 --> 00:35:17.000 He underwent surgery ilial bowel resuction  
NOTE Confidence: 0.943913018181818

00:35:17.000 --> 00:35:20.450 of metastatic Melanoma and anastomosis.  
NOTE Confidence: 0.943913018181818

00:35:20.450 --> 00:35:22.469 Subsequently he developed  
NOTE Confidence: 0.943913018181818

00:35:22.469 --> 00:35:24.488 symptoms of dizziness.  
NOTE Confidence: 0.943913018181818

00:35:24.490 --> 00:35:26.690 MRI of the brain performed  
NOTE Confidence: 0.943913018181818

00:35:26.690 --> 00:35:29.155 showed 49 to predatorial and

NOTE Confidence: 0.943913018181818

00:35:29.155 --> 00:35:31.127 14 in predatorial lesions.

NOTE Confidence: 0.823007833333333

00:35:33.860 --> 00:35:34.499 Next time I'll

NOTE Confidence: 0.93824082

00:35:37.060 --> 00:35:38.100 turn it to my colleague.

NOTE Confidence: 0.9503169

00:35:39.220 --> 00:35:41.825 Thank you, Flora. So when we

NOTE Confidence: 0.9503169

00:35:41.825 --> 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 --> 00:35:48.112 it's a terrible prognosis.

NOTE Confidence: 0.915252465714286

00:35:48.112 --> 00:35:50.860 We're actually within the last 20 years,

NOTE Confidence: 0.915252465714286

00:35:50.860 --> 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 --> 00:35:58.571 combinations that have sort of changed

NOTE Confidence: 0.915252465714286

00:35:58.571 --> 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 --> 00:36:06.780 year survival has been very dismal,

NOTE Confidence: 0.915252465714286

00:36:06.780 --> 00:36:10.049 but that is ongoing in terms of

NOTE Confidence: 0.915252465714286

00:36:10.049 --> 00:36:12.979 improvements within the last few decades.

NOTE Confidence: 0.915252465714286

00:36:12.980 --> 00:36:16.283 So in the middle here we have sort of

NOTE Confidence: 0.915252465714286

00:36:16.283 --> 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 --> 00:36:25.900 combinations of immune therapy in the

NOTE Confidence: 0.915252465714286

00:36:25.900 --> 00:36:28.560 systemic setting for metastatic disease.

NOTE Confidence: 0.915252465714286

00:36:28.560 --> 00:36:30.786 Which is which are all labeled

NOTE Confidence: 0.915252465714286

00:36:30.786 --> 00:36:33.040 above the the timeline bar there.

NOTE Confidence: 0.915252465714286

00:36:33.040 --> 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 --> 00:36:41.554 year two additional new treatments

NOTE Confidence: 0.915252465714286

00:36:41.554 --> 00:36:44.160 were are also approved as well.

NOTE Confidence: 0.915252465714286

00:36:44.160 --> 00:36:46.920 So when we talk about metastatic

NOTE Confidence: 0.915252465714286

00:36:46.920 --> 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 --> 00:36:53.800 demonstrated objective responses

NOTE Confidence: 0.915252465714286  
00:36:53.800 --> 00:36:56.688 rate response rates of around 58%.  
NOTE Confidence: 0.915252465714286  
00:36:56.688 --> 00:36:58.032 Which is astounding.  
NOTE Confidence: 0.915252465714286  
00:36:58.032 --> 00:37:00.272 So this means patients that  
NOTE Confidence: 0.915252465714286  
00:37:00.272 --> 00:37:02.555 respond have stable disease or  
NOTE Confidence: 0.915252465714286  
00:37:02.555 --> 00:37:04.622 even complete responses as well.  
NOTE Confidence: 0.915252465714286  
00:37:04.622 --> 00:37:06.592 There are multiple treatment options  
NOTE Confidence: 0.915252465714286  
00:37:06.592 --> 00:37:09.318 that we can try for these individuals,  
NOTE Confidence: 0.915252465714286  
00:37:09.320 --> 00:37:12.484 some of them more tailored to certain  
NOTE Confidence: 0.915252465714286  
00:37:12.484 --> 00:37:15.639 subtypes of Melanoma such as UVL melanomas,  
NOTE Confidence: 0.915252465714286  
00:37:15.640 --> 00:37:16.926 but overall,  
NOTE Confidence: 0.915252465714286  
00:37:16.926 --> 00:37:21.427 really kind of changing the paradigm here.  
NOTE Confidence: 0.915252465714286  
00:37:21.430 --> 00:37:23.308 When we talk about immune therapy,  
NOTE Confidence: 0.915252465714286  
00:37:23.310 --> 00:37:26.430 which is intravenous versus targeted therapy,  
NOTE Confidence: 0.915252465714286  
00:37:26.430 --> 00:37:27.540 which is oral,  
NOTE Confidence: 0.915252465714286  
00:37:27.540 --> 00:37:29.760 really the individuals that can only  
NOTE Confidence: 0.915252465714286

00:37:29.760 --> 00:37:32.076 benefit from the targeted therapies are  
NOTE Confidence: 0.915252465714286

00:37:32.076 --> 00:37:35.030 the ones with activating the graph mutations.  
NOTE Confidence: 0.915252465714286

00:37:35.030 --> 00:37:37.352 And so that's only a smaller  
NOTE Confidence: 0.915252465714286

00:37:37.352 --> 00:37:38.513 subset of individuals.  
NOTE Confidence: 0.915252465714286

00:37:38.520 --> 00:37:41.152 And when we talk about sort of what  
NOTE Confidence: 0.915252465714286

00:37:41.152 --> 00:37:43.613 is the correct sequence of therapies,  
NOTE Confidence: 0.915252465714286

00:37:43.613 --> 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 --> 00:37:50.270 know that frontline immune therapy  
NOTE Confidence: 0.915252465714286

00:37:50.270 --> 00:37:52.620 is superior to targeted therapy in  
NOTE Confidence: 0.915252465714286

00:37:52.620 --> 00:37:54.775 terms of multiple factors including  
NOTE Confidence: 0.915252465714286

00:37:54.775 --> 00:37:55.637 overall survival,  
NOTE Confidence: 0.915252465714286

00:37:55.640 --> 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: 0.915252465714286

00:37:59.992 --> 00:38:00.440 as well  
NOTE Confidence: 0.9402536

00:38:02.600 --> 00:38:06.440 next so. Immune therapy can



NOTE Confidence: 0.9402536

00:38:06.440 --> 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 --> 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 --> 00:38:18.062 So everything comes with

NOTE Confidence: 0.9402536

00:38:18.062 --> 00:38:19.190 the price unfortunately.

NOTE Confidence: 0.9402536

00:38:19.190 --> 00:38:20.828 So these immune therapies are wonderful

NOTE Confidence: 0.9402536

00:38:20.828 --> 00:38:23.149 in that not only do they induce response,

NOTE Confidence: 0.9402536

00:38:23.150 --> 00:38:25.362 but these response can be these responses

NOTE Confidence: 0.9402536

00:38:25.362 --> 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 --> 00:38:32.525 alive and well over a decade after

NOTE Confidence: 0.9402536

00:38:32.525 --> 00:38:33.710 stopping the immunotherapy.

NOTE Confidence: 0.9402536

00:38:33.710 --> 00:38:35.270 The other advantage to the immuno?

NOTE Confidence: 0.9402536

00:38:35.270 --> 00:38:36.866 Therapies that you can treat for a  
NOTE Confidence: 0.9402536

00:38:36.866 --> 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 --> 00:38:43.223 but the the price to pay is the  
NOTE Confidence: 0.9402536

00:38:43.223 --> 00:38:44.510 immune related adverse events.  
NOTE Confidence: 0.9402536

00:38:44.510 --> 00:38:46.540 So if you think about the mechanism  
NOTE Confidence: 0.9402536

00:38:46.540 --> 00:38:48.109 by which these drugs work,  
NOTE Confidence: 0.9402536

00:38:48.110 --> 00:38:49.530 it's not really specifically  
NOTE Confidence: 0.9402536

00:38:49.530 --> 00:38:50.950 targeting the cancer cells.  
NOTE Confidence: 0.9402536

00:38:50.950 --> 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 --> 00:38:57.423 but we also have T cells that  
NOTE Confidence: 0.9402536

00:38:57.423 --> 00:38:59.339 recognize our normal organs  
NOTE Confidence: 0.9402536

00:38:59.339 --> 00:39:01.899 that are that are quiescent.  
NOTE Confidence: 0.9402536

00:39:01.900 --> 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

NOTE Confidence: 0.9402536  
00:39:06.180 --> 00:39:08.268 our lifetime but they they live  
NOTE Confidence: 0.9402536  
00:39:08.268 --> 00:39:10.100 there as resident memory cells.  
NOTE Confidence: 0.9402536  
00:39:10.100 --> 00:39:12.230 So these these cells actually live  
NOTE Confidence: 0.9402536  
00:39:12.230 --> 00:39:14.498 in almost all organs in our body.  
NOTE Confidence: 0.9402536  
00:39:14.500 --> 00:39:16.271 And when we inhibit the breaks on  
NOTE Confidence: 0.9402536  
00:39:16.271 --> 00:39:17.529 these cells with immunotherapies  
NOTE Confidence: 0.9402536  
00:39:17.529 --> 00:39:18.858 that we administer,  
NOTE Confidence: 0.9402536  
00:39:18.860 --> 00:39:20.785 you then can get inflammation  
NOTE Confidence: 0.9402536  
00:39:20.785 --> 00:39:23.460 in almost any organ in the body.  
NOTE Confidence: 0.9402536  
00:39:23.460 --> 00:39:27.135 The common ones are the hormonal  
NOTE Confidence: 0.9402536  
00:39:27.135 --> 00:39:28.565 side effects,  
NOTE Confidence: 0.9402536  
00:39:28.565 --> 00:39:31.425 colitis and respiratory problems.  
NOTE Confidence: 0.9402536  
00:39:31.430 --> 00:39:33.782 Now some of them are quite  
NOTE Confidence: 0.9402536  
00:39:33.782 --> 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,  
NOTE Confidence: 0.9402536

00:39:37.510 --> 00:39:39.360 specifically steroids and sometimes they  
NOTE Confidence: 0.9402536

00:39:39.360 --> 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 --> 00:39:45.664 So for reasons that we still don't  
NOTE Confidence: 0.9402536

00:39:45.664 --> 00:39:47.564 quite understand the endocrine  
NOTE Confidence: 0.9402536

00:39:47.564 --> 00:39:49.464 toxicities are never reversible.  
NOTE Confidence: 0.9402536

00:39:49.470 --> 00:39:51.020 Diabetes or type one diabetes  
NOTE Confidence: 0.9402536

00:39:51.020 --> 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 --> 00:39:58.870 and certainly a life altering event.  
NOTE Confidence: 0.9402536

00:39:58.870 --> 00:40:02.390 Hyperpituitism occurs in around 15%,  
NOTE Confidence: 0.9402536

00:40:02.390 --> 00:40:04.868 that's one 5% of our patients.  
NOTE Confidence: 0.9402536

00:40:04.870 --> 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 --> 00:40:10.440 receiving immunotherapy in the adjuvant

NOTE Confidence: 0.9402536

00:40:10.440 --> 00:40:12.561 setting causing pituitary insufficiency

NOTE Confidence: 0.9402536

00:40:12.561 --> 00:40:15.246 as a lifelong toxicity certainly

NOTE Confidence: 0.9402536

00:40:15.246 --> 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 --> 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 --> 00:40:29.667 those steroids if they ever get sick.

NOTE Confidence: 0.9402536

00:40:29.670 --> 00:40:32.430 Sometimes the neurotoxicities and the

NOTE Confidence: 0.9402536

00:40:32.430 --> 00:40:35.190 cardiac toxicities are also irreversible.

NOTE Confidence: 0.9402536

00:40:35.190 --> 00:40:37.002 The death rate from the immunotherapy

NOTE Confidence: 0.9402536

00:40:37.002 --> 00:40:39.030 is quite a bit less than 1%,

NOTE Confidence: 0.9402536

00:40:39.030 --> 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 --> 00:40:44.823 regardless of how careful we are.

NOTE Confidence: 0.9402536

00:40:44.830 --> 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 --> 00:40:52.450 the toxicities and who won't.  
NOTE Confidence: 0.9402536

00:40:52.450 --> 00:40:54.896 There are a number of immune  
NOTE Confidence: 0.9402536

00:40:54.896 --> 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 --> 00:41:00.518 right primarily steroids,  
NOTE Confidence: 0.9402536

00:41:00.518 --> 00:41:03.136 but I think this field is undergoing  
NOTE Confidence: 0.9402536

00:41:03.136 --> 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 --> 00:41:09.481 using an array of different immune  
NOTE Confidence: 0.9402536

00:41:09.490 --> 00:41:13.426 suppressants that might be more specific.  
NOTE Confidence: 0.9402536

00:41:13.430 --> 00:41:15.800 To the the resident memory cells  
NOTE Confidence: 0.9402536

00:41:15.800 --> 00:41:17.380 rather than the anti  
NOTE Confidence: 0.923261784615385

00:41:17.458 --> 00:41:18.949 cancer immune cells.

NOTE Confidence: 0.923261784615385

00:41:18.950 --> 00:41:21.892 So more to come on that as we go as

NOTE Confidence: 0.923261784615385

00:41:21.892 --> 00:41:24.664 we proceed into the next decade.

NOTE Confidence: 0.923261784615385

00:41:24.670 --> 00:41:25.402 Next slide please.

NOTE Confidence: 0.923261784615385

00:41:25.402 --> 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 --> 00:41:38.750 Polymyalgia, Rheumatica and the like.

NOTE Confidence: 0.923261784615385

00:41:38.750 --> 00:41:40.470 And I think that sometimes

NOTE Confidence: 0.923261784615385

00:41:40.470 --> 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 --> 00:41:47.392 disease can possibly burn out with time.

NOTE Confidence: 0.923261784615385

00:41:47.392 --> 00:41:50.059 But we have been successful in treating

NOTE Confidence: 0.923261784615385

00:41:50.059 --> 00:41:53.148 some of these patients with immune therapy.

NOTE Confidence: 0.923261784615385

00:41:53.150 --> 00:41:55.102 It's it's challenging often

NOTE Confidence: 0.923261784615385

00:41:55.102 --> 00:41:57.542 we need to pay extra,

NOTE Confidence: 0.923261784615385

00:41:57.550 --> 00:42:00.028 extra attention to these folks but

NOTE Confidence: 0.923261784615385

00:42:00.028 --> 00:42:02.899 certainly if they have an underlying

NOTE Confidence: 0.923261784615385

00:42:02.899 --> 00:42:05.749 autoimmunity that's not life threatening,

NOTE Confidence: 0.923261784615385

00:42:05.750 --> 00:42:08.510 the immunotherapy can be administered.

NOTE Confidence: 0.923261784615385

00:42:08.510 --> 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 --> 00:42:16.401 in incidence and that is actually

NOTE Confidence: 0.923261784615385

00:42:16.401 --> 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 --> 00:42:22.022 perforation if we're not careful.

NOTE Confidence: 0.923261784615385

00:42:22.030 --> 00:42:23.507 It doesn't mean we can't do it.



NOTE Confidence: 0.923261784615385

00:42:23.510 --> 00:42:25.897 We can give therapies that are active

NOTE Confidence: 0.923261784615385

00:42:25.897 --> 00:42:27.916 specifically in the bowel such as

NOTE Confidence: 0.923261784615385

00:42:27.916 --> 00:42:29.782 veto lizumab and sometimes we are

NOTE Confidence: 0.923261784615385

00:42:29.782 --> 00:42:31.772 very successful with that and can

NOTE Confidence: 0.923261784615385

00:42:31.772 --> 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 --> 00:42:43.030 brain metastases in Melanoma

NOTE Confidence: 0.923261784615385

00:42:43.030 --> 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 --> 00:42:49.450 who have metastatic disease develop

NOTE Confidence: 0.923261784615385

00:42:49.515 --> 00:42:51.769 brain metastases at some point in the

NOTE Confidence: 0.923261784615385

00:42:51.769 --> 00:42:54.151 course of their illness and they can

NOTE Confidence: 0.923261784615385

00:42:54.151 --> 00:42:55.686 sometimes present with brain metastases

NOTE Confidence: 0.923261784615385

00:42:55.686 --> 00:42:58.068 as the first site of metastatic disease.

NOTE Confidence: 0.923261784615385

00:42:58.070 --> 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 --> 00:43:03.966 The tip off is that the headache  
NOTE Confidence: 0.923261784615385

00:43:03.966 --> 00:43:05.736 is worse when they lie down.  
NOTE Confidence: 0.923261784615385

00:43:05.740 --> 00:43:09.178 It gets better over the course of the day.  
NOTE Confidence: 0.923261784615385

00:43:09.180 --> 00:43:10.368 The headaches can be  
NOTE Confidence: 0.923261784615385

00:43:10.368 --> 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 --> 00:43:16.220 midline shift and the  
NOTE Confidence: 0.9402536

00:43:16.220 --> 00:43:18.340 one thing that Melanoma  
NOTE Confidence: 0.92919901

00:43:18.340 --> 00:43:20.368 brain metastases.  
NOTE Confidence: 0.92919901

00:43:20.368 --> 00:43:24.430 Unfortunately, do is is is hemorrhage.  
NOTE Confidence: 0.92919901

00:43:24.430 --> 00:43:26.810 So other than many other tumor types,  
NOTE Confidence: 0.92919901

00:43:26.810 --> 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

NOTE Confidence: 0.92919901

00:43:30.794 --> 00:43:32.450 edema around these lesions,

NOTE Confidence: 0.92919901

00:43:32.450 --> 00:43:34.410 possibly more than in other tumor types.

NOTE Confidence: 0.92919901

00:43:34.410 --> 00:43:36.423 And it's the edema itself that can

NOTE Confidence: 0.92919901

00:43:36.423 --> 00:43:38.815 actually cause problems and actually

NOTE Confidence: 0.92919901

00:43:38.815 --> 00:43:41.160 Doctor Tran has done a lot of.

NOTE Confidence: 0.92919901

00:43:41.160 --> 00:43:44.358 Research on this topic in particular,

NOTE Confidence: 0.92919901

00:43:44.360 --> 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 --> 00:43:50.120 therapies 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 --> 00:43:52.960 when they work in the body,

NOTE Confidence: 0.92919901

00:43:52.960 --> 00:43:54.517 they're going to work in the brain as well.

NOTE Confidence: 0.92919901

00:43:54.520 --> 00:43:57.432 But sometimes we have complications such as

NOTE Confidence: 0.92919901

00:43:57.432 --> 00:44:00.300 the edema and resultant symptoms from that.

NOTE Confidence: 0.92919901

00:44:00.300 --> 00:44:02.325 These lesions can be Gamma

NOTE Confidence: 0.92919901

00:44:02.325 --> 00:44:04.310 Knife with radiation therapy,  
NOTE Confidence: 0.92919901

00:44:04.310 --> 00:44:06.734 or they can simply be treated  
NOTE Confidence: 0.92919901

00:44:06.734 --> 00:44:07.946 with systemic therapy.  
NOTE Confidence: 0.92919901

00:44:07.950 --> 00:44:09.505 We tailor individual treatment plans  
NOTE Confidence: 0.92919901

00:44:09.505 --> 00:44:11.450 to all of these patients because  
NOTE Confidence: 0.92919901

00:44:11.450 --> 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 --> 00:44:15.843 while others, well,  
NOTE Confidence: 0.92919901

00:44:15.843 --> 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 --> 00:44:23.864 some have lesions that cause a lot of edema.  
NOTE Confidence: 0.92919901

00:44:23.870 --> 00:44:26.206 So this arena as well is an area  
NOTE Confidence: 0.92919901

00:44:26.206 --> 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 --> 00:44:34.654 Doctor Tran to talk about the  
NOTE Confidence: 0.9352219

00:44:34.654 --> 00:44:36.209 conclusions and the major takeaways.

NOTE Confidence: 0.87098536

00:44:38.650 --> 00:44:40.530 So I think Doctor Kluwe,

NOTE Confidence: 0.87098536

00:44:40.530 --> 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 --> 00:44:50.687 primary care colleagues to know about.

NOTE Confidence: 0.87098536

00:44:50.690 --> 00:44:53.270 We are typically very aggressive about

NOTE Confidence: 0.87098536

00:44:53.270 --> 00:44:54.990 treating these individuals metastatic

NOTE Confidence: 0.87098536

00:44:55.053 --> 00:44:56.809 Melanoma with immune therapies.

NOTE Confidence: 0.87098536

00:44:56.810 --> 00:44:58.880 Sometimes we do seem like we

NOTE Confidence: 0.87098536

00:44:58.880 --> 00:45:00.730 push them to be able to receive.

NOTE Confidence: 0.87098536

00:45:00.730 --> 00:45:02.925 Their treatments only because we

NOTE Confidence: 0.87098536

00:45:02.925 --> 00:45:06.040 know based on experience that if if

NOTE Confidence: 0.87098536

00:45:06.040 --> 00:45:08.584 they're able to attain a response

NOTE Confidence: 0.87098536

00:45:08.584 --> 00:45:10.442 with immunotherapies that response

NOTE Confidence: 0.87098536

00:45:10.442 --> 00:45:12.767 can be profound and longlasting.

NOTE Confidence: 0.87098536

00:45:12.770 --> 00:45:14.610 But unfortunately what happens during  
NOTE Confidence: 0.87098536

00:45:14.610 --> 00:45:16.882 the course of the this treatment  
NOTE Confidence: 0.87098536

00:45:16.882 --> 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 --> 00:45:23.156 care colleagues to be aware of  
NOTE Confidence: 0.87098536

00:45:23.156 --> 00:45:25.514 and to have a low threshold about  
NOTE Confidence: 0.87098536

00:45:25.514 --> 00:45:28.058 helping us to Co manage them.  
NOTE Confidence: 0.87098536

00:45:28.060 --> 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 --> 00:45:33.539 with a Uri symptoms,  
NOTE Confidence: 0.87098536

00:45:33.540 --> 00:45:34.660 they need to be stressed,  
NOTE Confidence: 0.87098536

00:45:34.660 --> 00:45:37.012 dosed and sometimes we can avert  
NOTE Confidence: 0.87098536

00:45:37.012 --> 00:45:39.439 hospital admissions if the patient and  
NOTE Confidence: 0.87098536

00:45:39.439 --> 00:45:41.791 the primary care physician are aware  
NOTE Confidence: 0.87098536

00:45:41.791 --> 00:45:44.193 that tunes to this potential side  
NOTE Confidence: 0.87098536

00:45:44.193 --> 00:45:47.499 effect also and as Doctor Kluber alluded to,

NOTE Confidence: 0.87098536

00:45:47.500 --> 00:45:48.745 you know diabetes.

NOTE Confidence: 0.87098536

00:45:48.745 --> 00:45:51.235 These type one diabetes that can

NOTE Confidence: 0.87098536

00:45:51.235 --> 00:45:54.675 develop on immune therapy are very life

NOTE Confidence: 0.87098536

00:45:54.675 --> 00:45:56.643 changing and require multidisciplinary

NOTE Confidence: 0.87098536

00:45:56.719 --> 00:45:58.869 care with endocrinology and primary

NOTE Confidence: 0.87098536

00:45:58.869 --> 00:46:01.430 care to help manage thyroiditis is

NOTE Confidence: 0.87098536

00:46:01.430 --> 00:46:04.199 sometimes one of the side effects that

NOTE Confidence: 0.87098536

00:46:04.199 --> 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 --> 00:46:11.064 frequently we check the the TSH levels.

NOTE Confidence: 0.87098536

00:46:11.064 --> 00:46:14.198 I think one of the also the important.

NOTE Confidence: 0.87098536

00:46:14.198 --> 00:46:17.614 Facts that as a primary care physician,

NOTE Confidence: 0.87098536

00:46:17.620 --> 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 --> 00:46:22.699 with extreme fatigue,

NOTE Confidence: 0.87098536

00:46:22.700 --> 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 --> 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 --> 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 --> 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 --> 00:46:51.116 is indicated for the individual  
NOTE Confidence: 0.87098536

00:46:51.116 --> 00:46:52.340 toxicities at hand.  
NOTE Confidence: 0.87098536

00:46:52.340 --> 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 --> 00:46:58.849 it's actually might be a good sign



NOTE Confidence: 0.87098536

00:46:58.849 --> 00:47:01.286 that maybe their immune system is

NOTE Confidence: 0.87098536

00:47:01.286 --> 00:47:03.496 being activated and potentially will

NOTE Confidence: 0.87098536

00:47:03.496 --> 00:47:06.020 produce the anti Melanoma response.

NOTE Confidence: 0.87098536

00:47:06.020 --> 00:47:08.580 So we've seen correlations between

NOTE Confidence: 0.87098536

00:47:08.580 --> 00:47:11.140 very severe toxicity toxicities and

NOTE Confidence: 0.87098536

00:47:11.222 --> 00:47:13.856 very good responses in our patients.

NOTE Confidence: 0.87098536

00:47:13.860 --> 00:47:16.020 So in terms of treatment assessments,

NOTE Confidence: 0.87098536

00:47:16.020 --> 00:47:18.540 so going back to the case in hand,

NOTE Confidence: 0.87098536

00:47:18.540 --> 00:47:20.820 this gentleman who Doctor Lena and

NOTE Confidence: 0.87098536

00:47:20.820 --> 00:47:22.999 I treated with metastatic Melanoma.

NOTE Confidence: 0.87098536

00:47:22.999 --> 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 --> 00:47:30.350 And after the first four cycles,

NOTE Confidence: 0.87098536

00:47:30.350 --> 00:47:32.030 so looking at his scans,

NOTE Confidence: 0.87098536

00:47:32.030 --> 00:47:34.448 pretreatment on the left and then

NOTE Confidence: 0.87098536

00:47:34.448 --> 00:47:36.630 on treatment after four cycles,  
NOTE Confidence: 0.87098536

00:47:36.630 --> 00:47:38.740 there is a dramatic improvement  
NOTE Confidence: 0.87098536

00:47:38.740 --> 00:47:40.998 in disease tumor burden both in  
NOTE Confidence: 0.87098536

00:47:40.998 --> 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 --> 00:47:47.254 these responses are concordant  
NOTE Confidence: 0.87098536

00:47:47.254 --> 00:47:49.633 because these are known to be  
NOTE Confidence: 0.87098536

00:47:49.633 --> 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 --> 00:47:55.086 if you do happen to come across a  
NOTE Confidence: 0.87098536

00:47:55.086 --> 00:47:57.467 scan for a patient on immune therapy,  
NOTE Confidence: 0.885067921538462

00:47:57.470 --> 00:47:59.695 just be wary that pseudoprogression  
NOTE Confidence: 0.885067921538462

00:47:59.695 --> 00:48:02.659 can exist in these patients on early  
NOTE Confidence: 0.885067921538462

00:48:02.659 --> 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 --> 00:48:10.586 be a full real tumor progression,

NOTE Confidence: 0.885067921538462  
00:48:10.590 --> 00:48:12.702 but actually just radiographing  
NOTE Confidence: 0.885067921538462  
00:48:12.702 --> 00:48:14.814 enlargement from the infiltration  
NOTE Confidence: 0.885067921538462  
00:48:14.814 --> 00:48:16.820 of activated immune cells.  
NOTE Confidence: 0.885067921538462  
00:48:16.820 --> 00:48:19.325 Clinically, we can sometimes determine  
NOTE Confidence: 0.885067921538462  
00:48:19.325 --> 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 --> 00:48:26.978 they don't have any symptoms and if the  
NOTE Confidence: 0.885067921538462  
00:48:26.978 --> 00:48:30.014 degree of enhancement is not significant,  
NOTE Confidence: 0.885067921538462  
00:48:30.020 --> 00:48:32.534 then sometimes we will push these  
NOTE Confidence: 0.885067921538462  
00:48:32.534 --> 00:48:34.210 patients continue treatment and  
NOTE Confidence: 0.885067921538462  
00:48:34.282 --> 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 --> 00:48:41.538 progression or true progression.  
NOTE Confidence: 0.885067921538462  
00:48:41.540 --> 00:48:45.980 So patients are able to eventually.  
NOTE Confidence: 0.885067921538462  
00:48:45.980 --> 00:48:48.170 In a subset of folks obtain  
NOTE Confidence: 0.885067921538462

00:48:48.170 --> 00:48:48.900 complete responses,  
NOTE Confidence: 0.885067921538462

00:48:48.900 --> 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 --> 00:48:56.090 and sometimes patients are able to  
NOTE Confidence: 0.885067921538462

00:48:56.090 --> 00:48:57.980 stop and have ongoing responses  
NOTE Confidence: 0.9402536

00:48:59.660 --> 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 --> 00:49:07.232 presentation is you know  
NOTE Confidence: 0.862933094444445

00:49:07.232 --> 00:49:09.084 early detection is critical.  
NOTE Confidence: 0.862933094444445

00:49:09.090 --> 00:49:10.836 And that's where you know all  
NOTE Confidence: 0.862933094444445

00:49:10.836 --> 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 --> 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 --> 00:49:23.568 assessing for any unusual atypical symptoms.

NOTE Confidence: 0.862933094444445  
00:49:23.570 --> 00:49:26.072 Because early detection is always important  
NOTE Confidence: 0.862933094444445  
00:49:26.072 --> 00:49:28.969 in terms of improving ultimate outcomes,  
NOTE Confidence: 0.862933094444445  
00:49:28.970 --> 00:49:31.035 and everyone plays a role  
NOTE Confidence: 0.862933094444445  
00:49:31.035 --> 00:49:32.274 in the surveillance.  
NOTE Confidence: 0.862933094444445  
00:49:32.280 --> 00:49:35.800 It's a truly multidisciplinary,  
NOTE Confidence: 0.862933094444445  
00:49:35.800 --> 00:49:39.568 multiexpertise kind of approach here.  
NOTE Confidence: 0.862933094444445  
00:49:39.568 --> 00:49:41.824 So aggressive upfront Melanoma  
NOTE Confidence: 0.862933094444445  
00:49:41.824 --> 00:49:43.516 management and treatment,  
NOTE Confidence: 0.862933094444445  
00:49:43.520 --> 00:49:44.740 as we always said,  
NOTE Confidence: 0.862933094444445  
00:49:44.740 --> 00:49:46.570 leads to improve outcomes not only  
NOTE Confidence: 0.862933094444445  
00:49:46.630 --> 00:49:49.129 for the patient but also to help  
NOTE Confidence: 0.862933094444445  
00:49:49.129 --> 00:49:50.719 minimize potential toxicities as well.  
NOTE Confidence: 0.937067243333334  
00:49:53.210 --> 00:49:54.830 Fortunately, we've lucky enough to  
NOTE Confidence: 0.937067243333334  
00:49:54.830 --> 00:49:56.893 work in a field where therapeutics  
NOTE Confidence: 0.937067243333334  
00:49:56.893 --> 00:49:58.778 are always improving and we've  
NOTE Confidence: 0.937067243333334

00:49:58.778 --> 00:50:01.334 been at the forefront of helping to  
NOTE Confidence: 0.937067243333334

00:50:01.334 --> 00:50:03.314 push that boundary forward with the  
NOTE Confidence: 0.937067243333334

00:50:03.314 --> 00:50:05.690 ongoing clinical trials here at Yale.  
NOTE Confidence: 0.937067243333334

00:50:05.690 --> 00:50:08.056 And the number of patients that are  
NOTE Confidence: 0.937067243333334

00:50:08.056 --> 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 --> 00:50:16.829 The drugs but also the close corroboration  
NOTE Confidence: 0.937067243333334

00:50:16.829 --> 00:50:19.492 that we have between or specialty  
NOTE Confidence: 0.937067243333334

00:50:19.492 --> 00:50:21.508 with in Melanoma but also with  
NOTE Confidence: 0.937067243333334

00:50:21.508 --> 00:50:23.380 ongoing primary care physicians too.  
NOTE Confidence: 0.953671466666667

00:50:26.260 --> 00:50:29.780 That was absolutely terrific.  
NOTE Confidence: 0.953671466666667

00:50:29.780 --> 00:50:33.940 Thank you for all of that.  
NOTE Confidence: 0.953671466666667

00:50:33.940 --> 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 --> 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

NOTE Confidence: 0.953671466666667

00:50:45.015 --> 00:50:47.837 have to say as a mature primary

NOTE Confidence: 0.953671466666667

00:50:47.837 --> 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 --> 00:50:55.501 is one of the most miraculous

NOTE Confidence: 0.953671466666667

00:50:55.510 --> 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 --> 00:51:05.198 evolution outlined although not

NOTE Confidence: 0.953671466666667

00:51:05.198 --> 00:51:07.470 without a price as we as we've heard.

NOTE Confidence: 0.93824092

00:51:09.860 --> 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 --> 00:51:19.780 questions for our Smilo panelists?

NOTE Confidence: 0.9402536

00:51:21.060 --> 00:51:24.300 So sure, a basic question.

NOTE Confidence: 0.9402536

00:51:24.300 --> 00:51:26.204 When we are dealing with a patient in  
NOTE Confidence: 0.9402536

00:51:26.204 --> 00:51:28.018 the office who we suspected toxicity,  
NOTE Confidence: 0.9402536

00:51:28.020 --> 00:51:29.772 what's the shortcut?  
NOTE Confidence: 0.9402536

00:51:29.772 --> 00:51:32.540 What's the the easiest way and  
NOTE Confidence: 0.9402536

00:51:32.540 --> 00:51:34.940 fastest way as well most effective  
NOTE Confidence: 0.9402536

00:51:35.017 --> 00:51:37.048 to get in touch with with the  
NOTE Confidence: 0.9402536

00:51:37.048 --> 00:51:38.418 team caring for this patient.  
NOTE Confidence: 0.917282112857143

00:51:40.160 --> 00:51:42.757 So we have one phone number that's  
NOTE Confidence: 0.93285812

00:51:45.480 --> 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 --> 00:51:51.677 immunotherapy put that on speed dial.  
NOTE Confidence: 0.93285812

00:51:51.680 --> 00:51:54.208 Someone answers that phone  
NOTE Confidence: 0.93285812

00:51:54.208 --> 00:51:55.686 24/7 during work hours.  
NOTE Confidence: 0.93285812

00:51:55.686 --> 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 --> 00:52:01.520 but depending on the urgency,



NOTE Confidence: 0.93285812

00:52:01.520 --> 00:52:02.800 they may decide to call.

NOTE Confidence: 0.90142358

00:52:04.830 --> 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 --> 00:52:10.290 calls for urgent issues such as

NOTE Confidence: 0.90142358

00:52:10.290 --> 00:52:12.427 that would come into New Haven.

NOTE Confidence: 0.9402536

00:52:14.230 --> 00:52:14.510 Thank you.

NOTE Confidence: 0.915773785714286

00:52:16.750 --> 00:52:18.990 And I'll just add on to that.

NOTE Confidence: 0.915773785714286

00:52:18.990 --> 00:52:21.348 When we have somebody, you know,

NOTE Confidence: 0.915773785714286

00:52:21.350 --> 00:52:23.464 with a skin lesion in primary care,

NOTE Confidence: 0.915773785714286

00:52:23.470 --> 00:52:25.395 we have ones that are like we

NOTE Confidence: 0.915773785714286

00:52:25.395 --> 00:52:27.105 can't really tell you it's normal.

NOTE Confidence: 0.915773785714286

00:52:27.110 --> 00:52:28.710 And then we have ones that like look

NOTE Confidence: 0.915773785714286

00:52:28.710 --> 00:52:30.380 like they might be a problem and then

NOTE Confidence: 0.915773785714286

00:52:30.380 --> 00:52:32.030 they have ones that that scream at us.

NOTE Confidence: 0.915773785714286

00:52:32.030 --> 00:52:34.466 This person absolutely needs this remove.

NOTE Confidence: 0.915773785714286

00:52:34.470 --> 00:52:37.630 Right away and delaying care is not good.  
NOTE Confidence: 0.915773785714286

00:52:37.630 --> 00:52:40.790 You know within the kind of Yale system,  
NOTE Confidence: 0.915773785714286

00:52:40.790 --> 00:52:43.006 what are some of the most efficient ways  
NOTE Confidence: 0.915773785714286

00:52:43.006 --> 00:52:45.279 that we can kind of help to navigate  
NOTE Confidence: 0.915773785714286

00:52:45.279 --> 00:52:47.309 and and refer those type of people.  
NOTE Confidence: 0.931867433333333

00:52:49.000 --> 00:52:50.440 Sure. I can take this one.  
NOTE Confidence: 0.931867433333333

00:52:50.440 --> 00:52:53.352 Well, I think you know we have many  
NOTE Confidence: 0.931867433333333

00:52:53.352 --> 00:52:54.666 dermatology services outpatient  
NOTE Confidence: 0.931867433333333

00:52:54.666 --> 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 --> 00:53:01.315 I think putting in an urgent referral.  
NOTE Confidence: 0.931867433333333

00:53:01.320 --> 00:53:03.208 I think what what often helps is calling  
NOTE Confidence: 0.931867433333333

00:53:03.208 --> 00:53:05.078 the office also just to leave a message.  
NOTE Confidence: 0.931867433333333

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 --> 00:53:10.927 send me an epic and basket message.

NOTE Confidence: 0.9318674333333333

00:53:10.930 --> 00:53:11.938 Can you please get this patient

NOTE Confidence: 0.9318674333333333

00:53:11.938 --> 00:53:13.170 in soon with you or a colleague,

NOTE Confidence: 0.9318674333333333

00:53:13.170 --> 00:53:14.568 We're really worried about this one.

NOTE Confidence: 0.9318674333333333

00:53:14.570 --> 00:53:17.243 I think that sort of triage is is helpful.

NOTE Confidence: 0.9318674333333333

00:53:17.250 --> 00:53:19.380 We also have telemedicine to

NOTE Confidence: 0.9318674333333333

00:53:19.380 --> 00:53:21.084 look for urgent lesions,

NOTE Confidence: 0.9318674333333333

00:53:21.090 --> 00:53:24.024 but I'm I'm more of a proponent of seeing

NOTE Confidence: 0.9318674333333333

00:53:24.024 --> 00:53:27.328 the the patient in in person to examine it.

NOTE Confidence: 0.9318674333333333

00:53:27.328 --> 00:53:30.410 So we can use a dermatoscope and biopsy

NOTE Confidence: 0.8615448266666667

00:53:31.850 --> 00:53:34.680 and then doctors are power

NOTE Confidence: 0.8615448266666667

00:53:34.680 --> 00:53:37.050 actually alerted me as to these.

NOTE Confidence: 0.8615448266666667

00:53:37.050 --> 00:53:38.805 Little things I I use them in the garden.

NOTE Confidence: 0.8615448266666667

00:53:38.810 --> 00:53:40.718 When I see a weed or something that I

NOTE Confidence: 0.8615448266666667

00:53:40.718 --> 00:53:42.708 think might be a weed or maybe the plant

NOTE Confidence: 0.8615448266666667

00:53:42.708 --> 00:53:44.529 I planted last year and forgot about,

NOTE Confidence: 0.8615448266666667

00:53:44.530 --> 00:53:47.002 I I use this identify thing and it  
NOTE Confidence: 0.861544826666667

00:53:47.002 --> 00:53:49.568 tells me exactly what the plant is.  
NOTE Confidence: 0.861544826666667

00:53:49.570 --> 00:53:51.370 Is there a software that can help us?  
NOTE Confidence: 0.933544666666667

00:53:52.450 --> 00:53:54.506 You know, there's a lot of new  
NOTE Confidence: 0.933544666666667

00:53:54.506 --> 00:53:56.490 technology and iPhone apps.  
NOTE Confidence: 0.933544666666667

00:53:56.490 --> 00:53:58.982 I think a lot of these aren't  
NOTE Confidence: 0.933544666666667

00:53:58.982 --> 00:54:01.424 really validated and I don't think  
NOTE Confidence: 0.933544666666667

00:54:01.424 --> 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 --> 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 --> 00:54:13.780 So immunotherapy first, technology second.  
NOTE Confidence: 0.943608066666667

00:54:13.780 --> 00:54:15.691 So we do have a couple of  
NOTE Confidence: 0.943608066666667

00:54:15.691 --> 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 --> 00:54:23.804 I'm not sure has asked when should a

NOTE Confidence: 0.943608066666667  
00:54:23.804 --> 00:54:26.188 PCP perform biopsy and when they when  
NOTE Confidence: 0.943608066666667  
00:54:26.188 --> 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 --> 00:54:33.068 but if it's within the skill set what,  
NOTE Confidence: 0.943608066666667  
00:54:33.068 --> 00:54:34.380 what do you think  
NOTE Confidence: 0.6005868  
00:54:35.620 --> 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 --> 00:54:44.340 biopsy a pigmented lesion,  
NOTE Confidence: 0.6005868  
00:54:44.340 --> 00:54:46.832 it's really important to to be sure  
NOTE Confidence: 0.6005868  
00:54:46.832 --> 00:54:49.134 that that you sample the lesion  
NOTE Confidence: 0.6005868  
00:54:49.134 --> 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.  
NOTE Confidence: 0.6005868

00:54:55.780 --> 00:54:57.676 Further, if it is a Melanoma

NOTE Confidence: 0.6005868

00:54:57.676 --> 00:54:58.940 but you transect it,

NOTE Confidence: 0.6005868

00:54:58.940 --> 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 --> 00:55:06.748 I would say if it's something that

NOTE Confidence: 0.6005868

00:55:06.748 --> 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 --> 00:55:10.530 But in general,

NOTE Confidence: 0.6005868

00:55:10.530 --> 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 --> 00:55:16.450 very happy to see those patients.

NOTE Confidence: 0.92518968

00:55:18.370 --> 00:55:20.850 And another question from Dr.

NOTE Confidence: 0.92518968

00:55:20.850 --> 00:55:23.710 Allard, what are your Melanoma

NOTE Confidence: 0.92518968

00:55:23.710 --> 00:55:25.998 screening recommendations by age

NOTE Confidence: 0.92518968

00:55:25.998 --> 00:55:29.024 despite the USPTF not recommending

NOTE Confidence: 0.92518968

00:55:29.024 --> 00:55:30.570 annual screening? Another

NOTE Confidence: 0.93857646

00:55:30.570 --> 00:55:31.425 really good question.

NOTE Confidence: 0.93857646

00:55:31.425 --> 00:55:34.089 I think a lot of it comes to those

NOTE Confidence: 0.93857646

00:55:34.089 --> 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 --> 00:55:41.210 nevi darker skin, no personal or

NOTE Confidence: 0.93857646

00:55:41.210 --> 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 --> 00:55:52.529 has a lot of nevi and in

NOTE Confidence: 0.93857646

00:55:52.529 --> 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 --> 00:55:57.748 If there's a lesion of concern,

NOTE Confidence: 0.93857646

00:55:57.750 --> 00:56:00.366 that's an automatic should be evaluated.

NOTE Confidence: 0.93857646

00:56:00.370 --> 00:56:02.162 Those screening guidelines don't

NOTE Confidence: 0.93857646

00:56:02.162 --> 00:56:04.402 apply to a concerning lesion.

NOTE Confidence: 0.93857646

00:56:04.410 --> 00:56:06.132 I think if it's a young child  
NOTE Confidence: 0.93857646

00:56:06.132 --> 00:56:07.968 who maybe has a parent or grant,  
NOTE Confidence: 0.93857646

00:56:07.970 --> 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 --> 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 --> 00:56:16.610 have that that child screened  
NOTE Confidence: 0.93689913333334

00:56:20.770 --> 00:56:24.546 well. That's the end of our questions that  
NOTE Confidence: 0.93689913333334

00:56:24.546 --> 00:56:28.494 have come in and also the end of our hour.  
NOTE Confidence: 0.93689913333334

00:56:28.500 --> 00:56:30.140 So again, I, you know,  
NOTE Confidence: 0.93689913333334

00:56:30.140 --> 00:56:33.020 each of you spent time to prepare for this.  
NOTE Confidence: 0.93689913333334

00:56:33.020 --> 00:56:35.548 It was just so well delivered and full  
NOTE Confidence: 0.93689913333334

00:56:35.548 --> 00:56:37.616 of information that I think is really,  
NOTE Confidence: 0.93689913333334

00:56:37.620 --> 00:56:41.213 really helpful. So these connections,  
NOTE Confidence: 0.93689913333334

00:56:41.213 --> 00:56:43.497 these moments are valuable  
NOTE Confidence: 0.93689913333334

00:56:43.500 --> 00:56:44.977 and and I thank you for that.



NOTE Confidence: 0.936899133333334

00:56:44.980 --> 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 --> 00:56:53.448 awful, horrible IT day here at the

NOTE Confidence: 0.936899133333334

00:56:53.448 --> 00:56:55.684 health system because we know it

NOTE Confidence: 0.936899133333334

00:56:55.684 --> 00:56:57.700 took special effort to get here.

NOTE Confidence: 0.936899133333334

00:56:57.700 --> 00:56:59.590 And encourage your friends to watch the

NOTE Confidence: 0.936899133333334

00:56:59.590 --> 00:57:01.460 recording, which we'll also send out.

NOTE Confidence: 0.936899133333334

00:57:01.460 --> 00:57:05.000 Good. Thank you all.