WEBVTT

NOTE duration:"01:29:48" NOTE recognizability:0.829

NOTE language:en-us

NOTE Confidence: 0.882699470666667

 $00:00:00.000 \longrightarrow 00:00:02.475$ So in terms of imaging,

NOTE Confidence: 0.882699470666667

00:00:02.475 --> 00:00:04.950 obviously mammography and ultrasound tend

NOTE Confidence: 0.882699470666667

 $00:00:05.026 \longrightarrow 00:00:07.863$ to be our main modalities and that is

NOTE Confidence: 0.882699470666667

 $00:00:07.863 \longrightarrow 00:00:11.339$ what I what we do at the shoreline MRI.

NOTE Confidence: 0.882699470666667

 $00:00:11.340 \longrightarrow 00:00:14.070$ We, you know for good quality MRI

NOTE Confidence: 0.882699470666667

 $00{:}00{:}14.070 \dashrightarrow 00{:}00{:}16.710$ it requires a special breast coil

NOTE Confidence: 0.882699470666667

 $00:00:16.710 \longrightarrow 00:00:19.476$ as well as the higher magnets.

NOTE Confidence: 0.882699470666667

 $00{:}00{:}19.480 \dashrightarrow 00{:}00{:}21.874$ The 3T magnet is what we prefer

NOTE Confidence: 0.882699470666667

 $00:00:21.874 \longrightarrow 00:00:23.499$ to perform our MRI on.

NOTE Confidence: 0.882699470666667

 $00:00:23.500 \longrightarrow 00:00:25.880$ So that's why we only perform those

NOTE Confidence: 0.882699470666667

00:00:25.880 --> 00:00:28.498 down in New Haven or at Park Ave.

NOTE Confidence: 0.882699470666667

 $00:00:28.500 \longrightarrow 00:00:30.288$ So we're not currently doing MRI.

NOTE Confidence: 0.882699470666667 00:00:30.288 --> 00:00:31.156 At Shoreline,

00:00:31.156 --> 00:00:34.540 patients do need to go downtown for that.

NOTE Confidence: 0.882699470666667

00:00:34.540 --> 00:00:36.286 You know, I just want to talk a little

NOTE Confidence: 0.882699470666667

00:00:36.286 --> 00:00:38.200 bit about the 3D mammography because we,

NOTE Confidence: 0.882699470666667

 $00:00:38.200 \longrightarrow 00:00:40.244$ you know we we've been using this

NOTE Confidence: 0.882699470666667

 $00:00:40.244 \longrightarrow 00:00:42.830$ for more than a decade now and it

NOTE Confidence: 0.882699470666667

00:00:42.830 --> 00:00:44.475 has really improved our outcomes.

NOTE Confidence: 0.882699470666667

 $00:00:44.480 \longrightarrow 00:00:46.688$ Yale was one of the five original beta

NOTE Confidence: 0.882699470666667

 $00:00:46.688 \longrightarrow 00:00:49.318$ sites for the development of this technology.

NOTE Confidence: 0.882699470666667

 $00:00:49.320 \longrightarrow 00:00:51.856$ So we're quite proud of it and this

NOTE Confidence: 0.882699470666667

 $00:00:51.856 \longrightarrow 00:00:54.433$ led to the FDA approval in 2011.

NOTE Confidence: 0.882699470666667

 $00{:}00{:}54.433 \dashrightarrow 00{:}00{:}57.897$ So we have a long history of it

NOTE Confidence: 0.882699470666667

00:00:57.897 --> 00:01:01.480 at Yale and after FDA approval.

NOTE Confidence: 0.882699470666667

 $00{:}01{:}01.480 \dashrightarrow 00{:}01{:}03.699$ We were the first in Connecticut to

NOTE Confidence: 0.882699470666667

 $00:01:03.699 \longrightarrow 00:01:06.181$ obtain a a commercial unit and the

NOTE Confidence: 0.882699470666667

 $00:01:06.181 \longrightarrow 00:01:09.409$ actual 13th unit in the whole United States.

NOTE Confidence: 0.882699470666667

 $00:01:09.410 \longrightarrow 00:01:10.850$ So we've had it for a long time.

 $00:01:10.850 \longrightarrow 00:01:12.985$ We've always offered it to all patients

NOTE Confidence: 0.882699470666667

 $00{:}01{:}12.985 \dashrightarrow 00{:}01{:}15.238$ at no cost and it's really permitted us

NOTE Confidence: 0.882699470666667

 $00{:}01{:}15.240 \dashrightarrow 00{:}01{:}18.271$ to have a a really invaluable research

NOTE Confidence: 0.882699470666667

 $00:01:18.271 \longrightarrow 00:01:21.234$ database that we have been able to

NOTE Confidence: 0.882699470666667

 $00:01:21.234 \longrightarrow 00:01:24.270$ publish and do a lot of good studies with.

NOTE Confidence: 0.882699470666667

 $00:01:24.270 \longrightarrow 00:01:26.256$ So basically you know a lot

NOTE Confidence: 0.882699470666667

 $00:01:26.256 \longrightarrow 00:01:28.060$ of these studies have shown,

NOTE Confidence: 0.882699470666667

 $00:01:28.060 \longrightarrow 00:01:29.986$ I think you know very well

NOTE Confidence: 0.882699470666667

 $00:01:29.986 \longrightarrow 00:01:31.530$ that the 3D mammography is.

NOTE Confidence: 0.882699470666667

 $00:01:31.530 \longrightarrow 00:01:33.630$ Very.

NOTE Confidence: 0.882699470666667

00:01:33.630 --> 00:01:35.634 Advantageous over treating mammography.

NOTE Confidence: 0.882699470666667

00:01:35.634 --> 00:01:38.448 Multiple sites now throughout the world,

NOTE Confidence: 0.882699470666667

 $00:01:38.450 \longrightarrow 00:01:39.695$ in North America,

NOTE Confidence: 0.882699470666667 00:01:39.695 --> 00:01:40.110 Europe, NOTE Confidence: 0.882699470666667

 $00:01:40.110 \longrightarrow 00:01:42.185$ Asia have repeatedly shown that

 $00:01:42.185 \longrightarrow 00:01:45.020$ it results in lower recall rates

NOTE Confidence: 0.882699470666667

 $00{:}01{:}45.020 \dashrightarrow 00{:}01{:}46.896$ and increased cancer detection,

NOTE Confidence: 0.882699470666667

 $00:01:46.900 \longrightarrow 00:01:48.568$ particularly for invasive cancers.

NOTE Confidence: 0.882699470666667

 $00:01:48.568 \longrightarrow 00:01:51.776$ And for those of you who might not

NOTE Confidence: 0.882699470666667

00:01:51.776 --> 00:01:53.974 have seen how it how it works,

NOTE Confidence: 0.882699470666667

 $00:01:53.980 \longrightarrow 00:01:57.382$ you can see here's the 2D portion

NOTE Confidence: 0.882699470666667

 $00:01:57.382 \longrightarrow 00:01:59.920$ of the screening mammogram.

NOTE Confidence: 0.882699470666667

 $00:01:59.920 \longrightarrow 00:02:01.584$ And in the tomosynthesis,

NOTE Confidence: 0.882699470666667

 $00{:}02{:}01.584 \dashrightarrow 00{:}02{:}04.540$ you can see the images moving here.

NOTE Confidence: 0.882699470666667

 $00:02:04.540 \longrightarrow 00:02:07.382$ We look at these in one millimeter

NOTE Confidence: 0.882699470666667

 $00{:}02{:}07.382 \longrightarrow 00{:}02{:}10.017$ slices through the breast and the

NOTE Confidence: 0.882699470666667

 $00:02:10.017 \longrightarrow 00:02:12.687$ cancers really can pop out beautifully

NOTE Confidence: 0.882699470666667

 $00:02:12.687 \longrightarrow 00:02:15.738$ that otherwise would have been hiding.

NOTE Confidence: 0.882699470666667

 $00:02:15.740 \longrightarrow 00:02:18.062$ So it's easy to understand how

NOTE Confidence: 0.882699470666667

 $00:02:18.062 \longrightarrow 00:02:20.360$ we can find more cancers,

NOTE Confidence: 0.882699470666667

 $00:02:20.360 \longrightarrow 00:02:24.920$ reduce the recalls for false positives,

 $00:02:24.920 \longrightarrow 00:02:27.480$ prove the outcomes for patients.

NOTE Confidence: 0.882699470666667 00:02:27.480 --> 00:02:29.080 All right. NOTE Confidence: 0.882699470666667

00:02:29.080 --> 00:02:31.215 Here's just another example of a patient.

NOTE Confidence: 0.882699470666667 00:02:31.220 --> 00:02:32.284 This is, NOTE Confidence: 0.882699470666667

 $00{:}02{:}32.284 \rightarrow 00{:}02{:}34.944$ it's the screening mammogram and

NOTE Confidence: 0.882699470666667

 $00:02:34.944 \longrightarrow 00:02:37.063$ there's a questionable asymmetry

NOTE Confidence: 0.882699470666667

 $00:02:37.063 \longrightarrow 00:02:40.519$ in the breast and that's on the 2D

NOTE Confidence: 0.882699470666667

 $00:02:40.519 \longrightarrow 00:02:43.040$ portion when you look at the 3D.

NOTE Confidence: 0.882699470666667

 $00:02:43.040 \longrightarrow 00:02:44.994$ Not only does it tell us exactly

NOTE Confidence: 0.882699470666667

 $00:02:44.994 \longrightarrow 00:02:46.830$ where it is in the breast,

NOTE Confidence: 0.882699470666667

 $00:02:46.830 \longrightarrow 00:02:48.286$ it's actually down here on the 2D.

NOTE Confidence: 0.882699470666667

00:02:48.290 --> 00:02:49.954 We might have thought it was up there,

NOTE Confidence: 0.882699470666667

 $00:02:49.960 \longrightarrow 00:02:51.304$ but it's down there.

NOTE Confidence: 0.882699470666667

 $00:02:51.304 \longrightarrow 00:02:52.984$ So we're able to accurately

NOTE Confidence: 0.882699470666667

 $00:02:52.984 \longrightarrow 00:02:54.891$ localize lesions and we're able

 $00:02:54.891 \longrightarrow 00:02:56.395$ to characterize them better.

NOTE Confidence: 0.882699470666667

 $00:02:56.400 \longrightarrow 00:02:58.094$ You see on the 2D that could

NOTE Confidence: 0.882699470666667

 $00:02:58.094 \longrightarrow 00:02:59.260$ easily have been missed,

NOTE Confidence: 0.882699470666667

 $00:02:59.260 \longrightarrow 00:03:00.965$ whereas here we exquisitely see

NOTE Confidence: 0.882699470666667

 $00:03:00.965 \longrightarrow 00:03:02.670$ the detail of the speculations.

NOTE Confidence: 0.882699470666667

 $00:03:02.670 \longrightarrow 00:03:03.940$ So we're able to localize,

NOTE Confidence: 0.882699470666667

 $00:03:03.940 \longrightarrow 00:03:06.230$ characterize and then honestly patients

NOTE Confidence: 0.882699470666667

 $00:03:06.230 \longrightarrow 00:03:09.240$ go directly to ultrasound from from this,

NOTE Confidence: 0.882699470666667

 $00{:}03{:}09.240 \dashrightarrow 00{:}03{:}12.090$ a lot of the diagnostic

NOTE Confidence: 0.882699470666667

 $00:03:12.090 \longrightarrow 00:03:13.800$ workup additional views.

NOTE Confidence: 0.80090105

 $00:03:13.800 \longrightarrow 00:03:15.156$ Are not necessary anymore.

NOTE Confidence: 0.80090105

 $00:03:15.156 \longrightarrow 00:03:17.190$ We can find things with ultrasound.

NOTE Confidence: 0.80090105

 $00:03:17.190 \longrightarrow 00:03:18.486$ So this is what we do.

NOTE Confidence: 0.80090105

 $00:03:18.490 \longrightarrow 00:03:20.605$ We do a lot of this at the shoreline,

NOTE Confidence: 0.80090105

 $00:03:20.610 \longrightarrow 00:03:22.900$ lot of ultrasound guided biopsies

NOTE Confidence: 0.80090105

 $00:03:22.900 \longrightarrow 00:03:25.763$ because the majority of lesions other

 $00{:}03{:}25.763 \dashrightarrow 00{:}03{:}27.739$ than true calcification lesions

NOTE Confidence: 0.80090105

00:03:27.739 --> 00:03:30.209 can be biopsied with ultrasound.

NOTE Confidence: 0.80090105

00:03:30.210 --> 00:03:33.540 Just a note about tissue density

NOTE Confidence: 0.80090105

 $00:03:33.540 \longrightarrow 00:03:35.600$ with breast in mammography.

NOTE Confidence: 0.80090105

 $00{:}03{:}35.600 \dashrightarrow 00{:}03{:}37.975$ The sensitivity of mammography is

NOTE Confidence: 0.80090105

 $00:03:37.975 \longrightarrow 00:03:40.489$ obviously related to tissue density.

NOTE Confidence: 0.80090105

00:03:40.490 --> 00:03:43.670 It's an important aspect of of

NOTE Confidence: 0.80090105

 $00:03:43.670 \longrightarrow 00:03:45.790$ of interpreting a mammogram.

NOTE Confidence: 0.80090105

 $00:03:45.790 \longrightarrow 00:03:47.345$ While while the sensitivity is

NOTE Confidence: 0.80090105

00:03:47.345 --> 00:03:49.370 very very high in fatty breast,

NOTE Confidence: 0.80090105

 $00:03:49.370 \longrightarrow 00:03:52.034$ it obviously is reduced even with

NOTE Confidence: 0.80090105

 $00{:}03{:}52.034 \dashrightarrow 00{:}03{:}55.030$ the 3D mammography in denser tissue.

NOTE Confidence: 0.80090105

 $00{:}03{:}55.030 \dashrightarrow 00{:}03{:}57.316$ So as you're probably well aware,

NOTE Confidence: 0.80090105

 $00:03:57.320 \longrightarrow 00:03:59.259$ we were the first state in the

NOTE Confidence: 0.80090105

 $00:03:59.259 \longrightarrow 00:04:00.350$ in the nation to.

00:04:00.350 --> 00:04:03.068 Uh, it's today density notification law.

NOTE Confidence: 0.80090105

 $00{:}04{:}03.070 \dashrightarrow 00{:}04{:}05.548$ So this took effect in October of

NOTE Confidence: 0.80090105

 $00:04:05.550 \longrightarrow 00:04:07.699$ 2009 and women are informed of their

NOTE Confidence: 0.80090105

 $00:04:07.699 \longrightarrow 00:04:09.260$ brands breast density and since

NOTE Confidence: 0.80090105

 $00:04:09.260 \longrightarrow 00:04:11.006$ that time many women with breasts,

NOTE Confidence: 0.80090105

 $00:04:11.010 \longrightarrow 00:04:13.746$ with dense breasts have opted to

NOTE Confidence: 0.80090105

 $00:04:13.746 \longrightarrow 00:04:15.114$ undergo supplemental screening

NOTE Confidence: 0.80090105

00:04:15.114 --> 00:04:16.782 particularly with ultrasound just

NOTE Confidence: 0.80090105

 $00{:}04{:}16.782 \to 00{:}04{:}18.546$ something that we developed it at Yale.

NOTE Confidence: 0.80090105

00:04:18.550 --> 00:04:20.406 So I just thought I would show you

NOTE Confidence: 0.80090105

 $00{:}04{:}20.406 \dashrightarrow 00{:}04{:}22.750$ is a density an artificial intention

NOTE Confidence: 0.80090105

 $00:04:22.750 \longrightarrow 00:04:24.566$ in intelligence density tool.

NOTE Confidence: 0.80090105

 $00:04:24.570 \longrightarrow 00:04:25.690$ This is through our visage,

NOTE Confidence: 0.80090105

 $00{:}04{:}25.690 \dashrightarrow 00{:}04{:}28.455$ our pack system and this is now

NOTE Confidence: 0.80090105

 $00:04:28.455 \longrightarrow 00:04:30.550$ FDA approved and this just.

NOTE Confidence: 0.80090105

00:04:30.550 --> 00:04:30.967 Obviously,

00:04:30.967 --> 00:04:33.469 breast density is a little bit

NOTE Confidence: 0.80090105

 $00:04:33.469 \longrightarrow 00:04:34.720$ of a subjective.

NOTE Confidence: 0.80090105

00:04:34.720 --> 00:04:37.220 It, you know, like classification,

NOTE Confidence: 0.80090105

 $00:04:37.220 \longrightarrow 00:04:39.500$ this makes it a little bit more objective.

NOTE Confidence: 0.80090105

 $00:04:39.500 \longrightarrow 00:04:42.934$ We get a density reading which

NOTE Confidence: 0.80090105

 $00:04:42.934 \longrightarrow 00:04:46.406$ is just an output on our on our

NOTE Confidence: 0.80090105

00:04:46.406 --> 00:04:48.637 workstations giving the breast

NOTE Confidence: 0.80090105

 $00{:}04{:}48.637 \dashrightarrow 00{:}04{:}50.917$ density with the confidence.

NOTE Confidence: 0.80090105

 $00:04:50.920 \longrightarrow 00:04:52.020$ Percentage.

NOTE Confidence: 0.80090105

 $00:04:52.020 \longrightarrow 00:04:53.916$ So it's a nice tool that we've developed.

NOTE Confidence: 0.80090105

00:04:53.920 --> 00:04:55.456 I mentioned the mobile van before

NOTE Confidence: 0.80090105

 $00:04:55.456 \longrightarrow 00:04:57.625$ is one of our sites and just to

NOTE Confidence: 0.80090105

 $00{:}04{:}57.625 \dashrightarrow 00{:}04{:}59.257$ to mention it again because this

NOTE Confidence: 0.80090105

00:04:59.317 --> 00:05:00.677 does visit the shoreline,

NOTE Confidence: 0.80090105

 $00:05:00.680 \longrightarrow 00:05:02.304$ you know four to five times a month,

00:05:02.310 --> 00:05:04.101 you may see it up in the parking lot

NOTE Confidence: 0.80090105

 $00{:}05{:}04.101 \dashrightarrow 00{:}05{:}05.597$ taking up valuable parking spaces,

NOTE Confidence: 0.80090105

 $00:05:05.600 \longrightarrow 00:05:07.502$ but but nonetheless it is good

NOTE Confidence: 0.80090105

 $00:05:07.502 \longrightarrow 00:05:08.453$ for our patients.

NOTE Confidence: 0.80090105

 $00:05:08.460 \longrightarrow 00:05:11.210$ We do screening on the van with the

NOTE Confidence: 0.80090105

 $00:05:11.210 \longrightarrow 00:05:13.100$ course 3D mammography and breast ultrasound.

NOTE Confidence: 0.80090105

 $00:05:13.100 \longrightarrow 00:05:15.348$ So this fan which has been on the

NOTE Confidence: 0.80090105

 $00:05:15.348 \longrightarrow 00:05:18.280$ road for about 2 years now has both a

NOTE Confidence: 0.80090105

 $00{:}05{:}18.280 \dashrightarrow 00{:}05{:}20.879$ mammography unit and an ultrasound separate.

NOTE Confidence: 0.80090105

 $00:05:20.880 \longrightarrow 00:05:24.888$ Sweets and while we've had a van for

NOTE Confidence: 0.80090105

 $00:05:24.890 \longrightarrow 00:05:28.157$ 35 some years in in New Haven at Yale,

NOTE Confidence: 0.80090105

 $00:05:28.160 \longrightarrow 00:05:30.260$ this is the first time we've had

NOTE Confidence: 0.80090105

 $00:05:30.260 \longrightarrow 00:05:31.769$ mammography and ultrasound on the van.

NOTE Confidence: 0.80090105

 $00{:}05{:}31.770 \dashrightarrow 00{:}05{:}33.495$ So certainly those women with

NOTE Confidence: 0.80090105

 $00:05:33.495 \longrightarrow 00:05:35.637$ dense tissue that really need the

NOTE Confidence: 0.80090105

 $00:05:35.637 \longrightarrow 00:05:37.392$ screening ultrasound as well can

 $00{:}05{:}37.392 \dashrightarrow 00{:}05{:}39.329$ be well accommodated on the van.

NOTE Confidence: 0.80090105

 $00:05:39.330 \longrightarrow 00:05:41.490$ And here's a case that was done on the van.

NOTE Confidence: 0.80090105

 $00:05:41.490 \longrightarrow 00:05:43.932$ Patient with dense tissue had her

NOTE Confidence: 0.80090105

 $00:05:43.932 \longrightarrow 00:05:46.014$ mammography and her ultrasound and

NOTE Confidence: 0.80090105

 $00:05:46.014 \longrightarrow 00:05:48.688$ actually had multiple cancers in her breast.

NOTE Confidence: 0.80090105

 $00:05:48.690 \longrightarrow 00:05:49.266$ Interventional procedures.

NOTE Confidence: 0.80090105

 $00:05:49.266 \longrightarrow 00:05:50.130$ Like I said,

NOTE Confidence: 0.80090105

 $00:05:50.130 \longrightarrow 00:05:50.816$ we perform.

NOTE Confidence: 0.80090105

00:05:50.816 --> 00:05:53.560 About two to three per day at the

NOTE Confidence: 0.80090105

 $00{:}05{:}53.637 \dashrightarrow 00{:}05{:}55.997$ shoreline and patients love it.

NOTE Confidence: 0.80090105

 $00{:}05{:}56.000 \dashrightarrow 00{:}05{:}58.114$ I'll just say we just do ultrasound

NOTE Confidence: 0.80090105

 $00:05:58.114 \longrightarrow 00:06:00.299$ biopsies currently we do not do stereotactic.

NOTE Confidence: 0.80090105

 $00:06:00.300 \longrightarrow 00:06:00.591$ Again,

NOTE Confidence: 0.80090105

00:06:00.591 --> 00:06:02.337 that is just something that is

NOTE Confidence: 0.80090105

 $00:06:02.337 \longrightarrow 00:06:03.999$ an extra piece of equipment.

00:06:04.000 --> 00:06:06.800 So we're doing those downtown right now,

NOTE Confidence: 0.80090105

 $00:06:06.800 \longrightarrow 00:06:08.792$ but maybe in the future we will when

NOTE Confidence: 0.80090105

 $00:06:08.792 \longrightarrow 00:06:11.167$ we have a little bit more resources

NOTE Confidence: 0.80090105

 $00:06:11.167 \longrightarrow 00:06:12.982$ at the shoreline ultrasound biopsies

NOTE Confidence: 0.855607974333333

 $00:06:13.039 \longrightarrow 00:06:15.421$ though again the majority of patients

NOTE Confidence: 0.855607974333333

00:06:15.421 --> 00:06:17.009 can undergo ultrasound biopsies,

NOTE Confidence: 0.855607974333333

 $00:06:17.010 \longrightarrow 00:06:18.954$ which is preferable modality,

NOTE Confidence: 0.855607974333333

 $00:06:18.954 \longrightarrow 00:06:20.898$ we also can localize.

NOTE Confidence: 0.855607974333333

00:06:20.900 --> 00:06:22.764 Patients for surgery using

NOTE Confidence: 0.855607974333333

00:06:22.764 --> 00:06:24.628 mammographic or sonographic guidance.

NOTE Confidence: 0.855607974333333

 $00:06:24.630 \longrightarrow 00:06:26.892$ We have dedicated breast imaging nurses

NOTE Confidence: 0.855607974333333

 $00:06:26.892 \longrightarrow 00:06:29.608$ now and this is that they're invaluable

NOTE Confidence: 0.855607974333333

 $00:06:29.608 \longrightarrow 00:06:33.010$ and always one is always at the shoreline.

NOTE Confidence: 0.855607974333333

 $00:06:33.010 \longrightarrow 00:06:35.092$ So these these nurses help us

NOTE Confidence: 0.855607974333333

00:06:35.092 --> 00:06:37.974 with our procedures, patient care,

NOTE Confidence: 0.855607974333333

00:06:37.974 --> 00:06:39.430 communication, pathology,

 $00:06:39.430 \longrightarrow 00:06:41.506$ follow up and then data entry.

NOTE Confidence: 0.855607974333333

 $00:06:41.510 \longrightarrow 00:06:44.750$ So it's really they're, they're wonderful.

NOTE Confidence: 0.855607974333333

 $00:06:44.750 \longrightarrow 00:06:46.558$ Here's just an example.

NOTE Confidence: 0.855607974333333

00:06:46.558 --> 00:06:48.942 Again, Doctor Zaneski is going to talk more

NOTE Confidence: 0.855607974333333

 $00:06:48.942 \longrightarrow 00:06:51.242$ about the surgery side of things, you know.

NOTE Confidence: 0.855607974333333

00:06:51.242 --> 00:06:52.220 Diagnosed the patients,

NOTE Confidence: 0.855607974333333

 $00:06:52.220 \longrightarrow 00:06:54.047$ we image them, we work them up,

NOTE Confidence: 0.855607974333333

 $00{:}06{:}54.050 \dashrightarrow 00{:}06{:}57.830$ we do the biopsies and then many of them

NOTE Confidence: 0.855607974333333

 $00{:}06{:}57.830 \dashrightarrow 00{:}07{:}00.378$ are able to have surgery at the shoreline

NOTE Confidence: 0.855607974333333

 $00{:}07{:}00.378 \dashrightarrow 00{:}07{:}02.850$ at which is just wonderful for them.

NOTE Confidence: 0.855607974333333

 $00:07:02.850 \longrightarrow 00:07:04.420$ We can do wire localizations

NOTE Confidence: 0.855607974333333

 $00:07:04.420 \longrightarrow 00:07:05.990$ as we've done for years.

NOTE Confidence: 0.855607974333333

 $00:07:05.990 \longrightarrow 00:07:09.070$ This is done on the day of surgery

NOTE Confidence: 0.855607974333333

 $00{:}07{:}09.070 \dashrightarrow 00{:}07{:}10.525$ and something that we've been

NOTE Confidence: 0.855607974333333

00:07:10.525 --> 00:07:13.098 doing for the last few years is a

 $00:07:13.098 \longrightarrow 00:07:14.506$ radio frequency tag localization.

NOTE Confidence: 0.855607974333333

 $00{:}07{:}14.510 \dashrightarrow 00{:}07{:}16.960$ The advantage of this is it could

NOTE Confidence: 0.855607974333333

 $00:07:16.960 \longrightarrow 00:07:19.440$ be inserted a few days or weeks

NOTE Confidence: 0.855607974333333

 $00:07:19.440 \longrightarrow 00:07:21.750$ before surgery and then the patient.

NOTE Confidence: 0.855607974333333

 $00:07:21.750 \longrightarrow 00:07:24.567$ Need to go directly to to surgery on that

NOTE Confidence: 0.855607974333333

 $00:07:24.567 \longrightarrow 00:07:28.470$ day and so that facilitates scheduling.

NOTE Confidence: 0.855607974333333

 $00:07:28.470 \longrightarrow 00:07:30.444$ Here's an example of a shoreline patient.

NOTE Confidence: 0.855607974333333

 $00:07:30.450 \longrightarrow 00:07:31.970$ Here is her screening mammogram.

NOTE Confidence: 0.855607974333333

 $00:07:31.970 \longrightarrow 00:07:33.650$ Obvious lesion in the breast.

NOTE Confidence: 0.855607974333333

 $00:07:33.650 \longrightarrow 00:07:35.510$ She goes directly to ultrasound,

NOTE Confidence: 0.855607974333333

 $00{:}07{:}35.510 \dashrightarrow 00{:}07{:}36.910$ doesn't need any extra views.

NOTE Confidence: 0.855607974333333

 $00:07:36.910 \longrightarrow 00:07:37.934$ Mammographic views.

NOTE Confidence: 0.855607974333333

 $00:07:37.934 \longrightarrow 00:07:41.006$ Ultrasound shows a highly suspicious mask.

NOTE Confidence: 0.855607974333333

 $00:07:41.010 \longrightarrow 00:07:45.220$ We then do a core biopsy and leave a marker.

NOTE Confidence: 0.855607974333333

 $00:07:45.220 \longrightarrow 00:07:47.836$ She comes back for a localization on the

NOTE Confidence: 0.855607974333333

 $00:07:47.836 \longrightarrow 00:07:50.412$ day of surgery and her specimen shows

 $00:07:50.412 \longrightarrow 00:07:53.169$ the lesion and the tag all removed.

NOTE Confidence: 0.855607974333333

00:07:53.170 --> 00:07:55.495 Very convenient for patients and

NOTE Confidence: 0.855607974333333

 $00:07:55.495 \longrightarrow 00:07:58.450$ they love it. Just in the next.

NOTE Confidence: 0.855607974333333

 $00:07:58.450 \longrightarrow 00:08:01.234$ The very shortly hopefully few months we

NOTE Confidence: 0.855607974333333

 $00:08:01.234 \longrightarrow 00:08:03.448$ are going to be starting construction

NOTE Confidence: 0.855607974333333

 $00:08:03.448 \longrightarrow 00:08:06.327$ and we will have expansion of our

NOTE Confidence: 0.855607974333333

00:08:06.327 --> 00:08:08.452 breast imaging services at Yale,

NOTE Confidence: 0.855607974333333

 $00{:}08{:}08{:}08{:}460 \dashrightarrow 00{:}08{:}11.668$ which at the shoreline which is much needed,

NOTE Confidence: 0.855607974333333

 $00:08:11.670 \longrightarrow 00:08:13.560$ we will have an additional 3D

NOTE Confidence: 0.855607974333333

 $00:08:13.560 \longrightarrow 00:08:15.480$ mammography and ultrasound units.

NOTE Confidence: 0.855607974333333

 $00:08:15.480 \longrightarrow 00:08:18.706$ So this is going to help with patient

NOTE Confidence: 0.855607974333333

 $00:08:18.706 \longrightarrow 00:08:22.297$ scheduling and also in terms of the,

NOTE Confidence: 0.855607974333333

 $00{:}08{:}22.300 \dashrightarrow 00{:}08{:}23.316$ the, the physical layout,

NOTE Confidence: 0.855607974333333

 $00{:}08{:}23.316 \dashrightarrow 00{:}08{:}25.211$ we're going to have a direct connection

NOTE Confidence: 0.855607974333333

00:08:25.211 --> 00:08:26.816 with the breast surgery suite.

 $00:08:26.820 \longrightarrow 00:08:28.476$ So that permits patients to go

NOTE Confidence: 0.855607974333333

 $00:08:28.476 \longrightarrow 00:08:29.304$ back and forth.

NOTE Confidence: 0.855607974333333

00:08:29.310 --> 00:08:32.298 Because I'm happy to go out in the hallway,

NOTE Confidence: 0.855607974333333

 $00:08:32.300 \longrightarrow 00:08:35.408$ so it's really a very comprehensive.

NOTE Confidence: 0.79772939

00:08:37.770 --> 00:08:40.250 Services and wonderful for patients,

NOTE Confidence: 0.79772939

 $00:08:40.250 \longrightarrow 00:08:43.751$ they love it and I think with this expansion

NOTE Confidence: 0.79772939

 $00:08:43.751 \longrightarrow 00:08:46.554$ we'll be able to to offer even more.

NOTE Confidence: 0.79772939

00:08:46.560 --> 00:08:49.032 More, get more patients in and offer more

NOTE Confidence: 0.79772939

 $00{:}08{:}49.032 \dashrightarrow 00{:}08{:}51.178$ patients to be seen at the shoreline.

NOTE Confidence: 0.79772939

 $00:08:51.180 \longrightarrow 00:08:53.518$ Just a shout out to the wonderful

NOTE Confidence: 0.79772939

 $00{:}08{:}53.518 \dashrightarrow 00{:}08{:}55.329$ technologists at the shoreline who

NOTE Confidence: 0.79772939

 $00:08:55.329 \longrightarrow 00:08:57.555$ take really good care of patients.

NOTE Confidence: 0.79772939

 $00:08:57.560 \longrightarrow 00:08:58.720$ So thank you very much.

NOTE Confidence: 0.79772939

 $00:08:58.720 \longrightarrow 00:09:01.244$ Hopefully that was helpful

NOTE Confidence: 0.79772939

 $00:09:01.244 \longrightarrow 00:09:03.490$ brief brief overview. Thank

NOTE Confidence: 0.90607865875

 $00{:}09{:}03.500 \dashrightarrow 00{:}09{:}06.265$ you so much Leanne and we have

 $00{:}09{:}06.265 \dashrightarrow 00{:}09{:}07.662$ patients who specifically reach

NOTE Confidence: 0.90607865875

 $00:09:07.662 \longrightarrow 00:09:10.000$ out to have you and doctor Butler?

NOTE Confidence: 0.90607865875

 $00:09:10.000 \longrightarrow 00:09:12.115$ Do their mammograms and overwhelmingly

NOTE Confidence: 0.90607865875

 $00:09:12.115 \longrightarrow 00:09:14.230$ their experience in the breast

NOTE Confidence: 0.90607865875

00:09:14.300 --> 00:09:16.020 imaging suite and Guildford?

NOTE Confidence: 0.90607865875

 $00:09:16.020 \longrightarrow 00:09:17.580$ Is is incredibly positive

NOTE Confidence: 0.90607865875

 $00:09:17.580 \longrightarrow 00:09:19.140$ and patient centered so.

NOTE Confidence: 0.90607865875

 $00:09:19.140 \longrightarrow 00:09:21.180$ Thank you for all you do.

NOTE Confidence: 0.90607865875

00:09:21.180 --> 00:09:22.745 Next up, we're going to

NOTE Confidence: 0.90607865875

00:09:22.745 --> 00:09:23.997 introduce doctor Greg Zaneski,

NOTE Confidence: 0.90607865875

 $00:09:24.000 \longrightarrow 00:09:25.220$ I'm thrilled to call him.

NOTE Confidence: 0.90607865875

 $00:09:25.220 \longrightarrow 00:09:27.956$ My partner and a member of our team,

NOTE Confidence: 0.90607865875

 $00{:}09{:}27.960 \dashrightarrow 00{:}09{:}30.010$ doctors and Esky joined Yale

NOTE Confidence: 0.90607865875

00:09:30.010 --> 00:09:32.060 School of Medicine in 2019,

NOTE Confidence: 0.90607865875

00:09:32.060 --> 00:09:33.764 he's an assistant professor.

 $00:09:33.764 \longrightarrow 00:09:36.320$ Surgical oncology and cares for women

NOTE Confidence: 0.90607865875

 $00:09:36.388 \longrightarrow 00:09:38.632$ with benign and malignant breast disease

NOTE Confidence: 0.90607865875

 $00:09:38.632 \longrightarrow 00:09:41.618$ and also men with breast related issues.

NOTE Confidence: 0.90607865875

00:09:41.620 --> 00:09:43.248 His clinical practice location

NOTE Confidence: 0.90607865875

 $00:09:43.248 \longrightarrow 00:09:45.283$ is predominantly at the Shoreline

NOTE Confidence: 0.90607865875

00:09:45.283 --> 00:09:46.820 Medical Center in Guilford,

NOTE Confidence: 0.90607865875

 $00:09:46.820 \longrightarrow 00:09:50.310$ but he also has a clinic weekly and some IT

NOTE Confidence: 0.90607865875

00:09:50.391 --> 00:09:53.799 operating room time at the New Haven site.

NOTE Confidence: 0.90607865875

 $00{:}09{:}53.800 \dashrightarrow 00{:}09{:}55.744$ And he received his medical degree

NOTE Confidence: 0.90607865875

00:09:55.744 --> 00:09:57.669 from the State University of New

NOTE Confidence: 0.90607865875

 $00{:}09{:}57.669 \dashrightarrow 00{:}09{:}59.385$ York at Stony Brook and completed

NOTE Confidence: 0.90607865875

 $00{:}09{:}59.385 \dashrightarrow 00{:}10{:}01.089$ a fellowship in surgical oncology

NOTE Confidence: 0.90607865875

 $00:10:01.089 \longrightarrow 00:10:02.879$ at the University of Pittsburgh.

NOTE Confidence: 0.90607865875

 $00{:}10{:}02.880 \dashrightarrow 00{:}10{:}04.455$ And he's going to be giving us.

NOTE Confidence: 0.90607865875

00:10:04.460 --> 00:10:08.048 And updates and breast cancer surgery.

NOTE Confidence: 0.90607865875

00:10:08.050 --> 00:10:08.776 Thank you,

00:10:08.776 --> 00:10:09.139 Greg.

NOTE Confidence: 0.546841385

00:10:17.020 --> 00:10:20.430 Good. Thank you, Rachel. Look at

NOTE Confidence: 0.818510215

 $00:10:20.440 \longrightarrow 00:10:21.820$ the share my screen.

NOTE Confidence: 0.95629686

 $00:10:24.780 \longrightarrow 00:10:25.370$ OK.

NOTE Confidence: 0.95740778

 $00{:}10{:}28.710 \dashrightarrow 00{:}10{:}31.430$ Thank you very much Rachel and and

NOTE Confidence: 0.95740778

 $00:10:31.430 \longrightarrow 00:10:33.710$ thank you everybody for attending

NOTE Confidence: 0.900367865

 $00:10:33.797 \longrightarrow 00:10:35.525$ on a on a rainy night.

NOTE Confidence: 0.900367865

00:10:35.530 --> 00:10:37.874 But my goal is to night is to talk

NOTE Confidence: 0.900367865

 $00:10:37.874 \longrightarrow 00:10:39.852$ about breast surgery you know here

NOTE Confidence: 0.900367865

 $00{:}10{:}39.852 \dashrightarrow 00{:}10{:}41.838$ at Guildford and also you know

NOTE Confidence: 0.900367865

00:10:41.909 --> 00:10:44.450 how we integrate it throughout

NOTE Confidence: 0.900367865

 $00:10:44.450 \longrightarrow 00:10:45.970$ the system here at smilow.

NOTE Confidence: 0.846369253846154

 $00{:}10{:}48.350 \dashrightarrow 00{:}10{:}51.325$ So here's our our grant institution here

NOTE Confidence: 0.846369253846154

 $00:10:51.325 \longrightarrow 00:10:54.169$ at Shoreline and as Doctor Philpotts,

NOTE Confidence: 0.846369253846154

 $00:10:54.170 \longrightarrow 00:10:56.222$ you know, describe very well the

 $00:10:56.222 \longrightarrow 00:10:58.362$ amount of breast imaging that's done

NOTE Confidence: 0.846369253846154

 $00{:}10{:}58.362 \dashrightarrow 00{:}11{:}00.480$ here and also the various findings.

NOTE Confidence: 0.846369253846154

 $00:11:00.480 \longrightarrow 00:11:02.454$ You know that we can come

NOTE Confidence: 0.846369253846154

00:11:02.454 --> 00:11:03.770 across not all malignant,

NOTE Confidence: 0.846369253846154

 $00:11:03.770 \longrightarrow 00:11:06.422$ sometimes benign or needing close follow

NOTE Confidence: 0.846369253846154

00:11:06.422 --> 00:11:09.693 up and surgery is an important component

NOTE Confidence: 0.846369253846154

 $00:11:09.693 \longrightarrow 00:11:13.004$ for helping integrate that at times and

NOTE Confidence: 0.846369253846154

 $00:11:13.083 \longrightarrow 00:11:15.790$ of course our multidisciplinary team

NOTE Confidence: 0.846369253846154

 $00:11:15.790 \longrightarrow 00:11:19.126$ which will be talked about further.

NOTE Confidence: 0.846369253846154

00:11:19.130 --> 00:11:21.770 So this is a picture of our surgical

NOTE Confidence: 0.846369253846154

00:11:21.770 --> 00:11:24.470 clinic and you know I think a lot of

NOTE Confidence: 0.846369253846154

00:11:24.470 --> 00:11:26.929 times with the with surgery we think

NOTE Confidence: 0.846369253846154

 $00:11:26.929 \longrightarrow 00:11:29.245$ about that it's a for malignancy.

NOTE Confidence: 0.846369253846154

00:11:29.250 --> 00:11:31.707 But I think a big part of our day

NOTE Confidence: 0.846369253846154

00:11:31.707 --> 00:11:34.046 including our nurse practitioners here at

NOTE Confidence: 0.846369253846154

 $00:11:34.046 \longrightarrow 00:11:36.620$ Guildford is things like benign disease.

 $00:11:36.670 \longrightarrow 00:11:38.980$ We can't see your slides.

NOTE Confidence: 0.82775805

00:11:41.770 --> 00:11:45.490 No, no. Sorry about that.

NOTE Confidence: 0.82037903

 $00:11:45.600 \longrightarrow 00:11:47.240$ Sorry, sorry about that.

NOTE Confidence: 0.963136485

00:11:47.960 --> 00:11:48.988 Can you try again?

NOTE Confidence: 0.839287393333333

00:11:49.680 --> 00:11:53.750 Yeah, let me. Escape, yeah.

NOTE Confidence: 0.5182581

 $00:11:58.520 \longrightarrow 00:11:59.580$ Yeah, share.

NOTE Confidence: 0.84800222

 $00:12:07.530 \longrightarrow 00:12:08.430$ Is that better?

NOTE Confidence: 0.92630425

 $00:12:13.310 \longrightarrow 00:12:14.110$ Can you see that?

NOTE Confidence: 0.95063041375

 $00{:}12{:}19.930 \dashrightarrow 00{:}12{:}21.354$ Do you want to send them to me

NOTE Confidence: 0.92658849555556

 $00:12:21.370 \longrightarrow 00:12:23.491$ and I can share them from my

NOTE Confidence: 0.92658849555556

 $00:12:23.491 \longrightarrow 00:12:25.570$ my computer? Sorry about that.

NOTE Confidence: 0.9082484

 $00:13:02.020 \longrightarrow 00:13:03.250$ OK. So I got them. Greg,

NOTE Confidence: 0.933861713333333

 $00{:}13{:}03.250 \dashrightarrow 00{:}13{:}04.671$ why don't you go ahead and keep

NOTE Confidence: 0.933861713333333

00:13:04.671 --> 00:13:07.248 talking and I'll pull them up here.

NOTE Confidence: 0.752807322

 $00:13:07.860 \longrightarrow 00:13:09.210$ Sorry about that. I don't

00:13:09.210 --> 00:13:10.560 know why it's not sharing.

NOTE Confidence: 0.81109915

 $00:13:22.570 \longrightarrow 00:13:24.640$ Alright, I think maybe now

NOTE Confidence: 0.665459663333333 $00:13:24.810 \longrightarrow 00:13:26.220$ we can. Now

NOTE Confidence: 0.91216684

 $00:13:26.230 \longrightarrow 00:13:27.058$ we can see it.

NOTE Confidence: 0.64943756

 $00:13:27.640 \longrightarrow 00:13:28.868$ Sorry about that everybody.

NOTE Confidence: 0.642499095

 $00{:}13{:}30.320 \dashrightarrow 00{:}13{:}32.528$ Right. Yeah. So you know again

NOTE Confidence: 0.882315219444445

 $00:13:32.540 \longrightarrow 00:13:34.430$ this is the clinic and you know

NOTE Confidence: 0.882315219444445

 $00:13:34.430 \longrightarrow 00:13:36.760$ what we see with our our nurse

NOTE Confidence: 0.882315219444445

 $00:13:36.760 \longrightarrow 00:13:38.208$ practitioners or or things,

NOTE Confidence: 0.882315219444445

00:13:38.210 --> 00:13:40.278 you know benign disease,

NOTE Confidence: 0.882315219444445

00:13:40.278 --> 00:13:43.380 you know palpable masses that patients

NOTE Confidence: 0.882315219444445

00:13:43.465 --> 00:13:46.748 may feel or if various imaging findings,

NOTE Confidence: 0.882315219444445

 $00:13:46.750 \longrightarrow 00:13:49.466$ you know things that require a close

NOTE Confidence: 0.882315219444445

00:13:49.466 --> 00:13:51.893 interval follow up will work with

NOTE Confidence: 0.882315219444445

 $00:13:51.893 \longrightarrow 00:13:53.868$ radiology to follow those patients

NOTE Confidence: 0.882315219444445

 $00:13:53.868 \longrightarrow 00:13:56.467$ or the wealth of biopsies can often

00:13:56.467 --> 00:13:59.024 be benign and how do you interpret

NOTE Confidence: 0.882315219444445

 $00:13:59.024 \longrightarrow 00:14:01.908$ them as your primary care or OBGYN.

NOTE Confidence: 0.882315219444445

00:14:01.910 --> 00:14:04.328 Positions you know what is a

NOTE Confidence: 0.882315219444445

00:14:04.328 --> 00:14:06.742 papilloma need or what type of

NOTE Confidence: 0.882315219444445

 $00{:}14{:}06.742 \dashrightarrow 00{:}14{:}09.366$ follow up a library card inside you.

NOTE Confidence: 0.882315219444445

 $00:14:09.366 \longrightarrow 00:14:12.222$ We're very happy to see those patients

NOTE Confidence: 0.882315219444445

 $00:14:12.222 \longrightarrow 00:14:15.604$ and you know talk about the different

NOTE Confidence: 0.882315219444445

 $00{:}14{:}15.604 \dashrightarrow 00{:}14{:}17.920$ management surgical options or even

NOTE Confidence: 0.882315219444445

 $00{:}14{:}17.920 \longrightarrow 00{:}14{:}20.520$ screening strategies and of course

NOTE Confidence: 0.882315219444445

 $00:14:20.520 \longrightarrow 00:14:22.911$ breast malignancy of course which you

NOTE Confidence: 0.882315219444445

00:14:22.911 --> 00:14:25.508 know breast surgeons are are both kind

NOTE Confidence: 0.882315219444445

 $00{:}14{:}25.508 \dashrightarrow 00{:}14{:}27.720$ of associated with clinical trials.

NOTE Confidence: 0.882315219444445

 $00{:}14{:}27.720 \dashrightarrow 00{:}14{:}30.522$ We enroll patients in our various

NOTE Confidence: 0.882315219444445

 $00{:}14{:}30.522 \dashrightarrow 00{:}14{:}32.850$ surgical clinical trials and even.

NOTE Confidence: 0.882315219444445

 $00:14:32.850 \longrightarrow 00:14:35.370$ Follow those patients up and

 $00:14:35.370 \longrightarrow 00:14:37.386$ coordinate the necessary imaging

NOTE Confidence: 0.882315219444445

 $00:14:37.386 \longrightarrow 00:14:39.957$ regarding the clinical trial protocol.

NOTE Confidence: 0.882315219444445

 $00:14:39.960 \longrightarrow 00:14:43.159$ And you know with the cooperation

NOTE Confidence: 0.882315219444445 00:14:43.159 --> 00:14:44.073 of radiology, NOTE Confidence: 0.882315219444445

 $00:14:44.080 \longrightarrow 00:14:46.160$ we're able to offer surveillance,

NOTE Confidence: 0.882315219444445

00:14:46.160 --> 00:14:48.393 clinical exams for instance you know women

NOTE Confidence: 0.882315219444445

 $00:14:48.393 \longrightarrow 00:14:50.560$ who have undergone breast cancer surgery,

NOTE Confidence: 0.882315219444445

 $00:14:50.560 \longrightarrow 00:14:51.654$ radiation therapy,

NOTE Confidence: 0.882315219444445

 $00:14:51.654 \longrightarrow 00:14:54.389$ oncology therapy and then it's

NOTE Confidence: 0.882315219444445

00:14:54.389 --> 00:14:57.516 time for annual follow-up how much

NOTE Confidence: 0.882315219444445

 $00{:}14{:}57.516 \dashrightarrow 00{:}14{:}59.424$ imaging is needed and we're happy

NOTE Confidence: 0.882315219444445

 $00:14:59.424 \longrightarrow 00:15:01.662$ to see our patients for clinical

NOTE Confidence: 0.882315219444445

 $00{:}15{:}01.662 \dashrightarrow 00{:}15{:}03.577$ exam and coordinate the follow

NOTE Confidence: 0.882315219444445

 $00:15:03.577 \longrightarrow 00:15:05.720$ up mammogram on the same day.

NOTE Confidence: 0.882315219444445

00:15:05.720 --> 00:15:07.344 A good portion of my clinic today

NOTE Confidence: 0.882315219444445

 $00:15:07.344 \longrightarrow 00:15:08.977$ was seeing some of our patients who

 $00:15:08.977 \longrightarrow 00:15:10.790$ are one year follow up with same day.

NOTE Confidence: 0.882315219444445

 $00{:}15{:}10.790 {\:{\circ}{\circ}{\circ}}>00{:}15{:}13.471$ Imaging and patients seem to be very

NOTE Confidence: 0.882315219444445

 $00:15:13.471 \longrightarrow 00:15:15.761$ happy to bundle those visits and

NOTE Confidence: 0.882315219444445

00:15:15.761 --> 00:15:18.681 make one trip to see the search and

NOTE Confidence: 0.882315219444445

 $00:15:18.681 \longrightarrow 00:15:20.889$ then the radiologists on one

NOTE Confidence: 0.882315219444445

 $00:15:20.889 \longrightarrow 00:15:23.604$ day take less time off from work,

NOTE Confidence: 0.882315219444445

 $00:15:23.604 \longrightarrow 00:15:26.010$ family and all the other busy

NOTE Confidence: 0.882315219444445

 $00:15:26.092 \longrightarrow 00:15:27.330$ things and also.

NOTE Confidence: 0.924669505

 $00:15:30.130 \longrightarrow 00:15:32.241$ OK. Yeah. Yeah, we can't.

NOTE Confidence: 0.924669505

 $00{:}15{:}32.241 \dashrightarrow 00{:}15{:}34.040$ We are stuck on the title slide.

NOTE Confidence: 0.90784943

 $00{:}15{:}36.370 \dashrightarrow 00{:}15{:}40.159$ OK. Real connectivity that.

NOTE Confidence: 0.7455934

 $00:15:43.170 \longrightarrow 00:15:44.349$ Are they advancing now?

NOTE Confidence: 0.78707952

 $00{:}15{:}49.360 \dashrightarrow 00{:}15{:}51.538$ You see surgical clinic slide?

NOTE Confidence: 0.78707952

 $00:15:51.540 \longrightarrow 00:15:54.594$ No, no, I'll try and pull them

NOTE Confidence: 0.78707952

 $00:15:54.594 \longrightarrow 00:15:56.690$ up here, Greg. Thank you.

 $00:16:00.310 \longrightarrow 00:16:01.750$ I'll stop sharing.

NOTE Confidence: 0.783316

 $00:16:11.510 \longrightarrow 00:16:13.710$ Apologies to the audience. Thank you

NOTE Confidence: 0.78811116

 $00:16:13.720 \longrightarrow 00:16:15.070$ for your patience.

NOTE Confidence: 0.90931463

 $00{:}16{:}16{.}900 --> 00{:}16{:}17{.}310 \ {\rm Yeah}.$

NOTE Confidence: 0.845175955714286

 $00:16:18.680 \longrightarrow 00:16:21.228$ And it's not stopping the sharing either.

NOTE Confidence: 0.920403788333333

00:16:31.350 --> 00:16:33.420 Well, in the interest of time, why don't

NOTE Confidence: 0.900537588

 $00{:}16{:}33.430 \dashrightarrow 00{:}16{:}35.650$ we move forward with medical oncology

NOTE Confidence: 0.900537588

 $00:16:35.650 \longrightarrow 00:16:38.236$ and then we'll come back or Doctor

NOTE Confidence: 0.900537588

00:16:38.236 --> 00:16:40.300 Butler from plastic surgery and we

NOTE Confidence: 0.900537588

 $00:16:40.300 \longrightarrow 00:16:42.992$ can come back to your slides when we

NOTE Confidence: 0.900537588

 $00:16:42.992 \longrightarrow 00:16:45.278$ get the technical issues worked out.

NOTE Confidence: 0.900537588

00:16:45.278 --> 00:16:48.950 Doctor Butler, Are you ready and loaded?

NOTE Confidence: 0.7968582225

 $00:16:50.580 \longrightarrow 00:16:52.676$ So I'm going to share my screen too.

NOTE Confidence: 0.7968582225

 $00:16:52.680 \longrightarrow 00:16:54.588$ Don't have the same challenge, but I'm ready.

NOTE Confidence: 0.906935142

00:16:54.920 --> 00:16:56.640 I'm gonna introduce Doctor Butler.

NOTE Confidence: 0.906935142

 $00:16:56.640 \longrightarrow 00:16:59.238$ He's an associate professor of surgery

00:16:59.238 --> 00:17:01.540 in plastics and reconstructive surgery,

NOTE Confidence: 0.906935142

 $00{:}17{:}01.540 {\:{\circ}{\circ}{\circ}}>00{:}17{:}03.316$ and he's the inaugural Yale Department

NOTE Confidence: 0.906935142

00:17:03.316 --> 00:17:05.199 of Surgery vice Chair of Diversity,

NOTE Confidence: 0.906935142

00:17:05.200 --> 00:17:06.860 Equity and Inclusion.

NOTE Confidence: 0.906935142

 $00{:}17{:}06.860 \dashrightarrow 00{:}17{:}08.750$ He's board certified both by the

NOTE Confidence: 0.906935142

 $00:17:08.750 \longrightarrow 00:17:10.659$ American Board of Surgery and the

NOTE Confidence: 0.906935142

00:17:10.659 --> 00:17:12.423 American Board of Plastic Surgery and

NOTE Confidence: 0.906935142

 $00{:}17{:}12.423 \dashrightarrow 00{:}17{:}14.750$ a Fellow of the American College of

NOTE Confidence: 0.906935142

 $00{:}17{:}14.750 \dashrightarrow 00{:}17{:}16.435$ Surgeons and his clinical interests

NOTE Confidence: 0.906935142

 $00:17:16.440 \longrightarrow 00:17:19.392$ are in breast reconstruction and body

NOTE Confidence: 0.906935142

 $00{:}17{:}19.392 \dashrightarrow 00{:}17{:}21.360$ contouring after bariatric surgery.

NOTE Confidence: 0.906935142

00:17:21.360 --> 00:17:24.648 Reductions left scars and aesthetic surgery,

NOTE Confidence: 0.906935142

 $00{:}17{:}24.650 \dashrightarrow 00{:}17{:}26.354$ and we're thrilled to have him

NOTE Confidence: 0.906935142

 $00:17:26.354 \longrightarrow 00:17:27.490$ on our Yale team.

NOTE Confidence: 0.906935142

 $00:17:27.490 \longrightarrow 00:17:29.060$ So take it away, Paris,

 $00:17:29.140 \longrightarrow 00:17:30.090$ thank you very much for

NOTE Confidence: 0.8715973625

 $00:17:30.090 \longrightarrow 00:17:30.660$ the kind introduction.

NOTE Confidence: 0.8715973625

 $00:17:30.660 \longrightarrow 00:17:31.548$ I'm going to share my screen.

NOTE Confidence: 0.8715973625

 $00:17:31.550 \longrightarrow 00:17:32.170$ Maybe, Rachel.

NOTE Confidence: 0.8715973625

00:17:32.170 --> 00:17:34.954 Just give me a thumbs up if you can

NOTE Confidence: 0.8715973625

 $00:17:34.954 \longrightarrow 00:17:36.950$ see my screen when the time comes.

NOTE Confidence: 0.8368552

 $00{:}17{:}41.410 \dashrightarrow 00{:}17{:}44.330$ Excellent. Looks great, wonderful.

NOTE Confidence: 0.868036085

 $00:17:46.560 \longrightarrow 00:17:47.925$ So thanks for allowing me

NOTE Confidence: 0.868036085

 $00:17:47.925 \longrightarrow 00:17:49.290$ to join you this evening.

NOTE Confidence: 0.868036085

 $00:17:49.290 \longrightarrow 00:17:52.182$ I have most recently been recruited

NOTE Confidence: 0.868036085

00:17:52.182 --> 00:17:54.053 to Yale plastic surgery from

NOTE Confidence: 0.868036085

 $00:17:54.053 \longrightarrow 00:17:55.257$ the University of Pennsylvania.

NOTE Confidence: 0.868036085

 $00:17:55.260 \longrightarrow 00:17:56.424$ I've been on faculty here for

NOTE Confidence: 0.868036085

 $00:17:56.424 \longrightarrow 00:17:57.530$ a little over five months,

NOTE Confidence: 0.868036085

 $00:17:57.530 \longrightarrow 00:17:59.287$ kind of hard to believe and really

NOTE Confidence: 0.868036085

 $00{:}17{:}59.287 \dashrightarrow 00{:}18{:}01.080$ for tunate to join an outstanding group

 $00:18:01.080 \longrightarrow 00:18:03.048$ of plastic surgeons within our division.

NOTE Confidence: 0.868036085

 $00{:}18{:}03.050 \dashrightarrow 00{:}18{:}05.420$ We are growing our division

NOTE Confidence: 0.868036085

 $00:18:05.420 \longrightarrow 00:18:06.368$ rather significantly.

NOTE Confidence: 0.868036085

 $00:18:06.370 \longrightarrow 00:18:08.280$ We have six plastic surgeons

NOTE Confidence: 0.868036085

00:18:08.280 --> 00:18:09.426 amongst our faculty.

NOTE Confidence: 0.868036085

 $00:18:09.430 \longrightarrow 00:18:11.565$ We have a faculty of 12 now,

NOTE Confidence: 0.868036085

00:18:11.570 --> 00:18:12.750 which is rapidly grown in

NOTE Confidence: 0.868036085

 $00:18:12.750 \longrightarrow 00:18:14.290$ the last four or five years.

NOTE Confidence: 0.868036085

00:18:14.290 --> 00:18:16.050 Our chief is Bo Pomahac,

NOTE Confidence: 0.868036085

 $00:18:16.050 \longrightarrow 00:18:16.900$ so all six of these.

NOTE Confidence: 0.868036085

 $00:18:16.900 \longrightarrow 00:18:18.604$ Individuals perform plastic and

NOTE Confidence: 0.868036085

 $00:18:18.604 \longrightarrow 00:18:21.470$ reconstructive surgery on breast in one way,

NOTE Confidence: 0.868036085

 $00{:}18{:}21.470 --> 00{:}18{:}22.769$ shape or form.

NOTE Confidence: 0.868036085

 $00:18:22.769 \longrightarrow 00:18:25.367$ The majority of us do reconstructive

NOTE Confidence: 0.868036085

00:18:25.367 --> 00:18:28.174 surgery as well on breast and I

 $00:18:28.174 \longrightarrow 00:18:31.240$ would say that is all about 50%

NOTE Confidence: 0.868036085

 $00{:}18{:}31.240 \dashrightarrow 00{:}18{:}32.990$ of my practice in particular.

NOTE Confidence: 0.868036085

 $00:18:32.990 \longrightarrow 00:18:34.292$ So we have Obama hawk who is

NOTE Confidence: 0.868036085

00:18:34.292 --> 00:18:34.850 our division chief.

NOTE Confidence: 0.868036085

00:18:34.850 --> 00:18:38.126 We have doctor Hari, Ayala myself here,

NOTE Confidence: 0.868036085

00:18:38.130 --> 00:18:39.546 Doctor Melissa Mastriani,

NOTE Confidence: 0.868036085

00:18:39.546 --> 00:18:41.906 Dr Peck and Doctor Vasquez,

NOTE Confidence: 0.868036085

00:18:41.910 --> 00:18:43.554 myself, doctor Pomahac,

NOTE Confidence: 0.868036085

 $00{:}18{:}43.554 \dashrightarrow 00{:}18{:}47.330$ Dr Ayala and Doctor Peck will be at.

NOTE Confidence: 0.868036085

 $00:18:47.330 \longrightarrow 00:18:49.700$ Shoreline facilities more times than not.

NOTE Confidence: 0.868036085

 $00:18:49.700 \longrightarrow 00:18:51.940$ So we are delighted to care for this,

NOTE Confidence: 0.868036085

 $00:18:51.940 \longrightarrow 00:18:54.406$ for this Community and this patient

NOTE Confidence: 0.868036085

 $00:18:54.406 \longrightarrow 00:18:57.928$ population over the next I would say.

NOTE Confidence: 0.868036085

 $00{:}18{:}57.930 \dashrightarrow 00{:}18{:}58.410\ 10\ \mathrm{minutes},$

NOTE Confidence: 0.868036085

00:18:58.410 --> 00:18:59.850 I'll try to keep it brief.

NOTE Confidence: 0.868036085

 $00{:}18{:}59.850 \dashrightarrow 00{:}19{:}01.374$ It's really difficult to give an

 $00:19:01.374 \longrightarrow 00:19:02.720$ overview of plastic and reconstructive

NOTE Confidence: 0.868036085

00:19:02.720 --> 00:19:04.666 surgery in in eight to 10 minutes,

NOTE Confidence: 0.868036085

00:19:04.670 --> 00:19:06.042 but I'm going to do my best

NOTE Confidence: 0.868036085

 $00:19:06.042 \longrightarrow 00:19:07.570$ to to kind of keep it there.

NOTE Confidence: 0.868036085

 $00:19:07.570 \longrightarrow 00:19:09.705$ So as it pertains to the the

NOTE Confidence: 0.868036085

 $00:19:09.705 \longrightarrow 00:19:12.469$ goal of a breast reconstruction,

NOTE Confidence: 0.868036085

 $00:19:12.470 \longrightarrow 00:19:14.747$ as many of you all know it's to to

NOTE Confidence: 0.868036085

 $00:19:14.747 \longrightarrow 00:19:16.870$ restore breast appearance and clothes.

NOTE Confidence: 0.868036085

 $00:19:16.870 \dashrightarrow 00:19:19.276$ We say as we're setting expectations

NOTE Confidence: 0.868036085

 $00:19:19.276 \longrightarrow 00:19:21.946$ with our patients and we don't try

NOTE Confidence: 0.868036085

 $00{:}19{:}21.946 \dashrightarrow 00{:}19{:}23.658$ to oversell what our capacity is,

NOTE Confidence: 0.868036085

00:19:23.658 --> 00:19:25.507 but we also try to provide a

NOTE Confidence: 0.868036085

 $00{:}19{:}25.507 \dashrightarrow 00{:}19{:}27.211$ a nice light at the end of the

NOTE Confidence: 0.868036085

 $00:19:27.211 \longrightarrow 00:19:28.468$ tunnel as it pertains to.

NOTE Confidence: 0.868036085

 $00:19:28.470 \longrightarrow 00:19:29.208$ The, the,

 $00:19:29.208 \longrightarrow 00:19:31.053$ the duration of the completion

NOTE Confidence: 0.868036085

00:19:31.053 --> 00:19:33.240 of their their oncologic care.

NOTE Confidence: 0.868036085

00:19:33.240 --> 00:19:34.560 So in my opinion,

NOTE Confidence: 0.868036085

 $00:19:34.560 \longrightarrow 00:19:36.540$ I think we can do honestly,

NOTE Confidence: 0.868036085

 $00:19:36.540 \longrightarrow 00:19:38.508$ I think we can do better than just

NOTE Confidence: 0.868036085

 $00:19:38.508 \dashrightarrow 00:19:40.519$ getting them to appear normal in clothes.

NOTE Confidence: 0.868036085

 $00:19:40.520 \longrightarrow 00:19:42.455$ I think we can get them to to restore

NOTE Confidence: 0.868036085

 $00:19:42.455 \longrightarrow 00:19:44.520$ their breast appearance in a bathing suit.

NOTE Confidence: 0.868036085

00:19:44.520 --> 00:19:44.809 However,

NOTE Confidence: 0.868036085

 $00:19:44.809 \longrightarrow 00:19:47.121$ we do let them know once that bathing

NOTE Confidence: 0.868036085

 $00{:}19{:}47.121 \dashrightarrow 00{:}19{:}49.006$ suit is removed and underwear is

NOTE Confidence: 0.868036085

 $00:19:49.006 \longrightarrow 00:19:51.192$ removed that they will see their their

NOTE Confidence: 0.868036085

 $00:19:51.192 \dashrightarrow 00:19:53.820$ scars and such how often is it performed.

NOTE Confidence: 0.868036085

 $00:19:53.820 \longrightarrow 00:19:56.956$ So if you look at the the national

NOTE Confidence: 0.868036085

 $00:19:56.956 \longrightarrow 00:19:58.668$ data about 65% of the time.

NOTE Confidence: 0.868036085

 $00:19:58.668 \longrightarrow 00:19:59.364$ In the US,

 $00:19:59.370 \longrightarrow 00:20:01.506$ formal breast reconstruction is

NOTE Confidence: 0.868036085

 $00{:}20{:}01.506 \to 00{:}20{:}04.176$ performed in post mastectomy patients.

NOTE Confidence: 0.868036085

 $00:20:04.180 \longrightarrow 00:20:07.476$ So that equates to about 138,000

NOTE Confidence: 0.868036085

 $00:20:07.476 \longrightarrow 00:20:08.874$ breast reconstruction procedures

NOTE Confidence: 0.868036085

 $00:20:08.874 \longrightarrow 00:20:10.738$ that are performed annually.

NOTE Confidence: 0.868036085

 $00:20:10.740 \longrightarrow 00:20:13.421$ This is data from 2020 and the

NOTE Confidence: 0.868036085

00:20:13.421 --> 00:20:15.498 numbers continue to just go up,

NOTE Confidence: 0.868036085

 $00{:}20{:}15.500 \dashrightarrow 00{:}20{:}17.719$ which I obviously is a plastic surgeon.

NOTE Confidence: 0.868036085

 $00:20:17.720 \longrightarrow 00:20:20.654$ I'm biased. I think it's a really good thing.

NOTE Confidence: 0.868036085

00:20:20.660 --> 00:20:21.490 Unfortunately though,

NOTE Confidence: 0.868036085

 $00{:}20{:}21.490 \dashrightarrow 00{:}20{:}24.000$ this varies according to age, race,

NOTE Confidence: 0.868036085

 $00{:}20{:}24.000 \dashrightarrow 00{:}20{:}25.720$ ethnicity and insurance status.

NOTE Confidence: 0.868036085

 $00:20:25.720 \longrightarrow 00:20:27.412$ While I was at the University

NOTE Confidence: 0.868036085

00:20:27.412 --> 00:20:27.976 of Pennsylvania,

NOTE Confidence: 0.868036085

 $00:20:27.980 \longrightarrow 00:20:29.666$ we actually looked at who was

 $00:20:29.666 \longrightarrow 00:20:30.509$ getting breast reconstruction

NOTE Confidence: 0.868036085

 $00{:}20{:}30.509 \dashrightarrow 00{:}20{:}32.056$ to determine what the rates were

NOTE Confidence: 0.868036085

 $00:20:32.056 \longrightarrow 00:20:33.610$ and also to determine if there

NOTE Confidence: 0.868036085

 $00:20:33.610 \longrightarrow 00:20:35.015$ are any patient populations that

NOTE Confidence: 0.868036085

00:20:35.015 --> 00:20:36.139 were not getting breast

NOTE Confidence: 0.855091302857143

 $00:20:36.140 \longrightarrow 00:20:37.610$ reconstruction at the same rate as others.

NOTE Confidence: 0.855091302857143

00:20:37.610 --> 00:20:40.508 And what we identified when we looked

NOTE Confidence: 0.855091302857143

00:20:40.508 --> 00:20:43.370 at national data over A6 year period,

NOTE Confidence: 0.855091302857143

 $00:20:43.370 \longrightarrow 00:20:44.690$ 48,000 patients, we identify that

NOTE Confidence: 0.855091302857143

00:20:44.690 --> 00:20:46.626 there are two subsets of the Community

NOTE Confidence: 0.855091302857143

 $00{:}20{:}46.626 \dashrightarrow 00{:}20{:}48.036$ that don't get breast reconstruction

NOTE Confidence: 0.855091302857143

 $00:20:48.036 \longrightarrow 00:20:49.620$ at the same rate as others.

NOTE Confidence: 0.855091302857143

00:20:49.620 --> 00:20:51.450 Those are more. Seasoned ladies,

NOTE Confidence: 0.855091302857143

 $00:20:51.450 \longrightarrow 00:20:53.018$ no one likes to be called old.

NOTE Confidence: 0.855091302857143

00:20:53.020 --> 00:20:56.140 So our ladies over 45 and then unfortunately

NOTE Confidence: 0.855091302857143

00:20:56.140 --> 00:20:58.942 our ladies of color and namely our

 $00{:}20{:}58.942 \dashrightarrow 00{:}21{:}01.390$ African American and our Latino women.

NOTE Confidence: 0.855091302857143

00:21:01.390 --> 00:21:03.574 And then when we look at insurance status,

NOTE Confidence: 0.855091302857143

00:21:03.580 --> 00:21:06.238 probably not a surprise that uninsured

NOTE Confidence: 0.855091302857143

00:21:06.240 --> 00:21:07.605 women would not receive breast

NOTE Confidence: 0.855091302857143

 $00:21:07.605 \longrightarrow 00:21:09.459$ reconstruction at the same rate as others.

NOTE Confidence: 0.855091302857143

 $00:21:09.460 \longrightarrow 00:21:10.700$ But we've also identified

NOTE Confidence: 0.855091302857143

00:21:10.700 --> 00:21:11.940 the fact that unfortunately,

NOTE Confidence: 0.855091302857143

 $00:21:11.940 \longrightarrow 00:21:14.610$ women who have public insurance don't

NOTE Confidence: 0.855091302857143

 $00:21:14.610 \longrightarrow 00:21:17.185$ receive breast reconstruction at the rate

NOTE Confidence: 0.855091302857143

 $00:21:17.185 \longrightarrow 00:21:19.375$ as those that have private insurance.

NOTE Confidence: 0.855091302857143

 $00:21:19.380 \longrightarrow 00:21:21.492$ This is a soft spot for me because

NOTE Confidence: 0.855091302857143

 $00{:}21{:}21.492 \dashrightarrow 00{:}21{:}24.206$ I do a lot of disparity research

NOTE Confidence: 0.855091302857143

00:21:24.206 --> 00:21:25.475 and scholastic effort,

NOTE Confidence: 0.855091302857143

 $00:21:25.480 \longrightarrow 00:21:27.152$ but I I do think that this is

NOTE Confidence: 0.855091302857143

00:21:27.152 --> 00:21:28.489 something that has been understated

 $00:21:28.489 \longrightarrow 00:21:30.229$ and something that needs to be

NOTE Confidence: 0.855091302857143

 $00{:}21{:}30.229 \dashrightarrow 00{:}21{:}31.470$ addressed kind of nationwide.

NOTE Confidence: 0.855091302857143

 $00:21:31.470 \longrightarrow 00:21:33.790$ I'm going to do my best here at

NOTE Confidence: 0.855091302857143

 $00:21:33.790 \longrightarrow 00:21:35.822$ Yale University to help push that

NOTE Confidence: 0.855091302857143

 $00:21:35.822 \longrightarrow 00:21:37.898$ envelope and push that needle forward.

NOTE Confidence: 0.855091302857143

 $00:21:37.900 \longrightarrow 00:21:39.846$ So what is the best timing for

NOTE Confidence: 0.855091302857143

 $00:21:39.846 \longrightarrow 00:21:41.333$ reconstruction? Pretty much anytime.

NOTE Confidence: 0.855091302857143

 $00:21:41.333 \longrightarrow 00:21:42.536$ Immediate or delayed,

NOTE Confidence: 0.855091302857143

 $00:21:42.540 \longrightarrow 00:21:44.310$ or typically both an option.

NOTE Confidence: 0.855091302857143

 $00:21:44.310 \longrightarrow 00:21:45.183$ There's been good,

NOTE Confidence: 0.855091302857143

00:21:45.183 --> 00:21:46.638 really good literature out there

NOTE Confidence: 0.855091302857143

00:21:46.638 --> 00:21:48.346 describing the fact that when a woman

NOTE Confidence: 0.855091302857143

 $00{:}21{:}48.346 \dashrightarrow 00{:}21{:}49.893$ wakes up from a mastectomy and has

NOTE Confidence: 0.855091302857143

 $00:21:49.893 \longrightarrow 00:21:51.363$ the semblance of a breast mount it,

NOTE Confidence: 0.855091302857143

 $00:21:51.370 \longrightarrow 00:21:53.590$ it can be helpful emotionally,

NOTE Confidence: 0.855091302857143

 $00:21:53.590 \longrightarrow 00:21:55.110$ socially, psychologically.

 $00:21:55.110 \longrightarrow 00:21:57.390$ And even functionally.

NOTE Confidence: 0.855091302857143

00:21:57.390 --> 00:21:59.987 So I would say it's probably strong

NOTE Confidence: 0.855091302857143

00:21:59.987 --> 00:22:02.625 language language to say that it is gold

NOTE Confidence: 0.855091302857143

00:22:02.625 --> 00:22:04.950 standard to have it done immediately,

NOTE Confidence: 0.855091302857143

 $00:22:04.950 \longrightarrow 00:22:06.552$ but it is more common occurrence

NOTE Confidence: 0.855091302857143

 $00:22:06.552 \longrightarrow 00:22:09.162$ for us to now do it in an immediate

NOTE Confidence: 0.855091302857143

 $00:22:09.162 \longrightarrow 00:22:11.170$ setting rather than a delayed setting.

NOTE Confidence: 0.855091302857143

 $00:22:11.170 \longrightarrow 00:22:11.995$ That being said,

NOTE Confidence: 0.855091302857143

 $00:22:11.995 \longrightarrow 00:22:13.920$ we can offer and do offer breast

NOTE Confidence: 0.855091302857143

 $00:22:13.984 \longrightarrow 00:22:16.009$ reconstruction in a delayed setting,

NOTE Confidence: 0.855091302857143

00:22:16.010 --> 00:22:19.286 so anytime after that initial mastectomy.

NOTE Confidence: 0.855091302857143

 $00:22:19.290 \longrightarrow 00:22:20.574$ Who's the candidate?

NOTE Confidence: 0.855091302857143

00:22:20.574 --> 00:22:21.430 Free construction,

NOTE Confidence: 0.855091302857143

 $00:22:21.430 \longrightarrow 00:22:23.646$ I would say the vast majority of patients.

NOTE Confidence: 0.855091302857143

 $00:22:23.650 \longrightarrow 00:22:25.288$ So any woman who has had or

 $00:22:25.288 \longrightarrow 00:22:27.130$ is going to have a mastectomy,

NOTE Confidence: 0.855091302857143

 $00{:}22{:}27.130 \dashrightarrow 00{:}22{:}28.948$ there's really no specific age limit.

NOTE Confidence: 0.855091302857143

 $00:22:28.950 \longrightarrow 00:22:30.732$ Women over 60 are welcome to

NOTE Confidence: 0.855091302857143

 $00:22:30.732 \longrightarrow 00:22:32.579$ inquire and I recommend to my

NOTE Confidence: 0.855091302857143

 $00:22:32.579 \longrightarrow 00:22:34.084$ breast surgeons that any woman,

NOTE Confidence: 0.855091302857143

00:22:34.090 --> 00:22:36.298 regardless or agnostic of of age,

NOTE Confidence: 0.855091302857143

 $00:22:36.300 \longrightarrow 00:22:36.622$ race,

NOTE Confidence: 0.855091302857143 00:22:36.622 --> 00:22:36.944 ethnicity, NOTE Confidence: 0.855091302857143

 $00:22:36.944 \longrightarrow 00:22:39.198$ have an appointment or consultation with one

NOTE Confidence: 0.855091302857143

00:22:39.198 --> 00:22:41.689 of those plastic and reconstructive surgeons.

NOTE Confidence: 0.855091302857143

 $00{:}22{:}41.690 \to 00{:}22{:}42.743$ Breast reconstruction is

NOTE Confidence: 0.855091302857143

 $00:22:42.743 \longrightarrow 00:22:43.796$ covered by insurance.

NOTE Confidence: 0.855091302857143

 $00:22:43.800 \longrightarrow 00:22:45.544$ I get this question all the time when

NOTE Confidence: 0.855091302857143

 $00{:}22{:}45.544 \dashrightarrow 00{:}22{:}47.608$ I'm out in the community talking about

NOTE Confidence: 0.855091302857143

00:22:47.608 --> 00:22:49.552 breast reconstruction and doing my best

NOTE Confidence: 0.855091302857143

 $00:22:49.552 \longrightarrow 00:22:51.127$ to enhance breast health literacy.

00:22:51.130 --> 00:22:52.930 Our country did a wonderful thing.

NOTE Confidence: 0.855091302857143

 $00:22:52.930 \longrightarrow 00:22:53.978$ In the late 90s,

NOTE Confidence: 0.855091302857143

 $00:22:53.978 \longrightarrow 00:22:55.894$ our legislators in DC passed the Women's

NOTE Confidence: 0.855091302857143

00:22:55.894 --> 00:22:57.903 Health and Cancer Rights Act of 98,

NOTE Confidence: 0.855091302857143

00:22:57.910 --> 00:23:00.910 which mandated that insurance companies,

NOTE Confidence: 0.855091302857143

 $00:23:00.910 \longrightarrow 00:23:03.202$ if a woman has medical insurance

NOTE Confidence: 0.855091302857143

00:23:03.202 --> 00:23:05.958 that's covering her, her surgical care,

NOTE Confidence: 0.855091302857143

00:23:05.958 --> 00:23:07.030 lumpectomy, mastectomy,

NOTE Confidence: 0.855091302857143

 $00:23:07.030 \longrightarrow 00:23:10.022$ radiation medical or medical

NOTE Confidence: 0.855091302857143

 $00:23:10.022 \longrightarrow 00:23:11.518$ oncology chemotherapy,

NOTE Confidence: 0.855091302857143

 $00:23:11.520 \longrightarrow 00:23:13.435$ they are also mandated to

NOTE Confidence: 0.855091302857143

 $00:23:13.435 \longrightarrow 00:23:14.584$ cover breast reconstruction.

NOTE Confidence: 0.855091302857143

 $00:23:14.590 \longrightarrow 00:23:16.228$ For the duration of their life,

NOTE Confidence: 0.855091302857143

 $00:23:16.230 \longrightarrow 00:23:18.020$ and that also includes a

NOTE Confidence: 0.855091302857143

 $00:23:18.020 \longrightarrow 00:23:19.452$ balancing operation on say,

 $00:23:19.460 \longrightarrow 00:23:20.618$ the contralateral side.

NOTE Confidence: 0.855091302857143

 $00{:}23{:}20.618 \dashrightarrow 00{:}23{:}23.320$ Patient suffers from a left sided cancer,

NOTE Confidence: 0.855091302857143

 $00:23:23.320 \longrightarrow 00:23:24.650$ has a left sided mastectomy.

NOTE Confidence: 0.872759584285714

 $00:23:24.650 \longrightarrow 00:23:26.379$ We do reconstruction on the left side.

NOTE Confidence: 0.872759584285714

 $00:23:26.380 \longrightarrow 00:23:28.110$ Their insurance company is mandated

NOTE Confidence: 0.872759584285714

 $00:23:28.110 \longrightarrow 00:23:30.595$ for me to also perform a balance

NOTE Confidence: 0.872759584285714

 $00:23:30.595 \longrightarrow 00:23:32.653$ and procedure on that opposite side.

NOTE Confidence: 0.872759584285714

 $00:23:32.660 \longrightarrow 00:23:34.820$ So as breast reconstruction safe,

NOTE Confidence: 0.872759584285714

 $00{:}23{:}34.820 \dashrightarrow 00{:}23{:}37.620$ this has come under a bit of attack of late,

NOTE Confidence: 0.872759584285714

 $00:23:37.620 \longrightarrow 00:23:39.495$ particularly as it pertains to

NOTE Confidence: 0.872759584285714

 $00{:}23{:}39.495 \dashrightarrow 00{:}23{:}40.620$ implant based reconstruction.

NOTE Confidence: 0.872759584285714

 $00:23:40.620 \longrightarrow 00:23:42.660$ So before I get to that,

NOTE Confidence: 0.872759584285714

00:23:42.660 --> 00:23:44.256 I just want to comment that brush

NOTE Confidence: 0.872759584285714

 $00:23:44.256 \longrightarrow 00:23:45.406$ reconstruction does not make the

NOTE Confidence: 0.872759584285714

 $00:23:45.406 \longrightarrow 00:23:46.897$ breast cancer recur at any higher rate.

NOTE Confidence: 0.872759584285714

 $00:23:46.900 \longrightarrow 00:23:48.764$ We've looked at this over and over and

00:23:48.764 --> 00:23:50.496 over again and there's no heightened

NOTE Confidence: 0.872759584285714

 $00{:}23{:}50.496 \dashrightarrow 00{:}23{:}52.320$ rates of recurrence in patients who've

NOTE Confidence: 0.872759584285714

 $00:23:52.375 \longrightarrow 00:23:54.015$ had reconstruction versus those that

NOTE Confidence: 0.872759584285714

 $00:23:54.015 \longrightarrow 00:23:56.394$ opted to not have reconstruction or were

NOTE Confidence: 0.872759584285714

 $00:23:56.394 \longrightarrow 00:23:58.229$ not healthy enough for reconstruction.

NOTE Confidence: 0.872759584285714

 $00:23:58.230 \longrightarrow 00:24:00.030$ Higher complication rates are noted

NOTE Confidence: 0.872759584285714

 $00:24:00.030 \longrightarrow 00:24:01.773$ in smokers, obesity and diabetics.

NOTE Confidence: 0.872759584285714

 $00{:}24{:}01.773 \dashrightarrow 00{:}24{:}03.478$ Sometimes we can optimize patients

NOTE Confidence: 0.872759584285714

00:24:03.478 --> 00:24:04.630 prior to surgery,

NOTE Confidence: 0.872759584285714

 $00:24:04.630 \longrightarrow 00:24:05.614$ other times we cannot.

NOTE Confidence: 0.872759584285714

 $00:24:05.614 \longrightarrow 00:24:07.754$ We just have to let them know once

NOTE Confidence: 0.872759584285714

 $00:24:07.754 \longrightarrow 00:24:09.578$ again what the expectations are and

NOTE Confidence: 0.872759584285714

 $00{:}24{:}09.578 \dashrightarrow 00{:}24{:}11.495$ it sometimes does limit the options

NOTE Confidence: 0.872759584285714

 $00:24:11.495 \longrightarrow 00:24:13.065$ we have for the reconstruction.

NOTE Confidence: 0.872759584285714

 $00:24:13.070 \longrightarrow 00:24:14.906$ Silicone implants have been proven to

00:24:14.906 --> 00:24:16.610 be safe and reconstruction patients,

NOTE Confidence: 0.872759584285714

 $00:24:16.610 \longrightarrow 00:24:18.402$ even if they rupture,

NOTE Confidence: 0.872759584285714

 $00:24:18.402 \longrightarrow 00:24:20.642$ they don't cause additional harm.

NOTE Confidence: 0.872759584285714

00:24:20.650 --> 00:24:22.170 So about six years ago,

NOTE Confidence: 0.872759584285714

00:24:22.170 --> 00:24:24.795 there was a lot of conversation about

NOTE Confidence: 0.872759584285714

00:24:24.795 --> 00:24:26.981 this association of anaplastic large

NOTE Confidence: 0.872759584285714

 $00:24:26.981 \longrightarrow 00:24:29.635$ cell lymphoma with textured implants.

NOTE Confidence: 0.872759584285714

 $00:24:29.635 \longrightarrow 00:24:33.520$ The FDA has identified a risk of

NOTE Confidence: 0.872759584285714

 $00:24:33.620 \longrightarrow 00:24:36.342$ about one in 30,000 women who had

NOTE Confidence: 0.872759584285714

00:24:36.342 --> 00:24:38.640 textured implants or risk of suffering

NOTE Confidence: 0.872759584285714

 $00{:}24{:}38.713 \dashrightarrow 00{:}24{:}40.729$ anaplastic large cell lymphoma.

NOTE Confidence: 0.872759584285714

 $00:24:40.730 \longrightarrow 00:24:43.842$ The the rates when you look more broadly,

NOTE Confidence: 0.872759584285714

 $00:24:43.842 \longrightarrow 00:24:46.278$ it's like being less than being

NOTE Confidence: 0.872759584285714

00:24:46.278 --> 00:24:48.650 struck by struck by lightning.

NOTE Confidence: 0.872759584285714

 $00:24:48.650 \longrightarrow 00:24:50.000$ That being said,

NOTE Confidence: 0.872759584285714

 $00:24:50.000 \longrightarrow 00:24:50.900 I do.$

 $00:24:50.900 \longrightarrow 00:24:53.035$ Address this with my patients at time

NOTE Confidence: 0.872759584285714

 $00:24:53.035 \longrightarrow 00:24:55.116$ of consultation and we we actually now

NOTE Confidence: 0.872759584285714

00:24:55.116 --> 00:24:57.188 give them paperwork and have them sign

NOTE Confidence: 0.872759584285714

00:24:57.188 --> 00:24:58.923 an affidavit with an understanding

NOTE Confidence: 0.872759584285714

 $00{:}24{:}58.923 \dashrightarrow 00{:}25{:}01.306$ that this association has been made.

NOTE Confidence: 0.872759584285714

 $00:25:01.306 \longrightarrow 00:25:03.278$ Most recently there's been

NOTE Confidence: 0.872759584285714

 $00:25:03.278 \longrightarrow 00:25:05.250$ conversation about an association

NOTE Confidence: 0.872759584285714

 $00{:}25{:}05.327 \dashrightarrow 00{:}25{:}07.892$ with a rare type of of a skin cancer,

NOTE Confidence: 0.872759584285714

 $00:25:07.900 \longrightarrow 00:25:09.640$ squamous cell skin cancer associated

NOTE Confidence: 0.872759584285714

 $00:25:09.640 \longrightarrow 00:25:11.821$ with the capsule that can develop

NOTE Confidence: 0.872759584285714

 $00:25:11.821 \longrightarrow 00:25:12.958$ around the implant.

NOTE Confidence: 0.872759584285714

 $00:25:12.960 \longrightarrow 00:25:16.138$ There have been 15 reported cases worldwide.

NOTE Confidence: 0.872759584285714

00:25:16.140 --> 00:25:18.498 This has been in the news in the last

NOTE Confidence: 0.872759584285714

 $00:25:18.498 \longrightarrow 00:25:20.870$ four to six weeks and the FDA made it.

NOTE Confidence: 0.872759584285714 00:25:20.870 --> 00:25:21.500 A statement.

00:25:21.500 --> 00:25:23.705 This is a statement from Bonita Ashar,

NOTE Confidence: 0.872759584285714

 $00{:}25{:}23.710 \dashrightarrow 00{:}25{:}26.174$ the director of the Office of Surgical

NOTE Confidence: 0.872759584285714

00:25:26.174 --> 00:25:27.949 Infection Control Devices for the FDA,

NOTE Confidence: 0.872759584285714

 $00:25:27.950 \longrightarrow 00:25:29.602$ that right now we do not have

NOTE Confidence: 0.872759584285714

 $00:25:29.602 \longrightarrow 00:25:30.887$ enough information to say whether

NOTE Confidence: 0.872759584285714

 $00:25:30.887 \longrightarrow 00:25:32.207$ breast implants cause these cancers

NOTE Confidence: 0.872759584285714

00:25:32.207 --> 00:25:34.158 or if any types of implants pose

NOTE Confidence: 0.872759584285714

 $00:25:34.158 \longrightarrow 00:25:35.270$ higher risks than others.

NOTE Confidence: 0.872759584285714

 $00:25:35.270 \longrightarrow 00:25:37.160$ So the reason for the louder part

NOTE Confidence: 0.872759584285714

00:25:37.160 --> 00:25:39.056 of that statement is because the

NOTE Confidence: 0.872759584285714

 $00{:}25{:}39.056 \dashrightarrow 00{:}25{:}40.432$ anaplastic large cell lymphoma

NOTE Confidence: 0.872759584285714

 $00:25:40.432 \longrightarrow 00:25:42.230$ has been associated with textured

NOTE Confidence: 0.872759584285714

 $00:25:42.230 \longrightarrow 00:25:44.005$ implants and not smooth implants.

NOTE Confidence: 0.872759584285714

00:25:44.010 --> 00:25:44.362 Thankfully,

NOTE Confidence: 0.872759584285714

00:25:44.362 --> 00:25:46.826 I really did not put in many

NOTE Confidence: 0.872759584285714

 $00:25:46.826 \longrightarrow 00:25:47.530$ textured implants,

00:25:47.530 --> 00:25:49.270 have only put in smooth implants,

NOTE Confidence: 0.872759584285714

 $00:25:49.270 \longrightarrow 00:25:51.550$ but this this skin cancer.

NOTE Confidence: 0.872759584285714

00:25:51.550 --> 00:25:53.230 Association has been identified

NOTE Confidence: 0.872759584285714

 $00:25:53.230 \longrightarrow 00:25:56.145$ both in smooth implants as well as

NOTE Confidence: 0.872759584285714

 $00{:}25{:}56.145 \dashrightarrow 00{:}25{:}57.775$ textured implants and once again

NOTE Confidence: 0.872759584285714

 $00:25:57.775 \longrightarrow 00:26:00.409$ we need to do additional studies

NOTE Confidence: 0.872759584285714

 $00:26:00.409 \longrightarrow 00:26:02.290$ and additional surveillance.

NOTE Confidence: 0.872759584285714

 $00:26:02.290 \longrightarrow 00:26:04.124$ So what are the methods of reconstruction?

NOTE Confidence: 0.872759584285714 00:26:04.130 --> 00:26:04.658 Once again, NOTE Confidence: 0.872759584285714

 $00:26:04.658 \longrightarrow 00:26:07.240$ it would take 2 hours to go over our

NOTE Confidence: 0.872759584285714

00:26:07.240 --> 00:26:09.290 our methods of breast reconstruction,

NOTE Confidence: 0.872759584285714

 $00:26:09.290 \longrightarrow 00:26:10.238$ but I kind of separate them.

NOTE Confidence: 0.872759584285714

 $00:26:10.240 \longrightarrow 00:26:12.232$ And then three buckets.

NOTE Confidence: 0.872759584285714

 $00:26:12.232 \longrightarrow 00:26:13.726$ First and foremost,

NOTE Confidence: 0.872759584285714

 $00:26:13.730 \longrightarrow 00:26:16.250$ I'd like to consider what we do as,

 $00:26:16.250 \longrightarrow 00:26:17.754$ as breast reconstructive surgeons,

NOTE Confidence: 0.729710134

 $00:26:17.754 \longrightarrow 00:26:20.160$ as, as this continuum of care.

NOTE Confidence: 0.729710134

 $00:26:20.160 \longrightarrow 00:26:23.086$ So we offer aesthetic flat closures because

NOTE Confidence: 0.729710134

 $00:26:23.086 \longrightarrow 00:26:25.889$ not everyone wants breast reconstruction.

NOTE Confidence: 0.729710134

 $00:26:25.890 \longrightarrow 00:26:27.375$ Not everyone is healthy enough

NOTE Confidence: 0.729710134

 $00{:}26{:}27.375 \dashrightarrow 00{:}26{:}28.266$ for breast reconstruction.

NOTE Confidence: 0.729710134

 $00:26:28.270 \longrightarrow 00:26:30.867$ So we offer these services to our

NOTE Confidence: 0.729710134

00:26:30.867 --> 00:26:31.980 surgical oncology colleagues.

NOTE Confidence: 0.729710134

 $00{:}26{:}31.980 \to 00{:}26{:}33.324$ Breast oncology colleagues,

NOTE Confidence: 0.729710134

 $00:26:33.324 \longrightarrow 00:26:36.012$ as it pertains to mastectomy closures,

NOTE Confidence: 0.729710134

 $00:26:36.020 \longrightarrow 00:26:38.085$ then there's implant based reconstruction

NOTE Confidence: 0.729710134

 $00:26:38.085 \longrightarrow 00:26:39.737$ and then autologous reconstruction.

NOTE Confidence: 0.729710134

00:26:39.740 --> 00:26:41.408 So aesthetic cloud closures

NOTE Confidence: 0.729710134

00:26:41.408 --> 00:26:43.493 are also becoming more common.

NOTE Confidence: 0.729710134

 $00{:}26{:}43.500 \dashrightarrow 00{:}26{:}46.020$ This is an article from the Annals

NOTE Confidence: 0.729710134

00:26:46.020 --> 00:26:47.958 of Surgical Oncology in 2020 which

 $00:26:47.958 \longrightarrow 00:26:49.926$ documented the fact that there was

NOTE Confidence: 0.729710134

 $00{:}26{:}49.926 \dashrightarrow 00{:}26{:}51.873$ some women that were pretty upset

NOTE Confidence: 0.729710134

00:26:51.873 --> 00:26:54.575 with the fact that $22 \ / \ 22\%$ of the

NOTE Confidence: 0.729710134

00:26:54.575 --> 00:26:56.450 women that were surveyed did not

NOTE Confidence: 0.729710134

 $00:26:56.450 \longrightarrow 00:26:58.922$ have this offer to them as an option.

NOTE Confidence: 0.729710134

00:26:58.930 --> 00:26:59.264 Additionally,

NOTE Confidence: 0.729710134

00:26:59.264 --> 00:27:01.936 they went on to identify the fact that

NOTE Confidence: 0.729710134

 $00:27:01.940 \longrightarrow 00:27:03.578$ 74% of the women that did have a flag.

NOTE Confidence: 0.729710134 00:27:03.580 --> 00:27:03.905 Sure. NOTE Confidence: 0.729710134

 $00{:}27{:}03.905 \dashrightarrow 00{:}27{:}05.855$ We're very satisfied with their outcome.

NOTE Confidence: 0.729710134

 $00:27:05.860 \longrightarrow 00:27:08.212$ So this you know plastic surgeons we like

NOTE Confidence: 0.729710134

 $00{:}27{:}08.212 \dashrightarrow 00{:}27{:}10.745$ show and tell this is a a patient that I.

NOTE Confidence: 0.729710134

 $00{:}27{:}10.750 \dashrightarrow 00{:}27{:}12.060$ Rather recently operated on who

NOTE Confidence: 0.729710134

 $00:27:12.060 \longrightarrow 00:27:13.816$ decided that she did not want

NOTE Confidence: 0.729710134

 $00:27:13.816 \longrightarrow 00:27:15.010$ formal breast reconstruction,

 $00:27:15.010 \longrightarrow 00:27:17.290$ she wanted to be closed flat.

NOTE Confidence: 0.729710134

 $00{:}27{:}17.290 \dashrightarrow 00{:}27{:}19.090$ Our our incision patterns are

NOTE Confidence: 0.729710134

 $00:27:19.090 \longrightarrow 00:27:20.170$ changed over time.

NOTE Confidence: 0.729710134

 $00:27:20.170 \longrightarrow 00:27:22.192$ There was more of a oblique

NOTE Confidence: 0.729710134

 $00:27:22.192 \longrightarrow 00:27:24.166$ incision initially and then we went

NOTE Confidence: 0.729710134

 $00:27:24.166 \longrightarrow 00:27:25.566$ to more of a horizontal.

NOTE Confidence: 0.729710134

 $00{:}27{:}25.570 \dashrightarrow 00{:}27{:}29.232$ And now I kind of prefer this incision

NOTE Confidence: 0.729710134

00:27:29.232 --> 00:27:31.644 that's that mimics the inframammary fold

NOTE Confidence: 0.729710134

 $00{:}27{:}31.644 \dashrightarrow 00{:}27{:}34.187$ and we've gotten good results with it.

NOTE Confidence: 0.729710134

 $00:27:34.190 \longrightarrow 00:27:35.912$ Women are able to be fitted with

NOTE Confidence: 0.729710134

 $00{:}27{:}35.912 \dashrightarrow 00{:}27{:}37.150$ external prosthesis if they want.

NOTE Confidence: 0.729710134

 $00:27:37.150 \longrightarrow 00:27:39.286$ It also avoids any of the

NOTE Confidence: 0.729710134

 $00:27:39.286 \longrightarrow 00:27:40.710$ extra skin and intertrigo.

NOTE Confidence: 0.729710134

 $00{:}27{:}40.710 \dashrightarrow 00{:}27{:}42.520$ That can happen after mastectomy,

NOTE Confidence: 0.729710134

 $00:27:42.520 \longrightarrow 00:27:45.380$ particularly in large breasted women.

NOTE Confidence: 0.729710134

 $00:27:45.380 \longrightarrow 00:27:47.508$ So when it comes to our methods of

 $00:27:47.508 \longrightarrow 00:27:49.439$ of formal breast reconstruction,

NOTE Confidence: 0.729710134

 $00{:}27{:}49.440 \dashrightarrow 00{:}27{:}52.260$ reconstructing a breast mound 75%

NOTE Confidence: 0.729710134

 $00:27:52.260 \longrightarrow 00:27:54.458$ of the time in this country it's

NOTE Confidence: 0.729710134

 $00:27:54.458 \longrightarrow 00:27:56.971$ performed via the use of a of a of

NOTE Confidence: 0.729710134

 $00:27:56.971 \longrightarrow 00:27:58.831$ an implant typically in two stage

NOTE Confidence: 0.729710134

 $00:27:58.831 \longrightarrow 00:28:01.201$ fashion with a tissue expander placed

NOTE Confidence: 0.729710134

 $00:28:01.201 \longrightarrow 00:28:03.348$ slowly inflated over multiple weeks to

NOTE Confidence: 0.729710134

 $00{:}28{:}03.348 \dashrightarrow 00{:}28{:}05.840$ months and then a permanent implant placed.

NOTE Confidence: 0.729710134

 $00:28:05.840 \longrightarrow 00:28:08.682$ And then 25% of the time we're

NOTE Confidence: 0.729710134

00:28:08.682 --> 00:28:10.800 using an autologous technique,

NOTE Confidence: 0.729710134

 $00:28:10.800 \longrightarrow 00:28:11.915$ so using tissue from another

NOTE Confidence: 0.729710134

 $00:28:11.915 \longrightarrow 00:28:13.500$ part of the body to recreate,

NOTE Confidence: 0.729710134

 $00{:}28{:}13.500 \dashrightarrow 00{:}28{:}15.126$ reconstruct and recreated.

NOTE Confidence: 0.729710134

00:28:15.126 --> 00:28:16.210 West Mound,

NOTE Confidence: 0.729710134

 $00{:}28{:}16.210 \dashrightarrow 00{:}28{:}17.918$ I would say at Yale this number

 $00:28:17.918 \longrightarrow 00:28:20.079$ is is not necessarily reflective.

NOTE Confidence: 0.729710134

 $00:28:20.080 \longrightarrow 00:28:21.942$ I would say that we do probably

NOTE Confidence: 0.729710134

 $00:28:21.942 \longrightarrow 00:28:23.892$ more 40 to 50% autologous and

NOTE Confidence: 0.729710134

 $00:28:23.892 \longrightarrow 00:28:26.832$ about 50 to 60% implant based.

NOTE Confidence: 0.729710134

 $00:28:26.832 \longrightarrow 00:28:28.560$ This is very,

NOTE Confidence: 0.729710134

 $00:28:28.560 \longrightarrow 00:28:30.005$ we're fortunate that the vast

NOTE Confidence: 0.729710134

 $00:28:30.005 \longrightarrow 00:28:32.252$ majority of us here have a background

NOTE Confidence: 0.729710134

 $00:28:32.252 \longrightarrow 00:28:33.362$ in microsurgical reconstruction

NOTE Confidence: 0.729710134

 $00{:}28{:}33.362 \dashrightarrow 00{:}28{:}36.000$ which allows us to carry out this

NOTE Confidence: 0.729710134

 $00:28:36.000 \longrightarrow 00:28:37.825$ additional technique and provide this

NOTE Confidence: 0.729710134

 $00:28:37.825 \longrightarrow 00:28:40.910$ additional option for these patients.

NOTE Confidence: 0.729710134

 $00:28:40.910 \longrightarrow 00:28:42.998$ So the realities of implant based

NOTE Confidence: 0.729710134

 $00:28:42.998 \longrightarrow 00:28:45.347$ reconstruction for the most part it's for

NOTE Confidence: 0.729710134

 $00:28:45.347 \longrightarrow 00:28:47.830$ small to moderate breast sizes kind of aided,

NOTE Confidence: 0.729710134

 $00:28:47.830 \longrightarrow 00:28:50.644$ we're limited in the size of implants.

NOTE Confidence: 0.729710134

00:28:50.650 --> 00:28:52.835 There is a large implant

 $00:28:52.835 \longrightarrow 00:28:54.583$ trial that is ongoing.

NOTE Confidence: 0.729710134

 $00{:}28{:}54.590 \dashrightarrow 00{:}28{:}56.634$ So we may have some additional options

NOTE Confidence: 0.729710134

 $00:28:56.634 \longrightarrow 00:28:58.649$ for our larger breasted women or women

NOTE Confidence: 0.729710134

 $00:28:58.649 \longrightarrow 00:29:00.990$ that desire to to reach a larger size.

NOTE Confidence: 0.729710134

 $00:29:00.990 \longrightarrow 00:29:02.290$ It's a shorter operative

NOTE Confidence: 0.729710134

00:29:02.290 --> 00:29:03.590 procedure about 2 hours,

NOTE Confidence: 0.729710134

 $00:29:03.590 \longrightarrow 00:29:05.786$ shorter hospitalization one to two days

NOTE Confidence: 0.729710134

 $00{:}29{:}05.786 \dashrightarrow 00{:}29{:}08.528$ and once again as I said typically

NOTE Confidence: 0.729710134

 $00:29:08.528 \longrightarrow 00:29:10.720$ requires 2 procedures that expand or.

NOTE Confidence: 0.729710134

 $00:29:10.720 \longrightarrow 00:29:12.670$ Followed by a permanent implant.

NOTE Confidence: 0.729710134

 $00{:}29{:}12.670 \dashrightarrow 00{:}29{:}13.870$ Implant replacement is recommended

NOTE Confidence: 0.729710134

 $00:29:13.870 \longrightarrow 00:29:15.670$ by all three of the big

NOTE Confidence: 0.859250781428571

 $00{:}29{:}15.731 \dashrightarrow 00{:}29{:}16.807$ implant manufacturers to happen

NOTE Confidence: 0.859250781428571

00:29:16.807 --> 00:29:18.740 at the 10 to 15 year Mark.

NOTE Confidence: 0.859250781428571

 $00:29:18.740 \longrightarrow 00:29:20.780$ And then it's not ideal for

 $00:29:20.780 \longrightarrow 00:29:22.555$ patients that need radiation therapy

NOTE Confidence: 0.859250781428571

00:29:22.555 --> 00:29:24.631 which which once again could be

NOTE Confidence: 0.859250781428571

 $00:29:24.631 \longrightarrow 00:29:26.530$ another hour long conversation.

NOTE Confidence: 0.859250781428571

 $00:29:26.530 \longrightarrow 00:29:28.912$ And then for the most part

NOTE Confidence: 0.859250781428571

 $00:29:28.912 \longrightarrow 00:29:30.103$ for unilateral operation,

NOTE Confidence: 0.859250781428571

00:29:30.110 --> 00:29:32.810 the patient must have an understanding

NOTE Confidence: 0.859250781428571

00:29:32.810 --> 00:29:35.489 that they should consider a balancing

NOTE Confidence: 0.859250781428571

 $00:29:35.489 \longrightarrow 00:29:37.499$ procedure on the other side.

NOTE Confidence: 0.859250781428571

 $00{:}29{:}37.500 \dashrightarrow 00{:}29{:}40.570$ Realities of flat based reconstruction.

NOTE Confidence: 0.859250781428571

 $00:29:40.570 \longrightarrow 00:29:42.474$ Once again we love, show and tell.

NOTE Confidence: 0.859250781428571

 $00{:}29{:}42.480 \dashrightarrow 00{:}29{:}43.698$ This is the woman that I did,

NOTE Confidence: 0.859250781428571

 $00:29:43.700 \longrightarrow 00:29:45.800$ as in a delayed fashion,

NOTE Confidence: 0.859250781428571

 $00:29:45.800 \longrightarrow 00:29:48.530$ we usually kind of steer women in

NOTE Confidence: 0.859250781428571

 $00:29:48.530 \longrightarrow 00:29:51.382$ this direction if they are are have a

NOTE Confidence: 0.859250781428571

00:29:51.382 --> 00:29:54.060 larger BMI or a larger body habitus.

NOTE Confidence: 0.859250781428571

 $00:29:54.060 \longrightarrow 00:29:55.620$ The operative procedure is longer,

00:29:55.620 --> 00:29:57.118 it's longer and it's more difficult on

NOTE Confidence: 0.859250781428571

 $00{:}29{:}57.118 \dashrightarrow 00{:}29{:}59.528$ the on the patient, at least up front.

NOTE Confidence: 0.859250781428571

 $00{:}29{:}59.528 \dashrightarrow 00{:}30{:}01.580$ It also requires a longer hospitalization,

NOTE Confidence: 0.859250781428571

 $00:30:01.580 \longrightarrow 00:30:03.320$ usually three to four days.

NOTE Confidence: 0.859250781428571

 $00:30:03.320 \longrightarrow 00:30:05.416$ There is a risk of hernia or bulge.

NOTE Confidence: 0.859250781428571

 $00:30:05.420 \longrightarrow 00:30:06.652$ I don't oversell this,

NOTE Confidence: 0.859250781428571

 $00:30:06.652 \longrightarrow 00:30:07.576$ I inform patient.

NOTE Confidence: 0.859250781428571

 $00:30:07.580 \longrightarrow 00:30:09.317$ It's about the five to 10% risk

NOTE Confidence: 0.859250781428571

00:30:09.317 --> 00:30:12.306 of a hernia and then flat death

NOTE Confidence: 0.859250781428571

 $00{:}30{:}12.306 \dashrightarrow 00{:}30{:}14.958$ is about 2% where that and at

NOTE Confidence: 0.859250781428571

 $00:30:14.958 \longrightarrow 00:30:16.089$ microsurgical anastomosis doesn't

NOTE Confidence: 0.859250781428571

 $00:30:16.089 \dashrightarrow 00:30:17.826$ work that's about 2% nationwide.

NOTE Confidence: 0.859250781428571

 $00{:}30{:}17.826 \to 00{:}30{:}19.570$ It's not for smokers,

NOTE Confidence: 0.859250781428571

 $00:30:19.570 \longrightarrow 00:30:20.690$ not for super obese,

NOTE Confidence: 0.859250781428571

 $00:30:20.690 \longrightarrow 00:30:22.370$ not for those that have severe

 $00:30:22.428 \longrightarrow 00:30:24.240$ comorbidities and then they also must

NOTE Confidence: 0.859250781428571

 $00:30:24.240 \longrightarrow 00:30:26.627$ know that this is typically not just a

NOTE Confidence: 0.859250781428571

 $00:30:26.627 \longrightarrow 00:30:28.878$ one and done either more times than option.

NOTE Confidence: 0.859250781428571

 $00:30:28.878 \longrightarrow 00:30:31.150$ If you look at the at the literature

NOTE Confidence: 0.859250781428571

 $00:30:31.150 \longrightarrow 00:30:33.310$ I touch up operation either one

NOTE Confidence: 0.859250781428571

 $00:30:33.310 \longrightarrow 00:30:35.424$ or two maybe sometimes three is

NOTE Confidence: 0.859250781428571

 $00:30:35.424 \longrightarrow 00:30:37.824$ required in order to get them to to.

NOTE Confidence: 0.859250781428571

 $00:30:37.830 \longrightarrow 00:30:39.923$ Do a result that they're pleased with

NOTE Confidence: 0.859250781428571

 $00:30:39.923 \longrightarrow 00:30:42.380$ and and we are also satisfied with.

NOTE Confidence: 0.859250781428571

00:30:42.380 --> 00:30:44.140 So what about lumpectomy patients,

NOTE Confidence: 0.859250781428571

 $00{:}30{:}44.140 {\:{\mbox{--}}\!>}\ 00{:}30{:}45.440$ I've been really pushing and

NOTE Confidence: 0.859250781428571

 $00:30:45.440 \longrightarrow 00:30:47.020$ doctor Greeno can attest to this.

NOTE Confidence: 0.859250781428571

 $00:30:47.020 \longrightarrow 00:30:48.994$ I think there's an operation out

NOTE Confidence: 0.859250781428571

 $00:30:48.994 \longrightarrow 00:30:50.678$ there called Uncle Plastic breast

NOTE Confidence: 0.859250781428571

 $00:30:50.678 \longrightarrow 00:30:52.238$ reduction surgery where a patient

NOTE Confidence: 0.859250781428571

 $00{:}30{:}52.238 \dashrightarrow 00{:}30{:}54.724$ who has a small cancer and a larger

 $00:30:54.724 \longrightarrow 00:30:56.494$ breast that are very toxic breast

NOTE Confidence: 0.859250781428571

 $00{:}30{:}56.500 \dashrightarrow 00{:}30{:}58.082$ and get the benefits of a breast

NOTE Confidence: 0.859250781428571

 $00:30:58.082 \longrightarrow 00:30:59.880$ reduction or a breast lift at the

NOTE Confidence: 0.859250781428571

 $00:30:59.880 \longrightarrow 00:31:01.215$ time of their cancer resection.

NOTE Confidence: 0.859250781428571

 $00:31:01.220 \longrightarrow 00:31:02.672$ This is the silver lining for

NOTE Confidence: 0.859250781428571

 $00:31:02.672 \longrightarrow 00:31:03.640$ many of our ladies.

NOTE Confidence: 0.859250781428571

 $00:31:03.640 \longrightarrow 00:31:06.454 \text{ I do a lot of breast reduction}$

NOTE Confidence: 0.859250781428571

 $00:31:06.454 \longrightarrow 00:31:09.444$ surgery and being able to.

NOTE Confidence: 0.859250781428571

 $00{:}31{:}09.444 \dashrightarrow 00{:}31{:}12.011$ To combine on cologic reconstructive

NOTE Confidence: 0.859250781428571

00:31:12.011 --> 00:31:13.535 principles along with breast

NOTE Confidence: 0.859250781428571

 $00:31:13.535 \longrightarrow 00:31:15.440$ reduction principles has caused this

NOTE Confidence: 0.859250781428571

 $00:31:15.493 \longrightarrow 00:31:17.208$ operation to be one of my favorites.

NOTE Confidence: 0.859250781428571

00:31:17.210 --> 00:31:18.674 I really think it's the both

NOTE Confidence: 0.859250781428571

 $00:31:18.674 \longrightarrow 00:31:20.090$ the best of both worlds.

NOTE Confidence: 0.859250781428571

00:31:20.090 --> 00:31:22.610 Patients obviously will still necessitate

 $00:31:22.610 \longrightarrow 00:31:24.235$ radiation therapy more times than

NOTE Confidence: 0.859250781428571

 $00{:}31{:}24.235 \dashrightarrow 00{:}31{:}26.853$ not because this is a component of

NOTE Confidence: 0.859250781428571

 $00:31:26.853 \longrightarrow 00:31:28.705$ their breast conservation therapy.

NOTE Confidence: 0.859250781428571

00:31:28.710 --> 00:31:30.960 So this is a patient who had large breast,

NOTE Confidence: 0.859250781428571

 $00:31:30.960 \longrightarrow 00:31:32.304$ she had always wanted a breast reduction.

NOTE Confidence: 0.859250781428571

 $00:31:32.310 \longrightarrow 00:31:34.407$ She had a small cancer on the right side.

NOTE Confidence: 0.859250781428571

 $00:31:34.410 \longrightarrow 00:31:36.727$ We were able to do an uncle

NOTE Confidence: 0.859250781428571

 $00:31:36.727 \longrightarrow 00:31:37.389$ plastic reconstruction.

NOTE Confidence: 0.859250781428571

00:31:37.390 --> 00:31:38.570 This is actually after her.

NOTE Confidence: 0.859250781428571

 $00:31:38.570 \longrightarrow 00:31:39.898$ Radiation as well and

NOTE Confidence: 0.859250781428571

00:31:39.898 --> 00:31:40.894 she's healed beautifully.

NOTE Confidence: 0.859250781428571

 $00:31:40.900 \longrightarrow 00:31:42.426$ She's got just a still a little

NOTE Confidence: 0.859250781428571

00:31:42.426 --> 00:31:44.071 bit of skin darkening but was

NOTE Confidence: 0.859250781428571

 $00:31:44.071 \longrightarrow 00:31:45.319$ ecstatic with her result.

NOTE Confidence: 0.859250781428571

 $00:31:45.320 \longrightarrow 00:31:46.196$ Here's another young lady.

NOTE Confidence: 0.859250781428571

 $00:31:46.196 \longrightarrow 00:31:47.999$ She had a cancer on the left side.

 $00:31:48.000 \longrightarrow 00:31:48.789$ Lots of tosis.

NOTE Confidence: 0.859250781428571

00:31:48.789 --> 00:31:50.367 Had always wanted a breast lift,

NOTE Confidence: 0.859250781428571

 $00:31:50.370 \longrightarrow 00:31:52.474$ thought she would be vain by setting it,

NOTE Confidence: 0.859250781428571

 $00:31:52.480 \longrightarrow 00:31:54.580$ setting herself for a breast lift.

NOTE Confidence: 0.859250781428571

 $00:31:54.580 \longrightarrow 00:31:57.230$ So we did a breast lift and and lumpectomy at

NOTE Confidence: 0.819561746153846

 $00:31:57.294 \longrightarrow 00:31:58.119$ the same time.

NOTE Confidence: 0.819561746153846

 $00:31:58.120 \longrightarrow 00:32:00.640$ And she was also quite pleased.

NOTE Confidence: 0.819561746153846

 $00:32:00.640 \dashrightarrow 00:32:02.020$ The breasts just keep getting larger.

NOTE Confidence: 0.819561746153846

 $00:32:02.020 \longrightarrow 00:32:04.540$ And my slideshow here's a woman who

NOTE Confidence: 0.819561746153846

 $00:32:04.540 \longrightarrow 00:32:07.256$ was actually turned down for breast

NOTE Confidence: 0.819561746153846

00:32:07.256 --> 00:32:08.825 reductions previously developed.

NOTE Confidence: 0.819561746153846

 $00:32:08.830 \longrightarrow 00:32:10.510$ Cancer and we were able

NOTE Confidence: 0.819561746153846

 $00:32:10.510 \longrightarrow 00:32:12.190$ to give her this result.

NOTE Confidence: 0.819561746153846

00:32:12.190 --> 00:32:14.990 And then finally a much more seasoned lady,

NOTE Confidence: 0.819561746153846

 $00:32:14.990 \longrightarrow 00:32:18.302$ I had a breast surgeon that that sent

 $00:32:18.302 \longrightarrow 00:32:19.950$ this patient to me said I don't think

NOTE Confidence: 0.819561746153846

 $00{:}32{:}19.997 \dashrightarrow 00{:}32{:}21.485$ there's anything we really can do.

NOTE Confidence: 0.819561746153846

 $00:32:21.490 \longrightarrow 00:32:23.258$ And the radiation oncologist,

NOTE Confidence: 0.819561746153846

00:32:23.258 --> 00:32:25.026 we're concerned about radiating

NOTE Confidence: 0.819561746153846

 $00:32:25.026 \longrightarrow 00:32:27.633$ such a large entatic breast causing

NOTE Confidence: 0.819561746153846

 $00:32:27.633 \longrightarrow 00:32:30.720$ lymphedema in the breast and we were

NOTE Confidence: 0.819561746153846

 $00:32:30.797 \longrightarrow 00:32:33.184$ able to to give her this result.

NOTE Confidence: 0.819561746153846

 $00:32:33.190 \longrightarrow 00:32:35.698$ So in short and in summary,

NOTE Confidence: 0.819561746153846

 $00:32:35.700 \longrightarrow 00:32:37.149$ there are many options and I believe

NOTE Confidence: 0.819561746153846

 $00:32:37.149 \longrightarrow 00:32:38.763$ that all patients should be offered a

NOTE Confidence: 0.819561746153846

 $00{:}32{:}38.763 \dashrightarrow 00{:}32{:}39.953$ consultation with a plastic surgeon.

NOTE Confidence: 0.819561746153846

00:32:39.960 --> 00:32:43.026 To just discuss those reconstructive options,

NOTE Confidence: 0.819561746153846

 $00:32:43.030 \longrightarrow 00:32:45.142$ I'm a big proponent of shared

NOTE Confidence: 0.819561746153846

00:32:45.142 --> 00:32:45.846 decision making.

NOTE Confidence: 0.819561746153846

00:32:45.850 --> 00:32:48.524 I don't push patients in any direction.

NOTE Confidence: 0.819561746153846

 $00:32:48.530 \longrightarrow 00:32:50.042$ I kind of provide them the menu and

 $00:32:50.042 \longrightarrow 00:32:51.659$ then we have a good conversation about

NOTE Confidence: 0.819561746153846

 $00:32:51.659 \longrightarrow 00:32:53.289$ what's going to be best for them.

NOTE Confidence: 0.819561746153846

 $00:32:53.290 \longrightarrow 00:32:55.126$ And then as I mentioned before,

NOTE Confidence: 0.819561746153846

 $00:32:55.130 \longrightarrow 00:32:56.936$ the method and timing of the

NOTE Confidence: 0.819561746153846

 $00:32:56.936 \longrightarrow 00:32:59.024$ procedure is one that should fulfill

NOTE Confidence: 0.819561746153846

 $00:32:59.024 \longrightarrow 00:33:01.084$ the patients needs and lifestyle.

NOTE Confidence: 0.819561746153846

 $00:33:01.090 \longrightarrow 00:33:03.505$ So with that I will stop sharing.

NOTE Confidence: 0.819561746153846

 $00:33:03.510 \longrightarrow 00:33:04.750$ Thank you all very much.

NOTE Confidence: 0.942527464

00:33:05.550 --> 00:33:07.692 Yeah. Thank you so much, Doctor Butler,

NOTE Confidence: 0.942527464

 $00{:}33{:}07.692 \dashrightarrow 00{:}33{:}10.390$ and we're so lucky to have you at Yale.

NOTE Confidence: 0.942527464

 $00:33:10.390 \longrightarrow 00:33:14.320$ Paris has a national reputation in

NOTE Confidence: 0.942527464

 $00:33:14.320 \longrightarrow 00:33:16.816$ on coplastic reconstruction and many of

NOTE Confidence: 0.942527464

 $00{:}33{:}16.816 \dashrightarrow 00{:}33{:}18.394$ our patients have thought about breast

NOTE Confidence: 0.942527464

 $00:33:18.394 \longrightarrow 00:33:20.290$ reduction or lift their whole life.

NOTE Confidence: 0.942527464

 $00:33:20.290 \longrightarrow 00:33:24.170$ And the ability to have it covered by

00:33:24.170 --> 00:33:27.577 insurance or the inability to pay cash

NOTE Confidence: 0.942527464

 $00:33:27.577 \longrightarrow 00:33:30.410$ has prohibited them from moving forward.

NOTE Confidence: 0.942527464

 $00:33:30.410 \longrightarrow 00:33:32.462$ So when they come to us with a cancer,

NOTE Confidence: 0.942527464

00:33:32.470 --> 00:33:35.536 it's an opportunity to both improve.

NOTE Confidence: 0.942527464

 $00{:}33{:}35.540 \dashrightarrow 00{:}33{:}38.258$ Eristics and also make it easier

NOTE Confidence: 0.942527464

 $00{:}33{:}38.258 \dashrightarrow 00{:}33{:}40.070$ for their downstream treatment

NOTE Confidence: 0.942527464

 $00{:}33{:}40.149 \dashrightarrow 00{:}33{:}42.309$ with lower risk of lymphedema.

NOTE Confidence: 0.942527464

00:33:42.310 --> 00:33:43.210 As you mentioned,

NOTE Confidence: 0.942527464

 $00:33:43.210 \longrightarrow 00:33:45.830$ we're going to ship back to Doctor Zaneski.

NOTE Confidence: 0.942527464

 $00{:}33{:}45.830 \dashrightarrow 00{:}33{:}48.238$ I think we've resolved our technical issues.

NOTE Confidence: 0.942527464

 $00:33:48.240 \longrightarrow 00:33:50.512$ So Eliza is going to load up his

NOTE Confidence: 0.942527464

 $00:33:50.512 \longrightarrow 00:33:52.772$ slides and we look forward to

NOTE Confidence: 0.942527464

 $00:33:52.772 \longrightarrow 00:33:54.792$ hearing about breast cancer surgery.

NOTE Confidence: 0.5556801

 $00:34:02.560 \longrightarrow 00:34:06.450$ OK. Alright, great. Thank you.

NOTE Confidence: 0.67799021

 $00:34:07.570 \longrightarrow 00:34:09.370$ Yes. And you'll be advancing them.

NOTE Confidence: 0.67799021

 $00:34:09.370 \longrightarrow 00:34:11.126$ Uh, thank you so much.

 $00:34:11.126 \longrightarrow 00:34:12.750$ You have advanced to the next slide.

NOTE Confidence: 0.746751922

 $00:34:14.990 \longrightarrow 00:34:17.250$ Great. And again, one more.

NOTE Confidence: 0.805293687777778

 $00:34:19.680 \longrightarrow 00:34:20.200$ Perfect. Yeah.

NOTE Confidence: 0.805293687777778

 $00:34:20.200 \longrightarrow 00:34:22.020$ We got stuff at the surgical clinic.

NOTE Confidence: 0.805293687777778

 $00:34:22.020 \longrightarrow 00:34:25.860$ Yep. Next slide. Yeah.

NOTE Confidence: 0.805293687777778

 $00:34:25.860 \longrightarrow 00:34:27.336$ So, so this is, you know,

NOTE Confidence: 0.805293687777778

 $00:34:27.340 \longrightarrow 00:34:30.820$ an operating room here at Shoreline.

NOTE Confidence: 0.805293687777778

00:34:30.820 --> 00:34:31.490 Detailed view,

NOTE Confidence: 0.805293687777778

 $00{:}34{:}31.490 \dashrightarrow 00{:}34{:}34.170$ you can see the operating room table and

NOTE Confidence: 0.80529368777778

 $00:34:34.233 \longrightarrow 00:34:36.669$ an esthesia station in the very far back.

NOTE Confidence: 0.805293687777778

 $00{:}34{:}36.670 \dashrightarrow 00{:}34{:}38.973$ In the back right is our intraoperative

NOTE Confidence: 0.805293687777778

 $00{:}34{:}38.973 \dashrightarrow 00{:}34{:}40.998$ facts atron where we take specimen

NOTE Confidence: 0.805293687777778

 $00{:}34{:}40.998 \dashrightarrow 00{:}34{:}42.618$ radiographs and of course of

NOTE Confidence: 0.805293687777778

00:34:42.618 --> 00:34:44.750 course the instrument table and

NOTE Confidence: 0.805293687777778

 $00:34:44.750 \longrightarrow 00:34:48.053$ the operations that we do here you

00:34:48.053 --> 00:34:49.628 know surgical excision, biopsy,

NOTE Confidence: 0.805293687777778

00:34:49.628 --> 00:34:52.048 you know things like atypia,

NOTE Confidence: 0.805293687777778

 $00:34:52.050 \longrightarrow 00:34:53.850$ some women choose to have

NOTE Confidence: 0.805293687777778

 $00:34:53.850 \longrightarrow 00:34:54.570$ fibroadenomas removed.

NOTE Confidence: 0.80529368777778

 $00:34:54.570 \longrightarrow 00:34:56.600$ These are benign tumors and so all

NOTE Confidence: 0.805293687777778

 $00:34:56.600 \longrightarrow 00:34:59.186$ can be done here with with the

NOTE Confidence: 0.805293687777778

 $00{:}34{:}59.186 \dashrightarrow 00{:}35{:}00.830$ localization as doctor Philpotts.

NOTE Confidence: 0.805293687777778

 $00:35:00.830 \longrightarrow 00:35:02.759$ Mentioned or without.

NOTE Confidence: 0.80529368777778

 $00{:}35{:}02.759 \dashrightarrow 00{:}35{:}05.974$ Breast conservation to classical lumpectomy,

NOTE Confidence: 0.805293687777778

 $00:35:05.980 \longrightarrow 00:35:08.215$ the big departure from radical

NOTE Confidence: 0.805293687777778

 $00:35:08.215 \longrightarrow 00:35:10.450$ mastectomy decades ago that we're

NOTE Confidence: 0.805293687777778

 $00:35:10.521 \longrightarrow 00:35:13.460$ performing hopefully over 70% of the

NOTE Confidence: 0.805293687777778

 $00:35:13.460 \longrightarrow 00:35:16.100$ time for early stage breast cancer.

NOTE Confidence: 0.80529368777778

00:35:16.100 --> 00:35:17.094 Radiological localization,

NOTE Confidence: 0.805293687777778

 $00:35:17.094 \longrightarrow 00:35:20.573$ Doctor Phil Potsin over that with wire

NOTE Confidence: 0.805293687777778

 $00{:}35{:}20.573 \dashrightarrow 00{:}35{:}22.478$ localization and tag localization.

 $00:35:22.480 \longrightarrow 00:35:24.916$ I'll show some images as well.

NOTE Confidence: 0.805293687777778

 $00:35:24.920 \longrightarrow 00:35:27.520$ Localization can be same day,

NOTE Confidence: 0.805293687777778

00:35:27.520 --> 00:35:29.592 you know bundled with you want Academy

NOTE Confidence: 0.805293687777778

 $00:35:29.592 \longrightarrow 00:35:31.992$ or we have the option to localize

NOTE Confidence: 0.805293687777778

 $00:35:31.992 \longrightarrow 00:35:33.802$ the small tumors and radiology.

NOTE Confidence: 0.805293687777778

 $00:35:33.810 \longrightarrow 00:35:35.987$ Sleep on a separate day and then

NOTE Confidence: 0.805293687777778

 $00:35:35.987 \longrightarrow 00:35:38.603$ do the going back to me as a first

NOTE Confidence: 0.805293687777778

00:35:38.603 --> 00:35:40.788 case early in the in the morning.

NOTE Confidence: 0.805293687777778

00:35:40.790 --> 00:35:41.896 Axillary surgery,

NOTE Confidence: 0.805293687777778

 $00{:}35{:}41.896 \dashrightarrow 00{:}35{:}44.661$ things like Sentinel lymph node

NOTE Confidence: 0.805293687777778

00:35:44.661 --> 00:35:46.837 biopsy routinely performed here

NOTE Confidence: 0.805293687777778

00:35:46.837 --> 00:35:48.585 actually lymph node dissection

NOTE Confidence: 0.805293687777778

 $00{:}35{:}48.585 \dashrightarrow 00{:}35{:}51.368$ or a lymph node excision biopsy

NOTE Confidence: 0.805293687777778

 $00{:}35{:}51.368 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}35{:}53.988$ to help our hematologists and

NOTE Confidence: 0.805293687777778

 $00:35:53.988 \longrightarrow 00:35:56.084$ oncologists with lymphoma diagnosis

 $00:35:56.090 \longrightarrow 00:35:58.580$ were often involved in that.

NOTE Confidence: 0.805293687777778

 $00{:}35{:}58.580 \dashrightarrow 00{:}36{:}00.850$ And as we go forward,

NOTE Confidence: 0.805293687777778

 $00:36:00.850 \longrightarrow 00:36:03.478$ we'll be introducing mastectomy.

NOTE Confidence: 0.805293687777778

 $00{:}36{:}03.478 \dashrightarrow 00{:}36{:}06.106$ Under the directorship of

NOTE Confidence: 0.805293687777778

00:36:06.106 --> 00:36:08.689 Doctor Greenup at Shoreline,

NOTE Confidence: 0.805293687777778

00:36:08.690 --> 00:36:10.580 Same Day mastectomies,

NOTE Confidence: 0.805293687777778

 $00:36:10.580 \longrightarrow 00:36:13.730$ possibly in the near future,

NOTE Confidence: 0.80529368777778

 $00{:}36{:}13.730 \dashrightarrow 00{:}36{:}16.034$ mast ectomies with immediate breast

NOTE Confidence: 0.805293687777778

00:36:16.034 --> 00:36:17.950 reconstruction, implant based,

NOTE Confidence: 0.805293687777778

 $00:36:17.950 \longrightarrow 00:36:20.630$ possibly same day discharge.

NOTE Confidence: 0.80529368777778

 $00{:}36{:}20.630 \dashrightarrow 00{:}36{:}22.614$ It was working on that in New Haven.

NOTE Confidence: 0.805293687777778

 $00:36:22.620 \longrightarrow 00:36:25.020$ That's a new addition to

NOTE Confidence: 0.805293687777778

 $00:36:25.020 \longrightarrow 00:36:26.940$ the Department of Surgery.

NOTE Confidence: 0.80529368777778

 $00:36:26.940 \longrightarrow 00:36:28.880$ And maybe even overnight stay

NOTE Confidence: 0.805293687777778

 $00:36:28.880 \longrightarrow 00:36:30.432$ at Shoreline one day.

NOTE Confidence: 0.805293687777778

 $00:36:30.440 \longrightarrow 00:36:32.757$ So all these things are are being

 $00:36:32.757 \longrightarrow 00:36:34.742$ thought about and discussed to

NOTE Confidence: 0.805293687777778

 $00{:}36{:}34.742 \dashrightarrow 00{:}36{:}37.508$ again bring more complex breast and

NOTE Confidence: 0.805293687777778

 $00{:}36{:}37.508 \dashrightarrow 00{:}36{:}39.424$ reconstruction surgery out to the

NOTE Confidence: 0.805293687777778

00:36:39.424 --> 00:36:41.277 community and closer to the patient's

NOTE Confidence: 0.805293687777778

 $00:36:41.277 \longrightarrow 00:36:43.119$ home that the next slide please.

NOTE Confidence: 0.8039096125

 $00:36:47.560 \longrightarrow 00:36:49.920$ Yeah. This is again some of the localization.

NOTE Confidence: 0.8039096125

 $00:36:49.920 \longrightarrow 00:36:51.957$ I can see the two wires there.

NOTE Confidence: 0.8039096125

 $00:36:51.960 \longrightarrow 00:36:53.644$ That's a bracketed lumpectomy.

NOTE Confidence: 0.8039096125

 $00:36:53.644 \longrightarrow 00:36:57.071$ And then the other image is what we

NOTE Confidence: 0.8039096125

00:36:57.071 --> 00:36:59.448 call our tag localization, which can

NOTE Confidence: 0.8039096125

 $00{:}36{:}59.448 \dashrightarrow 00{:}37{:}02.360$ be placed prior to the day of surgery.

NOTE Confidence: 0.8039096125

 $00:37:02.360 \longrightarrow 00:37:04.940$ And again, these are utilized to

NOTE Confidence: 0.8039096125

 $00:37:04.940 \longrightarrow 00:37:07.575$ find small tumors within the breast

NOTE Confidence: 0.8039096125

 $00:37:07.575 \longrightarrow 00:37:09.780$ that are not palpable. Next slide.

NOTE Confidence: 0.81232790555556

 $00:37:11.900 \longrightarrow 00:37:13.600$ There's a picture of a

 $00:37:13.600 \longrightarrow 00:37:14.960$ Sentinel lymph node biopsy.

NOTE Confidence: 0.81232790555556

 $00{:}37{:}14.960 \dashrightarrow 00{:}37{:}17.767$ I can see the tiny blue dye.

NOTE Confidence: 0.81232790555556

 $00:37:17.770 \longrightarrow 00:37:20.600$ We can do intraoperative injection

NOTE Confidence: 0.81232790555556

 $00:37:20.600 \longrightarrow 00:37:24.359$ of the radioisotope or the blue dye.

NOTE Confidence: 0.81232790555556

 $00:37:24.360 \longrightarrow 00:37:26.929$ These are two markers that are injected

NOTE Confidence: 0.81232790555556

 $00:37:26.929 \longrightarrow 00:37:29.305$ into the breast to help identify

NOTE Confidence: 0.81232790555556

00:37:29.305 --> 00:37:31.310 the Sentinel lymph node biopsy.

NOTE Confidence: 0.81232790555556

 $00:37:31.310 \longrightarrow 00:37:35.478$ And that's part of a routine staging process.

NOTE Confidence: 0.81232790555556

 $00:37:35.480 \longrightarrow 00:37:37.538$ And as we are moving forward,

NOTE Confidence: 0.81232790555556

 $00:37:37.540 \longrightarrow 00:37:39.565$ there's a new initiative called

NOTE Confidence: 0.812327905555556

 $00{:}37{:}39.565 \dashrightarrow 00{:}37{:}41.185$ the Choosing wisely initiative.

NOTE Confidence: 0.81232790555556

 $00:37:41.190 \longrightarrow 00:37:43.428$ Businesses from the Society of Surgical

NOTE Confidence: 0.81232790555556

 $00:37:43.428 \longrightarrow 00:37:45.671$ Oncology and the American Board of

NOTE Confidence: 0.812327905555556

00:37:45.671 --> 00:37:47.391 Internal Medicine where maybe we

NOTE Confidence: 0.81232790555556

 $00:37:47.391 \longrightarrow 00:37:49.839$ can dees calate and not have to do or

NOTE Confidence: 0.81232790555556

 $00{:}37{:}49.839 \dashrightarrow 00{:}37{:}51.579$ routinely do a Sentinel lymph node

 $00:37:51.579 \longrightarrow 00:37:55.080$ biopsy for our women who are 70 and above.

NOTE Confidence: 0.81232790555556

00:37:55.080 --> 00:37:57.740 Early stage breast cancer with

NOTE Confidence: 0.81232790555556

00:37:57.740 --> 00:37:59.336 favorable biologic markers,

NOTE Confidence: 0.81232790555556

 $00:37:59.340 \longrightarrow 00:38:01.312$ meaning estrogen receptor positive,

NOTE Confidence: 0.81232790555556

00:38:01.312 --> 00:38:03.777 her two negative patients are

NOTE Confidence: 0.81232790555556

 $00:38:03.777 \longrightarrow 00:38:06.607$ taking to this very strongly when we

NOTE Confidence: 0.81232790555556

 $00:38:06.607 \longrightarrow 00:38:08.786$ discuss this because what it's able

NOTE Confidence: 0.81232790555556

 $00:38:08.786 \longrightarrow 00:38:11.194$ to do is reduce the amount of side

NOTE Confidence: 0.81232790555556

 $00:38:11.200 \longrightarrow 00:38:13.384$ effects when the even though it's

NOTE Confidence: 0.81232790555556

00:38:13.384 --> 00:38:15.619 low risk with Sentinel and biopsy,

NOTE Confidence: 0.81232790555556

 $00:38:15.620 \longrightarrow 00:38:17.396$ we're able to lower that even

NOTE Confidence: 0.81232790555556

 $00:38:17.396 \longrightarrow 00:38:19.209$ further by not removing lymph nodes

NOTE Confidence: 0.81232790555556

 $00{:}38{:}19.209 \dashrightarrow 00{:}38{:}21.204$ and also a range of motion issues.

NOTE Confidence: 0.81232790555556

 $00:38:21.210 \longrightarrow 00:38:23.500$ So that's been a new,

NOTE Confidence: 0.81232790555556

 $00:38:23.500 \longrightarrow 00:38:25.320$ a new approach in surgical.

 $00:38:25.320 \longrightarrow 00:38:27.784$ College over the last four to five years.

NOTE Confidence: 0.838398844

 $00{:}38{:}28.610 \dashrightarrow 00{:}38{:}29.620$ And the next slide please.

NOTE Confidence: 0.9011805

00:38:31.650 --> 00:38:33.666 And the specimen radiograph again, you know,

NOTE Confidence: 0.830154918

 $00:38:33.670 \longrightarrow 00:38:35.230$ focusing on the instrument.

NOTE Confidence: 0.830154918

00:38:35.230 --> 00:38:36.790 Uh, the machine in the back,

NOTE Confidence: 0.830154918

00:38:36.790 --> 00:38:39.088 right when we do the lower

NOTE Confidence: 0.830154918

 $00:38:39.088 \longrightarrow 00:38:41.230$ back we were able to do.

NOTE Confidence: 0.830154918

00:38:41.230 --> 00:38:42.586 Immediate specimen radiograph,

NOTE Confidence: 0.830154918

 $00:38:42.586 \longrightarrow 00:38:45.750$ this is very good for confirming your

NOTE Confidence: 0.830154918

00:38:45.819 --> 00:38:48.475 removal of the tumor of the biopsy clip,

NOTE Confidence: 0.830154918

 $00:38:48.480 \longrightarrow 00:38:50.076$ but it also helps with with

NOTE Confidence: 0.830154918

 $00{:}38{:}50.076 \to 00{:}38{:}51.590$ helps us with margin status.

NOTE Confidence: 0.830154918

00:38:51.590 --> 00:38:54.606 You know one of the big things with

NOTE Confidence: 0.830154918

 $00:38:54.606 \longrightarrow 00:38:56.811$ successful oncologic surgery is negative

NOTE Confidence: 0.830154918

00:38:56.811 --> 00:38:59.440 margins for invasive cancers 2 Senate,

NOTE Confidence: 0.830154918

 $00:38:59.440 \longrightarrow 00:39:01.780$ 2 millimeters or greater for ductal

00:39:01.780 --> 00:39:03.659 carcinoma in situ only lobectomies

NOTE Confidence: 0.830154918

 $00{:}39{:}03.659 \dashrightarrow 00{:}39{:}07.072$ and we're able to gain more a lot of

NOTE Confidence: 0.830154918

 $00:39:07.072 \longrightarrow 00:39:08.956$ information with the intraoperative

NOTE Confidence: 0.830154918

 $00:39:08.956 \longrightarrow 00:39:11.701$ specimen radiograph to look at the margins.

NOTE Confidence: 0.830154918

 $00:39:11.701 \longrightarrow 00:39:13.136$ To see as a surgeon,

NOTE Confidence: 0.830154918

 $00{:}39{:}13.140 {\:{\circ}{\circ}{\circ}}>00{:}39{:}15.254$ you know are things looking very good

NOTE Confidence: 0.830154918

 $00:39:15.254 \longrightarrow 00:39:17.802$ on that on that radio graph and to

NOTE Confidence: 0.830154918

00:39:17.802 --> 00:39:20.107 take shave margins at that time of

NOTE Confidence: 0.830154918

 $00{:}39{:}20.107 \dashrightarrow 00{:}39{:}22.438$ surgery and thereby reduce the risk of

NOTE Confidence: 0.830154918

 $00{:}39{:}22.438 \dashrightarrow 00{:}39{:}24.408$ second operations for margin resection.

NOTE Confidence: 0.830154918

 $00:39:24.408 \longrightarrow 00:39:27.618$ You know our goal is to keep that

NOTE Confidence: 0.830154918

 $00:39:27.618 \longrightarrow 00:39:30.047$ and never we can never achieve 0,

NOTE Confidence: 0.830154918

 $00{:}39{:}30.050 \dashrightarrow 00{:}39{:}31.986$ but we want to find a very nice

NOTE Confidence: 0.830154918

 $00:39:31.986 \longrightarrow 00:39:33.539$ range where it's not too high,

NOTE Confidence: 0.830154918

 $00:39:33.540 \longrightarrow 00:39:34.221$ not too well,

00:39:34.221 --> 00:39:35.810 so we can have good cosmetic outcome,

NOTE Confidence: 0.830154918

 $00{:}39{:}35.810 \dashrightarrow 00{:}39{:}38.235$ good on cologic outcomes and that

NOTE Confidence: 0.830154918

 $00:39:38.235 \longrightarrow 00:39:40.175$ machine is very important.

NOTE Confidence: 0.830154918

 $00:39:40.180 \longrightarrow 00:39:40.948$ Next slide please.

NOTE Confidence: 0.861903025

 $00:39:46.230 \longrightarrow 00:39:47.558$ Go back one here,

NOTE Confidence: 0.771462525

 $00:39:47.990 \longrightarrow 00:39:51.868$ yeah, back one more. There we are. Yeah.

NOTE Confidence: 0.837919542857143

 $00:39:51.880 \longrightarrow 00:39:54.456$ So again, this is a special radiograph.

NOTE Confidence: 0.837919542857143

 $00:39:54.460 \longrightarrow 00:39:56.620$ The larger one is A tag,

NOTE Confidence: 0.837919542857143

 $00:39:56.620 \longrightarrow 00:39:58.936$ a lumpectomy and to the the

NOTE Confidence: 0.837919542857143

 $00:39:58.936 \longrightarrow 00:40:01.520$ middle slide is a lymph node.

NOTE Confidence: 0.837919542857143

00:40:01.520 --> 00:40:04.328 You know the tiny lymph node with the

NOTE Confidence: 0.837919542857143

 $00:40:04.328 \longrightarrow 00:40:07.120$ biopsy clip in it here at at Yale over

NOTE Confidence: 0.837919542857143

 $00:40:07.120 \longrightarrow 00:40:10.255$ 2 routinely put a biopsy clip after a

NOTE Confidence: 0.837919542857143

 $00:40:10.255 \longrightarrow 00:40:13.057$ lymph node has been radiologically biopsied.

NOTE Confidence: 0.837919542857143

 $00:40:13.060 \longrightarrow 00:40:15.112$ And we can confirm retrieval of

NOTE Confidence: 0.837919542857143

 $00:40:15.112 \longrightarrow 00:40:17.263$ that in the operating room to

 $00:40:17.263 \longrightarrow 00:40:19.393$ help with our accuracy and false

NOTE Confidence: 0.837919542857143

 $00:40:19.393 \longrightarrow 00:40:21.079$ negative rates with Sentinel.

NOTE Confidence: 0.837919542857143

00:40:21.080 --> 00:40:22.388 You know biopsy.

NOTE Confidence: 0.837919542857143

 $00:40:22.388 \longrightarrow 00:40:23.696$ Next slide please.

NOTE Confidence: 0.815230736923077

 $00{:}40{:}25.910 \dashrightarrow 00{:}40{:}28.352$ And with regard to clinical trials

NOTE Confidence: 0.815230736923077

 $00:40:28.352 \longrightarrow 00:40:31.169$ at the shoreline and in our clinics,

NOTE Confidence: 0.815230736923077

 $00:40:31.170 \longrightarrow 00:40:33.528$ we're able to offer you know,

NOTE Confidence: 0.815230736923077

 $00:40:33.530 \longrightarrow 00:40:35.790$ two trials, surgical trials.

NOTE Confidence: 0.815230736923077

 $00{:}40{:}35.790 --> 00{:}40{:}39.494$ This the alliance A 011202 was open here

NOTE Confidence: 0.815230736923077

 $00{:}40{:}39.494 \dashrightarrow 00{:}40{:}42.912$ and is now reached the coral and we'll be

NOTE Confidence: 0.815230736923077

 $00:40:42.912 \longrightarrow 00:40:45.649$ awaiting those results in about 5 years.

NOTE Confidence: 0.815230736923077

 $00:40:45.650 \longrightarrow 00:40:47.684$ And we've had patients who've enrolled

NOTE Confidence: 0.815230736923077

 $00{:}40{:}47.684 \dashrightarrow 00{:}40{:}50.301$ and able to do their files with

NOTE Confidence: 0.815230736923077

 $00:40:50.301 \longrightarrow 00:40:52.683$ us at Shoreline and we're actively

NOTE Confidence: 0.815230736923077

00:40:52.683 --> 00:40:54.618 recruiting within the comet trial.

00:40:54.620 --> 00:40:56.690 You know, we're asking ourselves.

NOTE Confidence: 0.815230736923077

 $00:40:56.690 \longrightarrow 00:40:59.636$ Finally, believe it or not is

NOTE Confidence: 0.815230736923077

00:40:59.636 --> 00:41:02.120 aggressive treatment as you know,

NOTE Confidence: 0.815230736923077

 $00:41:02.120 \longrightarrow 00:41:04.775$ are invasive cancer type treatments

NOTE Confidence: 0.815230736923077

 $00:41:04.775 \longrightarrow 00:41:06.899$ necessary for precancerous disease,

NOTE Confidence: 0.815230736923077

00:41:06.900 --> 00:41:09.096 ductal carcinoma inside you and this

NOTE Confidence: 0.815230736923077

00:41:09.096 --> 00:41:11.575 is a randomized trial looking at,

NOTE Confidence: 0.815230736923077

00:41:11.575 --> 00:41:13.523 believe it or not,

NOTE Confidence: 0.815230736923077

00:41:13.523 --> 00:41:14.936 possibly omitting surgery,

NOTE Confidence: 0.815230736923077

00:41:14.940 --> 00:41:18.820 randomizing women with favorable DCIS,

NOTE Confidence: 0.815230736923077

00:41:18.820 --> 00:41:21.900 meaning a low risk to surgery or no

NOTE Confidence: 0.815230736923077

00:41:21.900 --> 00:41:24.615 surgery with the options of some

NOTE Confidence: 0.815230736923077

 $00:41:24.615 \longrightarrow 00:41:26.935$ of the other adjuvant therapies.

NOTE Confidence: 0.815230736923077

00:41:26.940 --> 00:41:29.316 Um, so we've recruited patients at

NOTE Confidence: 0.815230736923077

00:41:29.316 --> 00:41:31.440 Shoreline already in our actively

NOTE Confidence: 0.815230736923077

 $00:41:31.440 \longrightarrow 00:41:32.850$ recruiting in this,

 $00{:}41{:}32.850 \dashrightarrow 00{:}41{:}35.251$ this trial to answer some of these

NOTE Confidence: 0.815230736923077

 $00:41:35.251 \longrightarrow 00:41:37.445$ pending questions of how aggressively do

NOTE Confidence: 0.815230736923077

 $00{:}41{:}37.445 \dashrightarrow 00{:}41{:}41.450$ we need to treat ductal carcinoma in situ.

NOTE Confidence: 0.815230736923077

 $00:41:41.450 \longrightarrow 00:41:42.248$ Next slide please.

NOTE Confidence: 0.803585498

00:41:44.620 --> 00:41:46.800 And comprehensive care, you know,

NOTE Confidence: 0.803585498

 $00:41:46.800 \longrightarrow 00:41:49.134$ a lot of our discussions when

NOTE Confidence: 0.803585498

00:41:49.134 --> 00:41:51.669 patients come in with newly diagnosed

NOTE Confidence: 0.803585498

00:41:51.669 --> 00:41:54.369 breast cancer or even high risk

NOTE Confidence: 0.803585498

 $00:41:54.369 \longrightarrow 00:41:56.800$ things like genetic counseling,

NOTE Confidence: 0.803585498

 $00:41:56.800 \longrightarrow 00:42:00.314$ risk stratifying by the various risk models,

NOTE Confidence: 0.803585498

00:42:00.320 --> 00:42:02.546 the Gale model, the Tyra Cusick model,

NOTE Confidence: 0.803585498

 $00:42:02.550 \longrightarrow 00:42:04.734$ we routinely do that in our

NOTE Confidence: 0.803585498

 $00:42:04.734 \longrightarrow 00:42:06.190$ clinics with appropriate referrals

NOTE Confidence: 0.803585498

 $00:42:06.249 \longrightarrow 00:42:08.009$ due to our genetic counselors.

NOTE Confidence: 0.803585498

00:42:08.010 --> 00:42:10.038 They're not on site at Shoreline,

 $00:42:10.040 \longrightarrow 00:42:13.295$ but certainly by zoom can do referrals.

NOTE Confidence: 0.803585498

00:42:13.300 --> 00:42:16.220 Uh, social work we have on site social

NOTE Confidence: 0.803585498

 $00:42:16.220 \longrightarrow 00:42:18.966$ workers who help us uh routinely and

NOTE Confidence: 0.803585498

 $00:42:18.966 \longrightarrow 00:42:22.274$ we're very grateful to their help our

NOTE Confidence: 0.803585498

00:42:22.274 --> 00:42:24.858 outpatient oncology rehabilitation services,

NOTE Confidence: 0.803585498

00:42:24.860 --> 00:42:26.220 OK, not on site,

NOTE Confidence: 0.803585498

 $00:42:26.220 \longrightarrow 00:42:28.738$ but again a quick phone call to

NOTE Confidence: 0.803585498

 $00{:}42{:}28.738 \dashrightarrow 00{:}42{:}31.138$ the director Scott Kaposa who is

NOTE Confidence: 0.803585498

 $00{:}42{:}31.138 \dashrightarrow 00{:}42{:}33.826$ always willing to see our patients

NOTE Confidence: 0.803585498

 $00:42:33.826 \longrightarrow 00:42:36.166$ promptly and streamline them for

NOTE Confidence: 0.803585498

 $00{:}42{:}36.166 {\:{\circ}{\circ}{\circ}\:} 00{:}42{:}38.283$ various post surgical issues or

NOTE Confidence: 0.803585498

 $00:42:38.283 \longrightarrow 00:42:40.238$ even non post surgical issues,

NOTE Confidence: 0.803585498

 $00:42:40.240 \longrightarrow 00:42:42.394$ things like lymphedema.

NOTE Confidence: 0.803585498

 $00{:}42{:}42.394 \dashrightarrow 00{:}42{:}44.905$ Um or postmastectomy, pain,

NOTE Confidence: 0.803585498

 $00:42:44.905 \longrightarrow 00:42:46.680$ all of those different things.

NOTE Confidence: 0.803585498

00:42:46.680 --> 00:42:48.234 Uh, nutrition consultation,

 $00:42:48.234 \longrightarrow 00:42:50.824$ again um within the system,

NOTE Confidence: 0.803585498

 $00:42:50.830 \longrightarrow 00:42:53.385$ we're able to access that at Smilo

NOTE Confidence: 0.803585498

 $00:42:53.385 \longrightarrow 00:42:56.030$ as well as smoking cessation.

NOTE Confidence: 0.803585498

00:42:56.030 --> 00:42:58.190 Patients have been very receptive

NOTE Confidence: 0.803585498

 $00:42:58.190 \longrightarrow 00:43:00.350$ to these consultations and part

NOTE Confidence: 0.803585498

 $00:43:00.421 \longrightarrow 00:43:02.546$ of our comprehensive care model.

NOTE Confidence: 0.803585498

 $00:43:02.550 \longrightarrow 00:43:03.330$ Next slide please.

NOTE Confidence: 0.6733104828

 $00:43:06.570 \longrightarrow 00:43:09.070$ That concludes my my discussion.

NOTE Confidence: 0.6733104828

 $00{:}43{:}09.070 \dashrightarrow 00{:}43{:}11.569$ Like to thank every body for their time.

NOTE Confidence: 0.6733104828

00:43:11.570 --> 00:43:13.460 The Breast Center number is

NOTE Confidence: 0.6733104828

 $00:43:13.460 \longrightarrow 00:43:15.350$ there and there's my e-mail.

NOTE Confidence: 0.6733104828

 $00:43:15.350 \longrightarrow 00:43:17.900$ You know, certainly I encourage anybody

NOTE Confidence: 0.6733104828

 $00:43:17.900 \longrightarrow 00:43:20.470$ to e-mail me directly and certainly

NOTE Confidence: 0.6733104828

 $00:43:20.470 \longrightarrow 00:43:22.852$ will provide my cell phone number

NOTE Confidence: 0.6733104828

 $00:43:22.852 \longrightarrow 00:43:25.532$ because a lot of the most difficult

00:43:25.532 --> 00:43:27.622 discussions I think in the primary

NOTE Confidence: 0.6733104828

 $00{:}43{:}27.622 \dashrightarrow 00{:}43{:}30.070$ care may very well be what do you do

NOTE Confidence: 0.6733104828

 $00:43:30.132 \longrightarrow 00:43:32.418$ with some of the radiologic findings?

NOTE Confidence: 0.6733104828

 $00:43:32.420 \longrightarrow 00:43:34.285$ We're happy to help integrate

NOTE Confidence: 0.6733104828

 $00:43:34.285 \longrightarrow 00:43:35.404$ and answer those.

NOTE Confidence: 0.6733104828

 $00:43:35.410 \longrightarrow 00:43:38.259$ Those questions, uh what types of follow-up

NOTE Confidence: 0.6733104828

 $00:43:38.259 \longrightarrow 00:43:40.139$ screening strategies for high risk.

NOTE Confidence: 0.6733104828

00:43:40.140 --> 00:43:42.460 Um, you know all of those different things.

NOTE Confidence: 0.6733104828

 $00:43:42.460 \longrightarrow 00:43:45.610$ So always happy to help problem solve

NOTE Confidence: 0.6733104828

00:43:45.610 --> 00:43:47.886 and would really encourage anyone

NOTE Confidence: 0.6733104828

 $00{:}43{:}47.886 \dashrightarrow 00{:}43{:}50.664$ to primary care OBGYN setting to

NOTE Confidence: 0.6733104828

 $00:43:50.664 \longrightarrow 00:43:52.858$ certainly send an e-mail how can

NOTE Confidence: 0.6733104828

 $00:43:52.858 \longrightarrow 00:43:55.461$ we help you remember sure surgery

NOTE Confidence: 0.6733104828

 $00:43:55.461 \longrightarrow 00:43:58.296$ at shoreline for breast cancer,

NOTE Confidence: 0.6733104828

 $00:43:58.300 \longrightarrow 00:44:01.280$ you know from Yale started in 2020 that

NOTE Confidence: 0.6733104828

 $00{:}44{:}01.280 \dashrightarrow 00{:}44{:}03.680$ was our first breast surgery there.

 $00{:}44{:}03.680 \dashrightarrow 00{:}44{:}05.712$ Breast conservation so alive.

NOTE Confidence: 0.6733104828

00:44:05.712 --> 00:44:07.744 Of changing quickly um.

NOTE Confidence: 0.6733104828

 $00{:}44{:}07.750 \dashrightarrow 00{:}44{:}09.577$ And we would like to certainly get

NOTE Confidence: 0.6733104828

 $00{:}44{:}09.577 \dashrightarrow 00{:}44{:}11.803$ your feedback on how we can help you

NOTE Confidence: 0.6733104828

 $00:44:11.803 \longrightarrow 00:44:13.650$ navigate your patients view benign disease,

NOTE Confidence: 0.6733104828

 $00{:}44{:}13.650 \dashrightarrow 00{:}44{:}16.320$ high risk as well as malignancy.

NOTE Confidence: 0.6733104828

00:44:16.320 --> 00:44:19.104 And there's a a shout out to Doctor

NOTE Confidence: 0.6733104828

00:44:19.104 --> 00:44:21.130 Horowitz who started the clinic

NOTE Confidence: 0.6733104828

 $00{:}44{:}21.130 \to 00{:}44{:}23.510$ here several years ago with Doctor

NOTE Confidence: 0.6733104828

00:44:23.510 --> 00:44:26.023 Kiley and it's a torture carrying

NOTE Confidence: 0.6733104828

00:44:26.023 --> 00:44:28.418 and we've since her retirement

NOTE Confidence: 0.6733104828

 $00:44:28.418 \longrightarrow 00:44:31.354$ we've added breast surgery and even

NOTE Confidence: 0.6733104828

 $00{:}44{:}31.354 \dashrightarrow 00{:}44{:}33.242$ expanding to reconstruction under

NOTE Confidence: 0.6733104828

 $00:44:33.242 \longrightarrow 00:44:35.505$ the directorship of of Doctor.

NOTE Confidence: 0.6733104828

 $00:44:35.505 \longrightarrow 00:44:36.255$ Or Salvador.

 $00:44:36.255 \longrightarrow 00:44:37.380$ Great things there.

NOTE Confidence: 0.6733104828

 $00:44:37.380 \longrightarrow 00:44:38.529$ And that's Elizabeth,

NOTE Confidence: 0.6733104828

00:44:38.529 --> 00:44:40.380 our nurse practitioner, uh Renee,

NOTE Confidence: 0.6733104828

00:44:40.380 --> 00:44:42.584 one of our assistants, and Sherry,

NOTE Confidence: 0.6733104828

 $00:44:42.584 \longrightarrow 00:44:45.398$ one of our our nurses and coordinators.

NOTE Confidence: 0.6733104828 00:44:45.400 --> 00:44:45.667 Again,

NOTE Confidence: 0.6733104828

 $00{:}44{:}45.667 \dashrightarrow 00{:}44{:}47.536$ feel free to always send an e-mail

NOTE Confidence: 0.6733104828

 $00:44:47.536 \longrightarrow 00:44:49.066$ and happy to help in any way

NOTE Confidence: 0.9562783175

 $00:44:49.080 \longrightarrow 00:44:50.268$ we can. Thank you.

NOTE Confidence: 0.95518799

00:44:51.410 --> 00:44:52.840 Thank you so much, Greg.

NOTE Confidence: 0.95518799

 $00{:}44{:}52.840 \dashrightarrow 00{:}44{:}55.500$ And I think the community had big

NOTE Confidence: 0.95518799

 $00:44:55.500 \longrightarrow 00:44:58.452$ concerns that we would not be able to

NOTE Confidence: 0.95518799

 $00{:}44{:}58.452 \dashrightarrow 00{:}45{:}00.974$ fill doctor Horowitz's tremendous role in

NOTE Confidence: 0.95518799

 $00{:}45{:}00.974 \dashrightarrow 00{:}45{:}03.710$ caring for our breast cancer patients.

NOTE Confidence: 0.95518799

 $00:45:03.710 \longrightarrow 00:45:05.036$ Those are big shoes to fill,

NOTE Confidence: 0.95518799

 $00:45:05.040 \longrightarrow 00:45:06.664$ but we're doing our best to keep up.

00:45:06.670 --> 00:45:09.743 So we all prioritize access and a

NOTE Confidence: 0.95518799

 $00{:}45{:}09.743 \dashrightarrow 00{:}45{:}12.061$ high quality patient centered care

NOTE Confidence: 0.95518799

 $00{:}45{:}12.061 \dashrightarrow 00{:}45{:}14.803$ and we're here to help any time.

NOTE Confidence: 0.95518799

00:45:14.810 --> 00:45:17.400 So I'm going to turn it over to Doctor Zahir.

NOTE Confidence: 0.90889765

 $00:45:22.260 \longrightarrow 00:45:24.570$ It's a pleasure to introduce the

NOTE Confidence: 0.90889765

 $00:45:24.570 \longrightarrow 00:45:27.820$ next speaker known her for some time.

NOTE Confidence: 0.90889765

 $00:45:27.820 \longrightarrow 00:45:30.020$ Sarah Sarah Mcgillion is an

NOTE Confidence: 0.90889765

 $00:45:30.020 \longrightarrow 00:45:31.780$ associate professor of medicine,

NOTE Confidence: 0.90889765

 $00{:}45{:}31.780 \dashrightarrow 00{:}45{:}34.606$ medical Oncology and chief chief ambulatory

NOTE Confidence: 0.90889765

 $00:45:34.606 \longrightarrow 00:45:37.180$ officer for Smilow Cancer Hospital.

NOTE Confidence: 0.90889765

 $00{:}45{:}37.180 \dashrightarrow 00{:}45{:}39.142$ She cares for patients with breast

NOTE Confidence: 0.90889765

 $00{:}45{:}39.142 \dashrightarrow 00{:}45{:}41.611$ cancer in New Haven and more recently we

NOTE Confidence: 0.90889765

 $00{:}45{:}41.611 \dashrightarrow 00{:}45{:}44.040$ are so happy to have her in Guilford.

NOTE Confidence: 0.90889765

 $00{:}45{:}44.040 \dashrightarrow 00{:}45{:}46.315$ She's also involved in education of students,

NOTE Confidence: 0.90889765

 $00:45:46.320 \longrightarrow 00:45:48.160$ residents and fellows here

 $00:45:48.160 \longrightarrow 00:45:50.460$ at Yale outside the clinic.

NOTE Confidence: 0.90889765

 $00:45:50.460 \longrightarrow 00:45:53.000$ She's involved with cancer outcomes,

NOTE Confidence: 0.90889765

 $00:45:53.000 \longrightarrow 00:45:55.910$ public policy and effective veness research,

NOTE Confidence: 0.90889765

00:45:55.910 --> 00:45:57.675 which is called Copper Center

NOTE Confidence: 0.90889765

00:45:57.675 --> 00:45:59.087 at Yale Cancer Center,

NOTE Confidence: 0.90889765

 $00:45:59.090 \longrightarrow 00:46:01.195$ with a specific interest in

NOTE Confidence: 0.90889765

00:46:01.195 --> 00:46:03.300 chemotherapy regimens used in the

NOTE Confidence: 0.90889765

 $00{:}46{:}03.378 \dashrightarrow 00{:}46{:}05.490$ treatment of breast cancer and how

NOTE Confidence: 0.90889765

 $00{:}46{:}05.490 \dashrightarrow 00{:}46{:}08.219$ they are used in clinical practice.

NOTE Confidence: 0.90889765

00:46:08.220 --> 00:46:09.069 So welcome, Sarah.

NOTE Confidence: 0.90889765

 $00:46:09.069 \longrightarrow 00:46:10.767$ Thank you for joining us today.

NOTE Confidence: 0.69482982625

00:46:11.080 --> 00:46:12.110 Thanks, waji.

NOTE Confidence: 0.69482982625

 $00:46:12.110 \longrightarrow 00:46:15.200$ So welcome everybody like Doctor Butler.

NOTE Confidence: 0.69482982625

 $00{:}46{:}15.200 \dashrightarrow 00{:}46{:}18.060$ I think that this is clearly a topic

NOTE Confidence: 0.69482982625

 $00:46:18.060 \longrightarrow 00:46:21.140$ that fits very nicely into 10 minutes.

NOTE Confidence: 0.69482982625

00:46:21.140 --> 00:46:22.916 Describe my job in 10 minutes,

 $00:46:22.920 \longrightarrow 00:46:25.236$ no problem. As what you said,

NOTE Confidence: 0.69482982625

 $00{:}46{:}25.240 \dashrightarrow 00{:}46{:}27.935$ I do see patients at the Guildford

NOTE Confidence: 0.69482982625

 $00:46:27.935 \longrightarrow 00:46:29.699$ location one day a week.

NOTE Confidence: 0.69482982625

 $00:46:29.700 \longrightarrow 00:46:31.680$ I'm also in New Haven one day a week.

NOTE Confidence: 0.69482982625

 $00:46:31.680 \longrightarrow 00:46:33.168$ But what we're really what what

NOTE Confidence: 0.69482982625

 $00:46:33.168 \longrightarrow 00:46:34.932$ I really want to get across is

NOTE Confidence: 0.69482982625

00:46:34.932 --> 00:46:36.598 anything we can do in New Haven,

NOTE Confidence: 0.69482982625

 $00:46:36.600 \longrightarrow 00:46:38.490$ we can also do in Guildford and.

NOTE Confidence: 0.69482982625

00:46:38.490 --> 00:46:41.028 I I love working in Guildford.

NOTE Confidence: 0.69482982625

00:46:41.030 --> 00:46:43.890 I love the parking situation.

NOTE Confidence: 0.69482982625

 $00{:}46{:}43.890 \dashrightarrow 00{:}46{:}46.428$ Air rights is my worst nightmare.

NOTE Confidence: 0.69482982625

 $00{:}46{:}46.430 \dashrightarrow 00{:}46{:}49.960$ But I love the the group that we have out

NOTE Confidence: 0.69482982625

 $00{:}46{:}50.047 \dashrightarrow 00{:}46{:}53.743$ here and I love my colleagues in Guildford.

NOTE Confidence: 0.69482982625

 $00:46:53.750 \longrightarrow 00:46:55.676$ So with the few small exceptions

NOTE Confidence: 0.69482982625

 $00:46:55.676 \longrightarrow 00:46:57.827$ of a couple of clinical trials

00:46:57.827 --> 00:47:00.203 that really have very high level

NOTE Confidence: 0.69482982625

 $00:47:00.203 \longrightarrow 00:47:02.510$ needs and and rapid turnaround,

NOTE Confidence: 0.69482982625

 $00:47:02.510 \longrightarrow 00:47:04.841$ we can do just about anything in

NOTE Confidence: 0.69482982625

 $00:47:04.841 \longrightarrow 00:47:07.250$ Guildford that we can do in New Haven.

NOTE Confidence: 0.69482982625

 $00:47:07.250 \longrightarrow 00:47:09.560$ What I really want to get across.

NOTE Confidence: 0.69482982625

 $00:47:09.560 \longrightarrow 00:47:11.555$ If you have a patient who's been

NOTE Confidence: 0.69482982625

 $00:47:11.555 \longrightarrow 00:47:12.840$ diagnosed with breast cancer,

NOTE Confidence: 0.69482982625

 $00:47:12.840 \longrightarrow 00:47:15.680$ she's in for, she's in for a ride,

NOTE Confidence: 0.69482982625

 $00:47:15.680 \longrightarrow 00:47:16.740$ most could be he,

NOTE Confidence: 0.69482982625

 $00:47:16.740 \longrightarrow 00:47:18.860$ but she is also in for a ride.

NOTE Confidence: 0.69482982625

 $00{:}47{:}18.860 \longrightarrow 00{:}47{:}20.358$ So if a patient has breast cancer,

NOTE Confidence: 0.69482982625

 $00{:}47{:}20.360 \dashrightarrow 00{:}47{:}21.800$ there's a multidisciplinary team

NOTE Confidence: 0.69482982625

 $00:47:21.800 \longrightarrow 00:47:23.600$ consisting of a medical oncologist,

NOTE Confidence: 0.69482982625

00:47:23.600 --> 00:47:25.355 a radiation oncologist,

NOTE Confidence: 0.69482982625

 $00:47:25.355 \longrightarrow 00:47:28.634$ a surgeon and those three different

NOTE Confidence: 0.69482982625

 $00{:}47{:}28.634 \dashrightarrow 00{:}47{:}30.502$ disciplines work closely with

 $00:47:30.502 \longrightarrow 00:47:32.879$ our diagnostic imagers as doctor

NOTE Confidence: 0.69482982625

 $00{:}47{:}32.879 \dashrightarrow 00{:}47{:}35.084$ Philpotts has described to get

NOTE Confidence: 0.69482982625

 $00:47:35.084 \longrightarrow 00:47:37.440$ appropriate imaging right off the bat.

NOTE Confidence: 0.69482982625

 $00:47:37.440 \longrightarrow 00:47:40.236$ We also have social work, physical therapy.

NOTE Confidence: 0.69482982625

00:47:40.236 --> 00:47:41.592 Nutrition, genetics,

NOTE Confidence: 0.69482982625

00:47:41.592 --> 00:47:44.304 fertility and reproductive endocrinology,

NOTE Confidence: 0.69482982625

00:47:44.310 --> 00:47:46.634 all prior to the patient who might

NOTE Confidence: 0.69482982625

 $00:47:46.634 \longrightarrow 00:47:48.777$ then have to undergo chemotherapy

NOTE Confidence: 0.69482982625

 $00:47:48.777 \longrightarrow 00:47:50.388$ prior to surgery.

NOTE Confidence: 0.69482982625

 $00{:}47{:}50.390 \dashrightarrow 00{:}47{:}53.470$ Each of those little dots is a treatment.

NOTE Confidence: 0.69482982625

 $00{:}47{:}53.470 \dashrightarrow 00{:}47{:}55.689$ Then the patient might have surgery with

NOTE Confidence: 0.69482982625

 $00:47:55.689 \longrightarrow 00:47:57.705$ a breast surgeon and a reconstructive

NOTE Confidence: 0.69482982625

 $00{:}47{:}57.705 \dashrightarrow 00{:}47{:}59.709$ surgeon as as doctor Zaneski and

NOTE Confidence: 0.69482982625

 $00:47:59.709 \longrightarrow 00:48:01.328$ Doctor Butler have described.

NOTE Confidence: 0.69482982625

00:48:01.330 --> 00:48:03.448 They might continue on getting more

 $00:48:03.448 \longrightarrow 00:48:05.695$ chemotherapy or more anti-cancer therapy

NOTE Confidence: 0.69482982625

00:48:05.695 --> 00:48:07.635 prior to then getting radiation,

NOTE Confidence: 0.69482982625

 $00:48:07.640 \longrightarrow 00:48:10.727$ which could be up to 30 or even more.

NOTE Confidence: 0.69482982625

 $00:48:10.730 \longrightarrow 00:48:13.070$ Treatments, all of that.

NOTE Confidence: 0.69482982625

00:48:13.070 --> 00:48:14.240 With nutrition,

NOTE Confidence: 0.69482982625

 $00:48:14.240 \longrightarrow 00:48:17.600$ physical therapy all along the

NOTE Confidence: 0.69482982625

 $00:48:17.600 \longrightarrow 00:48:19.640$ way and then once the definitive

NOTE Confidence: 0.69482982625

 $00:48:19.640 \longrightarrow 00:48:20.780$ treatment is finished,

NOTE Confidence: 0.69482982625

00:48:20.780 --> 00:48:22.632 there's continued follow-up visits,

NOTE Confidence: 0.69482982625

00:48:22.632 --> 00:48:24.456 mammograms, bone density studies,

NOTE Confidence: 0.69482982625

00:48:24.460 --> 00:48:24.834 infusions,

NOTE Confidence: 0.69482982625

 $00:48:24.834 \longrightarrow 00:48:28.200$ physical therapy and the list goes on and on.

NOTE Confidence: 0.69482982625

00:48:28.200 --> 00:48:30.034 So this is not one stop shopping,

NOTE Confidence: 0.69482982625

 $00{:}48{:}30.040 \dashrightarrow 00{:}48{:}32.578$ this really requires a closely knit

NOTE Confidence: 0.69482982625

 $00:48:32.578 \longrightarrow 00:48:35.510$ group of of clinicians who are working

NOTE Confidence: 0.69482982625

 $00{:}48{:}35.510 \dashrightarrow 00{:}48{:}38.219$ together to to provide the best care.

 $00:48:38.220 \longrightarrow 00:48:41.293$ So just a little bit more about

NOTE Confidence: 0.69482982625

 $00{:}48{:}41.293 \dashrightarrow 00{:}48{:}43.540$ multidisciplinary care in the actual.

NOTE Confidence: 0.69482982625

00:48:43.540 --> 00:48:46.370 Treatment of breast cancer itself.

NOTE Confidence: 0.69482982625

 $00:48:46.370 \longrightarrow 00:48:47.948$ The goal of breast surgery is

NOTE Confidence: 0.69482982625

 $00:48:47.948 \longrightarrow 00:48:49.430$ to remove the known cancer,

NOTE Confidence: 0.69482982625

 $00:48:49.430 \longrightarrow 00:48:50.516$ obtain negative margins,

NOTE Confidence: 0.69482982625

 $00:48:50.516 \longrightarrow 00:48:51.964$ evaluate the lymph nodes,

NOTE Confidence: 0.69482982625

 $00{:}48{:}51.970 \dashrightarrow 00{:}48{:}53.910$ removed the involved lymph nodes.

NOTE Confidence: 0.69482982625

 $00{:}48{:}53.910 \dashrightarrow 00{:}48{:}55.880$ Surgery alone can be curative

NOTE Confidence: 0.69482982625

 $00:48:55.880 \longrightarrow 00:48:57.850$ radiation on top of that,

NOTE Confidence: 0.69482982625

 $00:48:57.850 \longrightarrow 00:48:59.740$ and I don't want to steal

NOTE Confidence: 0.69482982625

00:48:59.740 --> 00:49:00.685 Doctor Higgins's Thunder.

NOTE Confidence: 0.69482982625

 $00:49:00.690 \longrightarrow 00:49:01.146$ However,

NOTE Confidence: 0.69482982625

00:49:01.146 --> 00:49:02.970 the goal of radiation,

NOTE Confidence: 0.69482982625

 $00:49:02.970 \longrightarrow 00:49:04.266$ as I like to describe it in clinic,

 $00:49:04.270 \longrightarrow 00:49:06.270$ is to mop up any microscopic disease in

NOTE Confidence: 0.69482982625

 $00{:}49{:}06.270 \dashrightarrow 00{:}49{:}08.270$ the breast and the regional lymph nodes,

NOTE Confidence: 0.69482982625

 $00{:}49{:}08.270 \dashrightarrow 00{:}49{:}09.835$ and this is generally administered

NOTE Confidence: 0.69482982625

 $00:49:09.835 \longrightarrow 00:49:11.780$ after lumpectomy and can be recommended

NOTE Confidence: 0.69482982625

 $00:49:11.780 \longrightarrow 00:49:13.730$ even after a mastectomy and this.

NOTE Confidence: 0.69482982625

 $00:49:13.730 \longrightarrow 00:49:15.760$ The goal of radiation is to reduce local

NOTE Confidence: 0.873352915

00:49:15.760 --> 00:49:19.168 recurrence. So then you might say,

NOTE Confidence: 0.873352915

 $00:49:19.170 \longrightarrow 00:49:20.205$ well surgery, radiation,

NOTE Confidence: 0.873352915

 $00:49:20.205 \longrightarrow 00:49:21.585$ breast is all clean.

NOTE Confidence: 0.873352915

00:49:21.590 --> 00:49:23.326 Why do you need a medical oncologist?

NOTE Confidence: 0.873352915

 $00:49:23.330 \longrightarrow 00:49:26.130$ Well, we have a different goal

NOTE Confidence: 0.873352915

 $00:49:26.130 \longrightarrow 00:49:27.960$ in medical oncology and our goal

NOTE Confidence: 0.873352915

 $00:49:27.960 \longrightarrow 00:49:30.713$ is to mop up the microscopically

NOTE Confidence: 0.873352915

 $00:49:30.713 \longrightarrow 00:49:32.909$ undetectable disease systemically.

NOTE Confidence: 0.873352915

 $00:49:32.910 \longrightarrow 00:49:34.870$ And our goal is to reduce the risk

NOTE Confidence: 0.873352915

 $00{:}49{:}34.870 \dashrightarrow 00{:}49{:}36.389$ of distant recurrence to reduce

 $00:49:36.389 \longrightarrow 00:49:38.321$ the the likelihood that a patient

NOTE Confidence: 0.873352915

 $00:49:38.321 \longrightarrow 00:49:40.228$ dies of metastatic breast cancer.

NOTE Confidence: 0.4904061

 $00:49:42.330 \longrightarrow 00:49:45.730$ Umm. Nope. I'm going to do

NOTE Confidence: 0.4904061

 $00:49:45.730 \longrightarrow 00:49:46.830$ a little more animation.

NOTE Confidence: 0.4904061

00:49:46.830 --> 00:49:49.785 This is what happens when you oops,

NOTE Confidence: 0.4904061

 $00:49:49.785 \longrightarrow 00:49:52.970$ when you copy forward animated things.

NOTE Confidence: 0.4904061

 $00:49:52.970 \longrightarrow 00:49:54.650$ So how do we decide who

NOTE Confidence: 0.4904061

 $00:49:54.650 \longrightarrow 00:49:55.770$ gets what medical treatment?

NOTE Confidence: 0.4904061

 $00:49:55.770 \longrightarrow 00:49:58.110$ It's a really complicated story.

NOTE Confidence: 0.4904061

00:49:58.110 --> 00:50:00.265 It takes into account patient

NOTE Confidence: 0.4904061

00:50:00.265 --> 00:50:01.472 characteristics, their age,

NOTE Confidence: 0.4904061

00:50:01.472 --> 00:50:02.630 their medical comorbidities,

NOTE Confidence: 0.4904061

 $00:50:02.630 \longrightarrow 00:50:04.214$ their own personal preferences.

NOTE Confidence: 0.4904061

00:50:04.214 --> 00:50:06.590 It takes into account tumor stage,

NOTE Confidence: 0.4904061

 $00:50:06.590 \longrightarrow 00:50:08.306$ which is tumor size, nodal status,

 $00:50:08.310 \longrightarrow 00:50:10.578$ and the presence or absence of metastatic

NOTE Confidence: 0.4904061

 $00{:}50{:}10.578 \longrightarrow 00{:}50{:}12.446$ disease and tumor characteristics such

NOTE Confidence: 0.4904061

 $00:50:12.446 \longrightarrow 00:50:14.432$ as grade hormone, receptor status.

NOTE Confidence: 0.4904061

 $00:50:14.432 \longrightarrow 00:50:15.530$ Her two status.

NOTE Confidence: 0.4904061

 $00:50:15.530 \longrightarrow 00:50:17.090$ And I know that these may

NOTE Confidence: 0.4904061

 $00:50:17.090 \longrightarrow 00:50:18.130$ not be quite familiar.

NOTE Confidence: 0.4904061

00:50:18.130 --> 00:50:18.480 Concepts,

NOTE Confidence: 0.4904061

 $00:50:18.480 \longrightarrow 00:50:21.280$ but they the goal of this slide is

NOTE Confidence: 0.4904061

 $00{:}50{:}21.280 \dashrightarrow 00{:}50{:}23.940$ to just demonstrate that it's not

NOTE Confidence: 0.4904061

 $00:50:23.940 \longrightarrow 00:50:26.568$ one-size-fits-all for all patients.

NOTE Confidence: 0.4904061

 $00:50:26.570 \longrightarrow 00:50:28.628$ And based on that combination we

NOTE Confidence: 0.4904061

 $00:50:28.628 \longrightarrow 00:50:30.570$ then choose a systemic therapy.

NOTE Confidence: 0.4904061

 $00:50:30.570 \longrightarrow 00:50:32.600$ I want to review really quickly staging

NOTE Confidence: 0.4904061

00:50:32.600 --> 00:50:34.463 you know it's it's funny everybody

NOTE Confidence: 0.4904061

 $00:50:34.463 \longrightarrow 00:50:36.335$ comes into clinic and they that

NOTE Confidence: 0.4904061

 $00:50:36.335 \longrightarrow 00:50:38.287$ this is their number one question,

 $00:50:38.290 \longrightarrow 00:50:40.170$ what's my stage because apparently

NOTE Confidence: 0.4904061

 $00{:}50{:}40.170 \dashrightarrow 00{:}50{:}42.050$ that's the most common question

NOTE Confidence: 0.4904061

 $00:50:42.110 \longrightarrow 00:50:44.162$ that they are asked upon revealing

NOTE Confidence: 0.4904061

00:50:44.162 --> 00:50:45.924 a breast cancer diagnosis stage

NOTE Confidence: 0.4904061

 $00:50:45.924 \longrightarrow 00:50:48.288$ is more than just the tumor,

NOTE Confidence: 0.4904061

 $00:50:48.290 \longrightarrow 00:50:50.678$ the nodal status and the presence

NOTE Confidence: 0.4904061

 $00:50:50.678 \longrightarrow 00:50:52.270$ or absence of metastases.

NOTE Confidence: 0.4904061

 $00:50:52.270 \longrightarrow 00:50:54.286$ More recently we started in

NOTE Confidence: 0.4904061

 $00{:}50{:}54.286 \to 00{:}50{:}56.526$ incorporating some of these other.

NOTE Confidence: 0.4904061

 $00:50:56.530 \longrightarrow 00:50:58.903$ Features of of a breast cancer such

NOTE Confidence: 0.4904061

 $00{:}50{:}58.903 \dashrightarrow 00{:}51{:}01.159$ as the grade, the estrogen receptor,

NOTE Confidence: 0.4904061

 $00:51:01.159 \longrightarrow 00:51:03.637$ the progesterone receptor and her two

NOTE Confidence: 0.4904061

 $00{:}51{:}03.637 {\:{\circ}{\circ}{\circ}}>00{:}51{:}06.277$ to come up with a more prognostic

NOTE Confidence: 0.4904061

 $00:51:06.277 \longrightarrow 00:51:08.771$ stage that's really more aligned with

NOTE Confidence: 0.4904061

00:51:08.771 --> 00:51:10.735 the patient's overall prognosis.

00:51:10.740 --> 00:51:11.844 So you might say, OK,

NOTE Confidence: 0.4904061

 $00:51:11.844 \longrightarrow 00:51:13.140$ well what does all that mean?

NOTE Confidence: 0.4904061

00:51:13.140 --> 00:51:15.086 Well grade is a measure of how

NOTE Confidence: 0.4904061

00:51:15.086 --> 00:51:16.349 aggressive the cancer appears

NOTE Confidence: 0.4904061

 $00:51:16.349 \longrightarrow 00:51:18.219$ under the microscope as described

NOTE Confidence: 0.4904061

 $00{:}51{:}18.219 \dashrightarrow 00{:}51{:}19.715$ by our pathology colleagues.

NOTE Confidence: 0.4904061

00:51:19.720 --> 00:51:21.274 And in general, the higher the grade,

NOTE Confidence: 0.4904061

 $00:51:21.280 \longrightarrow 00:51:23.116$ the more aggressive the cancer and

NOTE Confidence: 0.4904061

 $00{:}51{:}23.116 \dashrightarrow 00{:}51{:}25.281$ the more aggressive we have to be

NOTE Confidence: 0.4904061

 $00:51:25.281 \longrightarrow 00:51:26.756$ to prevent a systemic recurrence.

NOTE Confidence: 0.4904061

 $00{:}51{:}26.760 \dashrightarrow 00{:}51{:}29.042$ Then we get on to the estrogen

NOTE Confidence: 0.4904061

 $00{:}51{:}29.042 \dashrightarrow 00{:}51{:}30.020$ and progester one receptors.

NOTE Confidence: 0.4904061

 $00:51:30.020 \longrightarrow 00:51:32.636$ These are nuclear based hormone receptors.

NOTE Confidence: 0.4904061

 $00:51:32.640 \longrightarrow 00:51:34.684$ They and the kind of quick and

NOTE Confidence: 0.4904061

 $00:51:34.684 \longrightarrow 00:51:36.825$ dirty way of thinking about these

NOTE Confidence: 0.4904061

 $00:51:36.825 \longrightarrow 00:51:39.380$ is if the cancer expressed expresses

 $00:51:39.380 \longrightarrow 00:51:41.620$ estrogen or progesterone receptors,

NOTE Confidence: 0.4904061

 $00{:}51{:}41.620 \to 00{:}51{:}44.784$ it's fueled by hormones and so hormone

NOTE Confidence: 0.4904061

 $00:51:44.784 \longrightarrow 00:51:46.641$ deprivation or interference with

NOTE Confidence: 0.4904061

 $00:51:46.641 \longrightarrow 00:51:48.766$ that receptor and ligand interaction

NOTE Confidence: 0.4904061

 $00:51:48.766 \longrightarrow 00:51:51.657$ can be a the rapeutic option and we

NOTE Confidence: 0.4904061

00:51:51.657 --> 00:51:53.895 have medications that do just that.

NOTE Confidence: 0.4904061

 $00:51:53.900 \longrightarrow 00:51:56.412$ Her two is a member of the EGFR

NOTE Confidence: 0.4904061

 $00:51:56.412 \longrightarrow 00:51:58.879$ family of cell surface receptors,

NOTE Confidence: 0.4904061

 $00:51:58.880 \longrightarrow 00:52:01.043$ and it can be overexpressed in some

NOTE Confidence: 0.4904061

 $00:52:01.043 \longrightarrow 00:52:03.749$ of the most aggressive breast cancers.

NOTE Confidence: 0.859969678888889

 $00{:}52{:}05.850 {\:{\mbox{--}}\!>}\ 00{:}52{:}07.620$ Her two positive or her her

NOTE Confidence: 0.859969678888889

 $00{:}52{:}07.620 \dashrightarrow 00{:}52{:}08.800$ two overexpressing cancers are

NOTE Confidence: 0.859969678888889

 $00{:}52{:}08.853 \dashrightarrow 00{:}52{:}10.481$ often poorly differentiated and

NOTE Confidence: 0.859969678888889

00:52:10.481 --> 00:52:12.109 require chemotherapy and really,

NOTE Confidence: 0.859969678888889

 $00:52:12.110 \longrightarrow 00:52:16.250$ really aggressive and intense therapy.

00:52:16.250 --> 00:52:18.490 We also have gene expression

NOTE Confidence: 0.859969678888889

 $00{:}52{:}18.490 \dashrightarrow 00{:}52{:}20.730$ profiles at our disposal that

NOTE Confidence: 0.859969678888889

 $00:52:20.815 \longrightarrow 00:52:23.250$ can help determine whether or

NOTE Confidence: 0.859969678888889

 $00:52:23.250 \longrightarrow 00:52:25.685$ not a patient needs chemotherapy.

NOTE Confidence: 0.859969678888889

00:52:25.690 --> 00:52:28.140 One such example is the Oncotype DX,

NOTE Confidence: 0.859969678888889

 $00:52:28.140 \longrightarrow 00:52:31.633$ which is a 21 cancer related gene

NOTE Confidence: 0.859969678888889

 $00:52:31.633 \longrightarrow 00:52:34.313$ expression panel that spits out a

NOTE Confidence: 0.859969678888889

 $00:52:34.313 \longrightarrow 00:52:37.310$ number on a scale of zero to 100.

NOTE Confidence: 0.859969678888889

 $00:52:37.310 \longrightarrow 00:52:38.418$ The higher the number,

NOTE Confidence: 0.859969678888889

00:52:38.418 --> 00:52:40.430 the higher the risk of the recurrence

NOTE Confidence: 0.859969678888889

 $00:52:40.430 \longrightarrow 00:52:43.022$ and if that number is over 25 in general

NOTE Confidence: 0.859969678888889

 $00{:}52{:}43.030 {\:\dashrightarrow\:} 00{:}52{:}46.390$ chemotherapy is going to be discussed.

NOTE Confidence: 0.859969678888889

 $00:52:46.390 \longrightarrow 00:52:48.820$ It's it's a kind of a a quick and

NOTE Confidence: 0.859969678888889

00:52:48.820 --> 00:52:51.165 dirty way of thinking about what's

NOTE Confidence: 0.859969678888889

 $00:52:51.165 \longrightarrow 00:52:53.730$ the underlying biology of the cancer.

NOTE Confidence: 0.859969678888889

 $00{:}52{:}53.730 \dashrightarrow 00{:}52{:}57.250$ In determining who needs chemo,

 $00:52:57.250 \longrightarrow 00:52:59.650$ we take a lot of things into consideration.

NOTE Confidence: 0.859969678888889

 $00{:}52{:}59.650 \dashrightarrow 00{:}53{:}01.834$ We take into account medical history and

NOTE Confidence: 0.859969678888889

00:53:01.834 --> 00:53:04.230 the presence or absence of heart disease,

NOTE Confidence: 0.859969678888889

 $00:53:04.230 \longrightarrow 00:53:06.302$ diabetes, osteoporosis,

NOTE Confidence: 0.859969678888889

00:53:06.302 --> 00:53:09.410 prior venous thromboembolism,

NOTE Confidence: 0.859969678888889

 $00{:}53{:}09.410 \dashrightarrow 00{:}53{:}12.510$ autoimmune disease and then importantly,

NOTE Confidence: 0.859969678888889

00:53:12.510 --> 00:53:14.466 and we haven't mentioned this much,

NOTE Confidence: 0.859969678888889

 $00:53:14.470 \longrightarrow 00:53:17.088$ but we take into account family history,

NOTE Confidence: 0.859969678888889

 $00:53:17.090 \longrightarrow 00:53:18.998$ there are a lot of different

NOTE Confidence: 0.859969678888889

 $00:53:18.998 \longrightarrow 00:53:20.270$ genetic syndromes associated with

NOTE Confidence: 0.859969678888889

 $00:53:20.325 \longrightarrow 00:53:21.987$ breast cancer and the presence or

NOTE Confidence: 0.859969678888889

 $00:53:21.987 \longrightarrow 00:53:23.920$ absence of a genetic predisposition.

NOTE Confidence: 0.859969678888889

 $00{:}53{:}23.920 \dashrightarrow 00{:}53{:}25.888$ May impact not only local therapy,

NOTE Confidence: 0.859969678888889

 $00:53:25.890 \longrightarrow 00:53:27.682$ but it's becoming increasingly

NOTE Confidence: 0.859969678888889

 $00:53:27.682 \longrightarrow 00:53:30.140$ used to determine what systemic

 $00:53:30.140 \longrightarrow 00:53:32.360$ therapies might be used.

NOTE Confidence: 0.859969678888889

 $00{:}53{:}32.360 --> 00{:}53{:}33.812$ So I'll quiz you all on

NOTE Confidence: 0.859969678888889

 $00:53:33.812 \longrightarrow 00:53:35.200$ this a little bit later.

NOTE Confidence: 0.859969678888889

 $00:53:35.200 \longrightarrow 00:53:36.805$ These are all the chemotherapy

NOTE Confidence: 0.859969678888889

 $00:53:36.805 \longrightarrow 00:53:37.447$ regimens actually.

NOTE Confidence: 0.859969678888889

 $00:53:37.450 \longrightarrow 00:53:38.248$ These are not all of them,

NOTE Confidence: 0.859969678888889

 $00:53:38.250 \longrightarrow 00:53:39.920$ these are some of them,

NOTE Confidence: 0.859969678888889

 $00:53:39.920 \longrightarrow 00:53:41.250$ but they're complicated and they

NOTE Confidence: 0.859969678888889

 $00:53:41.250 \longrightarrow 00:53:42.580$ all have different side effects.

NOTE Confidence: 0.859969678888889

 $00:53:42.580 \longrightarrow 00:53:43.680$ They all have different schedules,

NOTE Confidence: 0.859969678888889

 $00{:}53{:}43.680 \dashrightarrow 00{:}53{:}45.140$ they all have different needs,

NOTE Confidence: 0.859969678888889

 $00:53:45.140 \longrightarrow 00:53:48.980$ different central access requirements,

NOTE Confidence: 0.859969678888889

 $00:53:48.980 \longrightarrow 00:53:50.900$ different durations.

NOTE Confidence: 0.859969678888889

 $00:53:50.900 \longrightarrow 00:53:52.262$ It's because of this that doctors

NOTE Confidence: 0.859969678888889

 $00:53:52.262 \longrightarrow 00:53:53.738$ are here and I have a job.

NOTE Confidence: 0.859969678888889

 $00:53:53.740 \longrightarrow 00:53:58.420$ So, so not to not to make light of this,

 $00:53:58.420 \longrightarrow 00:54:00.355$ but it's complicated and different

NOTE Confidence: 0.859969678888889

 $00{:}54{:}00.355 \dashrightarrow 00{:}54{:}03.010$ regimens are used for for different.

NOTE Confidence: 0.859969678888889

00:54:03.010 --> 00:54:05.250 Different settings.

NOTE Confidence: 0.859969678888889

 $00:54:05.250 \longrightarrow 00:54:07.586$ We use a lot of different chemotherapy drugs.

NOTE Confidence: 0.859969678888889

 $00:54:07.590 \longrightarrow 00:54:09.658$ Here are some common ones and

NOTE Confidence: 0.859969678888889

00:54:09.658 --> 00:54:11.326 some of the more long-term side

NOTE Confidence: 0.859969678888889

 $00:54:11.326 \longrightarrow 00:54:12.590$ effects that can happen.

NOTE Confidence: 0.859969678888889

 $00{:}54{:}12.590 \dashrightarrow 00{:}54{:}14.210$ These are really potent drugs

NOTE Confidence: 0.859969678888889

 $00:54:14.210 \longrightarrow 00:54:15.830$ that that do kill cancer,

NOTE Confidence: 0.859969678888889

00:54:15.830 --> 00:54:17.244 and it's great that they kill cancer,

NOTE Confidence: 0.859969678888889

00:54:17.250 --> 00:54:19.834 but they can cause other problems as well,

NOTE Confidence: 0.859969678888889

00:54:19.840 --> 00:54:21.481 namely cardiomyopathy with

NOTE Confidence: 0.859969678888889

 $00{:}54{:}21.481 \dashrightarrow 00{:}54{:}23.669$ some of the anthracyclines,

NOTE Confidence: 0.859969678888889

 $00:54:23.670 \longrightarrow 00:54:25.866$ neuropathy with some of the taxanes,

NOTE Confidence: 0.859969678888889

 $00:54:25.870 \longrightarrow 00:54:27.235$ and and hypersensitivity

 $00:54:27.235 \longrightarrow 00:54:29.055$ reactions across the board.

NOTE Confidence: 0.8808648844

00:54:31.700 --> 00:54:33.228 Just really quickly, we,

NOTE Confidence: 0.8808648844

 $00:54:33.228 \longrightarrow 00:54:34.756$ the multidisciplinary treatment of

NOTE Confidence: 0.8808648844

 $00:54:34.756 \longrightarrow 00:54:36.687$ breast cancer does require conversations

NOTE Confidence: 0.8808648844

 $00:54:36.687 \longrightarrow 00:54:38.913$ for a number of different clinical

NOTE Confidence: 0.8808648844

00.54.38.913 --> 00.54.40.980 scenarios where we have to decide, well,

NOTE Confidence: 0.8808648844

00:54:40.980 --> 00:54:43.260 who's going first, surgery going first?

NOTE Confidence: 0.8808648844

00:54:43.260 --> 00:54:45.198 Is chemotherapy going first? Are we,

NOTE Confidence: 0.8808648844

 $00:54:45.200 \longrightarrow 00:54:48.296$ are we thinking about other strategies?

NOTE Confidence: 0.8808648844

 $00:54:48.300 \longrightarrow 00:54:50.432$ And there are different

NOTE Confidence: 0.8808648844

 $00{:}54{:}50.432 \to 00{:}54{:}52.564$ rationales for doing either.

NOTE Confidence: 0.8808648844

00:54:52.570 --> 00:54:54.295 It's called adjuvant systemic therapy

NOTE Confidence: 0.8808648844

 $00:54:54.295 \longrightarrow 00:54:56.906$ when surgery is 1st and it's called

NOTE Confidence: 0.8808648844

 $00:54:56.906 \longrightarrow 00:54:58.966$ neoadjuvant when chemotherapy is first.

NOTE Confidence: 0.8808648844

 $00:54:58.970 \longrightarrow 00:55:00.257$ So if you ever see that in a note,

NOTE Confidence: 0.8808648844

 $00:55:00.260 \longrightarrow 00:55:01.884$ that's kind of all that that's describing.

 $00:55:01.890 \longrightarrow 00:55:04.375$ But this really does require

NOTE Confidence: 0.8808648844

 $00:55:04.375 \longrightarrow 00:55:05.369$ close communication,

NOTE Confidence: 0.8808648844

 $00:55:05.370 \longrightarrow 00:55:06.746$ particularly between the surgeon

NOTE Confidence: 0.8808648844

 $00:55:06.746 \longrightarrow 00:55:08.810$ and the and the medical oncologist,

NOTE Confidence: 0.8808648844

 $00{:}55{:}08.810 \dashrightarrow 00{:}55{:}10.975$ but often requires the radiation

NOTE Confidence: 0.8808648844

00:55:10.975 --> 00:55:13.698 input as well as the reconstructive

NOTE Confidence: 0.8808648844

00:55:13.698 --> 00:55:17.016 surgery input to to plan down the

NOTE Confidence: 0.8808648844

 $00:55:17.016 \longrightarrow 00:55:20.090$ line once chemotherapy is complete.

NOTE Confidence: 0.8808648844

 $00{:}55{:}20.090 \dashrightarrow 00{:}55{:}23.090$ And then moving on into the more chronic

NOTE Confidence: 0.8808648844

 $00:55:23.090 \longrightarrow 00:55:26.446$ phase of cancer of many cancer treatments,

NOTE Confidence: 0.8808648844

 $00:55:26.450 \longrightarrow 00:55:29.170$ we use a lot of anti estrogen therapy,

NOTE Confidence: 0.8808648844

 $00:55:29.170 \longrightarrow 00:55:31.642$ namely tamoxifen or other or aromatase

NOTE Confidence: 0.8808648844

 $00{:}55{:}31.642 \dashrightarrow 00{:}55{:}33.910$ inhibitors which work by preventing

NOTE Confidence: 0.8808648844

 $00{:}55{:}33.910 \dashrightarrow 00{:}55{:}35.575$ the peripheral aromatization

NOTE Confidence: 0.8808648844

 $00:55:35.575 \longrightarrow 00:55:38.578$ of steroids into estrogen.

00:55:38.578 --> 00:55:42.226 And they work in different ways.

NOTE Confidence: 0.8808648844

00:55:42.230 --> 00:55:44.638 They have pretty nasty

NOTE Confidence: 0.8808648844

 $00:55:44.638 \longrightarrow 00:55:46.444$ potential side effects.

NOTE Confidence: 0.8808648844

00:55:46.450 --> 00:55:48.194 Tamoxifen can cause vasomotor

NOTE Confidence: 0.8808648844

 $00:55:48.194 \longrightarrow 00:55:49.938$ symptoms like hot flashes.

NOTE Confidence: 0.8808648844

 $00:55:49.940 \longrightarrow 00:55:50.666$ Food changes.

NOTE Confidence: 0.8808648844

 $00:55:50.666 \longrightarrow 00:55:52.844$ There's a small risk of blood

NOTE Confidence: 0.8808648844

 $00:55:52.844 \longrightarrow 00:55:54.670$ clots and uterine cancer,

NOTE Confidence: 0.8808648844

 $00:55:54.670 \longrightarrow 00:55:57.806$ although it may be helpful for osteoporosis.

NOTE Confidence: 0.8808648844

00:55:57.810 --> 00:55:58.442 Aromatase inhibitors,

NOTE Confidence: 0.8808648844

 $00:55:58.442 \longrightarrow 00:55:59.706$ on the other hand,

NOTE Confidence: 0.8808648844

 $00{:}55{:}59.710 \dashrightarrow 00{:}56{:}03.054$ can cause more of a second menopause in

NOTE Confidence: 0.8808648844

 $00:56:03.054 \longrightarrow 00:56:05.072$ postmenopausal women with a persistent

NOTE Confidence: 0.8808648844

 $00:56:05.072 \longrightarrow 00:56:07.830$ or even more pronounced low estrogen state,

NOTE Confidence: 0.8808648844

 $00:56:07.830 \longrightarrow 00:56:09.510$ and can cause vasomotor symptoms,

NOTE Confidence: 0.8808648844

00:56:09.510 --> 00:56:11.274 accelerated bone loss,

 $00:56:11.274 \longrightarrow 00:56:14.214$ and and even increased cholesterol.

NOTE Confidence: 0.8808648844

 $00:56:14.220 \dashrightarrow 00:56:16.824$ Once we've completed the definitive treatment

NOTE Confidence: 0.8808648844

 $00:56:16.824 \longrightarrow 00:56:20.698$ or in and are into the surveillance phase,

NOTE Confidence: 0.8808648844

 $00:56:20.700 \longrightarrow 00:56:22.608$ we do history and physicals one

NOTE Confidence: 0.8808648844

 $00:56:22.608 \longrightarrow 00:56:24.280$ to four times per year.

NOTE Confidence: 0.8808648844

 $00:56:24.280 \longrightarrow 00:56:26.800$ We do periodic screenings for family history.

NOTE Confidence: 0.8808648844

 $00:56:26.800 \longrightarrow 00:56:29.600$ We manage some of the acute and chronic

NOTE Confidence: 0.8808648844

 $00:56:29.600 \longrightarrow 00:56:31.819$ toxicities of our cancer treatments.

NOTE Confidence: 0.8808648844

 $00{:}56{:}31.820 \dashrightarrow 00{:}56{:}33.276$ Patients get annual mammograms.

NOTE Confidence: 0.8808648844

 $00{:}56{:}33.276 \dashrightarrow 00{:}56{:}35.900$ I think it's important to note that

NOTE Confidence: 0.8808648844

 $00:56:35.900 \longrightarrow 00:56:37.780$ we're not doing routine surveillance

NOTE Confidence: 0.8808648844

 $00:56:37.780 \longrightarrow 00:56:40.154$ imaging in the absence of clinical

NOTE Confidence: 0.8808648844

 $00{:}56{:}40.154 \dashrightarrow 00{:}56{:}42.578$ signs and symptoms that suggest recurrence.

NOTE Confidence: 0.8808648844

 $00:56:42.580 \longrightarrow 00:56:42.850$ However,

NOTE Confidence: 0.8808648844

 $00:56:42.850 \longrightarrow 00:56:43.930$ there may be a.

 $00:56:43.930 \longrightarrow 00:56:46.762$ A low threshold to image in the

NOTE Confidence: 0.8808648844

 $00:56:46.762 \longrightarrow 00:56:48.042$ setting of symptoms that meet

NOTE Confidence: 0.8808648844

 $00:56:48.042 \longrightarrow 00:56:50.130$ what I like to call the three P's

NOTE Confidence: 0.8808648844

 $00:56:50.130 \longrightarrow 00:56:51.570$ symptoms that are perplexing,

NOTE Confidence: 0.8808648844

00:56:51.570 --> 00:56:53.121 persistent or progressive.

NOTE Confidence: 0.8808648844

00:56:53.121 --> 00:56:55.706 And that's that's where patients

NOTE Confidence: 0.8808648844

 $00:56:55.706 \longrightarrow 00:56:59.179$ with a history of cancer may end up

NOTE Confidence: 0.8808648844

 $00:56:59.179 \longrightarrow 00:57:01.770$ getting more scans as a result of.

NOTE Confidence: 0.8808648844

00:57:01.770 --> 00:57:04.066 What may end up being just

NOTE Confidence: 0.8808648844

 $00:57:04.066 \longrightarrow 00:57:06.298$ a common problem then a patient

NOTE Confidence: 0.8808648844

 $00:57:06.298 \longrightarrow 00:57:07.866$ without that same history?

NOTE Confidence: 0.8808648844

00:57:07.870 --> 00:57:10.460 Unfortunately about 15% of the

NOTE Confidence: 0.8808648844

 $00:57:10.460 \longrightarrow 00:57:13.050$ time are are curative treatments

NOTE Confidence: 0.8808648844

 $00:57:13.137 \longrightarrow 00:57:16.197$ aren't effective or patients present

NOTE Confidence: 0.8808648844

 $00{:}57{:}16.197 \dashrightarrow 00{:}57{:}18.645$ with metastatic breast cancer.

NOTE Confidence: 0.8808648844

 $00:57:18.650 \longrightarrow 00:57:20.666$ The most common sites of breast

00:57:20.666 --> 00:57:22.010 cancer metastases are bone,

NOTE Confidence: 0.8808648844

 $00:57:22.010 \longrightarrow 00:57:23.052$ liver, lung,

NOTE Confidence: 0.8808648844

 $00:57:23.052 \longrightarrow 00:57:26.178$ with brain being a distant fourth.

NOTE Confidence: 0.8808648844

 $00:57:26.180 \longrightarrow 00:57:27.900$ Although on average the life

NOTE Confidence: 0.8808648844

 $00:57:27.900 \longrightarrow 00:57:29.620$ expectancy after a diagnosis of

NOTE Confidence: 0.8808648844

00:57:29.684 --> 00:57:31.580 breast cancer is about two years,

NOTE Confidence: 0.8808648844

 $00:57:31.580 \longrightarrow 00:57:34.562$ this is a huge spectrum with

NOTE Confidence: 0.8808648844

 $00:57:34.562 \longrightarrow 00:57:36.870$ patients that could live for

NOTE Confidence: 0.8808648844

 $00{:}57{:}36.870 {\:\dashrightarrow\:} 00{:}57{:}38.895$ even decades depending on some

NOTE Confidence: 0.8808648844

 $00:57:38.895 \longrightarrow 00:57:41.309$ of their their disease burden,

NOTE Confidence: 0.8808648844

00:57:41.310 --> 00:57:42.255 their performance status,

NOTE Confidence: 0.8808648844

 $00:57:42.255 \longrightarrow 00:57:44.460$ what type of breast cancer they have,

NOTE Confidence: 0.8808648844

 $00:57:44.460 \longrightarrow 00:57:47.178$ and then then the response

NOTE Confidence: 0.8808648844

00:57:47.178 --> 00:57:50.209 that their cancer has to treatment.

NOTE Confidence: 0.8808648844

 $00:57:50.210 \longrightarrow 00:57:52.072$ I wanted just to mention that this

00:57:52.072 --> 00:57:54.157 is an area that breast cancer and

NOTE Confidence: 0.8808648844

00:57:54.157 --> 00:57:55.999 breast oncology is an area of

NOTE Confidence: 0.880309991

 $00{:}57{:}56.062 \dashrightarrow 00{:}57{:}58.278$ a lot of research with lots of novel

NOTE Confidence: 0.880309991

 $00:57:58.278 \longrightarrow 00:58:01.075$ drugs that are all at our beckon

NOTE Confidence: 0.880309991

 $00:58:01.075 \longrightarrow 00:58:05.513$ call and all of which can be either

NOTE Confidence: 0.880309991

 $00:58:05.513 \longrightarrow 00:58:09.384$ administered IV IM subcutaneously or or

NOTE Confidence: 0.880309991

 $00:58:09.384 \longrightarrow 00:58:12.606$ orally with new targeted agents such

NOTE Confidence: 0.880309991

00:58:12.606 --> 00:58:15.890 as CDK 46 inhibitors, PARP inhibitors,

NOTE Confidence: 0.880309991

00:58:15.890 --> 00:58:19.880 PI3 kinase inhibitors and antibody drug.

NOTE Confidence: 0.880309991

00:58:19.880 --> 00:58:21.572 Projects, and I'm not gonna bore you with all

NOTE Confidence: 0.880309991

 $00:58:21.572 \longrightarrow 00:58:23.285$ of the mechanisms of all of those things,

NOTE Confidence: 0.880309991

 $00.58:23.290 \longrightarrow 00.58:26.326$ but they are new and exciting,

NOTE Confidence: 0.880309991

 $00:58:26.330 \longrightarrow 00:58:28.290$ and we're doing an even better job

NOTE Confidence: 0.880309991

 $00{:}58{:}28.290 \to 00{:}58{:}29.914$ keeping people with metastatic breast

NOTE Confidence: 0.880309991

 $00:58:29.914 \longrightarrow 00:58:32.462$ cancer alive for longer, to enjoy more

NOTE Confidence: 0.880309991

 $00:58:32.462 \longrightarrow 00:58:34.646$ quality life with their loved ones.

 $00:58:34.650 \longrightarrow 00:58:37.728$ That is all that I have.

NOTE Confidence: 0.880309991

 $00{:}58{:}37.730 \dashrightarrow 00{:}58{:}39.389$ Thank you very much for the opportunity.

NOTE Confidence: 0.880309991

 $00:58:39.390 \longrightarrow 00:58:40.785$ I'll turn it back over

NOTE Confidence: 0.880309991

 $00:58:40.785 \longrightarrow 00:58:42.180$ to I think Doctor Zahir.

NOTE Confidence: 0.795044841666667

00:58:44.070 --> 00:58:45.408 Thank you, Sarah. That was wonderful.

NOTE Confidence: 0.795044841666667

 $00:58:45.410 \longrightarrow 00:58:47.520$ That was an excellent review of what we do in

NOTE Confidence: 0.795044841666667

 $00:58:47.570 \longrightarrow 00:58:49.586$ 10 minutes and I completely agree with you.

NOTE Confidence: 0.795044841666667

 $00:58:49.590 \longrightarrow 00:58:51.720$ We try to do what we are doing in New

NOTE Confidence: 0.795044841666667

 $00{:}58{:}51.783 \dashrightarrow 00{:}58{:}54.375$ Haven and even more because of the very

NOTE Confidence: 0.795044841666667

 $00:58:54.375 \longrightarrow 00:58:56.626$ people that are presenting here to night.

NOTE Confidence: 0.795044841666667

00:58:56.630 --> 00:58:59.366 So before I go on to the last speaker

NOTE Confidence: 0.795044841666667

 $00:58:59.366 \longrightarrow 00:59:01.502$ of the evening, I just want to

NOTE Confidence: 0.795044841666667

 $00{:}59{:}01.502 \dashrightarrow 00{:}59{:}02.750$ mention if you have any questions,

NOTE Confidence: 0.795044841666667

 $00:59:02.750 \longrightarrow 00:59:04.690$ please be prepared to ask.

NOTE Confidence: 0.795044841666667

 $00:59:04.690 \longrightarrow 00:59:06.970$ And don't be afraid to ask

 $00:59:06.970 \longrightarrow 00:59:08.490$ and write them down.

NOTE Confidence: 0.795044841666667

 $00:59:08.490 \longrightarrow 00:59:10.749$ Also, there's a there's a choice to do that.

NOTE Confidence: 0.795044841666667

 $00:59:10.750 \dashrightarrow 00:59:13.606$ So the next speaker is really a pleasure

NOTE Confidence: 0.795044841666667

00:59:13.606 --> 00:59:15.809 to introduce Doctor Susan Higgins,

NOTE Confidence: 0.795044841666667

 $00:59:15.810 \longrightarrow 00:59:17.586$ who I have known for forever,

NOTE Confidence: 0.795044841666667

 $00:59:17.590 \longrightarrow 00:59:19.310$ I think for many years.

NOTE Confidence: 0.795044841666667

 $00:59:19.310 \longrightarrow 00:59:21.420$ She's a professor of the rapeutic

NOTE Confidence: 0.795044841666667

 $00:59:21.420 \longrightarrow 00:59:23.108$ radiology and of obstetrics,

NOTE Confidence: 0.795044841666667

 $00{:}59{:}23.110 \dashrightarrow 00{:}59{:}24.638$ GYN and reproductive services.

NOTE Confidence: 0.795044841666667

 $00:59:24.638 \longrightarrow 00:59:26.930$ She she also serves as a.

NOTE Confidence: 0.795044841666667

 $00:59:26.930 \longrightarrow 00:59:29.534$ Last year of Wellness and engagement

NOTE Confidence: 0.795044841666667

 $00:59:29.534 \longrightarrow 00:59:31.806$ for the rapeutic radiology and she is

NOTE Confidence: 0.795044841666667

 $00:59:31.806 \longrightarrow 00:59:33.738$ a medical director for the radiation

NOTE Confidence: 0.795044841666667

 $00:59:33.738 \longrightarrow 00:59:35.738$ Oncology at Shoreline Medical Center.

NOTE Confidence: 0.795044841666667

 $00:59:35.740 \longrightarrow 00:59:37.930$ She completed her residency in

NOTE Confidence: 0.795044841666667

 $00:59:37.930 \longrightarrow 00:59:40.120$ therapeutic radiology at Yale and

00:59:40.195 --> 00:59:42.253 Great Great for Yale and all of

NOTE Confidence: 0.795044841666667

 $00:59:42.253 \longrightarrow 00:59:44.647$ us that she decided to stay here.

NOTE Confidence: 0.795044841666667

00:59:44.650 --> 00:59:46.984 She for nearly 25 years has

NOTE Confidence: 0.795044841666667

 $00:59:46.984 \longrightarrow 00:59:49.310$ dedicated herself as an educator,

NOTE Confidence: 0.795044841666667 00:59:49.310 --> 00:59:49.820 mentor, NOTE Confidence: 0.795044841666667

 $00:59:49.820 \longrightarrow 00:59:52.880$ researcher and above all a dedicated

NOTE Confidence: 0.795044841666667

 $00:59:52.880 \longrightarrow 00:59:54.410$ clinician at Yale.

NOTE Confidence: 0.795044841666667

00:59:54.410 --> 00:59:57.066 It's really a pleasure to work with her.

NOTE Confidence: 0.795044841666667 00:59:57.070 --> 00:59:57.906 We all, NOTE Confidence: 0.795044841666667

 $00:59:57.906 \longrightarrow 01:00:00.832$ the all the patients as well as

NOTE Confidence: 0.795044841666667

 $01:00:00.832 \longrightarrow 01:00:03.614$ the staff at at the shoreline are

NOTE Confidence: 0.795044841666667

 $01:00:03.614 \longrightarrow 01:00:05.840$ so grateful that she's here with

NOTE Confidence: 0.795044841666667

 $01{:}00{:}05.910 \dashrightarrow 01{:}00{:}08.290$ us and takes care of our patients.

NOTE Confidence: 0.795044841666667

 $01:00:08.290 \longrightarrow 01:00:08.740$ Thank you.

NOTE Confidence: 0.8753506

 $01:00:12.870 \longrightarrow 01:00:15.410$ So then you're muted.

 $01:00:15.410 \longrightarrow 01:00:16.554$ Yep. Thank you Angie.

NOTE Confidence: 0.8753506

 $01:00:16.554 \longrightarrow 01:00:18.270$ I'm going to share my screen

NOTE Confidence: 0.8753506

 $01:00:18.270 \longrightarrow 01:00:21.210$ and hopefully let me get to.

NOTE Confidence: 0.83398247

 $01:00:23.540 \longrightarrow 01:00:25.640$ Let's see if I can get this

NOTE Confidence: 0.83398247

 $01:00:25.640 \longrightarrow 01:00:29.030$ to show the slideshow. OK.

NOTE Confidence: 0.83398247

 $01:00:29.030 \longrightarrow 01:00:30.694$ Hold on one second. OK.

NOTE Confidence: 0.83398247

 $01:00:30.694 \longrightarrow 01:00:31.590$ Can everybody see that?

NOTE Confidence: 0.928922105

 $01{:}00{:}33.820 \dashrightarrow 01{:}00{:}35.172$ So one of the things I wanted to

NOTE Confidence: 0.928922105

 $01{:}00{:}35.172 --> 01{:}00{:}36.549$ do was just a little bit of a,

NOTE Confidence: 0.928922105

 $01:00:36.550 \longrightarrow 01:00:39.374$ a little bit of a historic overview before

NOTE Confidence: 0.928922105

01:00:39.374 --> 01:00:42.607 I talk about radiation and and basically.

NOTE Confidence: 0.928922105

 $01:00:42.610 \longrightarrow 01:00:44.374$ It continues on some of the themes

NOTE Confidence: 0.928922105

 $01:00:44.374 \longrightarrow 01:00:46.068$ that others have talked about here.

NOTE Confidence: 0.928922105

01:00:46.070 --> 01:00:47.684 But in terms of the regional

NOTE Confidence: 0.928922105

01:00:47.684 --> 01:00:49.310 oncology services and the shoreline,

NOTE Confidence: 0.928922105

 $01:00:49.310 \longrightarrow 01:00:51.608$ you know we started the Shoreline

01:00:51.608 --> 01:00:53.458 Medical Center actually it's now

NOTE Confidence: 0.928922105

 $01{:}00{:}53.458 \dashrightarrow 01{:}00{:}55.434$ about 18 years ago and it was one

NOTE Confidence: 0.928922105

 $01\text{:}00\text{:}55\text{.}434 \dashrightarrow 01\text{:}00\text{:}57\text{.}483$ of the first places where we were

NOTE Confidence: 0.928922105

01:00:57.483 --> 01:00:59.823 able to get Yale medical Oncology,

NOTE Confidence: 0.928922105

 $01:00:59.823 \longrightarrow 01:01:01.787$ radiation oncology and diagnostic

NOTE Confidence: 0.928922105

 $01:01:01.787 \longrightarrow 01:01:03.990$ imaging under the same roof.

NOTE Confidence: 0.928922105

01:01:03.990 --> 01:01:06.430 And I think we all had you know

NOTE Confidence: 0.928922105

 $01:01:06.430 \longrightarrow 01:01:08.224$ great hopes for the shoreline that

NOTE Confidence: 0.928922105

 $01:01:08.224 \longrightarrow 01:01:10.310$ are all now sort of coming true.

NOTE Confidence: 0.928922105

 $01:01:10.310 \longrightarrow 01:01:11.870$ So it's it's a really exciting

NOTE Confidence: 0.928922105

 $01:01:11.870 \longrightarrow 01:01:12.910$ time to be here.

NOTE Confidence: 0.928922105

 $01:01:12.910 \longrightarrow 01:01:16.134$ And Umm, we had served at this phase

NOTE Confidence: 0.928922105

 $01{:}01{:}16.134 \dashrightarrow 01{:}01{:}18.200$ of the Yale New Haven Hospital,

NOTE Confidence: 0.928922105

01:01:18.200 --> 01:01:19.460 Shoreline Medical Center phase

NOTE Confidence: 0.928922105

 $01:01:19.460 \longrightarrow 01:01:20.759$ in the early 2000s,

 $01:01:20.760 \longrightarrow 01:01:23.838$ but then we in 2019 here,

NOTE Confidence: 0.928922105

 $01:01:23.840 \longrightarrow 01:01:25.488$ well in the near term we had this

NOTE Confidence: 0.928922105

 $01:01:25.488 \longrightarrow 01:01:26.785$ smile all of course expansion

NOTE Confidence: 0.928922105

01:01:26.785 --> 01:01:28.175 of our Cancer Center downtown

NOTE Confidence: 0.928922105

 $01:01:28.175 \longrightarrow 01:01:29.790$ with the Smilow Cancer Center.

NOTE Confidence: 0.928922105

01:01:29.790 --> 01:01:31.502 And then in 2019,

NOTE Confidence: 0.928922105

 $01:01:31.502 \longrightarrow 01:01:34.070$ the investment in our infrastructure here

NOTE Confidence: 0.928922105

 $01:01:34.142 \longrightarrow 01:01:36.578$ with the renovation and expansion of

NOTE Confidence: 0.928922105

 $01{:}01{:}36.578 \longrightarrow 01{:}01{:}39.798$ all of our oncology and imaging services,

NOTE Confidence: 0.928922105

 $01:01:39.800 \longrightarrow 01:01:42.096$ including upgrades that gave

NOTE Confidence: 0.928922105

 $01{:}01{:}42.096 \dashrightarrow 01{:}01{:}44.966$ us a beautiful surgical center.

NOTE Confidence: 0.928922105

 $01:01:44.970 \longrightarrow 01:01:47.010$ With more accommodations for our

NOTE Confidence: 0.928922105

 $01{:}01{:}47.010 \dashrightarrow 01{:}01{:}48.642$ breast surgeons including our

NOTE Confidence: 0.928922105

 $01{:}01{:}48.642 \dashrightarrow 01{:}01{:}51.051$ plastic surgeons and more space for

NOTE Confidence: 0.928922105

 $01:01:51.051 \longrightarrow 01:01:52.603$ our medical oncology colleagues.

NOTE Confidence: 0.928922105

 $01:01:52.610 \longrightarrow 01:01:55.538$ And I think that you know we continue

 $01:01:55.538 \longrightarrow 01:01:58.908$ to build the team and build the services.

NOTE Confidence: 0.928922105

01:01:58.910 --> 01:02:01.557 And what we're seeing now in 2022

NOTE Confidence: 0.928922105

01:02:01.557 --> 01:02:03.879 as my colleagues have spoken about

NOTE Confidence: 0.928922105

 $01:02:03.879 \longrightarrow 01:02:07.545$ is that we really have a truly

NOTE Confidence: 0.928922105

 $01:02:07.545 \longrightarrow 01:02:08.755$ comprehensive multidisciplinary

NOTE Confidence: 0.928922105

 $01:02:08.755 \longrightarrow 01:02:11.903$ oncology Center for breast care here

NOTE Confidence: 0.928922105

 $01:02:11.903 \longrightarrow 01:02:15.280$ and we are happy to see you know in our.

NOTE Confidence: 0.928922105

 $01:02:15.280 \longrightarrow 01:02:17.205$ Our catchment area is expanding.

NOTE Confidence: 0.928922105

 $01:02:17.210 \longrightarrow 01:02:18.038$ And you know,

NOTE Confidence: 0.928922105

 $01:02:18.038 \longrightarrow 01:02:19.970$ we're just very happy to serve the

NOTE Confidence: 0.928922105

01:02:20.027 --> 01:02:22.267 community and I think that as you know,

NOTE Confidence: 0.928922105

 $01:02:22.270 \longrightarrow 01:02:23.630$ we continue to to grow.

NOTE Confidence: 0.928922105

 $01{:}02{:}23.630 \dashrightarrow 01{:}02{:}25.611$ We're seeing a lot of gratitude from

NOTE Confidence: 0.928922105

 $01:02:25.611 \longrightarrow 01:02:27.429$ the patients and it's just a great

NOTE Confidence: 0.928922105

01:02:27.429 --> 01:02:29.610 place to work and a great place to Park,

01:02:29.610 --> 01:02:30.100 right, Sarah?

NOTE Confidence: 0.846441477692308

 $01:02:32.870 \longrightarrow 01:02:34.067$ Not only a great place to work

NOTE Confidence: 0.846441477692308

 $01:02:34.067 \longrightarrow 01:02:35.198$ but a great place to Park.

NOTE Confidence: 0.846441477692308

01:02:35.200 --> 01:02:37.270 But anyway, so I just wanted to you know

NOTE Confidence: 0.846441477692308

 $01:02:37.270 \longrightarrow 01:02:39.276$ just I think if I get one point across

NOTE Confidence: 0.846441477692308

01:02:39.276 --> 01:02:41.137 is we're happy to see your patients,

NOTE Confidence: 0.846441477692308

01:02:41.140 --> 01:02:42.946 we love working here and you know

NOTE Confidence: 0.846441477692308

 $01:02:42.946 \longrightarrow 01:02:44.716$ it's one stop shopping for patients

NOTE Confidence: 0.846441477692308

 $01:02:44.716 \longrightarrow 01:02:46.907$ with breast cancer and it's sort of

NOTE Confidence: 0.846441477692308

 $01:02:46.962 \longrightarrow 01:02:48.825$ a dream come true for a lot of us.

NOTE Confidence: 0.846441477692308

 $01{:}02{:}48.830 \dashrightarrow 01{:}02{:}52.200$ So basically with regard to

NOTE Confidence: 0.846441477692308

 $01:02:52.200 \longrightarrow 01:02:53.548$ radiation therapy.

NOTE Confidence: 0.846441477692308

 $01:02:53.550 \longrightarrow 01:02:55.766$ To do a little bit of an overview,

NOTE Confidence: 0.846441477692308

01:02:55.770 --> 01:02:57.520 uh, people know a little less about

NOTE Confidence: 0.846441477692308

 $01:02:57.520 \longrightarrow 01:02:59.162$ radiation than they do about some

NOTE Confidence: 0.846441477692308

 $01{:}02{:}59.162 \dashrightarrow 01{:}03{:}00.557$ of the other oncologic disciplines.

 $01:03:00.560 \longrightarrow 01:03:02.954$ So I'll just start with like a

NOTE Confidence: 0.846441477692308

01:03:02.954 --> 01:03:05.269 little tiny intro of radiation 101,

NOTE Confidence: 0.846441477692308

 $01:03:05.270 \longrightarrow 01:03:07.105$ then talk about radiation therapy

NOTE Confidence: 0.846441477692308

 $01:03:07.105 \longrightarrow 01:03:08.573$ and the multidisciplinary treatment

NOTE Confidence: 0.846441477692308

 $01:03:08.573 \longrightarrow 01:03:09.710$ of breast cancer,

NOTE Confidence: 0.846441477692308

01:03:09.710 --> 01:03:11.915 both for breast conservation and

NOTE Confidence: 0.846441477692308

01:03:11.915 --> 01:03:15.070 patients who have had a mastectomy.

NOTE Confidence: 0.846441477692308

 $01:03:15.070 \longrightarrow 01:03:17.286$ And one of the technical advances that I

NOTE Confidence: 0.846441477692308

01:03:17.286 --> 01:03:19.615 wanted to talk about today is one of our,

NOTE Confidence: 0.846441477692308

 $01:03:19.620 \longrightarrow 01:03:21.724$ our, our projects that we began a few

NOTE Confidence: 0.846441477692308

01:03:21.724 --> 01:03:23.820 years ago that's at all of our sites.

NOTE Confidence: 0.846441477692308

 $01:03:23.820 \longrightarrow 01:03:26.052$ That has really changed what we do with

NOTE Confidence: 0.846441477692308

 $01:03:26.052 \longrightarrow 01:03:28.705$ regard to treatment and that's the deep

NOTE Confidence: 0.846441477692308

 $01:03:28.705 \longrightarrow 01:03:30.329$ inspiration breath hold technique.

NOTE Confidence: 0.846441477692308

01:03:30.330 --> 01:03:31.020 And then finally,

 $01:03:31.020 \longrightarrow 01:03:32.630$ I thought it would be helpful to

NOTE Confidence: 0.846441477692308

 $01{:}03{:}32.681 \dashrightarrow 01{:}03{:}33.923$ speak about some of the things

NOTE Confidence: 0.846441477692308

 $01:03:33.923 \longrightarrow 01:03:35.768$ that we do for our patients with

NOTE Confidence: 0.846441477692308

 $01:03:35.768 \longrightarrow 01:03:37.378$ metastatic disease because as our

NOTE Confidence: 0.846441477692308

 $01:03:37.378 \longrightarrow 01:03:39.716$ systemic therapies are getting better,

NOTE Confidence: 0.846441477692308

 $01:03:39.716 \longrightarrow 01:03:41.964$ we're being called upon.

NOTE Confidence: 0.846441477692308

 $01:03:41.970 \longrightarrow 01:03:44.226$ We as radiation oncologists are being

NOTE Confidence: 0.846441477692308

01:03:44.226 --> 01:03:46.785 called upon now even more to help

NOTE Confidence: 0.846441477692308

 $01{:}03{:}46.785 \dashrightarrow 01{:}03{:}48.765$ with the sites of sanctuary sites

NOTE Confidence: 0.846441477692308

 $01{:}03{:}48.765 \dashrightarrow 01{:}03{:}51.141$ like the CNS and some extracranial

NOTE Confidence: 0.846441477692308

 $01:03:51.141 \longrightarrow 01:03:53.116$ sites have been static disease.

NOTE Confidence: 0.846441477692308

01:03:53.120 --> 01:03:55.955 So, you know, for five decades now,

NOTE Confidence: 0.846441477692308

 $01:03:55.960 \longrightarrow 01:03:57.645$ radiation therapy has been an

NOTE Confidence: 0.846441477692308

 $01:03:57.645 \longrightarrow 01:03:59.330$ essential part of the oncologic

NOTE Confidence: 0.846441477692308

01:03:59.385 --> 01:04:01.180 triad of oncologic treatments and

NOTE Confidence: 0.846441477692308

 $01:04:01.180 \longrightarrow 01:04:03.640$ about 50% of people who have cancer

01:04:03.640 --> 01:04:05.040 receive radiation therapy during

NOTE Confidence: 0.846441477692308

 $01:04:05.096 \longrightarrow 01:04:06.786$ their course of their illness.

NOTE Confidence: 0.766930606666667

01:04:09.230 --> 01:04:11.610 And it's radiation is a key component

NOTE Confidence: 0.766930606666667

01:04:11.610 --> 01:04:13.730 of curative breast cancer treatment,

NOTE Confidence: 0.766930606666667

 $01:04:13.730 \longrightarrow 01:04:15.795$ both in breast conservation therapy

NOTE Confidence: 0.766930606666667

 $01:04:15.795 \longrightarrow 01:04:17.860$ where patients who receive lumpectomy

NOTE Confidence: 0.766930606666667

01:04:17.921 --> 01:04:19.787 in general with a few exceptions,

NOTE Confidence: 0.766930606666667

 $01:04:19.790 \longrightarrow 01:04:21.764$ but most patients who get a lumpectomy.

NOTE Confidence: 0.766930606666667

 $01:04:21.770 \longrightarrow 01:04:23.970$ It's followed by as as

NOTE Confidence: 0.766930606666667

 $01:04:23.970 \longrightarrow 01:04:25.730$ Doctor Mccallion pointed out,

NOTE Confidence: 0.766930606666667

 $01:04:25.730 \longrightarrow 01:04:27.470$ we are the cleanup crew radiation

NOTE Confidence: 0.766930606666667

 $01:04:27.470 \longrightarrow 01:04:29.211$ therapies used to take care of

NOTE Confidence: 0.766930606666667

 $01{:}04{:}29.211 \dashrightarrow 01{:}04{:}30.531$ microscopic cells that might be

NOTE Confidence: 0.766930606666667

 $01:04:30.531 \longrightarrow 01:04:32.853$ left in the breast or nodes and

NOTE Confidence: 0.766930606666667

01:04:32.853 --> 01:04:34.329 following mastectomy select patients,

01:04:34.330 --> 01:04:37.708 not all, but many patients received

NOTE Confidence: 0.766930606666667

 $01:04:37.708 \longrightarrow 01:04:39.397$ postmastectomy radiation therapy.

NOTE Confidence: 0.766930606666667

 $01:04:39.400 \longrightarrow 01:04:41.770$ To reduce the risk of local

NOTE Confidence: 0.766930606666667

 $01:04:41.770 \longrightarrow 01:04:42.560$ regional recurrence.

NOTE Confidence: 0.766930606666667

 $01:04:42.560 \longrightarrow 01:04:45.570$ In either case, radiation has been

NOTE Confidence: 0.766930606666667

01:04:45.570 --> 01:04:47.320 shown to be really safe and effective,

NOTE Confidence: 0.766930606666667

 $01:04:47.320 \longrightarrow 01:04:49.728$ and it can reduce the risk of local

NOTE Confidence: 0.766930606666667

 $01:04:49.728 \longrightarrow 01:04:51.957$ and regional recurrences by 50 to 70%.

NOTE Confidence: 0.766930606666667

 $01{:}04{:}51.960 \dashrightarrow 01{:}04{:}54.060$ And in certain patient subsets,

NOTE Confidence: 0.766930606666667

 $01:04:54.060 \longrightarrow 01:04:56.036$ radiation therapy is associated

NOTE Confidence: 0.766930606666667

 $01{:}04{:}56.036 \dashrightarrow 01{:}04{:}58.506$ with an increase in survival.

NOTE Confidence: 0.766930606666667

 $01:04:58.510 \longrightarrow 01:05:01.450$ And in general, um, this very,

NOTE Confidence: 0.766930606666667

 $01:05:01.450 \longrightarrow 01:05:03.058$ very basic radiobiology.

NOTE Confidence: 0.766930606666667

 $01:05:03.058 \longrightarrow 01:05:05.738$ It's ionizing radiation causes damage

NOTE Confidence: 0.766930606666667

 $01:05:05.738 \longrightarrow 01:05:08.839$ to cellular DNA and in malignant cells.

NOTE Confidence: 0.766930606666667

 $01:05:08.840 \longrightarrow 01:05:12.120$ They are not able to repair this DNA

01:05:12.120 --> 01:05:14.858 damage and they cannot reproduce

NOTE Confidence: 0.766930606666667

 $01:05:14.860 \longrightarrow 01:05:15.733$ in normal cells.

NOTE Confidence: 0.766930606666667

01:05:15.733 --> 01:05:17.479 There's also damage to the DNA,

NOTE Confidence: 0.766930606666667

 $01:05:17.480 \longrightarrow 01:05:20.560$ but it's normal cells are better able

NOTE Confidence: 0.766930606666667

 $01:05:20.560 \longrightarrow 01:05:23.578$ to repair this type of DNA damage.

NOTE Confidence: 0.766930606666667

 $01:05:23.580 \longrightarrow 01:05:25.455$ And radiation therapy is delivered

NOTE Confidence: 0.766930606666667

 $01:05:25.455 \longrightarrow 01:05:26.955$ with the linear accelerator.

NOTE Confidence: 0.766930606666667

 $01{:}05{:}26.960 \dashrightarrow 01{:}05{:}29.170$ We have two bays downstairs

NOTE Confidence: 0.766930606666667

 $01:05:29.170 \longrightarrow 01:05:30.496$ in our department,

NOTE Confidence: 0.766930606666667

 $01:05:30.500 \longrightarrow 01:05:33.140$ we'd say emits high energy photon beams and

NOTE Confidence: 0.766930606666667

 $01:05:33.140 \longrightarrow 01:05:35.739$ we target the breast and regional nodes.

NOTE Confidence: 0.766930606666667

 $01:05:35.740 \longrightarrow 01:05:37.444$ And what you see here is just a

NOTE Confidence: 0.766930606666667

 $01{:}05{:}37.444 \dashrightarrow 01{:}05{:}38.975$ schematic of a patient on the

NOTE Confidence: 0.766930606666667

 $01:05:38.975 \longrightarrow 01:05:40.285$ treatment table getting what we

NOTE Confidence: 0.766930606666667

 $01:05:40.285 \longrightarrow 01:05:41.620$ would call breast tangents.

01:05:41.620 --> 01:05:42.957 And in the upper right hand corner,

NOTE Confidence: 0.766930606666667

 $01:05:42.960 \longrightarrow 01:05:45.360$ you can see that we're targeting

NOTE Confidence: 0.766930606666667

 $01:05:45.360 \longrightarrow 01:05:48.130$ the breast and we basically have a

NOTE Confidence: 0.766930606666667

 $01:05:48.130 \longrightarrow 01:05:50.100$ tangential field that comes across

NOTE Confidence: 0.766930606666667

 $01:05:50.169 \longrightarrow 01:05:52.085$ the chest wall and you can see that

NOTE Confidence: 0.766930606666667

01:05:52.085 --> 01:05:53.839 sometimes we have a little bit of underlying.

NOTE Confidence: 0.766930606666667

 $01:05:53.840 \longrightarrow 01:05:55.534$ Along in the field and we're going

NOTE Confidence: 0.766930606666667

 $01:05:55.534 \longrightarrow 01:05:57.180$ to talk about that in a minute.

NOTE Confidence: 0.766930606666667

 $01:05:57.180 \longrightarrow 01:05:57.976$ But basically,

NOTE Confidence: 0.766930606666667

 $01:05:57.976 \longrightarrow 01:05:59.966$ as Doctor Magellan referred to,

NOTE Confidence: 0.766930606666667

 $01:05:59.970 \longrightarrow 01:06:02.105$ we do daily treatments and it's delivered

NOTE Confidence: 0.766930606666667

 $01:06:02.105 \longrightarrow 01:06:04.260$ over the course of three to six weeks,

NOTE Confidence: 0.766930606666667

 $01:06:04.260 \longrightarrow 01:06:06.858$ so there is some time involved.

NOTE Confidence: 0.766930606666667

 $01:06:06.860 \longrightarrow 01:06:08.850$ Treatment again is directed at

NOTE Confidence: 0.766930606666667

 $01:06:08.850 \longrightarrow 01:06:11.345$ the breast or chest wall with

NOTE Confidence: 0.766930606666667

 $01:06:11.345 \longrightarrow 01:06:13.460$ or without the regional nodes.

 $01:06:13.460 \longrightarrow 01:06:15.259$ And the way it's done is in

NOTE Confidence: 0.766930606666667

 $01:06:15.259 \longrightarrow 01:06:17.060$ terms of the just logistics,

NOTE Confidence: 0.766930606666667

01:06:17.060 --> 01:06:18.520 patients come in for something

NOTE Confidence: 0.766930606666667

 $01:06:18.520 \longrightarrow 01:06:19.396$ called the simulation,

NOTE Confidence: 0.766930606666667

01:06:19.400 --> 01:06:21.052 which is a CAT scan and they're

NOTE Confidence: 0.766930606666667

 $01:06:21.052 \longrightarrow 01:06:22.371$ immobilized in the position that

NOTE Confidence: 0.766930606666667

 $01:06:22.371 \longrightarrow 01:06:24.039$ we're going to use for treatment.

NOTE Confidence: 0.766930606666667

 $01:06:24.040 \longrightarrow 01:06:25.860$ And basically it's shown here

NOTE Confidence: 0.766930606666667

 $01:06:25.860 \longrightarrow 01:06:27.680$ they're on a slant board.

NOTE Confidence: 0.766930606666667

 $01:06:27.680 \longrightarrow 01:06:29.129$ The arms are over the head because

NOTE Confidence: 0.766930606666667

 $01:06:29.129 \longrightarrow 01:06:30.958$ we need to have the arms out of the

NOTE Confidence: 0.766930606666667

 $01:06:30.958 \longrightarrow 01:06:32.457$ way when we treat the breast and

NOTE Confidence: 0.766930606666667

 $01{:}06{:}32.457 \dashrightarrow 01{:}06{:}34.032$ the nose with with fields that are

NOTE Confidence: 0.766930606666667

 $01:06:34.040 \longrightarrow 01:06:36.836$ directed and those at the chest.

NOTE Confidence: 0.766930606666667

 $01:06:36.840 \longrightarrow 01:06:38.910$ And what we get is a CT scan that

01:06:38.910 --> 01:06:40.618 shows us the patient's entire,

NOTE Confidence: 0.766930606666667 01:06:40.620 --> 01:06:41.104 you know, NOTE Confidence: 0.766930606666667

 $01:06:41.104 \longrightarrow 01:06:43.685$ body and we can do sort of a 3D

NOTE Confidence: 0.766930606666667

 $01:06:43.685 \longrightarrow 01:06:46.108$ reconstruction. Of their body.

NOTE Confidence: 0.766930606666667

 $01:06:46.110 \longrightarrow 01:06:48.616$ And the doctor then goes to the

NOTE Confidence: 0.766930606666667

01:06:48.616 --> 01:06:51.162 computer and we use that CT data

NOTE Confidence: 0.766930606666667

 $01:06:51.162 \longrightarrow 01:06:52.206$ set to contour.

NOTE Confidence: 0.766930606666667

 $01:06:52.210 \longrightarrow 01:06:54.172$ We will contour out the targets

NOTE Confidence: 0.766930606666667

 $01:06:54.172 \longrightarrow 01:06:56.586$ which are the breast and the nodes

NOTE Confidence: 0.766930606666667

 $01:06:56.586 \longrightarrow 01:06:58.316$ and then the physician prescribes

NOTE Confidence: 0.766930606666667

 $01:06:58.316 \longrightarrow 01:07:00.459$ the the dose to those targets.

NOTE Confidence: 0.766930606666667

 $01:07:00.460 \longrightarrow 01:07:02.700$ Then then our sophisticated

NOTE Confidence: 0.766930606666667

 $01:07:02.700 \longrightarrow 01:07:04.380$ treatment planning system

NOTE Confidence: 0.808383406

01:07:04.380 --> 01:07:05.630 comes up with what we

NOTE Confidence: 0.808383406

 $01:07:05.630 \longrightarrow 01:07:06.880$ call a 3D conformal plan.

NOTE Confidence: 0.808383406

 $01{:}07{:}06.880 \dashrightarrow 01{:}07{:}09.124$ It's a basically the optimal beam

 $01:07:09.124 \longrightarrow 01:07:11.021$ arrangement and the beam strength

NOTE Confidence: 0.808383406

 $01{:}07{:}11.021 \dashrightarrow 01{:}07{:}13.324$ and beam shape to maximize the dose

NOTE Confidence: 0.808383406

01:07:13.324 --> 01:07:15.791 to the targets which breast in nodes

NOTE Confidence: 0.808383406

 $01:07:15.791 \longrightarrow 01:07:18.350$ and minimize the dose to the organs

NOTE Confidence: 0.808383406

 $01:07:18.350 \longrightarrow 01:07:21.185$ at risk like the lung and heart.

NOTE Confidence: 0.808383406

 $01:07:21.190 \longrightarrow 01:07:22.958$ So this is sort of a what a

NOTE Confidence: 0.808383406

01:07:22.958 --> 01:07:24.785 this actually comes right off of

NOTE Confidence: 0.808383406

 $01:07:24.785 \longrightarrow 01:07:26.109$ our treatment planning system.

NOTE Confidence: 0.808383406

 $01{:}07{:}26.110 \dashrightarrow 01{:}07{:}27.818$ This is what you would see when

NOTE Confidence: 0.808383406

 $01:07:27.818 \longrightarrow 01:07:29.619$ you do that 3D conformal treatment

NOTE Confidence: 0.808383406

 $01:07:29.619 \longrightarrow 01:07:31.629$ in the upper left hand corner.

NOTE Confidence: 0.808383406

01:07:31.630 --> 01:07:33.058 I don't know if you could see

NOTE Confidence: 0.808383406

 $01:07:33.058 \longrightarrow 01:07:34.747$ my can you see my pointer here?

NOTE Confidence: 0.808383406

01:07:34.750 --> 01:07:37.366 Probably not, but in the upper,

NOTE Confidence: 0.808383406

 $01:07:37.370 \longrightarrow 01:07:39.404$ you can't good in the upper left hand corner.

 $01:07:39.410 \longrightarrow 01:07:40.364$ Thank you, Sarah.

NOTE Confidence: 0.808383406

 $01:07:40.364 \longrightarrow 01:07:42.590$ You can see there are two tangential

NOTE Confidence: 0.808383406

 $01:07:42.650 \longrightarrow 01:07:44.558$ fields and there's a green that

NOTE Confidence: 0.808383406

 $01:07:44.558 \longrightarrow 01:07:46.949$ represents the dose to the breast tissue.

NOTE Confidence: 0.808383406

01:07:46.950 --> 01:07:48.646 So this would be a right breast cancer,

NOTE Confidence: 0.808383406

01:07:48.650 --> 01:07:50.484 a beam would be coming this way

NOTE Confidence: 0.808383406

 $01:07:50.484 \longrightarrow 01:07:51.270$ from the right,

NOTE Confidence: 0.808383406

 $01{:}07{:}51.270 \dashrightarrow 01{:}07{:}54.110$ a beam from the left and then a

NOTE Confidence: 0.808383406

01:07:54.110 --> 01:07:56.610 single field that's pointed at the

NOTE Confidence: 0.808383406

 $01:07:56.610 \longrightarrow 01:07:58.350$ patient for the Super cloud fields.

NOTE Confidence: 0.808383406

 $01:07:58.350 \longrightarrow 01:08:00.526$ But this would be a typical sort of

NOTE Confidence: 0.808383406

 $01:08:00.526 \longrightarrow 01:08:01.947$ dose distribution and this is the,

NOTE Confidence: 0.808383406

 $01:08:01.950 \longrightarrow 01:08:04.820$ this is what the physician basically is.

NOTE Confidence: 0.808383406

 $01{:}08{:}04.820 \dashrightarrow 01{:}08{:}07.548$ Is going to you know devise in order

NOTE Confidence: 0.808383406

 $01:08:07.548 \longrightarrow 01:08:10.438$ to treat that patients breast cancer.

NOTE Confidence: 0.808383406

 $01:08:10.440 \longrightarrow 01:08:13.024$ I'm a have one sort of schematic here

 $01:08:13.024 \longrightarrow 01:08:15.602$ just to show you again this is a

NOTE Confidence: 0.808383406

 $01:08:15.602 \longrightarrow 01:08:17.950$ cross section of a patient's heart.

NOTE Confidence: 0.808383406

01:08:17.950 --> 01:08:20.725 In Gray's lungs in black,

NOTE Confidence: 0.808383406

 $01:08:20.730 \longrightarrow 01:08:22.340$ the actual treatment fields for

NOTE Confidence: 0.808383406

01:08:22.340 --> 01:08:23.628 a right breast cancer,

NOTE Confidence: 0.808383406

 $01:08:23.630 \longrightarrow 01:08:25.046$ one would be the lateral field,

NOTE Confidence: 0.808383406

 $01:08:25.050 \longrightarrow 01:08:27.538$ one would be a medial field and the

NOTE Confidence: 0.808383406

 $01:08:27.538 \longrightarrow 01:08:29.549$ beams basically treat the breast and

NOTE Confidence: 0.808383406

 $01:08:29.549 \longrightarrow 01:08:31.529$ just some of the underlying lung.

NOTE Confidence: 0.853085722222222

 $01:08:33.540 \longrightarrow 01:08:35.433$ For postmastectomy radiation,

NOTE Confidence: 0.853085722222222

 $01:08:35.433 \longrightarrow 01:08:39.219$ it's very similar sort of theme.

NOTE Confidence: 0.853085722222222

 $01:08:39.220 \longrightarrow 01:08:41.446$ But in this case, we're treating the

NOTE Confidence: 0.853085722222222

 $01{:}08{:}41.446 \dashrightarrow 01{:}08{:}43.940$ chest wall or a reconstructed breast,

NOTE Confidence: 0.853085722222222

 $01:08:43.940 \longrightarrow 01:08:46.832$ whether that's an implant or a

NOTE Confidence: 0.853085722222222

 $01:08:46.832 \longrightarrow 01:08:48.892$ deep flap and the regional notes.

01:08:48.892 --> 01:08:51.138 So again, you can see on the patient

NOTE Confidence: 0.853085722222222

 $01{:}08{:}51.138 \dashrightarrow 01{:}08{:}53.134$ that the regional notes up above in

NOTE Confidence: 0.853085722222222

 $01:08:53.134 \longrightarrow 01:08:55.374$ the clavicle area and under the arm are

NOTE Confidence: 0.853085722222222

 $01:08:55.374 \longrightarrow 01:08:57.558$ being treated along with the chest wall.

NOTE Confidence: 0.853085722222222

 $01:08:57.560 \longrightarrow 01:09:00.696$ And not everyone who has a mastectomy

NOTE Confidence: 0.853085722222222

01:09:00.696 --> 01:09:02.040 needs postmastectomy radiation.

NOTE Confidence: 0.853085722222222

 $01:09:02.040 \longrightarrow 01:09:04.242$ We often have lots of discussions

NOTE Confidence: 0.853085722222222

 $01:09:04.242 \longrightarrow 01:09:06.094$ with patients about whether they

NOTE Confidence: 0.853085722222222

 $01:09:06.094 \longrightarrow 01:09:08.296$ fall into the category that is high

NOTE Confidence: 0.853085722222222

 $01:09:08.296 \longrightarrow 01:09:09.786$ risk and that usually includes.

NOTE Confidence: 0.853085722222222

 $01:09:09.790 \longrightarrow 01:09:13.018$ Patients with positive nodes AT3 or

NOTE Confidence: 0.853085722222222

01:09:13.018 --> 01:09:15.420 larger tumor or a positive margin.

NOTE Confidence: 0.928653492142857

 $01:09:17.590 \longrightarrow 01:09:20.229$ So what has happened over the years

NOTE Confidence: 0.928653492142857

 $01:09:20.229 \longrightarrow 01:09:23.428$ is that our technical advances have

NOTE Confidence: 0.928653492142857

 $01:09:23.428 \longrightarrow 01:09:25.715$ basically been aimed at making this

NOTE Confidence: 0.928653492142857

 $01:09:25.715 \longrightarrow 01:09:27.662$ a safer treatment, and that means

 $01{:}09{:}27.662 \dashrightarrow 01{:}09{:}29.606$ maximizing the dose of the target,

NOTE Confidence: 0.928653492142857

 $01:09:29.610 \longrightarrow 01:09:31.824$ minimizing the dose to the underlying

NOTE Confidence: 0.928653492142857

01:09:31.824 --> 01:09:34.410 organs and for left press treatment,

NOTE Confidence: 0.928653492142857

 $01:09:34.410 \longrightarrow 01:09:35.960$ the underlying organs that we're

NOTE Confidence: 0.928653492142857

 $01:09:35.960 \longrightarrow 01:09:38.130$ trying to spare a lung and heart.

NOTE Confidence: 0.928653492142857

01:09:38.130 --> 01:09:40.216 So one of the new things we've

NOTE Confidence: 0.928653492142857

 $01:09:40.216 \longrightarrow 01:09:42.569$ been able to do in the last few

NOTE Confidence: 0.928653492142857

 $01:09:42.569 \longrightarrow 01:09:45.244$ years is to address this with the

NOTE Confidence: 0.928653492142857

01:09:45.244 --> 01:09:46.840 deep inspiration breath hold.

NOTE Confidence: 0.928653492142857 01:09:46.840 --> 01:09:47.136 Technique. NOTE Confidence: 0.928653492142857

NOTE Confidence: 0.928653492142857

 $01:09:49.504 \longrightarrow 01:09:51.559$ challenge is from an anatomic standpoint.

NOTE Confidence: 0.928653492142857

01:09:51.560 --> 01:09:53.600 I think was just showing you that the

01:09:47.136 --> 01:09:49.504 But let me just show you what the

NOTE Confidence: 0.928653492142857

 $01:09:53.600 \longrightarrow 01:09:55.180$ tangent fields that we're trying to

NOTE Confidence: 0.928653492142857

01:09:55.180 --> 01:09:57.017 use are coming across the chest wall

01:09:57.017 --> 01:09:58.816 and you're trying to treat the green,

NOTE Confidence: 0.928653492142857

 $01:09:58.820 \longrightarrow 01:10:01.232$ which is the breast tissue without

NOTE Confidence: 0.928653492142857

01:10:01.232 --> 01:10:02.840 encountering too much lung,

NOTE Confidence: 0.928653492142857

 $01:10:02.840 \longrightarrow 01:10:07.097$ which is black and heart circled here in red.

NOTE Confidence: 0.928653492142857

 $01:10:07.100 \longrightarrow 01:10:08.619$ But the problem is, in many ladies,

NOTE Confidence: 0.928653492142857

 $01:10:08.620 \longrightarrow 01:10:10.900$ the heart and lung are immediately

NOTE Confidence: 0.928653492142857

 $01:10:10.900 \longrightarrow 01:10:12.420$ adjacent to our target.

NOTE Confidence: 0.928653492142857

01:10:12.420 --> 01:10:13.716 And in the past,

NOTE Confidence: 0.928653492142857

 $01:10:13.716 \longrightarrow 01:10:15.336$ we could adjust the beams,

NOTE Confidence: 0.928653492142857

 $01:10:15.340 \longrightarrow 01:10:16.804$ we could change the strength of the beam,

NOTE Confidence: 0.928653492142857

 $01:10:16.810 \longrightarrow 01:10:17.720$ the angle of the beam,

NOTE Confidence: 0.928653492142857

 $01:10:17.720 \longrightarrow 01:10:19.100$ we could shape the beam,

NOTE Confidence: 0.928653492142857

 $01:10:19.100 \longrightarrow 01:10:21.926$ but we couldn't change the anatomy.

NOTE Confidence: 0.928653492142857

 $01:10:21.930 \longrightarrow 01:10:24.266$ So we do now have a technique to

NOTE Confidence: 0.928653492142857

 $01:10:24.266 \longrightarrow 01:10:27.322$ do that and it's called the deep

NOTE Confidence: 0.928653492142857

 $01{:}10{:}27.322 \dashrightarrow 01{:}10{:}29.238$ inspiration breath hole technique.

 $01:10:29.240 \longrightarrow 01:10:31.118$ And it's there are two things

NOTE Confidence: 0.928653492142857

 $01:10:31.118 \longrightarrow 01:10:33.935$ we need to do this we have to

NOTE Confidence: 0.928653492142857

 $01:10:33.935 \longrightarrow 01:10:35.795$ use in surface imaging system.

NOTE Confidence: 0.928653492142857

01:10:35.800 --> 01:10:36.040 Uh,

NOTE Confidence: 0.928653492142857

 $01:10:36.040 \longrightarrow 01:10:37.240$ a specific surface imaging system

NOTE Confidence: 0.928653492142857

01:10:37.240 --> 01:10:38.758 that I'll show you in a minute,

NOTE Confidence: 0.928653492142857

 $01:10:38.760 \longrightarrow 01:10:42.160$ and a special gated treatment

NOTE Confidence: 0.928653492142857

01:10:42.160 --> 01:10:43.520 delivery system.

NOTE Confidence: 0.928653492142857

 $01{:}10{:}43.520 \dashrightarrow 01{:}10{:}46.382$ So the surface imaging system is

NOTE Confidence: 0.928653492142857

 $01:10:46.382 \longrightarrow 01:10:49.608$ a new technology that allows us to

NOTE Confidence: 0.928653492142857

01:10:49.608 --> 01:10:52.457 map out and actually in real time

NOTE Confidence: 0.928653492142857

01:10:52.547 --> 01:10:55.284 put a surface map on a patient.

NOTE Confidence: 0.928653492142857

01:10:55.290 --> 01:10:56.910 Using a light system,

NOTE Confidence: 0.928653492142857

 $01:10:56.910 \longrightarrow 01:10:58.935$ there are three cameras and

NOTE Confidence: 0.928653492142857

 $01:10:58.935 \longrightarrow 01:11:01.544$ we're able to check a patient's

 $01:11:01.544 \longrightarrow 01:11:03.696$ position prior to treatment.

NOTE Confidence: 0.928653492142857

01:11:03.700 --> 01:11:06.908 And see if they're in the correct position.

NOTE Confidence: 0.928653492142857

01:11:06.910 --> 01:11:09.094 By looking at the overlay of a pre

NOTE Confidence: 0.928653492142857

01:11:09.094 --> 01:11:11.662 sort of pre recorded or pre obtained

NOTE Confidence: 0.928653492142857

01:11:11.662 --> 01:11:13.612 body contour and basically when

NOTE Confidence: 0.928653492142857

01:11:13.686 --> 01:11:15.990 blue and green coincide they're in

NOTE Confidence: 0.928653492142857

 $01:11:15.990 \longrightarrow 01:11:17.826$ the exact right position position.

NOTE Confidence: 0.928653492142857

 $01:11:17.826 \longrightarrow 01:11:20.490$ Every part of their body is within a few

NOTE Confidence: 0.928653492142857

 $01{:}11{:}20.557 \dashrightarrow 01{:}11{:}23.109$ millimeters on you know where it should be,

NOTE Confidence: 0.928653492142857

01:11:23.110 --> 01:11:25.614 but if you see red or yellow that

NOTE Confidence: 0.928653492142857

 $01:11:25.614 \longrightarrow 01:11:28.201$ means that body part is in or out of

NOTE Confidence: 0.928653492142857

01:11:28.201 --> 01:11:30.349 the plane of the field and basically

NOTE Confidence: 0.928653492142857

 $01:11:30.349 \longrightarrow 01:11:33.061$ that allows us to maneuver them in the

NOTE Confidence: 0.928653492142857

01:11:33.061 --> 01:11:35.229 exact position prior to treatment,

NOTE Confidence: 0.928653492142857

 $01:11:35.230 \longrightarrow 01:11:36.910$ which is really important again

NOTE Confidence: 0.928653492142857

 $01:11:36.910 \longrightarrow 01:11:38.254$ when we're trying to.

01:11:38.260 --> 01:11:39.980 Deliver with, you know,

NOTE Confidence: 0.928653492142857

01:11:39.980 --> 01:11:42.130 sub millimeter to millimeter accuracy.

NOTE Confidence: 0.928653492142857

 $01:11:42.130 \longrightarrow 01:11:43.999$ The other thing this does is allows

NOTE Confidence: 0.928653492142857

01:11:43.999 --> 01:11:46.174 us to track in real time this these

NOTE Confidence: 0.928653492142857

01:11:46.174 --> 01:11:48.177 cameras are on in real time and

NOTE Confidence: 0.928653492142857

01:11:48.177 --> 01:11:50.403 giving constant feedback so that as a

NOTE Confidence: 0.928653492142857

01:11:50.403 --> 01:11:52.795 patient's chest wall changes in the

NOTE Confidence: 0.928653492142857

 $01:11:52.795 \longrightarrow 01:11:56.070$ motion of the chest as the chest wall moves,

NOTE Confidence: 0.928653492142857

 $01:11:56.070 \longrightarrow 01:11:57.366$ we are all we are able

NOTE Confidence: 0.928653492142857

 $01:11:57.370 \longrightarrow 01:11:58.796$ to track the chest wall.

NOTE Confidence: 0.928653492142857

 $01:11:58.796 \longrightarrow 01:12:00.632$ And that allows us to perform

NOTE Confidence: 0.928653492142857

 $01:12:00.632 \longrightarrow 01:12:02.709$ what we call gated treatments.

NOTE Confidence: 0.928653492142857

 $01{:}12{:}02.710 \dashrightarrow 01{:}12{:}04.726$ So when the patient is breathing

NOTE Confidence: 0.928653492142857

 $01:12:04.726 \longrightarrow 01:12:06.879$ we can choose when to deliver

NOTE Confidence: 0.928653492142857

 $01:12:06.879 \longrightarrow 01:12:09.093$ radiation and when to have the

 $01:12:09.093 \longrightarrow 01:12:11.523$ radiation beam stopped and we call

NOTE Confidence: 0.928653492142857

01:12:11.523 --> 01:12:12.738 those gated treatments.

NOTE Confidence: 0.855748158

 $01:12:12.740 \longrightarrow 01:12:14.310$ So it actually all starts

NOTE Confidence: 0.855748158

 $01:12:14.310 \longrightarrow 01:12:15.880$ when we simulate the patient.

NOTE Confidence: 0.855748158

 $01:12:15.880 \longrightarrow 01:12:17.987$ So when they come in for simulation

NOTE Confidence: 0.855748158

01:12:17.987 --> 01:12:19.804 and we used a basically a

NOTE Confidence: 0.855748158

 $01:12:19.804 \longrightarrow 01:12:21.778$ just a mockup of a torso here.

NOTE Confidence: 0.855748158

01:12:21.780 --> 01:12:22.590 But when they come in,

NOTE Confidence: 0.855748158

 $01:12:22.590 \longrightarrow 01:12:24.888$ there's a a camera here that

NOTE Confidence: 0.855748158

01:12:24.888 --> 01:12:27.223 actually starts to collect this data

NOTE Confidence: 0.855748158

01:12:27.223 --> 01:12:29.413 on their surface of the patient,

NOTE Confidence: 0.855748158

 $01:12:29.420 \longrightarrow 01:12:31.090$ collects the surface image and

NOTE Confidence: 0.855748158

 $01:12:31.090 \longrightarrow 01:12:33.691$ we pick up a spot for tracking

NOTE Confidence: 0.855748158

 $01:12:33.691 \longrightarrow 01:12:35.407$ their chest wall motion.

NOTE Confidence: 0.855748158

01:12:35.410 --> 01:12:39.618 And who so once we picked that spot?

NOTE Confidence: 0.855748158

 $01:12:39.620 \longrightarrow 01:12:41.528$ We then have the patient start

01:12:41.528 --> 01:12:43.451 breathing and where this is what

NOTE Confidence: 0.855748158

 $01:12:43.451 \longrightarrow 01:12:45.227$ we're seeing in the control room,

NOTE Confidence: 0.855748158

01:12:45.230 --> 01:12:46.658 the patients actually in,

NOTE Confidence: 0.855748158

 $01:12:46.658 \longrightarrow 01:12:49.460$ let's imagine this patients in the simulator.

NOTE Confidence: 0.855748158

01:12:49.460 --> 01:12:51.140 And we're tracking this position on

NOTE Confidence: 0.855748158

 $01:12:51.140 \longrightarrow 01:12:54.350$ their chest. They have these goggles on.

NOTE Confidence: 0.855748158

 $01:12:54.350 \longrightarrow 01:12:57.670$ We asked them to basically,

NOTE Confidence: 0.855748158

 $01:12:57.670 \longrightarrow 01:12:58.945$ this is their baseline breath

NOTE Confidence: 0.855748158

 $01:12:58.945 \longrightarrow 01:13:00.789$ and then we ask them to inhale.

NOTE Confidence: 0.855748158

 $01:13:00.790 \longrightarrow 01:13:02.375$ You'll see they'll hold their

NOTE Confidence: 0.855748158

 $01:13:02.375 \longrightarrow 01:13:04.418$ breath and then we exhale and

NOTE Confidence: 0.855748158

01:13:04.418 --> 01:13:05.986 the baseline breathing inhale.

NOTE Confidence: 0.855748158

 $01{:}13{:}05.990 \dashrightarrow 01{:}13{:}08.279$ What we're trying to do is figure

NOTE Confidence: 0.855748158

01:13:08.279 --> 01:13:10.794 out exactly what position can they

NOTE Confidence: 0.855748158

01:13:10.794 --> 01:13:13.154 sort of reproducibly obtain with,

01:13:13.160 --> 01:13:14.660 you know, expanding their chest.

NOTE Confidence: 0.855748158

 $01:13:14.660 \longrightarrow 01:13:15.959$ In other words,

NOTE Confidence: 0.855748158

 $01:13:15.959 \longrightarrow 01:13:18.124$ what's their kind of comfortable

NOTE Confidence: 0.855748158

01:13:18.124 --> 01:13:19.570 breath hold volume?

NOTE Confidence: 0.855748158

 $01:13:19.570 \longrightarrow 01:13:21.236$ And it's really cool because what was

NOTE Confidence: 0.855748158

01:13:21.236 --> 01:13:22.730 really interesting about this is we thought,

NOTE Confidence: 0.855748158 01:13:22.730 --> 01:13:22.882 oh, NOTE Confidence: 0.855748158

01:13:22.882 --> 01:13:24.250 this is going to be too much for patients.

NOTE Confidence: 0.855748158

 $01{:}13{:}24.250 \to 01{:}13{:}26.105$ It's going to make them really nervous.

NOTE Confidence: 0.855748158

01:13:26.110 --> 01:13:27.832 But what was really cool about it

NOTE Confidence: 0.855748158

 $01{:}13{:}27.832 \dashrightarrow 01{:}13{:}29.778$ was it gave them something to do.

NOTE Confidence: 0.7889869675

01:13:30.460 --> 01:13:31.840 And the Goggles Act

NOTE Confidence: 0.866093403333334

01:13:31.850 --> 01:13:34.874 sort of like A to insulate them from other,

NOTE Confidence: 0.8660934033333334

 $01:13:34.880 \longrightarrow 01:13:35.430$ like, distractors.

NOTE Confidence: 0.866093403333334

 $01:13:35.430 \longrightarrow 01:13:37.630$ And it actually helped a lot of our

NOTE Confidence: 0.866093403333334

 $01{:}13{:}37.681 \dashrightarrow 01{:}13{:}39.257$ patients feel more comfortable.

01:13:39.260 --> 01:13:40.760 And I think people like to

NOTE Confidence: 0.866093403333334

 $01:13:40.760 \longrightarrow 01:13:41.760$ participate in their care.

NOTE Confidence: 0.866093403333334

01:13:41.760 --> 01:13:42.937 You know, people like say, oh,

NOTE Confidence: 0.866093403333334

 $01:13:42.937 \longrightarrow 01:13:44.456$ what can I do to help myself?

NOTE Confidence: 0.866093403333334

01:13:44.460 --> 01:13:46.076 And when we tell them this is something

NOTE Confidence: 0.866093403333334

01:13:46.076 --> 01:13:47.720 you could do and you can't do it wrong,

NOTE Confidence: 0.866093403333334

 $01:13:47.720 \longrightarrow 01:13:49.589$ they like that.

NOTE Confidence: 0.866093403333334

 $01:13:49.590 \longrightarrow 01:13:53.132$ So when we do the simulation and you look at.

NOTE Confidence: 0.866093403333334

 $01:13:53.132 \longrightarrow 01:13:54.524$ The comparison will do

NOTE Confidence: 0.866093403333334

 $01:13:54.524 \longrightarrow 01:13:56.050$ basically a simulation.

NOTE Confidence: 0.866093403333334

01:13:56.050 --> 01:13:57.387 We'll look at it in free breathing,

NOTE Confidence: 0.866093403333334

 $01:13:57.390 \longrightarrow 01:13:58.332$ and we'll look at what their

NOTE Confidence: 0.866093403333334

01:13:58.332 --> 01:13:59.230 chest looks like in breath.

NOTE Confidence: 0.866093403333334

 $01:13:59.230 \longrightarrow 01:14:00.618$ Hold on the left.

NOTE Confidence: 0.866093403333334

 $01:14:00.618 \longrightarrow 01:14:03.940$ You can see this patient in free breathing.

01:14:03.940 --> 01:14:05.578 The chest is right up against,

NOTE Confidence: 0.866093403333334

 $01:14:05.580 \longrightarrow 01:14:06.884$ I'm sorry, the the.

NOTE Confidence: 0.866093403333334

 $01:14:06.884 \longrightarrow 01:14:09.650$ Heart is right up against the chest wall.

NOTE Confidence: 0.866093403333334

 $01:14:09.650 \longrightarrow 01:14:12.138$ You could see the heart sitting on the

NOTE Confidence: 0.866093403333334

 $01:14:12.138 \longrightarrow 01:14:14.541$ diaphragm on the right when they expand

NOTE Confidence: 0.866093403333334

 $01:14:14.541 \longrightarrow 01:14:16.989$ their chest and the diaphragm moves down.

NOTE Confidence: 0.866093403333334

 $01:14:16.990 \longrightarrow 01:14:19.153$ The heart that creates a little space

NOTE Confidence: 0.866093403333334

 $01:14:19.153 \longrightarrow 01:14:21.209$ between the heart and the chest wall.

NOTE Confidence: 0.866093403333334

01:14:21.210 --> 01:14:23.450 So diaphragm drops and the heart moves

NOTE Confidence: 0.866093403333334

 $01:14:23.450 \longrightarrow 01:14:25.709$ down and away from the chest wall.

NOTE Confidence: 0.866093403333334

 $01:14:25.710 \longrightarrow 01:14:28.473$ So now when we go to do our planning.

NOTE Confidence: 0.866093403333334 01:14:28.480 --> 01:14:29.260 So Step 2, NOTE Confidence: 0.866093403333334

 $01:14:29.260 \longrightarrow 01:14:30.560$ as you did your simulation,

NOTE Confidence: 0.866093403333334

01:14:30.560 --> 01:14:32.030 now you want to go back and

NOTE Confidence: 0.866093403333334

 $01:14:32.030 \longrightarrow 01:14:32.940$ do your treatment plan.

NOTE Confidence: 0.866093403333334

 $01:14:32.940 \longrightarrow 01:14:35.496$ And on the left you could see free breathing.

 $01:14:35.500 \longrightarrow 01:14:37.756$ The chest is sort of collapsed.

NOTE Confidence: 0.866093403333334

 $01:14:37.760 \longrightarrow 01:14:38.604$ And there's the line.

NOTE Confidence: 0.866093403333334

01:14:38.604 --> 01:14:40.283 That little green line is where we'd like

NOTE Confidence: 0.866093403333334

 $01:14:40.283 \longrightarrow 01:14:41.779$ to put the edge of our tangent field.

NOTE Confidence: 0.866093403333334

01:14:41.780 --> 01:14:42.758 You could see it's right near,

NOTE Confidence: 0.866093403333334

01:14:42.760 --> 01:14:44.765 actually right near the left

NOTE Confidence: 0.866093403333334

01:14:44.765 --> 01:14:45.968 anterior descending artery.

NOTE Confidence: 0.866093403333334

 $01:14:45.970 \longrightarrow 01:14:47.380$ But when the patient on the

NOTE Confidence: 0.866093403333334

01:14:47.380 --> 01:14:48.610 is doing their breath hold,

NOTE Confidence: 0.866093403333334

 $01:14:48.610 \longrightarrow 01:14:49.858$ this is the same patient on

NOTE Confidence: 0.866093403333334

 $01:14:49.858 \longrightarrow 01:14:50.950$ the right and breath hold.

NOTE Confidence: 0.866093403333334

 $01:14:50.950 \longrightarrow 01:14:52.786$ We've moved the chest on the

NOTE Confidence: 0.8660934033333334

 $01{:}14{:}52.786 \dashrightarrow 01{:}14{:}54.641$ contents of the chest such that

NOTE Confidence: 0.866093403333334

 $01:14:54.641 \longrightarrow 01:14:56.615$ the heart is now moved away from

NOTE Confidence: 0.866093403333334

 $01:14:56.615 \longrightarrow 01:14:58.651$ the field and a smaller portion of

 $01:14:58.651 \longrightarrow 01:15:00.344$ the lung is now being radiated.

NOTE Confidence: 0.866093403333334

01:15:00.344 --> 01:15:02.318 So actually you know it was really

NOTE Confidence: 0.866093403333334

 $01:15:02.318 \longrightarrow 01:15:04.310$ a game changer because now you know

NOTE Confidence: 0.866093403333334

01:15:04.310 --> 01:15:06.450 your your sort of therapeutic ratio,

NOTE Confidence: 0.866093403333334

 $01:15:06.450 \longrightarrow 01:15:08.510$ your risk benefit is really

NOTE Confidence: 0.866093403333334

01:15:08.510 --> 01:15:10.570 changed because you've been able

NOTE Confidence: 0.866093403333334

 $01:15:10.640 \longrightarrow 01:15:12.700$ to change the internal organs.

NOTE Confidence: 0.866093403333334

01:15:12.700 --> 01:15:13.348 And then finally,

NOTE Confidence: 0.866093403333334

01:15:13.348 --> 01:15:14.860 when they get on the treatment machine,

NOTE Confidence: 0.866093403333334

01:15:14.860 --> 01:15:16.252 you have to have what's called

NOTE Confidence: 0.866093403333334

 $01:15:16.252 \longrightarrow 01:15:17.180$ a gated delivery system.

NOTE Confidence: 0.866093403333334

 $01:15:17.180 \longrightarrow 01:15:19.588$ So now we've set up the plan.

NOTE Confidence: 0.866093403333334

01:15:19.590 --> 01:15:21.126 They know what to do with the goggles,

NOTE Confidence: 0.8660934033333334

01:15:21.130 --> 01:15:22.708 but when you actually deliver radiation,

NOTE Confidence: 0.866093403333334

01:15:22.710 --> 01:15:24.859 you have to have a system that

NOTE Confidence: 0.866093403333334

 $01:15:24.859 \longrightarrow 01:15:26.565$ basically will only give the

 $01:15:26.565 \longrightarrow 01:15:28.375$ radiation when they're in the

NOTE Confidence: 0.866093403333334

 $01:15:28.375 \longrightarrow 01:15:30.042$ exact correct breath hold position.

NOTE Confidence: 0.866093403333334

01:15:30.042 --> 01:15:32.490 And I tell them you can't do it wrong

NOTE Confidence: 0.866093403333334

 $01:15:32.552 \longrightarrow 01:15:34.869$ because they all get nervous about that.

NOTE Confidence: 0.866093403333334

 $01:15:34.870 \longrightarrow 01:15:36.872$ But basically we have three cameras in

NOTE Confidence: 0.866093403333334

 $01:15:36.872 \longrightarrow 01:15:39.156$ the room and the three cameras again

NOTE Confidence: 0.866093403333334

01:15:39.156 --> 01:15:41.660 are tracking the patient's chest wall motion.

NOTE Confidence: 0.866093403333334

01:15:41.660 --> 01:15:42.638 And we have,

NOTE Confidence: 0.866093403333334

 $01:15:42.638 \longrightarrow 01:15:45.520$ the patient has their goggles in the goggles,

NOTE Confidence: 0.866093403333334

 $01{:}15{:}45.520 \dashrightarrow 01{:}15{:}47.080$ they see this little green box

NOTE Confidence: 0.866093403333334

 $01:15:47.080 \longrightarrow 01:15:48.989$ and the orange is like sort of a,

NOTE Confidence: 0.866093403333334

 $01:15:48.990 \longrightarrow 01:15:50.486$ a vertical line that goes up and down.

NOTE Confidence: 0.866093403333334

 $01{:}15{:}50.490 \dashrightarrow 01{:}15{:}52.380$ And this biofeedback allows them

NOTE Confidence: 0.866093403333334

 $01:15:52.380 \longrightarrow 01:15:54.674$ to position their chest in exactly

NOTE Confidence: 0.866093403333334

 $01:15:54.674 \longrightarrow 01:15:56.672$ the right spot and when they're

 $01:15:56.672 \longrightarrow 01:15:57.671$ in that spot

NOTE Confidence: 0.817686503461538

 $01:15:57.742 \longrightarrow 01:15:59.860$ and their chest wall is expanded.

NOTE Confidence: 0.817686503461538

 $01:15:59.860 \longrightarrow 01:16:01.148$ The beam goes on,

NOTE Confidence: 0.817686503461538

01:16:01.148 --> 01:16:02.758 treatments delivered in 20 seconds,

NOTE Confidence: 0.817686503461538

 $01:16:02.760 \longrightarrow 01:16:05.427$ 30 seconds at a time and when

NOTE Confidence: 0.817686503461538

 $01:16:05.427 \longrightarrow 01:16:07.840$ they exhale the beam goes off.

NOTE Confidence: 0.817686503461538

01:16:07.840 --> 01:16:09.784 So this is a way that you know

NOTE Confidence: 0.817686503461538

 $01:16:09.784 \longrightarrow 01:16:11.852$ again with this system that we use

NOTE Confidence: 0.817686503461538

 $01:16:11.852 \longrightarrow 01:16:13.282$ we can significantly reduce the

NOTE Confidence: 0.817686503461538

 $01:16:13.282 \longrightarrow 01:16:15.290$ the dose to the heart and lung.

NOTE Confidence: 0.817686503461538

 $01:16:15.290 \longrightarrow 01:16:17.418$ And again it was a real game changer

NOTE Confidence: 0.817686503461538

 $01:16:17.418 \longrightarrow 01:16:19.419$ because this is an actually this is

NOTE Confidence: 0.817686503461538

 $01:16:19.419 \longrightarrow 01:16:21.238$ being used with lymphomas and other

NOTE Confidence: 0.817686503461538

01:16:21.238 --> 01:16:22.630 thoracic malignancies because now

NOTE Confidence: 0.817686503461538

 $01:16:22.630 \longrightarrow 01:16:24.758$ using breath hold we can actually

NOTE Confidence: 0.817686503461538

 $01:16:24.758 \longrightarrow 01:16:27.161$ change their anatomy to suit what

 $01:16:27.161 \longrightarrow 01:16:30.388$ we need to do for the malignancy.

NOTE Confidence: 0.817686503461538

 $01:16:30.390 \longrightarrow 01:16:32.322$ And then just two final things

NOTE Confidence: 0.817686503461538

 $01:16:32.322 \longrightarrow 01:16:34.090$ I wanted to speak about.

NOTE Confidence: 0.817686503461538

 $01:16:34.090 \longrightarrow 01:16:36.142$ Now that we have such great

NOTE Confidence: 0.817686503461538

01:16:36.142 --> 01:16:36.826 systemic therapies,

NOTE Confidence: 0.817686503461538

 $01:16:36.830 \longrightarrow 01:16:39.882$ we are seeing that we're using more

NOTE Confidence: 0.817686503461538

 $01:16:39.882 \longrightarrow 01:16:42.831$ and more radiation therapy and a

NOTE Confidence: 0.817686503461538

 $01:16:42.831 \longrightarrow 01:16:47.220$ stereotactic fashion to deliver radiation.

NOTE Confidence: 0.817686503461538

 $01:16:47.220 \longrightarrow 01:16:49.500$ In higher doses to more targeted

NOTE Confidence: 0.817686503461538

 $01:16:49.500 \longrightarrow 01:16:52.601$ sites so that we can optimize the

NOTE Confidence: 0.817686503461538

 $01:16:52.601 \longrightarrow 01:16:55.262$ control of both intracranial and

NOTE Confidence: 0.817686503461538

 $01{:}16{:}55.262 \rightarrow 01{:}16{:}57.248$ extracranial metastatic disease.

NOTE Confidence: 0.817686503461538

01:16:57.248 --> 01:16:59.896 For intracranial metastatic disease,

NOTE Confidence: 0.817686503461538

 $01:16:59.900 \longrightarrow 01:17:02.784$ we have the only gamma knife stereotactic

NOTE Confidence: 0.817686503461538

 $01:17:02.784 \longrightarrow 01:17:04.760$ radiosurgery unit in the state.

 $01{:}17{:}04.760 \dashrightarrow 01{:}17{:}07.196$ We have a huge gamma knife program.

NOTE Confidence: 0.817686503461538

 $01:17:07.200 \longrightarrow 01:17:08.055$ It's very active.

NOTE Confidence: 0.817686503461538

 $01:17:08.055 \longrightarrow 01:17:09.765$ I don't know how many thousands

NOTE Confidence: 0.817686503461538

 $01:17:09.765 \longrightarrow 01:17:11.478$ of patients they see a year,

NOTE Confidence: 0.817686503461538

01:17:11.480 --> 01:17:13.472 but it's I'd say the gamma knife is

NOTE Confidence: 0.817686503461538

 $01{:}17{:}13.472 \dashrightarrow 01{:}17{:}15.510$ pretty much running almost all the time.

NOTE Confidence: 0.817686503461538

01:17:15.510 --> 01:17:17.855 Now we also have a new program

NOTE Confidence: 0.817686503461538

01:17:17.855 --> 01:17:18.860 with Doctor Ann,

NOTE Confidence: 0.817686503461538

01:17:18.860 --> 01:17:22.658 which is the Spine SRS program

NOTE Confidence: 0.817686503461538

01:17:22.660 --> 01:17:24.880 and that program with Doctor

NOTE Confidence: 0.817686503461538

 $01{:}17{:}24.880 \dashrightarrow 01{:}17{:}27.100$ Mandel is getting very active.

NOTE Confidence: 0.817686503461538

01:17:27.100 --> 01:17:27.976 And I'll just.

NOTE Confidence: 0.817686503461538

01:17:27.976 --> 01:17:30.020 I'll give the little background in why

NOTE Confidence: 0.817686503461538

 $01{:}17{:}30.079 \dashrightarrow 01{:}17{:}32.116$ we do spine radio surgery in a minute,

NOTE Confidence: 0.817686503461538

 $01:17:32.120 \longrightarrow 01:17:34.344$ but we also have the ability to do

NOTE Confidence: 0.817686503461538

 $01:17:34.344 \longrightarrow 01:17:36.651$ body radio surgery and that would

 $01:17:36.651 \longrightarrow 01:17:39.042$ be for sites that again someone

NOTE Confidence: 0.817686503461538

 $01:17:39.042 \longrightarrow 01:17:40.854$ has a long disease free interval,

NOTE Confidence: 0.817686503461538

 $01:17:40.860 \longrightarrow 01:17:42.743$ something comes up in a site that

NOTE Confidence: 0.817686503461538

 $01:17:42.743 \longrightarrow 01:17:45.326$ we feel might be the only site or a

NOTE Confidence: 0.817686503461538

 $01:17:45.326 \longrightarrow 01:17:47.076$ limited site of extracranial metastatic

NOTE Confidence: 0.817686503461538

 $01:17:47.076 \longrightarrow 01:17:50.500$ disease. We can also do body SRS.

NOTE Confidence: 0.817686503461538

 $01:17:50.500 \longrightarrow 01:17:53.302$ So any type of stereotactic radiosurgery

NOTE Confidence: 0.817686503461538

01:17:53.302 --> 01:17:55.840 requires a very highly precise,

NOTE Confidence: 0.817686503461538

01:17:55.840 --> 01:17:58.008 precise treatment and a

NOTE Confidence: 0.817686503461538

01:17:58.008 --> 01:17:59.634 lot of immobilization.

NOTE Confidence: 0.817686503461538

 $01:17:59.640 \longrightarrow 01:18:00.820$ But the advantage there is

NOTE Confidence: 0.817686503461538

01:18:00.820 --> 01:18:02.360 that you can treat a large,

NOTE Confidence: 0.817686503461538

 $01{:}18{:}02.360 \dashrightarrow 01{:}18{:}04.435$ a small target with extremely

NOTE Confidence: 0.817686503461538

01:18:04.435 --> 01:18:06.980 high doses and very high dose,

NOTE Confidence: 0.817686503461538

 $01:18:06.980 \longrightarrow 01:18:08.212$ steep falloff of dose.

 $01:18:08.212 \longrightarrow 01:18:10.060$ So very little dose to the

NOTE Confidence: 0.817686503461538

01:18:10.129 --> 01:18:12.144 surrounding tissue and it's typically

NOTE Confidence: 0.817686503461538

 $01:18:12.144 \longrightarrow 01:18:14.159$ done in a single fraction.

NOTE Confidence: 0.817686503461538

01:18:14.160 --> 01:18:15.720 This is actually being used very,

NOTE Confidence: 0.817686503461538

 $01:18:15.720 \longrightarrow 01:18:17.540$ very frequently for lung cancers.

NOTE Confidence: 0.817686503461538

01:18:17.540 --> 01:18:19.538 Now for early stage lung cancer,

NOTE Confidence: 0.817686503461538

 $01:18:19.540 \longrightarrow 01:18:21.640$ the benefit from metastases is,

NOTE Confidence: 0.817686503461538

01:18:21.640 --> 01:18:23.936 is that you can get more durable local

NOTE Confidence: 0.817686503461538

01:18:23.936 --> 01:18:26.008 control and again in select patients.

NOTE Confidence: 0.804687427777778

01:18:28.290 --> 01:18:31.234 As they spoke about with the spine SBRT

NOTE Confidence: 0.804687427777778

 $01{:}18{:}31.234 \dashrightarrow 01{:}18{:}34.868$ program, the spine SBRT, here's just a.

NOTE Confidence: 0.80468742777778

 $01:18:34.870 \longrightarrow 01:18:36.914$ Schematic that shows how precise it is.

NOTE Confidence: 0.804687427777778

01:18:36.920 --> 01:18:39.404 You can see that you can take this very

NOTE Confidence: 0.804687427777778

01:18:39.404 --> 01:18:41.678 high dose curve which is red and wrap

NOTE Confidence: 0.80468742777778

01:18:41.678 --> 01:18:44.153 a very high dose around the vertebral

NOTE Confidence: 0.80468742777778

 $01:18:44.153 \longrightarrow 01:18:46.523$ body while avoiding the spinal canal,

 $01:18:46.530 \longrightarrow 01:18:50.002$ canal, spinal cord and that dose can be

NOTE Confidence: 0.80468742777778

 $01:18:50.002 \longrightarrow 01:18:52.850$ adjusted within again a few millimeters.

NOTE Confidence: 0.80468742777778

 $01:18:52.850 \longrightarrow 01:18:54.110$ It's a very precise treatment.

NOTE Confidence: 0.80468742777778

01:18:54.110 --> 01:18:56.194 It requires milligrams, etcetera,

NOTE Confidence: 0.804687427777778

 $01:18:56.194 \longrightarrow 01:18:58.799$ but very helpful for various

NOTE Confidence: 0.80468742777778

01:18:58.799 --> 01:19:00.290 patient populations.

NOTE Confidence: 0.804687427777778

01:19:00.290 --> 01:19:02.551 Spinus PRT is being used for people

NOTE Confidence: 0.80468742777778

 $01:19:02.551 \longrightarrow 01:19:04.040$ with oligo metastatic disease,

NOTE Confidence: 0.80468742777778

 $01{:}19{:}04.040 \dashrightarrow 01{:}19{:}07.220$ especially if it's a new diagnosis.

NOTE Confidence: 0.80468742777778

 $01:19:07.220 \longrightarrow 01:19:09.302$ Some people have a limited metastatic

NOTE Confidence: 0.804687427777778

 $01:19:09.302 \longrightarrow 01:19:11.224$ lesion after a long interval

NOTE Confidence: 0.804687427777778

 $01:19:11.224 \longrightarrow 01:19:13.080$ from their primary diagnosis.

NOTE Confidence: 0.804687427777778

 $01{:}19{:}13.080 \dashrightarrow 01{:}19{:}16.224$ Or for people who have previously

NOTE Confidence: 0.80468742777778

01:19:16.224 --> 01:19:17.796 radiated spine metastases,

NOTE Confidence: 0.804687427777778

01:19:17.800 --> 01:19:19.500 we've done maybe external beam,

 $01:19:19.500 \longrightarrow 01:19:21.336$ and then they have a recurrence,

NOTE Confidence: 0.80468742777778

 $01:19:21.340 \longrightarrow 01:19:22.099$ which is unusual,

NOTE Confidence: 0.80468742777778

 $01:19:22.099 \longrightarrow 01:19:24.220$ but maybe a recurrence a few years later.

NOTE Confidence: 0.804687427777778

 $01:19:24.220 \longrightarrow 01:19:26.676$ We can give this and spare the spinal

NOTE Confidence: 0.80468742777778

 $01:19:26.676 \longrightarrow 01:19:29.028$ cord and treat the vertebral body.

NOTE Confidence: 0.804687427777778 01:19:29.030 --> 01:19:29.918 And finally,

NOTE Confidence: 0.804687427777778

 $01:19:29.918 \longrightarrow 01:19:32.582$ just our gamma knife program and

NOTE Confidence: 0.80468742777778

 $01:19:32.582 \longrightarrow 01:19:35.058$ especially in this era of of very,

NOTE Confidence: 0.804687427777778

01:19:35.060 --> 01:19:37.800 very effective targeted therapies,

NOTE Confidence: 0.80468742777778

 $01:19:37.800 \longrightarrow 01:19:40.540$ we still have the,

NOTE Confidence: 0.804687427777778

 $01{:}19{:}40.540 \dashrightarrow 01{:}19{:}42.878$ the brain is still a sanctuary site.

NOTE Confidence: 0.80468742777778

 $01:19:42.880 \longrightarrow 01:19:46.219$ We are still dealing with people who

NOTE Confidence: 0.804687427777778

 $01:19:46.219 \longrightarrow 01:19:49.215$ have uncontrolled or come to us with

NOTE Confidence: 0.804687427777778

 $01:19:49.215 \longrightarrow 01:19:50.436$ uncontrolled intracranial disease.

NOTE Confidence: 0.80468742777778

01:19:50.440 --> 01:19:51.748 And with our gamma knife program,

NOTE Confidence: 0.804687427777778

 $01:19:51.750 \longrightarrow 01:19:54.262$ we're able to deliver very high doses of

 $01:19:54.262 \longrightarrow 01:19:56.498$ radiation to multiple brain metastases.

NOTE Confidence: 0.804687427777778

 $01:19:56.500 \longrightarrow 01:19:58.120$ It's a single treatment session.

NOTE Confidence: 0.80468742777778

 $01:19:58.120 \longrightarrow 01:19:59.038$ People go home.

NOTE Confidence: 0.804687427777778

01:19:59.038 --> 01:20:01.670 I know that Doctor Bindra says his famous,

NOTE Confidence: 0.804687427777778

01:20:01.670 --> 01:20:01.882 his,

NOTE Confidence: 0.804687427777778

01:20:01.882 --> 01:20:03.790 his favorite call is like the people who say,

NOTE Confidence: 0.804687427777778 01:20:03.790 --> 01:20:04.240 Oh yeah,

NOTE Confidence: 0.804687427777778

 $01{:}20{:}04.240 \dashrightarrow 01{:}20{:}06.040$ I just went golfing like the guys like

NOTE Confidence: 0.80468742777778

 $01:20:06.092 \longrightarrow 01:20:07.856$ 24 hours out and he gives him a follow

NOTE Confidence: 0.80468742777778

 $01:20:07.856 \longrightarrow 01:20:09.689$ up call and the guy was out golfing.

NOTE Confidence: 0.80468742777778 01:20:09.690 --> 01:20:11.022 It's a very, NOTE Confidence: 0.80468742777778

01:20:11.022 --> 01:20:11.910 very beneficial,

NOTE Confidence: 0.804687427777778

 $01{:}20{:}11.910 \dashrightarrow 01{:}20{:}15.434$ very effective treatment and gives more

NOTE Confidence: 0.80468742777778

 $01{:}20{:}15.434 \dashrightarrow 01{:}20{:}17.366$ durable local control for brain medicine,

NOTE Confidence: 0.804687427777778

01:20:17.370 --> 01:20:18.930 significant decrease in morbidity

01:20:18.930 --> 01:20:20.880 when compared with our standard

NOTE Confidence: 0.80468742777778

 $01:20:20.880 \longrightarrow 01:20:22.650$ whole brain radiation therapy.

NOTE Confidence: 0.80468742777778

01:20:22.650 --> 01:20:23.676 And you know,

NOTE Confidence: 0.804687427777778

 $01:20:23.676 \longrightarrow 01:20:26.070$ Doctor Chang and my other colleagues are

NOTE Confidence: 0.804687427777778

 $01:20:26.135 \longrightarrow 01:20:28.263$ just always available and a doctor is

NOTE Confidence: 0.80468742777778

01:20:28.263 --> 01:20:31.139 here and I work really closely with them.

NOTE Confidence: 0.80468742777778

 $01{:}20{:}31.140 \dashrightarrow 01{:}20{:}33.100$ And and Doctor Mcgauley and we we can

NOTE Confidence: 0.80468742777778

01:20:33.100 --> 01:20:35.037 get those patients to the gamma knife

NOTE Confidence: 0.804687427777778

 $01:20:35.037 \longrightarrow 01:20:36.765$ people to the spine radio surgeons

NOTE Confidence: 0.804687427777778

01:20:36.765 --> 01:20:38.774 and anything they need at any time.

NOTE Confidence: 0.804687427777778

 $01{:}20{:}38.780 \dashrightarrow 01{:}20{:}40.931$ So we we have a very like hand in

NOTE Confidence: 0.80468742777778

 $01:20:40.931 \longrightarrow 01:20:43.136$ glove type of relationship with them.

NOTE Confidence: 0.804687427777778

 $01:20:43.140 \longrightarrow 01:20:45.040$ So basically radiation therapy

NOTE Confidence: 0.804687427777778

 $01{:}20{:}45.040 \dashrightarrow 01{:}20{:}47.415$ to summarize is an essential

NOTE Confidence: 0.80468742777778

 $01:20:47.415 \longrightarrow 01:20:49.818$ part of the multidisciplinary.

NOTE Confidence: 0.80468742777778

 $01{:}20{:}49.820 \dashrightarrow 01{:}20{:}51.248$ Treatment for breast cancer,

 $01:20:51.248 \longrightarrow 01:20:53.390$ it's very safe and effective and

NOTE Confidence: 0.804687427777778

 $01:20:53.452 \longrightarrow 01:20:55.420$ you know I think the DBH is making

NOTE Confidence: 0.80468742777778

01:20:55.420 --> 01:20:57.431 it even more safe and effective and

NOTE Confidence: 0.80468742777778

01:20:57.431 --> 01:20:59.654 it reduces the risk of local and

NOTE Confidence: 0.804687427777778

 $01:20:59.654 \longrightarrow 01:21:01.916$ regional recurrence by 50 to 70%.

NOTE Confidence: 0.80468742777778

01:21:01.920 --> 01:21:03.999 And you know what's really I think

NOTE Confidence: 0.804687427777778

 $01:21:03.999 \longrightarrow 01:21:06.285$ going to help in the future with

NOTE Confidence: 0.80468742777778

 $01:21:06.285 \longrightarrow 01:21:07.940$ quality of life for patients,

NOTE Confidence: 0.80468742777778

01:21:07.940 --> 01:21:10.406 especially for gamma knife is the

NOTE Confidence: 0.80468742777778

 $01:21:10.406 \longrightarrow 01:21:12.621$ use of these stereotactic procedures

NOTE Confidence: 0.804687427777778

 $01:21:12.621 \longrightarrow 01:21:15.096$ to to control local regional

NOTE Confidence: 0.804687427777778

 $01{:}21{:}15.096 \dashrightarrow 01{:}21{:}17.076$ disease and metastatic disease.

NOTE Confidence: 0.804687427777778

 $01:21:17.080 \longrightarrow 01:21:17.960$ Thank you very much.

NOTE Confidence: 0.807927305

01:21:21.560 --> 01:21:25.272 Thank you Susan for a very you

NOTE Confidence: 0.807927305

01:21:25.272 --> 01:21:27.240 know good comprehensive review,

 $01:21:27.240 \longrightarrow 01:21:29.478$ comprehensive with short review of radiation

NOTE Confidence: 0.807927305

 $01:21:29.478 \longrightarrow 01:21:31.779$ oncology and what we provide here.

NOTE Confidence: 0.807927305

 $01:21:31.780 \longrightarrow 01:21:33.784$ The the biggest thing is availability

NOTE Confidence: 0.807927305

 $01:21:33.784 \longrightarrow 01:21:35.977$ of all the providers and really the

NOTE Confidence: 0.807927305

01:21:35.977 --> 01:21:38.191 great thing that I can call you and

NOTE Confidence: 0.807927305

01:21:38.191 --> 01:21:39.985 get the person in fairly quickly

NOTE Confidence: 0.807927305

 $01:21:39.985 \longrightarrow 01:21:42.198$ within the same day or sometimes

NOTE Confidence: 0.807927305

 $01:21:42.198 \longrightarrow 01:21:44.814$ within 24 hours and that's wonderful.

NOTE Confidence: 0.807927305

 $01:21:44.820 \longrightarrow 01:21:46.682$ So thank you very much for everybody

NOTE Confidence: 0.807927305

01:21:46.682 --> 01:21:48.781 to to join us today and I just

NOTE Confidence: 0.807927305

 $01:21:48.781 \longrightarrow 01:21:50.456$ was hoping we would have some

NOTE Confidence: 0.807927305

 $01:21:50.456 \longrightarrow 01:21:51.948$ questions from the audience.

NOTE Confidence: 0.863517245

 $01:21:54.280 \longrightarrow 01:21:55.570$ I had. I don't see any.

NOTE Confidence: 0.863517245

 $01:21:55.570 \longrightarrow 01:21:57.640$ No, there is one question here.

NOTE Confidence: 0.890116198

 $01:21:57.710 \longrightarrow 01:21:59.418$ I'm going to stop sharing. There we go.

NOTE Confidence: 0.88826765375

 $01:22:01.930 \longrightarrow 01:22:03.274$ I don't know how do they ask

 $01:22:03.274 \longrightarrow 01:22:04.130$ questions, I'm not sure.

NOTE Confidence: 0.898097536363636

 $01:22:05.820 \longrightarrow 01:22:06.980$ I'm looking at the question

NOTE Confidence: 0.898097536363636

 $01:22:06.980 \longrightarrow 01:22:08.440$ answer in the in the chat,

NOTE Confidence: 0.898097536363636

 $01:22:08.440 \longrightarrow 01:22:12.238$ but I don't see any so.

NOTE Confidence: 0.898097536363636

01:22:12.240 --> 01:22:14.337 So I may ask one question of all the,

NOTE Confidence: 0.898097536363636

01:22:14.340 --> 01:22:16.140 you know, all the speakers

NOTE Confidence: 0.898097536363636

 $01:22:16.140 \longrightarrow 01:22:17.940$ tonight and anyone can answer.

NOTE Confidence: 0.898097536363636

 $01{:}22{:}17.940 \dashrightarrow 01{:}22{:}20.916$ Umm, it's a very simple question.

NOTE Confidence: 0.898097536363636

 $01:22:20.920 \longrightarrow 01:22:22.915$ What do you think is the most

NOTE Confidence: 0.898097536363636

 $01:22:22.915 \longrightarrow 01:22:24.355$ important advance in breast cancer

NOTE Confidence: 0.898097536363636

01:22:24.355 --> 01:22:26.451 over the past year and it can be

NOTE Confidence: 0.898097536363636

 $01:22:26.514 \longrightarrow 01:22:28.348$ one or two sentences and we can

NOTE Confidence: 0.898097536363636

 $01:22:28.348 \longrightarrow 01:22:30.199$ finish up this meeting this evening.

NOTE Confidence: 0.898097536363636

 $01:22:30.199 \longrightarrow 01:22:31.964$ Sarah, you want to start.

NOTE Confidence: 0.750245201666667

01:22:32.740 --> 01:22:34.996 So in in breast medical oncology,

 $01:22:35.000 \longrightarrow 01:22:37.177$ I think the biggest breakthrough was

NOTE Confidence: 0.750245201666667

 $01:22:37.177 \longrightarrow 01:22:39.817$ the use of an antibody drug conjugate,

NOTE Confidence: 0.750245201666667

 $01:22:39.820 \longrightarrow 01:22:42.190$ which is kind of like a.

NOTE Confidence: 0.750245201666667

01:22:42.190 --> 01:22:44.240 Very directed heat seeking missile

NOTE Confidence: 0.750245201666667

 $01:22:44.240 \longrightarrow 01:22:47.036$ toward the her two protein which is

NOTE Confidence: 0.750245201666667

01:22:47.036 --> 01:22:48.877 effective in not just people who have

NOTE Confidence: 0.750245201666667

01:22:48.877 --> 01:22:50.770 truly hurt to overexpressing cancers,

NOTE Confidence: 0.750245201666667

 $01:22:50.770 \longrightarrow 01:22:52.800$ but lots of different other kinds that

NOTE Confidence: 0.750245201666667

 $01:22:52.800 \longrightarrow 01:22:54.908$ have very low levels of expression.

NOTE Confidence: 0.750245201666667

 $01:22:54.910 \longrightarrow 01:22:56.720$ Kind of revolutionary in the

NOTE Confidence: 0.750245201666667

 $01:22:56.720 \longrightarrow 01:22:58.530$ treatment of metastatic disease waji.

NOTE Confidence: 0.750245201666667

 $01:22:58.530 \longrightarrow 01:23:00.978$ I would point out that there is a

NOTE Confidence: 0.750245201666667

 $01:23:00.978 \longrightarrow 01:23:03.152$ question that asks about the best way to

NOTE Confidence: 0.750245201666667

 $01:23:03.152 \longrightarrow 01:23:04.999$ initiate a referral to the breast team.

NOTE Confidence: 0.884426565

 $01:23:06.310 \longrightarrow 01:23:07.258$ You can answer there,

NOTE Confidence: 0.90554838

 $01:23:07.330 \longrightarrow 01:23:11.810$ OK. We are happy to take referrals

 $01:23:11.810 \longrightarrow 01:23:13.900$ through any referrals to breast

NOTE Confidence: 0.90554838

 $01{:}23{:}13.900 \longrightarrow 01{:}23{:}15.990$ surgery can be breast surgery.

NOTE Confidence: 0.90554838

 $01:23:15.990 \longrightarrow 01:23:18.384$ Guildford can be breast surgery New Haven.

NOTE Confidence: 0.90554838

01:23:18.390 --> 01:23:20.154 And a part of our process is to try

NOTE Confidence: 0.90554838

01:23:20.154 --> 01:23:22.136 to make sure that we're accommodating

NOTE Confidence: 0.90554838

 $01:23:22.136 \longrightarrow 01:23:23.866$ where the patient's coming from.

NOTE Confidence: 0.90554838

 $01:23:23.870 \longrightarrow 01:23:25.232$ So that if the patient is

NOTE Confidence: 0.90554838

01:23:25.232 --> 01:23:26.140 located on the shoreline,

NOTE Confidence: 0.90554838

01:23:26.140 --> 01:23:27.820 we really try to get them into

NOTE Confidence: 0.90554838

 $01{:}23{:}27.820 \dashrightarrow 01{:}23{:}29.075$ the shoreline because there's no

NOTE Confidence: 0.90554838

 $01:23:29.075 \longrightarrow 01:23:30.755$ reason for them to shut down and

NOTE Confidence: 0.90554838

 $01:23:30.755 \longrightarrow 01:23:32.067$ tolerate the air rights garage.

NOTE Confidence: 0.90616145375

 $01{:}23{:}33.600 \dashrightarrow 01{:}23{:}35.360$ And you know, if there's ever any question,

NOTE Confidence: 0.90616145375

01:23:35.360 --> 01:23:36.540 you're welcome to call us.

NOTE Confidence: 0.90616145375

 $01:23:36.540 \longrightarrow 01:23:38.157$ Any one of us call me especially

 $01:23:38.157 \longrightarrow 01:23:39.580$ if you want to. I mean,

NOTE Confidence: 0.90616145375

01:23:39.580 --> 01:23:41.840 I will get the person in right away.

NOTE Confidence: 0.90616145375

 $01:23:41.840 \longrightarrow 01:23:43.590$ All of the providers here.

NOTE Confidence: 0.90616145375

01:23:43.590 --> 01:23:45.198 I know, I know they can,

NOTE Confidence: 0.90616145375

 $01:23:45.200 \longrightarrow 01:23:46.288$ they can make space.

NOTE Confidence: 0.91908164444445

 $01:23:49.020 \longrightarrow 01:23:50.940$ I happen to know that people sit in

NOTE Confidence: 0.91908164444445

 $01:23:50.940 \longrightarrow 01:23:52.838$ the queue for our referrals for less

NOTE Confidence: 0.91908164444445

01:23:52.838 --> 01:23:54.950 than 24 hours, so we usually make those

NOTE Confidence: 0.91908164444445

 $01:23:54.950 \longrightarrow 01:23:56.240$ appointments within one business day.

NOTE Confidence: 0.854417813571428

01:24:00.280 --> 01:24:02.224 So Leanne, what do you want to tell

NOTE Confidence: 0.854417813571428

 $01{:}24{:}02.224 \dashrightarrow 01{:}24{:}03.812$ us about the latest development

NOTE Confidence: 0.854417813571428

01:24:03.812 --> 01:24:07.120 in radiology over the past year,

NOTE Confidence: 0.854417813571428

 $01:24:07.120 \longrightarrow 01:24:08.288$ there have been many.

NOTE Confidence: 0.9131738125

 $01:24:10.010 \longrightarrow 01:24:13.110$ In the past year.

NOTE Confidence: 0.9131738125

 $01:24:13.110 \longrightarrow 01:24:15.318$ Not really sure if there's anything

NOTE Confidence: 0.9131738125

 $01:24:15.318 \longrightarrow 01:24:17.860$ really in the in the past year.

 $01{:}24{:}17.860 \dashrightarrow 01{:}24{:}20.644$ I mean there are things artificial

NOTE Confidence: 0.9131738125

 $01:24:20.644 \longrightarrow 01:24:22.036$ intelligence is obviously

NOTE Confidence: 0.9131738125

 $01:24:22.036 \longrightarrow 01:24:24.099$ taking off in breast imaging.

NOTE Confidence: 0.9131738125

01:24:24.100 --> 01:24:25.445 It's a challenging area though

NOTE Confidence: 0.9131738125

 $01{:}24{:}25.445 \dashrightarrow 01{:}24{:}27.310$ compared to other areas of radiology.

NOTE Confidence: 0.9131738125

01:24:27.310 --> 01:24:29.286 Mammography is just really

NOTE Confidence: 0.9131738125

 $01:24:29.286 \longrightarrow 01:24:31.756$ one of the hardest things.

NOTE Confidence: 0.9131738125

01:24:31.760 --> 01:24:34.007 But I think we'll see that coming

NOTE Confidence: 0.9131738125

 $01{:}24{:}34.007 \dashrightarrow 01{:}24{:}36.105$ very shortly and that should help

NOTE Confidence: 0.9131738125

 $01:24:36.105 \longrightarrow 01:24:38.229$ us some you know hopefully improve

NOTE Confidence: 0.9131738125

01:24:38.229 --> 01:24:40.139 our accuracy and reduce again

NOTE Confidence: 0.9131738125

 $01:24:40.139 \longrightarrow 01:24:42.377$ reduce a lot of false positives.

NOTE Confidence: 0.9131738125

 $01{:}24{:}42.380 \dashrightarrow 01{:}24{:}43.860$ I think that's that's where I see it,

NOTE Confidence: 0.9131738125

 $01:24:43.860 \longrightarrow 01:24:46.348$ it helping a lot.

NOTE Confidence: 0.9131738125

 $01:24:46.350 \longrightarrow 01:24:47.700$ I can't share any more slides

 $01:24:47.700 \longrightarrow 01:24:48.375$ on Thomas synthesis,

NOTE Confidence: 0.9131738125

 $01:24:48.380 \longrightarrow 01:24:50.228$ but we're going to be presenting

NOTE Confidence: 0.9131738125

01:24:50.228 --> 01:24:51.467 data next month looking,

NOTE Confidence: 0.9131738125

01:24:51.467 --> 01:24:52.081 you know,

NOTE Confidence: 0.9131738125

 $01:24:52.081 \longrightarrow 01:24:54.230$ we've been doing it for 10 years

NOTE Confidence: 0.9131738125

01:24:54.292 --> 01:24:56.189 and looking at all of our cancers

NOTE Confidence: 0.9131738125

 $01:24:56.189 \longrightarrow 01:24:57.848$ on detected with Thomas synthesis

NOTE Confidence: 0.9131738125

 $01:24:57.848 \longrightarrow 01:24:59.930$ and comparing it with the 2D

NOTE Confidence: 0.9131738125

 $01:24:59.994 \longrightarrow 01:25:02.076$ mammography and we are finding a

NOTE Confidence: 0.9131738125

 $01:25:02.076 \longrightarrow 01:25:04.000$ difference in the advanced cancers,

NOTE Confidence: 0.9131738125

 $01:25:04.000 \longrightarrow 01:25:09.140$ significantly fewer advanced cancers, so.

NOTE Confidence: 0.9131738125

01:25:09.140 --> 01:25:10.388 You know,

NOTE Confidence: 0.9131738125

01:25:10.388 --> 01:25:12.614 that's it's encouraging you know,

NOTE Confidence: 0.9131738125

 $01:25:12.614 \longrightarrow 01:25:13.499$ because we just don't want

NOTE Confidence: 0.9131738125

 $01:25:13.499 \longrightarrow 01:25:14.360$ to find more cancers,

NOTE Confidence: 0.9131738125

01:25:14.360 --> 01:25:16.448 we want to find the bad cancers and we're

 $01:25:16.448 \longrightarrow 01:25:18.400$ finding the bad cancers at a lower stage.

NOTE Confidence: 0.9131738125

 $01:25:18.400 \longrightarrow 01:25:21.658$ So really feel good about that.

NOTE Confidence: 0.9131738125

01:25:21.660 --> 01:25:22.644 So, you know,

NOTE Confidence: 0.9131738125

01:25:22.644 --> 01:25:24.940 definitely tomosynthesis is here to stay,

NOTE Confidence: 0.9131738125

 $01:25:24.940 \longrightarrow 01:25:26.130$ there's no doubt about that.

NOTE Confidence: 0.9131738125

01:25:26.130 --> 01:25:26.578 But yeah,

NOTE Confidence: 0.9131738125

01:25:26.578 --> 01:25:27.922 I think AI is going to

NOTE Confidence: 0.9131738125

 $01:25:27.922 \longrightarrow 01:25:29.299$ be the next big thing.

NOTE Confidence: 0.85171378

 $01:25:31.190 \longrightarrow 01:25:32.630$ Any of the other speakers,

NOTE Confidence: 0.85171378

01:25:32.630 --> 01:25:35.118 Paris or Greg, Susan,

NOTE Confidence: 0.790515968333333

01:25:36.170 --> 01:25:38.890 I would say in the in the plastic

NOTE Confidence: 0.790515968333333

 $01:25:38.890 \longrightarrow 01:25:40.559$ and reconstructive surgery space.

NOTE Confidence: 0.790515968333333

 $01{:}25{:}40.560 \dashrightarrow 01{:}25{:}42.648$ The medical devices, the the prosthesis,

NOTE Confidence: 0.790515968333333

 $01{:}25{:}42.650 \to 01{:}25{:}44.239$ the implants they get better and better.

NOTE Confidence: 0.790515968333333

01:25:44.240 --> 01:25:45.944 We're on our fifth generation of

 $01:25:45.944 \longrightarrow 01:25:48.018$ implants at this point in time and

NOTE Confidence: 0.790515968333333

01:25:48.018 --> 01:25:49.776 they they increasingly get more sturdy.

NOTE Confidence: 0.790515968333333

 $01:25:49.780 \longrightarrow 01:25:52.398$ I have been in practice long enough.

NOTE Confidence: 0.790515968333333

01:25:52.400 --> 01:25:53.705 So president plants of silicone

NOTE Confidence: 0.790515968333333

01:25:53.705 --> 01:25:54.749 breast implants have been

NOTE Confidence: 0.790515968333333

 $01:25:54.749 \longrightarrow 01:25:56.040$ out for well over 50 years.

NOTE Confidence: 0.790515968333333

01:25:56.040 --> 01:25:58.287 And that first generation and even second

NOTE Confidence: 0.790515968333333

 $01:25:58.287 \longrightarrow 01:26:00.276$ generation when they ruptured it was it

NOTE Confidence: 0.790515968333333

01:26:00.276 --> 01:26:02.379 was a nightmare to to remove them and I

NOTE Confidence: 0.790515968333333

 $01:26:02.379 \longrightarrow 01:26:05.072$ I've had to do more than my fair share.

NOTE Confidence: 0.790515968333333

01:26:05.072 --> 01:26:07.626 This fifth generation they

NOTE Confidence: 0.790515968333333

 $01:26:07.626 \longrightarrow 01:26:10.556$ call them cohesive, stable so.

NOTE Confidence: 0.790515968333333

 $01:26:10.560 \longrightarrow 01:26:11.456$ The gummy bear implants.

NOTE Confidence: 0.790515968333333

 $01{:}26{:}11.456 \dashrightarrow 01{:}26{:}13.070$ So you can imagine a gummy bear,

NOTE Confidence: 0.790515968333333

01:26:13.070 --> 01:26:14.126 if you cut a gummy bear in half,

NOTE Confidence: 0.790515968333333

 $01:26:14.130 \longrightarrow 01:26:14.805$ nothing leaks out.

 $01:26:14.805 \longrightarrow 01:26:15.930$ That's what all of these

NOTE Confidence: 0.790515968333333

01:26:15.930 --> 01:26:16.790 new devices are like,

NOTE Confidence: 0.790515968333333

01:26:16.790 --> 01:26:19.910 which is which is of of benefit in in many,

NOTE Confidence: 0.790515968333333 01:26:19.910 --> 01:26:21.046 many ways.

NOTE Confidence: 0.790515968333333

 $01:26:21.046 \longrightarrow 01:26:25.590$ One is they tended to have better durability.

NOTE Confidence: 0.790515968333333

 $01:26:25.590 \longrightarrow 01:26:27.459$ The second is that they tend to

NOTE Confidence: 0.790515968333333

01:26:27.459 --> 01:26:28.969 have longer and better projection

NOTE Confidence: 0.790515968333333

 $01:26:28.969 \longrightarrow 01:26:30.925$ for a longer period of time.

NOTE Confidence: 0.790515968333333

 $01{:}26{:}30.930 \dashrightarrow 01{:}26{:}33.106$ So I would say and over the course

NOTE Confidence: 0.790515968333333

01:26:33.106 --> 01:26:35.162 of the year this most recent

NOTE Confidence: 0.790515968333333

01:26:35.162 --> 01:26:37.316 generations kind of come out and

NOTE Confidence: 0.790515968333333

 $01:26:37.387 \longrightarrow 01:26:39.447$ really has become very popular.

NOTE Confidence: 0.790515968333333 01:26:39.450 --> 01:26:39.800 Great.

NOTE Confidence: 0.6712608

01:26:41.400 --> 01:26:46.070 Greg, yeah, absolutely. You know,

NOTE Confidence: 0.885616018

 $01:26:46.080 \longrightarrow 01:26:47.170$ as we go through training,

01:26:47.180 --> 01:26:48.545 you know through residency and

NOTE Confidence: 0.800407766666667

 $01:26:48.545 \longrightarrow 01:26:50.738$ fellowship I think and also the the

NOTE Confidence: 0.800407766666667

 $01:26:50.740 \longrightarrow 01:26:53.040$ menu clinical trials we see at breast.

NOTE Confidence: 0.800407766666667

 $01:26:53.040 \longrightarrow 01:26:55.501$ I think I think what I've seen the

NOTE Confidence: 0.800407766666667

01:26:55.501 --> 01:26:57.583 most is the patients now inactive

NOTE Confidence: 0.783563756

01:26:57.600 --> 01:27:00.610 participant. Yeah, they they now

NOTE Confidence: 0.889677626428572

 $01:27:00.620 \longrightarrow 01:27:02.924$ have a big voice in terms of how

NOTE Confidence: 0.889677626428572

01:27:02.924 --> 01:27:04.597 much imaging they want to do,

NOTE Confidence: 0.889677626428572

 $01{:}27{:}04.600 \longrightarrow 01{:}27{:}07.176$ how much treatment they want to do.

NOTE Confidence: 0.889677626428572

01:27:07.180 --> 01:27:09.112 With the help of medical oncology

NOTE Confidence: 0.889677626428572

 $01:27:09.112 \longrightarrow 01:27:11.529$ we can reduce your tumor burden and

NOTE Confidence: 0.889677626428572

01:27:11.529 --> 01:27:13.294 give them more surgical options

NOTE Confidence: 0.889677626428572

 $01:27:13.294 \longrightarrow 01:27:15.558$ with the help of plastic surgery.

NOTE Confidence: 0.889677626428572

 $01:27:15.560 \longrightarrow 01:27:17.205$ You know we're able to give them

NOTE Confidence: 0.889677626428572

01:27:17.205 --> 01:27:18.806 more options and I think what

NOTE Confidence: 0.889677626428572

 $01:27:18.806 \longrightarrow 01:27:20.384$ we're going to see more and more

 $01:27:20.384 \longrightarrow 01:27:21.944$ is more options of de escalation.

NOTE Confidence: 0.889677626428572

 $01:27:21.950 \longrightarrow 01:27:24.035$ You know as we're accumulating

NOTE Confidence: 0.889677626428572

 $01:27:24.035 \longrightarrow 01:27:26.016$ more trials we're finding that

NOTE Confidence: 0.889677626428572

 $01:27:26.016 \longrightarrow 01:27:28.308$ you know maybe less axillary lymph

NOTE Confidence: 0.889677626428572

01:27:28.308 --> 01:27:29.638 node dissections and surgeries,

NOTE Confidence: 0.889677626428572

01:27:29.638 --> 01:27:31.218 maybe patients are going to

NOTE Confidence: 0.889677626428572

 $01:27:31.218 \longrightarrow 01:27:32.558$ be doing just as well.

NOTE Confidence: 0.889677626428572

 $01:27:32.560 \longrightarrow 01:27:35.916$ We have a lot of trials that have met

NOTE Confidence: 0.889677626428572

 $01:27:35.916 \longrightarrow 01:27:39.004$ accuro and are going to be releasing their,

NOTE Confidence: 0.889677626428572

 $01:27:39.010 \longrightarrow 01:27:41.229$ you know their data in five years

NOTE Confidence: 0.889677626428572

 $01:27:41.229 \longrightarrow 01:27:43.727$ and I think it's nice to see

NOTE Confidence: 0.889677626428572

 $01:27:43.727 \longrightarrow 01:27:45.567$ you know the patient advocacy.

NOTE Confidence: 0.889677626428572

 $01{:}27{:}45.570 \dashrightarrow 01{:}27{:}47.844$ For themselves and and they've really

NOTE Confidence: 0.889677626428572

 $01:27:47.844 \longrightarrow 01:27:50.002$ been an active participant and you

NOTE Confidence: 0.889677626428572

01:27:50.002 --> 01:27:51.742 know it's nice to see physicians

 $01:27:51.742 \longrightarrow 01:27:54.331$ who have had an open year and a lot

NOTE Confidence: 0.889677626428572

 $01:27:54.331 \longrightarrow 01:27:55.959$ of our conversations are are really

NOTE Confidence: 0.889677626428572

 $01:27:55.959 \longrightarrow 01:27:57.800$ you know geared toward them and and

NOTE Confidence: 0.889677626428572

 $01:27:57.862 \longrightarrow 01:27:59.956$ we're happy to provide all those

NOTE Confidence: 0.889677626428572

 $01:27:59.956 \longrightarrow 01:28:01.460$ different operations different options.

NOTE Confidence: 0.889677626428572

01:28:01.460 --> 01:28:03.060 So it's really been enlightening.

NOTE Confidence: 0.775706458

 $01:28:04.230 \longrightarrow 01:28:05.830$ Thank you. That's, that's great.

NOTE Confidence: 0.775706458

01:28:05.830 --> 01:28:07.180 Susan, you want to add something?

NOTE Confidence: 0.866679508888889

01:28:07.550 --> 01:28:09.454 I I would say that the thing I've

NOTE Confidence: 0.866679508888889

 $01:28:09.454 \longrightarrow 01:28:11.514$ seen over the last few years that's

NOTE Confidence: 0.866679508888889

 $01:28:11.514 \longrightarrow 01:28:13.379$ been gratifying on a personal level

NOTE Confidence: 0.866679508888889

01:28:13.379 --> 01:28:15.089 and I think my colleagues are,

NOTE Confidence: 0.866679508888889

01:28:15.090 --> 01:28:17.922 we're just enjoying working with our

NOTE Confidence: 0.866679508888889

 $01:28:17.922 \longrightarrow 01:28:20.488$ plastics colleagues and making sort

NOTE Confidence: 0.866679508888889

01:28:20.488 --> 01:28:23.559 of this I think multidisciplinary

NOTE Confidence: 0.866679508888889

 $01{:}28{:}23.559 \dashrightarrow 01{:}28{:}26.072$ efforts of knowing when and how to

 $01:28:26.072 \longrightarrow 01:28:28.140$ kind of coordinate the radiation

NOTE Confidence: 0.866679508888889

 $01:28:28.140 \longrightarrow 01:28:30.720$ with regard to all the different

NOTE Confidence: 0.866679508888889

 $01:28:30.720 \longrightarrow 01:28:32.335$ reconstruction techniques has been

NOTE Confidence: 0.866679508888889

 $01:28:32.335 \longrightarrow 01:28:34.567$ really gratifying and as they check.

NOTE Confidence: 0.866679508888889

 $01:28:34.570 \longrightarrow 01:28:35.658$ Says the techniques change.

NOTE Confidence: 0.866679508888889

 $01:28:35.658 \longrightarrow 01:28:38.260$ We like to learn how to change with them.

NOTE Confidence: 0.866679508888889

01:28:38.260 --> 01:28:41.596 So I think that, you know,

NOTE Confidence: 0.866679508888889

 $01:28:41.600 \longrightarrow 01:28:43.712$ radiation therapy in the post mastectomy

NOTE Confidence: 0.866679508888889

 $01:28:43.712 \longrightarrow 01:28:46.119$ setting has gotten more and more complex,

NOTE Confidence: 0.866679508888889

 $01:28:46.120 \longrightarrow 01:28:48.775$ but in a good way because I think that.

NOTE Confidence: 0.866679508888889

01:28:48.780 --> 01:28:50.072 Our group, you know,

NOTE Confidence: 0.866679508888889

 $01:28:50.072 \longrightarrow 01:28:52.318$ we all have very good communication and

NOTE Confidence: 0.866679508888889

 $01{:}28{:}52.318 \dashrightarrow 01{:}28{:}54.496$ we're able to sort of preempt a lot of

NOTE Confidence: 0.866679508888889

01:28:54.562 --> 01:28:57.588 the issues that I think maybe in the

NOTE Confidence: 0.866679508888889

01:28:57.588 --> 01:29:00.505 beginning of many years ago when we

 $01:29:00.505 \longrightarrow 01:29:02.600$ people started doing plastics procedures,

NOTE Confidence: 0.866679508888889

 $01:29:02.600 \longrightarrow 01:29:03.800$ we didn't know all the questions

NOTE Confidence: 0.866679508888889

 $01:29:03.800 \longrightarrow 01:29:04.600$ to ask up front.

NOTE Confidence: 0.866679508888889

 $01:29:04.600 \longrightarrow 01:29:07.352$ But now I think we have a really

NOTE Confidence: 0.866679508888889

 $01:29:07.352 \longrightarrow 01:29:08.990$ great workflow for communicating

NOTE Confidence: 0.866679508888889

01:29:08.990 --> 01:29:11.140 with their colleagues and patients

NOTE Confidence: 0.866679508888889

01:29:11.140 --> 01:29:13.528 get really good oncologic as well

NOTE Confidence: 0.866679508888889

 $01:29:13.528 \dashrightarrow 01:29:15.353$ as plastics outcomes because we're

NOTE Confidence: 0.866679508888889

 $01{:}29{:}15.353 \dashrightarrow 01{:}29{:}17.703$ all sort of on the same page and

NOTE Confidence: 0.866679508888889

 $01:29:17.703 \longrightarrow 01:29:18.794$ speaking the same language.

NOTE Confidence: 0.866679508888889

01:29:18.794 --> 01:29:20.378 So I think our patients really

NOTE Confidence: 0.866679508888889

 $01:29:20.378 \longrightarrow 01:29:21.170$ benefit from that.

NOTE Confidence: 0.866679508888889

 $01:29:21.170 \longrightarrow 01:29:23.834$ I think all of us have a lot of

NOTE Confidence: 0.866679508888889

 $01:29:23.834 \longrightarrow 01:29:25.064$ sort of satisfaction from that

NOTE Confidence: 0.866679508888889

 $01:29:25.064 \longrightarrow 01:29:26.721$ part of our job and it continues

NOTE Confidence: 0.866679508888889

 $01:29:26.721 \longrightarrow 01:29:28.030$ to evolve and get better.

 $01:29:30.020 \longrightarrow 01:29:31.280$ Thank you. Thank you very much.

NOTE Confidence: 0.952463066666667

 $01:29:31.280 \longrightarrow 01:29:33.344$ I think we are just about to overtime

NOTE Confidence: 0.9524630666666667

 $01:29:33.344 \longrightarrow 01:29:35.246$ and I really greatly appreciate all

NOTE Confidence: 0.952463066666667

01:29:35.246 --> 01:29:37.617 of you for joining us and really

NOTE Confidence: 0.952463066666667

 $01{:}29{:}37.617 \dashrightarrow 01{:}29{:}39.885$ appreciate for what you do every day

NOTE Confidence: 0.952463066666667

 $01{:}29{:}39.885 \dashrightarrow 01{:}29{:}41.704$ and thanks everyone for joining in.

NOTE Confidence: 0.9524630666666667

 $01:29:41.704 \longrightarrow 01:29:42.868$ Have a great night.

NOTE Confidence: 0.888579366666667

 $01{:}29{:}43.180 \dashrightarrow 01{:}29{:}45.850$ Thanks very much. Thank you. Take care.