WEBVTT

NOTE duration:"01:29:48"

NOTE recognizability:0.829

NOTE language:en-us

NOTE Confidence: 0.8826994706666667

00:00:00.000 --> 00:00:02.475 So in terms of imaging,

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}00{:}05{.}026 \dashrightarrow 00{:}00{:}07{.}863$  to be our main modalities and that is

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

00:00:11.340 --> 00:00:14.070 We, you know for good quality MRI

NOTE Confidence: 0.8826994706666667

00:00:14.070 - 00:00:16.710 it requires a special breast coil

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}00{:}19{.}480 \dashrightarrow 00{:}00{:}21{.}874$  The 3T magnet is what we prefer

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

00:00:30.288 --> 00:00:31.156 At Shoreline,

 $00:00:31.156 \rightarrow 00:00:34.540$  patients do need to go downtown for that.

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00:00:36.286 \rightarrow 00:00:38.200$  bit about the 3D mammography because we,

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}00{:}40{.}244 \dashrightarrow 00{:}00{:}42{.}830$  for more than a decade now and it

NOTE Confidence: 0.8826994706666667

 $00:00:42.830 \rightarrow 00:00:44.475$  has really improved our outcomes.

NOTE Confidence: 0.8826994706666667

 $00{:}00{:}44{.}480 \dashrightarrow 00{:}00{:}46{.}688$  Yale was one of the five original beta

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}00{:}57.897 \dashrightarrow 00{:}01{:}01.480$  at Yale and after FDA approval.

NOTE Confidence: 0.8826994706666667

00:01:01.480 --> 00:01:03.699 We were the first in Connecticut to

NOTE Confidence: 0.8826994706666667

 $00{:}01{:}03.699 \dashrightarrow 00{:}01{:}06.181$  obtain a a commercial unit and the

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

- NOTE Confidence: 0.8826994706666667
- $00:01:10.850 \rightarrow 00:01:12.985$  We've always offered it to all patients
- NOTE Confidence: 0.8826994706666667
- $00:01:12.985 \dashrightarrow 00:01:15.238$  at no cost and it's really permitted us
- NOTE Confidence: 0.8826994706666667
- $00{:}01{:}15{.}240 \dashrightarrow 00{:}01{:}18{.}271$  to have a a really invaluable research
- NOTE Confidence: 0.8826994706666667
- $00{:}01{:}18.271 \dashrightarrow 00{:}01{:}21.234$  database that we have been able to
- NOTE Confidence: 0.8826994706666667
- $00:01:21.234 \rightarrow 00:01:24.270$  publish and do a lot of good studies with.
- NOTE Confidence: 0.8826994706666667
- 00:01:24.270 --> 00:01:26.256 So basically you know a lot
- NOTE Confidence: 0.8826994706666667
- 00:01:26.256 --> 00:01:28.060 of these studies have shown,
- NOTE Confidence: 0.8826994706666667
- 00:01:28.060 --> 00:01:29.986 I think you know very well
- NOTE Confidence: 0.8826994706666667
- $00:01:29.986 \rightarrow 00:01:31.530$  that the 3D mammography is.
- NOTE Confidence: 0.8826994706666667
- 00:01:31.530 --> 00:01:33.630 Very.
- NOTE Confidence: 0.8826994706666667
- $00:01:33.630 \rightarrow 00:01:35.634$  Advantageous over treating mammography.
- NOTE Confidence: 0.8826994706666667
- $00:01:35.634 \dashrightarrow 00:01:38.448$  Multiple sites now throughout the world,
- NOTE Confidence: 0.8826994706666667
- 00:01:38.450 --> 00:01:39.695 in North America,
- NOTE Confidence: 0.8826994706666667
- 00:01:39.695 --> 00:01:40.110 Europe,
- NOTE Confidence: 0.8826994706666667
- $00{:}01{:}40{.}110 \dashrightarrow 00{:}01{:}42{.}185$  Asia have repeatedly shown that
- NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}01{:}45{.}020 \dashrightarrow 00{:}01{:}46{.}896$  and increased cancer detection,

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}02{:}01{.}584 \dashrightarrow 00{:}02{:}04{.}540$  you can see the images moving here.

NOTE Confidence: 0.8826994706666667

 $00{:}02{:}04.540 \dashrightarrow 00{:}02{:}07.382$  We look at these in one millimeter

NOTE Confidence: 0.8826994706666667

 $00:02:07.382 \dashrightarrow 00:02:10.017$  slices through the breast and the

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

- NOTE Confidence: 0.8826994706666667
- $00:02:24.920 \dashrightarrow 00:02:27.480$  prove the outcomes for patients.
- NOTE Confidence: 0.8826994706666667
- 00:02:27.480 --> 00:02:29.080 All right.
- NOTE Confidence: 0.8826994706666667
- $00:02:29.080 \rightarrow 00:02:31.215$  Here's just another example of a patient.
- NOTE Confidence: 0.8826994706666667
- 00:02:31.220 --> 00:02:32.284 This is,
- NOTE Confidence: 0.8826994706666667
- $00:02:32.284 \rightarrow 00:02:34.944$  it's the screening mammogram and
- NOTE Confidence: 0.8826994706666667
- $00:02:34.944 \rightarrow 00:02:37.063$  there's a questionable asymmetry
- NOTE Confidence: 0.8826994706666667
- $00{:}02{:}37.063 \dashrightarrow 00{:}02{:}40.519$  in the breast and that's on the 2D
- NOTE Confidence: 0.8826994706666667
- $00:02:40.519 \longrightarrow 00:02:43.040$  portion when you look at the 3D.
- NOTE Confidence: 0.8826994706666667
- $00:02:43.040 \longrightarrow 00:02:44.994$  Not only does it tell us exactly
- NOTE Confidence: 0.8826994706666667
- $00:02:44.994 \rightarrow 00:02:46.830$  where it is in the breast,
- NOTE Confidence: 0.8826994706666667
- $00:02:46.830 \rightarrow 00:02:48.286$  it's actually down here on the 2D.
- NOTE Confidence: 0.8826994706666667
- $00:02:48.290 \rightarrow 00:02:49.954$  We might have thought it was up there,
- NOTE Confidence: 0.8826994706666667
- $00:02:49.960 \longrightarrow 00:02:51.304$  but it's down there.
- NOTE Confidence: 0.8826994706666667
- $00:02:51.304 \longrightarrow 00:02:52.984$  So we're able to accurately
- NOTE Confidence: 0.8826994706666667
- $00{:}02{:}52{.}984 \dashrightarrow 00{:}02{:}54{.}891$  localize lesions and we're able
- NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

 $00{:}02{:}56{.}400 \dashrightarrow 00{:}02{:}58{.}094$  You see on the 2D that could

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

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

NOTE Confidence: 0.8826994706666667

00:03:09.240 --> 00:03:12.090 a lot of the diagnostic

NOTE Confidence: 0.8826994706666667

00:03:12.090 - 00:03:13.800 workup additional views.

NOTE Confidence: 0.80090105

00:03:13.800 -> 00:03:15.156 Are not necessary anymore.

NOTE Confidence: 0.80090105

 $00:03:15.156 \dashrightarrow 00:03:17.190$  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

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

 $00{:}03{:}25{.}763 \dashrightarrow 00{:}03{:}27{.}739$  than true calcification lesions

NOTE Confidence: 0.80090105

 $00:03:27.739 \rightarrow 00:03:30.209$  can be biopsied with ultrasound.

NOTE Confidence: 0.80090105

 $00:03:30.210 \dashrightarrow 00:03:33.540$  Just a note about tissue density

NOTE Confidence: 0.80090105

00:03:33.540 - 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

 $00{:}03{:}37{.}975 \dashrightarrow 00{:}03{:}40{.}489$  obviously related to tissue density.

NOTE Confidence: 0.80090105

 $00:03:40.490 \longrightarrow 00:03:43.670$  It's an important aspect of of

NOTE Confidence: 0.80090105

00:03:43.670 - 00:03:45.790 of interpreting a mammogram.

NOTE Confidence: 0.80090105

 $00{:}03{:}45{.}790 \dashrightarrow 00{:}03{:}47{.}345$  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

 $00{:}03{:}57{.}320 \dashrightarrow 00{:}03{:}59{.}259$  we were the first state in the

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105  $00{:}04{:}03.070 \dashrightarrow 00{:}04{:}05.548$  So this took effect in October of NOTE Confidence: 0.80090105  $00{:}04{:}05{.}550 \dashrightarrow 00{:}04{:}07{.}699$  2009 and women are informed of their NOTE Confidence: 0.80090105  $00:04:07.699 \rightarrow 00:04:09.260$  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 -> 00:04:13.746 with dense breasts have opted to NOTE Confidence: 0.80090105  $00:04:13.746 \rightarrow 00:04:15.114$  undergo supplemental screening NOTE Confidence: 0.80090105  $00:04:15.114 \rightarrow 00:04:16.782$  particularly with ultrasound just NOTE Confidence: 0.80090105  $00{:}04{:}16.782 \dashrightarrow 00{:}04{:}18.546$  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  $00:04:20.406 \rightarrow 00:04:22.750$  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  $00:04:24.570 \rightarrow 00:04:25.690$  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  $00:04:28.455 \rightarrow 00:04:30.550$  FDA approved and this just. NOTE Confidence: 0.80090105 00:04:30.550 --> 00:04:30.967 Obviously, 8

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

- NOTE Confidence: 0.80090105
- 00:04:30.967 --> 00:04:33.469 breast density is a little bit

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

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

00:04:39.500 --> 00:04:42.934 We get a density reading which

NOTE Confidence: 0.80090105

 $00{:}04{:}42{.}934 \dashrightarrow 00{:}04{:}46{.}406$  is just an output on our on our

NOTE Confidence: 0.80090105

 $00{:}04{:}46{.}406 \dashrightarrow 00{:}04{:}48{.}637$  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

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

NOTE Confidence: 0.80090105

 $00{:}04{:}53{.}920 \dashrightarrow 00{:}04{:}55{.}456$  I mentioned the mobile van before

NOTE Confidence: 0.80090105

 $00{:}04{:}55{.}456 \dashrightarrow 00{:}04{:}57{.}625$  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

 $00{:}04{:}59{.}317 \dashrightarrow 00{:}05{:}00{.}677$  does visit the shoreline,

NOTE Confidence: 0.80090105

 $00{:}05{:}00{.}680 \dashrightarrow 00{:}05{:}02{.}304$  you know four to five times a month,

 $00:05:02.310 \longrightarrow 00:05:04.101$  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

 $00{:}05{:}05{.}600 \dashrightarrow 00{:}05{:}07{.}502$  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

 $00{:}05{:}08{.}460 \dashrightarrow 00{:}05{:}11{.}210$  We do screening on the van with the

NOTE Confidence: 0.80090105

00:05:11.210 --> 00:05:13.100 course 3D mammography and breast ultrasound.

NOTE Confidence: 0.80090105

 $00{:}05{:}13{.}100 \dashrightarrow 00{:}05{:}15{.}348$  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

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

NOTE Confidence: 0.80090105

00:05:24.890 - 00:05:28.157 35 some years in in New Haven at Yale,

NOTE Confidence: 0.80090105

 $00{:}05{:}28{.}160 \dashrightarrow 00{:}05{:}30{.}260$  this is the first time we've had

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

 $00:05:31.770 \longrightarrow 00:05:33.495$  So certainly those women with

NOTE Confidence: 0.80090105

00:05:33.495 - 00:05:35.637 dense tissue that really need the

NOTE Confidence: 0.80090105

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

- NOTE Confidence: 0.80090105
- $00{:}05{:}37{.}392 \dashrightarrow 00{:}05{:}39{.}329$  be well accommodated on the van.

 $00{:}05{:}39{.}330 \dashrightarrow 00{:}05{:}41{.}490$  And here's a case that was done on the van.

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.80090105

 $00{:}05{:}48.690 \dashrightarrow 00{:}05{:}49.266$  Interventional procedures.

NOTE Confidence: 0.80090105

00:05:49.266 --> 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

 $00:05:50.816 \dashrightarrow 00:05:53.560$  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

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

NOTE Confidence: 0.80090105

00:06:00.300 --> 00:06:00.591 Again,

NOTE Confidence: 0.80090105

 $00{:}06{:}00{.}591 \dashrightarrow 00{:}06{:}02{.}337$  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

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

NOTE Confidence: 0.80090105

 $00{:}06{:}08{.}792 \dashrightarrow 00{:}06{:}11{.}167$  we have a little bit more resources

NOTE Confidence: 0.80090105

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

NOTE Confidence: 0.855607974333333

 $00:06:13.039 \rightarrow 00:06:15.421$  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 - 00:06:18.954 which is preferable modality,

NOTE Confidence: 0.855607974333333

 $00{:}06{:}18.954 \dashrightarrow 00{:}06{:}20.898$  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

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

NOTE Confidence: 0.855607974333333

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

NOTE Confidence: 0.855607974333333

 $00:06:29.608 \rightarrow 00:06:33.010$  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

 $00:06:35.092 \rightarrow 00:06:37.974$  with our procedures, patient care,

NOTE Confidence: 0.855607974333333

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

- NOTE Confidence: 0.855607974333333
- $00:06:39.430 \longrightarrow 00:06:41.506$  follow up and then data entry.
- NOTE Confidence: 0.855607974333333
- 00:06:41.510 --> 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
- $00:06:46.558 \dashrightarrow 00:06:48.942$  Again, Doctor Zaneski is going to talk more
- NOTE Confidence: 0.855607974333333
- $00{:}06{:}48{.}942 \dashrightarrow 00{:}06{:}51{.}242$  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
- $00:06:54.050 \rightarrow 00:06:57.830$  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
- $00:07:00.378 \rightarrow 00:07:02.850$  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
- $00{:}07{:}04.420 \dashrightarrow 00{:}07{:}05.990$  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
- NOTE Confidence: 0.855607974333333

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

NOTE Confidence: 0.855607974333333

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

NOTE Confidence: 0.855607974333333

00:07:16.960 --> 00:07:19.440 be inserted a few days or weeks

NOTE Confidence: 0.855607974333333

 $00:07:19.440 \rightarrow 00:07:21.750$  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

 $00{:}07{:}24.567 \dashrightarrow 00{:}07{:}28.470$  day and so that facilitates scheduling.

NOTE Confidence: 0.855607974333333

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

NOTE Confidence: 0.855607974333333

 $00:07:30.450 \dashrightarrow 00:07:31.970$  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 - 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 --> 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

 $00{:}07{:}45{.}220 \dashrightarrow 00{:}07{:}47{.}836$  She comes back for a localization on the

NOTE Confidence: 0.855607974333333

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

- NOTE Confidence: 0.855607974333333
- $00:07:50.412 \rightarrow 00:07:53.169$  the lesion and the tag all removed.
- NOTE Confidence: 0.855607974333333
- $00:07:53.170 \longrightarrow 00:07:55.495$  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
- $00:07:58.450 \rightarrow 00:08:01.234$  The very shortly hopefully few months we
- NOTE Confidence: 0.855607974333333
- $00:08:01.234 \rightarrow 00:08:03.448$  are going to be starting construction
- NOTE Confidence: 0.855607974333333
- $00{:}08{:}03{.}448 \dashrightarrow 00{:}08{:}06{.}327$  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
- $00:08:08.460 \rightarrow 00:08:11.668$  which at the shoreline which is much needed,
- NOTE Confidence: 0.855607974333333
- 00:08:11.670 00:08:13.560 we will have an additional 3D
- NOTE Confidence: 0.855607974333333
- 00:08:13.560 --> 00:08:15.480 mammography and ultrasound units.
- NOTE Confidence: 0.855607974333333
- $00:08:15.480 \rightarrow 00:08:18.706$  So this is going to help with patient
- NOTE Confidence: 0.855607974333333
- $00:08:18.706 \rightarrow 00:08:22.297$  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
- $00:08:25.211 \dashrightarrow 00:08:26.816$  with the breast surgery suite.
- NOTE Confidence: 0.855607974333333

 $00:08:26.820 \longrightarrow 00:08:28.476$  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

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

NOTE Confidence: 0.79772939

 $00{:}08{:}37{.}770 \dashrightarrow 00{:}08{:}40{.}250$  Services and wonderful for patients,

NOTE Confidence: 0.79772939

00:08:40.250 --> 00:08:43.751 they love it and I think with this expansion NOTE Confidence: 0.79772939

00:08:43.751 --> 00:08:46.554 we'll be able to to offer even more.

NOTE Confidence: 0.79772939

 $00:08:46.560 \rightarrow 00:08:49.032$  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

 $00{:}08{:}51{.}180 \dashrightarrow 00{:}08{:}53{.}518$  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

 $00:08:55.329 \rightarrow 00:08:57.555$  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

 $00:09:03.500 \longrightarrow 00:09:06.265$  you so much Leanne and we have

- NOTE Confidence: 0.90607865875
- $00:09:06.265 \rightarrow 00:09:07.662$  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
- $00:09:10.000 \rightarrow 00:09:12.115$  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
- $00:09:24.000 \rightarrow 00:09:25.220$  I'm thrilled to call him.
- NOTE Confidence: 0.90607865875
- $00:09:25.220 \dashrightarrow 00:09:27.956$  My partner and a member of our team,
- NOTE Confidence: 0.90607865875
- 00:09:27.960 --> 00:09:30.010 doctors and Esky joined Yale
- NOTE Confidence: 0.90607865875
- $00:09:30.010 \longrightarrow 00:09:32.060$  School of Medicine in 2019,
- NOTE Confidence: 0.90607865875
- $00:09:32.060 \longrightarrow 00:09:33.764$  he's an assistant professor.
- NOTE Confidence: 0.90607865875

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

NOTE Confidence: 0.90607865875

 $00:09:36.388 \rightarrow 00:09:38.632$  with being and malignant breast disease

NOTE Confidence: 0.90607865875

 $00:09:38.632 \dashrightarrow 00:09:41.618$  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

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

NOTE Confidence: 0.90607865875

 $00:09:50.391 \rightarrow 00:09:53.799$  operating room time at the New Haven site.

NOTE Confidence: 0.90607865875

00:09:53.800 --> 00:09:55.744 And he received his medical degree

NOTE Confidence: 0.90607865875

 $00:09:55.744 \rightarrow 00:09:57.669$  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 --> 00:10:01.089 a fellowship in surgical oncology

NOTE Confidence: 0.90607865875

 $00{:}10{:}01{.}089 \dashrightarrow 00{:}10{:}02{.}879$  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

 $00:10:04.460 \dashrightarrow 00:10:08.048$  And updates and breast cancer surgery.

NOTE Confidence: 0.90607865875

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

- NOTE Confidence: 0.90607865875
- 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
- $00{:}10{:}24.780 \dashrightarrow 00{:}10{:}25.370$  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 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 tonight is to talk
- NOTE Confidence: 0.900367865
- $00{:}10{:}37{.}874 \dashrightarrow 00{:}10{:}39{.}852$  about breast surgery you know here
- NOTE Confidence: 0.900367865
- 00:10:39.852 --> 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
- $00:10:51.325 \rightarrow 00:10:54.169$  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
- NOTE Confidence: 0.846369253846154

 $00:10:56.222 \rightarrow 00:10:58.362$  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

 $00{:}11{:}00{.}480 \dashrightarrow 00{:}11{:}02{.}454$  You know that we can come

NOTE Confidence: 0.846369253846154

 $00:11:02.454 \rightarrow 00:11:03.770$  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

 $00{:}11{:}06{.}422 \dashrightarrow 00{:}11{:}09{.}693$  up and surgery is an important component

NOTE Confidence: 0.846369253846154

 $00{:}11{:}09{.}693 \dashrightarrow 00{:}11{:}13{.}004$  for helping integrate that at times and

NOTE Confidence: 0.846369253846154

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

NOTE Confidence: 0.846369253846154

 $00{:}11{:}15{.}790 \dashrightarrow 00{:}11{:}19{.}126$  which will be talked about further.

NOTE Confidence: 0.846369253846154

 $00{:}11{:}19{.}130 \dashrightarrow 00{:}11{:}21{.}770$  So this is a picture of our surgical

NOTE Confidence: 0.846369253846154

00:11:21.770 $\operatorname{-->}$ 00:11:24.470 clinic and you know I think a lot of

NOTE Confidence: 0.846369253846154

 $00:11:24.470 \longrightarrow 00:11:26.929$  times with the with surgery we think

NOTE Confidence: 0.846369253846154

 $00:11:26.929 \dashrightarrow 00:11:29.245$  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

 $00:11:31.707 \longrightarrow 00:11:34.046$  including our nurse practitioners here at

NOTE Confidence: 0.846369253846154

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

- NOTE Confidence: 0.609698163333333
- 00:11:36.670 00:11:38.980 We can't see your slides.
- NOTE Confidence: 0.82775805
- $00{:}11{:}41{.}770 \dashrightarrow 00{:}11{:}45{.}490$  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
- $00{:}11{:}58{.}520 \dashrightarrow 00{:}11{:}59{.}580$  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 --> 00:12:21.354 Do you want to send them to me
- NOTE Confidence: 0.926588495555556
- 00:12:21.370 --> 00:12:23.491 and I can share them from my
- NOTE Confidence: 0.926588495555556
- $00:12:23.491 \rightarrow 00:12:25.570$  my computer? Sorry about that.
- NOTE Confidence: 0.9082484
- $00{:}13{:}02{.}020 \dashrightarrow 00{:}13{:}03{.}250$  OK. So I got them. Greg,
- NOTE Confidence: 0.933861713333333
- $00:13:03.250 \longrightarrow 00:13:04.671$  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
- NOTE Confidence: 0.752807322

 $00:13:09.210 \rightarrow 00:13:10.560$  know why it's not sharing.

NOTE Confidence: 0.81109915

00:13:22.570 --> 00:13:24.640 Alright, I think maybe now

NOTE Confidence: 0.665459663333333

 $00{:}13{:}24.810 \dashrightarrow 00{:}13{:}26.220$  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 --> 00:13:32.528 Right. Yeah. So you know again

NOTE Confidence: 0.88231521944445

 $00:13:32.540 \longrightarrow 00:13:34.430$  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 --> 00:13:38.208 practitioners or or things,

NOTE Confidence: 0.88231521944445

 $00:13:38.210 \longrightarrow 00:13:40.278$  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

 $00:13:43.465 \rightarrow 00:13:46.748$  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

 $00:13:49.466 \rightarrow 00:13:51.893$  interval follow up will work with

NOTE Confidence: 0.882315219444445

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

NOTE Confidence: 0.882315219444445

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

 $00:13:56.467 \rightarrow 00:13:59.024$  be benign and how do you interpret

NOTE Confidence: 0.88231521944445

00:13:59.024 --> 00:14:01.908 them as your primary care or OBGYN.

NOTE Confidence: 0.88231521944445

 $00:14:01.910 \longrightarrow 00:14:04.328$  Positions you know what is a

NOTE Confidence: 0.88231521944445

 $00:14:04.328 \longrightarrow 00:14:06.742$  papilloma need or what type of

NOTE Confidence: 0.882315219444445

 $00:14:06.742 \longrightarrow 00:14:09.366$  follow up a library card inside you.

NOTE Confidence: 0.882315219444445

 $00{:}14{:}09{.}366 \dashrightarrow 00{:}14{:}12{.}222$  We're very happy to see those patients

NOTE Confidence: 0.882315219444445

 $00{:}14{:}12{.}222 \dashrightarrow 00{:}14{:}15{.}604$  and you know talk about the different

NOTE Confidence: 0.882315219444445

 $00:14:15.604 \rightarrow 00:14:17.920$  management surgical options or even

NOTE Confidence: 0.882315219444445

 $00{:}14{:}17{.}920 \dashrightarrow 00{:}14{:}20{.}520$  screening strategies and of course

NOTE Confidence: 0.88231521944445

 $00{:}14{:}20{.}520 \dashrightarrow 00{:}14{:}22{.}911$  breast malignancy of course which you

NOTE Confidence: 0.882315219444445

 $00{:}14{:}22{.}911 \dashrightarrow 00{:}14{:}25{.}508$  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

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

NOTE Confidence: 0.88231521944445

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

NOTE Confidence: 0.88231521944445

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

NOTE Confidence: 0.882315219444445

 $00:14:43.159 \longrightarrow 00:14:44.073$  of radiology,

NOTE Confidence: 0.88231521944445

00:14:44.080 --> 00:14:46.160 we're able to offer surveillance,

NOTE Confidence: 0.882315219444445

 $00{:}14{:}46{.}160 \dashrightarrow 00{:}14{:}48{.}393$  clinical exams for instance you know women

NOTE Confidence: 0.88231521944445

 $00:14:48.393 \rightarrow 00:14:50.560$  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

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

NOTE Confidence: 0.88231521944445

 $00:14:54.389 \rightarrow 00:14:57.516$  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

 $00{:}14{:}59{.}424 \dashrightarrow 00{:}15{:}01{.}662$  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

 $00:15:03.577 \rightarrow 00:15:05.720$  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

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

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

NOTE Confidence: 0.882315219444445

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

NOTE Confidence: 0.882315219444445

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

NOTE Confidence: 0.882315219444445

 $00:15:15.761 \rightarrow 00:15:18.681$  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 --> 00:15:23.604 day take less time off from work,

NOTE Confidence: 0.882315219444445

 $00:15:23.604 \rightarrow 00:15:26.010$  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 --> 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

 $00:15:36.370 \longrightarrow 00:15:40.159$  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 --> 00:15:51.538 You see surgical clinic slide?

NOTE Confidence: 0.78707952

 $00{:}15{:}51{.}540$  -->  $00{:}15{:}54{.}594$  No, no, I'll try and pull them

NOTE Confidence: 0.78707952

 $00{:}15{:}54{.}594 \dashrightarrow 00{:}15{:}56{.}690$  up here, Greg. Thank you.

- $00:16:00.310 \longrightarrow 00:16:01.750$  I'll stop sharing.
- NOTE Confidence: 0.783316
- $00{:}16{:}11.510 \dashrightarrow 00{:}16{:}13.710$  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 Yeah.
- NOTE Confidence: 0.845175955714286
- $00:16:18.680 \dashrightarrow 00:16:21.228$  And it's not stopping the sharing either.
- NOTE Confidence: 0.920403788333333
- $00{:}16{:}31{.}350 \dashrightarrow 00{:}16{:}33{.}420$  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 on cology
- 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
- $00{:}16{:}40{.}300 \dashrightarrow 00{:}16{:}42{.}992$  can come back to your slides when we
- NOTE Confidence: 0.900537588
- $00:16:42.992 \rightarrow 00:16:45.278$  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
- $00{:}16{:}50{.}580 \dashrightarrow 00{:}16{:}52{.}676$  So I'm going to share my screen too.
- NOTE Confidence: 0.7968582225
- $00:16:52.680 \rightarrow 00:16:54.588$  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
- $00:16:56.640 \rightarrow 00:16:59.238$  He's an associate professor of surgery

- NOTE Confidence: 0.906935142
- $00:16:59.238 \rightarrow 00:17:01.540$  in plastics and reconstructive surgery,
- NOTE Confidence: 0.906935142
- $00{:}17{:}01{.}540 \dashrightarrow 00{:}17{:}03{.}316$  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
- $00{:}17{:}05{.}200 \dashrightarrow 00{:}17{:}06{.}860$  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
- $00{:}17{:}08.750 \dashrightarrow 00{:}17{:}10.659$  American Board of Surgery and the
- NOTE Confidence: 0.906935142
- $00{:}17{:}10.659 \dashrightarrow 00{:}17{:}12.423$  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 --> 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,
- NOTE Confidence: 0.8715973625

- $00:17:29.140 \longrightarrow 00:17:30.090$  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
- $00:17:30.660 \rightarrow 00:17:31.548$  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
- $00{:}17{:}34{.}954 \dashrightarrow 00{:}17{:}36{.}950$  see my screen when the time comes.
- NOTE Confidence: 0.8368552
- 00:17:41.410 --> 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
- $00{:}17{:}47{.}925 \dashrightarrow 00{:}17{:}49{.}290$  to join you this evening.
- NOTE Confidence: 0.868036085
- $00{:}17{:}49{.}290 \dashrightarrow 00{:}17{:}52{.}182$  I have most recently been recruited
- NOTE Confidence: 0.868036085
- $00:17:52.182 \longrightarrow 00:17:54.053$  to Yale plastic surgery from
- NOTE Confidence: 0.868036085
- $00{:}17{:}54.053 \dashrightarrow 00{:}17{:}55.257$  the University of Pennsylvania.
- NOTE Confidence: 0.868036085
- $00{:}17{:}55{.}260 \dashrightarrow 00{:}17{:}56{.}424$  I've been on faculty here for
- NOTE Confidence: 0.868036085
- $00:17:56.424 \rightarrow 00:17:57.530$  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
- $00:17:59.287 \rightarrow 00:18:01.080$  fortunate to join an outstanding group

- NOTE Confidence: 0.868036085
- $00:18:01.080 \rightarrow 00:18:03.048$  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
- $00:18:08.280 \longrightarrow 00:18:09.426$  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
- $00:18:11.570 \longrightarrow 00:18:12.750$  which is rapidly grown in
- NOTE Confidence: 0.868036085
- $00{:}18{:}12.750 \dashrightarrow 00{:}18{:}14.290$  the last four or five years.
- NOTE Confidence: 0.868036085
- $00{:}18{:}14{.}290 \dashrightarrow 00{:}18{:}16{.}050$  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 --> 00:18:18.604 Individuals perform plastic and
- NOTE Confidence: 0.868036085
- 00:18:18.604 --> 00:18:21.470 reconstructive surgery on breast in one way,
- NOTE Confidence: 0.868036085
- $00{:}18{:}21.470 \dashrightarrow 00{:}18{:}22.769$  shape or form.
- NOTE Confidence: 0.868036085
- 00:18:22.769 --> 00:18:25.367 The majority of us do reconstructive
- NOTE Confidence: 0.868036085
- $00{:}18{:}25{.}367 \dashrightarrow 00{:}18{:}28{.}174$  surgery as well on breast and I
- NOTE Confidence: 0.868036085

- $00:18:28.174 \longrightarrow 00:18:31.240$  would say that is all about 50%
- NOTE Confidence: 0.868036085
- 00:18:31.240 --> 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
- $00:18:34.292 \longrightarrow 00:18:34.850$  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
- $00:18:51.940 \rightarrow 00:18:54.406$  for this Community and this patient
- NOTE Confidence: 0.868036085
- $00:18:54.406 \rightarrow 00:18:57.928$  population over the next I would say.
- NOTE Confidence: 0.868036085
- 00:18:57.930 --> 00:18:58.410 10 minutes,
- NOTE Confidence: 0.868036085
- $00:18:58.410 \longrightarrow 00:18:59.850$  I'll try to keep it brief.
- NOTE Confidence: 0.868036085
- $00:18:59.850 \rightarrow 00:19:01.374$  It's really difficult to give an

 $00:19:01.374 \rightarrow 00:19:02.720$  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

 $00:19:04.670 \longrightarrow 00:19:06.042$  but I'm going to do my best

NOTE Confidence: 0.868036085

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

NOTE Confidence: 0.868036085

 $00{:}19{:}07{.}570 \dashrightarrow 00{:}19{:}09{.}705$  So as it pertains to the the

NOTE Confidence: 0.868036085

00:19:09.705 --> 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

 $00:19:14.747 \rightarrow 00:19:16.870$  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

 $00:19:19.276 \rightarrow 00:19:21.946$  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

 $00{:}19{:}23.658 \dashrightarrow 00{:}19{:}25.507$  but we also try to provide a

NOTE Confidence: 0.868036085

 $00:19:25.507 \longrightarrow 00:19:27.211$  a nice light at the end of the

NOTE Confidence: 0.868036085

 $00{:}19{:}27{.}211 \dashrightarrow 00{:}19{:}28{.}468$  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

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

NOTE Confidence: 0.868036085

 $00{:}19{:}36{.}540 \dashrightarrow 00{:}19{:}38{.}508$  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

 $00{:}19{:}40.520 \dashrightarrow 00{:}19{:}42.455$  I think we can get them to to restore

NOTE Confidence: 0.868036085

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

NOTE Confidence: 0.868036085

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

NOTE Confidence: 0.868036085

 $00{:}19{:}44{.}809 \dashrightarrow 00{:}19{:}47{.}121$  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

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

NOTE Confidence: 0.868036085

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

NOTE Confidence: 0.868036085

 $00{:}19{:}53.820 \dashrightarrow 00{:}19{:}56.956$  So if you look at the the national

NOTE Confidence: 0.868036085

 $00{:}19{:}56{.}956 \dashrightarrow 00{:}19{:}58{.}668$  data about 65% of the time.

NOTE Confidence: 0.868036085

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

- NOTE Confidence: 0.868036085
- $00{:}19{:}59{.}370 \dashrightarrow 00{:}20{:}01{.}506$  formal breast reconstruction is
- NOTE Confidence: 0.868036085
- $00{:}20{:}01.506 \dashrightarrow 00{:}20{:}04.176$  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
- $00:20:15.500 \rightarrow 00:20:17.719$  which I obviously is a plastic surgeon.
- NOTE Confidence: 0.868036085
- 00:20:17.720 --> 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
- $00:20:24.000 \rightarrow 00:20:25.720$  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
- NOTE Confidence: 0.868036085

00:20:29.666 --> 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

 $00{:}20{:}32.056 \dashrightarrow 00{:}20{:}33.610$  and also to determine if there

NOTE Confidence: 0.868036085

00:20:33.610 - > 00:20:35.015 are any patient populations that

NOTE Confidence: 0.868036085

 $00:20:35.015 \longrightarrow 00:20:36.139$  were not getting breast

NOTE Confidence: 0.855091302857143

 $00{:}20{:}36{.}140 \dashrightarrow 00{:}20{:}37{.}610$  reconstruction at the same rate as others.

NOTE Confidence: 0.855091302857143

 $00{:}20{:}37.610 \dashrightarrow 00{:}20{:}40.508$  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

 $00{:}20{:}44.690 \dashrightarrow 00{:}20{:}46.626$  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

 $00{:}20{:}48.036 \dashrightarrow 00{:}20{:}49.620$  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

 $00:20:53.020 \rightarrow 00:20:56.140$  So our ladies over 45 and then unfortunately

NOTE Confidence: 0.855091302857143

 $00:20:56.140 \longrightarrow 00:20:58.942$  our ladies of color and namely our

- NOTE Confidence: 0.855091302857143
- $00{:}20{:}58{.}942 \dashrightarrow 00{:}21{:}01{.}390$  African American and our Latino women.
- NOTE Confidence: 0.855091302857143
- $00:21:01.390 \rightarrow 00:21:03.574$  And then when we look at insurance status,
- NOTE Confidence: 0.855091302857143
- $00:21:03.580 \longrightarrow 00:21:06.238$  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
- $00{:}21{:}07.605 \dashrightarrow 00{:}21{:}09.459$  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
- $00:21:10.700 \rightarrow 00:21:11.940$  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
- $00:21:14.610 \rightarrow 00:21:17.185$  receive breast reconstruction at the rate
- NOTE Confidence: 0.855091302857143
- $00:21:17.185 \rightarrow 00:21:19.375$  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 --> 00:21:24.206 I do a lot of disparity research
- NOTE Confidence: 0.855091302857143
- $00{:}21{:}24.206 \dashrightarrow 00{:}21{:}25.475$  and scholastic effort,
- NOTE Confidence: 0.855091302857143
- 00:21:25.480 --> 00:21:27.152 but I I do think that this is
- NOTE Confidence: 0.855091302857143
- $00{:}21{:}27.152 \dashrightarrow 00{:}21{:}28.489$  something that has been understated
- NOTE Confidence: 0.855091302857143

 $00{:}21{:}28{.}489 \dashrightarrow 00{:}21{:}30{.}229$  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

 $00:21:35.822 \rightarrow 00:21:37.898$  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 --> 00:21:41.333 reconstruction? Pretty much anytime.

NOTE Confidence: 0.855091302857143

00:21:41.333 --> 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

 $00{:}21{:}45.183 \dashrightarrow 00{:}21{:}46.638$  really good literature out there

NOTE Confidence: 0.855091302857143

 $00{:}21{:}46.638 \dashrightarrow 00{:}21{:}48.346$  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

 $00:21:49.893 \rightarrow 00:21:51.363$  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

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

- NOTE Confidence: 0.855091302857143
- 00:21:55.110 --> 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
- $00:21:59.987 \rightarrow 00:22:02.625$  language language to say that it is gold
- NOTE Confidence: 0.855091302857143
- $00:22:02.625 \rightarrow 00:22:04.950$  standard to have it done immediately,
- NOTE Confidence: 0.855091302857143
- $00{:}22{:}04{.}950 \dashrightarrow 00{:}22{:}06{.}552$  but it is more common occurrence
- NOTE Confidence: 0.855091302857143
- $00{:}22{:}06{.}552 \dashrightarrow 00{:}22{:}09{.}162$  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
- $00{:}22{:}11.995 \dashrightarrow 00{:}22{:}13.920$  we can offer and do offer breast
- NOTE Confidence: 0.855091302857143
- $00:22:13.984 \rightarrow 00:22:16.009$  reconstruction in a delayed setting,
- NOTE Confidence: 0.855091302857143
- $00:22:16.010 \rightarrow 00:22:19.286$  so anytime after that initial mastectomy.
- NOTE Confidence: 0.855091302857143
- $00{:}22{:}19{.}290 \dashrightarrow 00{:}22{:}20{.}574$  Who's the candidate?
- NOTE Confidence: 0.855091302857143
- $00:22:20.574 \longrightarrow 00:22:21.430$  Free construction,
- NOTE Confidence: 0.855091302857143
- $00{:}22{:}21{.}430 \dashrightarrow 00{:}22{:}23{.}646$  I would say the vast majority of patients.
- NOTE Confidence: 0.855091302857143
- $00{:}22{:}23.650 \dashrightarrow 00{:}22{:}25.288$  So any woman who has had or
- NOTE Confidence: 0.855091302857143

 $00:22:25.288 \rightarrow 00:22:27.130$  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 --> 00:22:32.579 inquire and I recommend to my

NOTE Confidence: 0.855091302857143

 $00{:}22{:}32{.}579 \dashrightarrow 00{:}22{:}34{.}084$  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 --> 00:22:36.622 race,

NOTE Confidence: 0.855091302857143

00:22:36.622 --> 00:22:36.944 ethnicity,

NOTE Confidence: 0.855091302857143

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

NOTE Confidence: 0.855091302857143

 $00:22:39.198 \rightarrow 00:22:41.689$  of those plastic and reconstructive surgeons.

NOTE Confidence: 0.855091302857143

00:22:41.690 --> 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

 $00{:}22{:}43.800 \dashrightarrow 00{:}22{:}45.544$  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

 $00{:}22{:}47.608 \dashrightarrow 00{:}22{:}49.552$  breast reconstruction and doing my best

NOTE Confidence: 0.855091302857143

 $00:22:49.552 \rightarrow 00:22:51.127$  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

 $00{:}22{:}53{.}978$  -->  $00{:}22{:}55{.}894$  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

 $00:22:57.910 \rightarrow 00:23:00.910$  which mandated that insurance companies,

NOTE Confidence: 0.855091302857143

 $00{:}23{:}00{.}910 \dashrightarrow 00{:}23{:}03{.}202$  if a woman has medical insurance

NOTE Confidence: 0.855091302857143

 $00:23:03.202 \rightarrow 00:23:05.958$  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

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

NOTE Confidence: 0.855091302857143

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

NOTE Confidence: 0.855091302857143

 $00{:}23{:}13.435 \dashrightarrow 00{:}23{:}14.584$  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

 $00{:}23{:}16{.}230 \dashrightarrow 00{:}23{:}18{.}020$  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

 $00:23:24.650 \rightarrow 00:23:26.379$  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

 $00{:}23{:}28{.}110 \dashrightarrow 00{:}23{:}30{.}595$  for me to also perform a balance

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00:23:32.660 \rightarrow 00:23:34.820$  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

 $00:23:37.620 \rightarrow 00:23:39.495$  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

 $00:23:42.660 \rightarrow 00:23:44.256$  I just want to comment that brush

NOTE Confidence: 0.872759584285714

 $00{:}23{:}44{.}256 \dashrightarrow 00{:}23{:}45{.}406$  reconstruction does not make the

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00{:}23{:}46{.}900 \dashrightarrow 00{:}23{:}48{.}764$  We've looked at this over and over and

 $00:23:48.764 \longrightarrow 00:23:50.496$  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

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

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

00:23:58.230 --> 00:24:00.030 Higher complication rates are noted

NOTE Confidence: 0.872759584285714

 $00:24:00.030 \rightarrow 00:24:01.773$  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

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

NOTE Confidence: 0.872759584285714

00:24:07.754 --> 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

 $00{:}24{:}11{.}495 \dashrightarrow 00{:}24{:}13.065$  we have for the reconstruction.

NOTE Confidence: 0.872759584285714

 $00{:}24{:}13.070 \dashrightarrow 00{:}24{:}14.906$  Silicone implants have been proven to

 $00:24:14.906 \rightarrow 00:24:16.610$  be safe and reconstruction patients,

NOTE Confidence: 0.872759584285714

00:24:16.610 --> 00:24:18.402 even if they rupture,

NOTE Confidence: 0.872759584285714

 $00{:}24{:}18{.}402 \dashrightarrow 00{:}24{:}20{.}642$  they don't cause additional harm.

NOTE Confidence: 0.872759584285714

 $00:24:20.650 \longrightarrow 00:24:22.170$  So about six years ago,

NOTE Confidence: 0.872759584285714

 $00{:}24{:}22.170 \dashrightarrow 00{:}24{:}24.795$  there was a lot of conversation about

NOTE Confidence: 0.872759584285714

 $00{:}24{:}24{.}795 \dashrightarrow 00{:}24{:}26{.}981$  this association of an aplastic large

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00{:}24{:}29.635 \dashrightarrow 00{:}24{:}33.520$  The FDA has identified a risk of

NOTE Confidence: 0.872759584285714

 $00{:}24{:}33{.}620 \dashrightarrow 00{:}24{:}36{.}342$  about one in 30,000 women who had

NOTE Confidence: 0.872759584285714

 $00{:}24{:}36{.}342 \dashrightarrow 00{:}24{:}38{.}640$  textured implants or risk of suffering

NOTE Confidence: 0.872759584285714

00:24:38.713 --> 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

 $00{:}24{:}50{.}000 \dashrightarrow 00{:}24{:}50{.}900$  I do.

 $00{:}24{:}50{.}900 \dashrightarrow 00{:}24{:}53{.}035$  Address this with my patients at time

NOTE Confidence: 0.872759584285714

 $00{:}24{:}53.035 \dashrightarrow 00{:}24{:}55.116$  of consultation and we we actually now

NOTE Confidence: 0.872759584285714

 $00:24:55.116 \rightarrow 00:24:57.188$  give them paperwork and have them sign

NOTE Confidence: 0.872759584285714

 $00:24:57.188 \rightarrow 00:24:58.923$  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 - 00:25:03.278 Most recently there's been

NOTE Confidence: 0.872759584285714

 $00{:}25{:}03{.}278 \dashrightarrow 00{:}25{:}05{.}250$  conversation about an association

NOTE Confidence: 0.872759584285714

 $00:25:05.327 \rightarrow 00:25:07.892$  with a rare type of of a skin cancer,

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00:25:09.640 \rightarrow 00:25:11.821$  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

 $00{:}25{:}12{.}960 \dashrightarrow 00{:}25{:}16{.}138$  There have been 15 reported cases worldwide.

NOTE Confidence: 0.872759584285714

 $00{:}25{:}16.140 \dashrightarrow 00{:}25{:}18.498$  This has been in the news in the last

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00:25:20.870 \rightarrow 00:25:21.500$  A statement.

 $00:25:21.500 \rightarrow 00:25:23.705$  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

 $00:25:26.174 \rightarrow 00:25:27.949$  Infection Control Devices for the FDA,

NOTE Confidence: 0.872759584285714

 $00{:}25{:}27{.}950 \dashrightarrow 00{:}25{:}29{.}602$  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 --> 00:25:32.207 breast implants cause these cancers

NOTE Confidence: 0.872759584285714

 $00{:}25{:}32{.}207 \dashrightarrow 00{:}25{:}34{.}158$  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

 $00{:}25{:}35{.}270 \dashrightarrow 00{:}25{:}37{.}160$  So the reason for the louder part

NOTE Confidence: 0.872759584285714

 $00{:}25{:}37{.}160 \dashrightarrow 00{:}25{:}39{.}056$  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

 $00{:}25{:}40{.}432 \dashrightarrow 00{:}25{:}42{.}230$  has been associated with textured

NOTE Confidence: 0.872759584285714

 $00:25:42.230 \rightarrow 00:25:44.005$  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

 $00:25:46.826 \rightarrow 00:25:47.530$  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

 $00{:}25{:}51{.}550 \dashrightarrow 00{:}25{:}53{.}230$  Association has been identified

NOTE Confidence: 0.872759584285714

 $00:25:53.230 \rightarrow 00:25:56.145$  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

 $00{:}25{:}57{.}775 \dashrightarrow 00{:}26{:}00{.}409$  we need to do additional studies

NOTE Confidence: 0.872759584285714

 $00{:}26{:}00{.}409 \dashrightarrow 00{:}26{:}02{.}290$  and additional surveillance.

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00:26:04.130 \longrightarrow 00:26:04.658$  Once again,

NOTE Confidence: 0.872759584285714

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

NOTE Confidence: 0.872759584285714

 $00:26:07.240 \longrightarrow 00:26:09.290$  our methods of breast reconstruction,

NOTE Confidence: 0.872759584285714

 $00{:}26{:}09{.}290 \dashrightarrow 00{:}26{:}10{.}238$  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 --> 00:26:13.726 First and foremost,

NOTE Confidence: 0.872759584285714

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

 $00:26:16.250 \rightarrow 00:26:17.754$  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

 $00{:}26{:}20.160 \dashrightarrow 00{:}26{:}23.086$  So we offer aesthetic flat closures because

NOTE Confidence: 0.729710134

 $00:26:23.086 \rightarrow 00:26:25.889$  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

 $00{:}26{:}28{.}270 \dashrightarrow 00{:}26{:}30{.}867$  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 --> 00:26:33.324 Breast oncology colleagues,

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

 $00{:}26{:}36{.}020 \dashrightarrow 00{:}26{:}38{.}085$  then there's implant based reconstruction

NOTE Confidence: 0.729710134

 $00{:}26{:}38.085 \dashrightarrow 00{:}26{:}39.737$  and then autologous reconstruction.

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

 $00:26:41.408 \longrightarrow 00:26:43.493$  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

 $00{:}26{:}47.958 \dashrightarrow 00{:}26{:}49.926$  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

 $00:26:51.873 \longrightarrow 00:26:54.575$  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

 $00{:}26{:}56{.}450 \dashrightarrow 00{:}26{:}58{.}922$  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

 $00{:}26{:}59{.}264 \dashrightarrow 00{:}27{:}01{.}936$  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

 $00:27:03.580 \longrightarrow 00:27:03.905$  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

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

NOTE Confidence: 0.729710134

 $00{:}27{:}08{.}212$  -->  $00{:}27{:}10.745$  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

 $00{:}27{:}12.060 \dashrightarrow 00{:}27{:}13.816$  decided that she did not want

NOTE Confidence: 0.729710134

 $00{:}27{:}13.816 \dashrightarrow 00{:}27{:}15.010$  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 --> 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

 $00{:}27{:}20.170 \dashrightarrow 00{:}27{:}22.192$  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

 $00{:}27{:}24.166 \dashrightarrow 00{:}27{:}25.566$  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

 $00:27:29.232 \rightarrow 00:27:31.644$  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

 $00{:}27{:}34{.}190 \dashrightarrow 00{:}27{:}35{.}912$  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

 $00{:}27{:}37{.}150 \dashrightarrow 00{:}27{:}39{.}286$  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 -> 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

 $00{:}27{:}45{.}380 \dashrightarrow 00{:}27{:}47{.}508$  So when it comes to our methods of

- NOTE Confidence: 0.729710134
- 00:27:47.508 --> 00:27:49.439 of formal breast reconstruction,

 $00{:}27{:}49{.}440 \dashrightarrow 00{:}27{:}52{.}260$  reconstructing a breast mound 75%

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

 $00{:}27{:}54.458 \dashrightarrow 00{:}27{:}56.971$  performed via the use of a of a of

NOTE Confidence: 0.729710134

00:27:56.971 -> 00:27:58.831 an implant typically in two stage

NOTE Confidence: 0.729710134

 $00{:}27{:}58.831 \dashrightarrow 00{:}28{:}01.201$  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

 $00{:}28{:}05{.}840 \dashrightarrow 00{:}28{:}08{.}682$  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

 $00{:}28{:}28{.}560 \dashrightarrow 00{:}28{:}30{.}005$  we're fortunate that the vast

NOTE Confidence: 0.729710134

00:28:30.005 --> 00:28:32.252 majority of us here have a background

NOTE Confidence: 0.729710134

 $00{:}28{:}32{.}252 \dashrightarrow 00{:}28{:}33{.}362$  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

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

NOTE Confidence: 0.729710134

 $00{:}28{:}37{.}825 \dashrightarrow 00{:}28{:}40{.}910$  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

 $00{:}28{:}42.998 \dashrightarrow 00{:}28{:}45.347$  reconstruction for the most part it's for

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

 $00:28:50.650 \longrightarrow 00:28:52.835$  There is a large implant

- NOTE Confidence: 0.729710134
- $00:28:52.835 \longrightarrow 00:28:54.583$  trial that is ongoing.

 $00{:}28{:}54{.}590 \dashrightarrow 00{:}28{:}56{.}634$  So we may have some additional options

NOTE Confidence: 0.729710134

 $00{:}28{:}56{.}634 \dashrightarrow 00{:}28{:}58{.}649$  for our larger breasted women or women

NOTE Confidence: 0.729710134

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

NOTE Confidence: 0.729710134

00:29:00.990 --> 00:29:02.290 It's a shorter operative

NOTE Confidence: 0.729710134

 $00:29:02.290 \longrightarrow 00:29:03.590$  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

 $00:29:10.720 \rightarrow 00:29:12.670$  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

 $00{:}29{:}13.870 \dashrightarrow 00{:}29{:}15.670$  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

 $00{:}29{:}16{.}807 \dashrightarrow 00{:}29{:}18{.}740$  at the 10 to 15 year Mark.

NOTE Confidence: 0.859250781428571

 $00{:}29{:}18.740 \dashrightarrow 00{:}29{:}20.780$  And then it's not ideal for

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

NOTE Confidence: 0.859250781428571

 $00{:}29{:}22.555 \dashrightarrow 00{:}29{:}24.631$  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

 $00{:}29{:}32{.}810 \dashrightarrow 00{:}29{:}35{.}489$  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

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

NOTE Confidence: 0.859250781428571

 $00:29:42.480 \longrightarrow 00:29:43.698$  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

 $00{:}29{:}45{.}800 \dashrightarrow 00{:}29{:}48{.}530$  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

 $00:29:51.382 \rightarrow 00:29:54.060$  larger BMI or a larger body habitus.

NOTE Confidence: 0.859250781428571

 $00:29:54.060 \rightarrow 00:29:55.620$  The operative procedure is longer,

 $00:29:55.620 \rightarrow 00:29:57.118$  it's longer and it's more difficult on

NOTE Confidence: 0.859250781428571

 $00{:}29{:}57{.}118$  -->  $00{:}29{:}59{.}528$  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

 $00{:}30{:}06.652 \dashrightarrow 00{:}30{:}07.576$  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

 $00{:}30{:}09{.}317 \dashrightarrow 00{:}30{:}12{.}306$  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 --> 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% nation wide.

NOTE Confidence: 0.859250781428571

00:30:17.826 --> 00:30:19.570 It's not for smokers,

NOTE Confidence: 0.859250781428571

 $00{:}30{:}19{.}570 \dashrightarrow 00{:}30{:}20{.}690$  not for super obese,

NOTE Confidence: 0.859250781428571

 $00{:}30{:}20.690 \dashrightarrow 00{:}30{:}22.370$  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

 $00:30:26.627 \dashrightarrow 00:30:28.878$  one and done either more times than option.

NOTE Confidence: 0.859250781428571

 $00:30:28.878 \rightarrow 00:30:31.150$  If you look at the at the literature

NOTE Confidence: 0.859250781428571

 $00{:}30{:}31{.}150 \dashrightarrow 00{:}30{:}33{.}310$  I touch up operation either one

NOTE Confidence: 0.859250781428571

 $00:30:33.310 \dashrightarrow 00:30:35.424$  or two maybe sometimes three is

NOTE Confidence: 0.859250781428571

 $00:30:35.424 \rightarrow 00:30:37.824$  required in order to get them to to.

NOTE Confidence: 0.859250781428571

 $00{:}30{:}37{.}830 \dashrightarrow 00{:}30{:}39{.}923$  Do a result that they're pleased with

NOTE Confidence: 0.859250781428571

 $00:30:39.923 \dashrightarrow 00:30:42.380$  and and we are also satisfied with.

NOTE Confidence: 0.859250781428571

 $00:30:42.380 \rightarrow 00:30:44.140$  So what about lumpectomy patients,

NOTE Confidence: 0.859250781428571

 $00:30:44.140 \longrightarrow 00:30:45.440$  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

 $00{:}30{:}47.020 \dashrightarrow 00{:}30{:}48.994$  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

 $00:30:50.678 \rightarrow 00:30:52.238$  reduction surgery where a patient

NOTE Confidence: 0.859250781428571

 $00:30:52.238 \rightarrow 00:30:54.724$  who has a small cancer and a larger

- NOTE Confidence: 0.859250781428571
- $00:30:54.724 \rightarrow 00:30:56.494$  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
- $00{:}30{:}59{.}880 \dashrightarrow 00{:}31{:}01{.}215$  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
- $00:31:02.672 \rightarrow 00:31:03.640$  many of our ladies.
- NOTE Confidence: 0.859250781428571
- 00:31:03.640 --> 00:31:06.454 I do a lot of breast reduction
- NOTE Confidence: 0.859250781428571
- $00:31:06.454 \rightarrow 00:31:09.444$  surgery and being able to.
- NOTE Confidence: 0.859250781428571
- 00:31:09.444 --> 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
- $00:31:13.535 \rightarrow 00:31:15.440$  reduction principles has caused this
- NOTE Confidence: 0.859250781428571
- $00:31:15.493 \rightarrow 00:31:17.208$  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
- $00{:}31{:}18.674 \dashrightarrow 00{:}31{:}20.090$  the best of both worlds.
- NOTE Confidence: 0.859250781428571
- $00{:}31{:}20.090 \dashrightarrow 00{:}31{:}22.610$  Patients obviously will still necessitate
- NOTE Confidence: 0.859250781428571

 $00:31:22.610 \rightarrow 00:31:24.235$  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

 $00:31:26.853 \rightarrow 00:31:28.705$  their breast conservation therapy.

NOTE Confidence: 0.859250781428571

 $00:31:28.710 \rightarrow 00:31:30.960$  So this is a patient who had large breast,

NOTE Confidence: 0.859250781428571

 $00:31:30.960 \rightarrow 00:31:32.304$  she had always wanted a breast reduction.

NOTE Confidence: 0.859250781428571

 $00:31:32.310 \rightarrow 00:31:34.407$  She had a small cancer on the right side.

NOTE Confidence: 0.859250781428571

 $00{:}31{:}34{.}410 \dashrightarrow 00{:}31{:}36{.}727$  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

 $00{:}31{:}37{.}390 \dashrightarrow 00{:}31{:}38{.}570$  This is actually after her.

NOTE Confidence: 0.859250781428571

 $00{:}31{:}38{.}570 \dashrightarrow 00{:}31{:}39{.}898$  Radiation as well and

NOTE Confidence: 0.859250781428571

 $00:31:39.898 \longrightarrow 00:31:40.894$  she's healed beautifully.

NOTE Confidence: 0.859250781428571

00:31:40.900 --> 00:31:42.426 She's got just a still a little

NOTE Confidence: 0.859250781428571

 $00:31:42.426 \longrightarrow 00:31:44.071$  bit of skin darkening but was

NOTE Confidence: 0.859250781428571

00:31:44.071 -> 00:31:45.319 ecstatic with her result.

NOTE Confidence: 0.859250781428571

 $00:31:45.320 \rightarrow 00:31:46.196$  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.

- NOTE Confidence: 0.859250781428571
- $00:31:48.000 \longrightarrow 00:31:48.789$  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
- $00:31:50.370 \rightarrow 00:31:52.474$  thought she would be vain by setting it,
- NOTE Confidence: 0.859250781428571
- $00:31:52.480 \rightarrow 00:31:54.580$  setting herself for a breast lift.
- NOTE Confidence: 0.859250781428571
- $00:31:54.580 \rightarrow 00:31:57.230$  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
- $00:32:00.640 \rightarrow 00:32:02.020$  The breasts just keep getting larger.
- NOTE Confidence: 0.819561746153846
- $00:32:02.020 \rightarrow 00:32:04.540$  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
- $00:32:07.256 \rightarrow 00:32:08.825$  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
- $00{:}32{:}12{.}190 \dashrightarrow 00{:}32{:}14{.}990$  And then finally a much more seasoned lady,
- NOTE Confidence: 0.819561746153846
- $00{:}32{:}14{.}990 \dashrightarrow 00{:}32{:}18{.}302$  I had a breast surgeon that that sent
- NOTE Confidence: 0.819561746153846

 $00:32:18.302 \dashrightarrow 00:32:19.950$  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

 $00:32:23.258 \rightarrow 00:32:25.026$  we're concerned about radiating

NOTE Confidence: 0.819561746153846

 $00:32:25.026 \rightarrow 00:32:27.633$  such a large entatic breast causing

NOTE Confidence: 0.819561746153846

 $00{:}32{:}27.633 \dashrightarrow 00{:}32{:}30.720$  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

 $00:32:35.700 \dashrightarrow 00:32:37.149$  there are many options and I believe

NOTE Confidence: 0.819561746153846

 $00:32:37.149 \dashrightarrow 00:32:38.763$  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

 $00:32:39.960 \rightarrow 00:32:43.026$  To just discuss those reconstructive options,

NOTE Confidence: 0.819561746153846

00:32:43.030 --> 00:32:45.142 I'm a big proponent of shared

NOTE Confidence: 0.819561746153846

 $00:32:45.142 \longrightarrow 00:32:45.846$  decision making.

NOTE Confidence: 0.819561746153846

 $00:32:45.850 \dashrightarrow 00:32:48.524$  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

 $00:32:51.659 \rightarrow 00:32:53.289$  what's going to be best for them.

NOTE Confidence: 0.819561746153846

 $00:32:53.290 \rightarrow 00:32:55.126$  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

 $00:32:56.936 \rightarrow 00:32:59.024$  procedure is one that should fulfill

NOTE Confidence: 0.819561746153846

 $00:32:59.024 \rightarrow 00:33:01.084$  the patients needs and lifestyle.

NOTE Confidence: 0.819561746153846

 $00:33:01.090 \rightarrow 00:33:03.505$  So with that I will stop sharing.

NOTE Confidence: 0.819561746153846

00:33:03.510 -> 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

 $00:33:07.692 \rightarrow 00:33:10.390$  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

 $00{:}33{:}14{.}320 \dashrightarrow 00{:}33{:}16{.}816$  on coplastic reconstruction and many of

NOTE Confidence: 0.942527464

00:33:16.816 --> 00:33:18.394 our patients have thought about breast NOTE Confidence: 0.942527464

1011 Connuclice: 0.942021404

00:33:18.394 --> 00:33:20.290 reduction or lift their whole life.

NOTE Confidence: 0.942527464

 $00{:}33{:}20{.}290 \dashrightarrow 00{:}33{:}24{.}170$  And the ability to have it covered by

 $00:33:24.170 \longrightarrow 00:33:27.577$  insurance or the inability to pay cash

NOTE Confidence: 0.942527464

 $00:33:27.577 \rightarrow 00:33:30.410$  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

 $00:33:32.470 \rightarrow 00:33:35.536$  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

 $00:33:40.149 \longrightarrow 00:33:42.309$  with lower risk of lymphedema.

NOTE Confidence: 0.942527464

00:33:42.310 --> 00:33:43.210 As you mentioned,

NOTE Confidence: 0.942527464

 $00{:}33{:}43.210 \dashrightarrow 00{:}33{:}45.830$  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

 $00{:}33{:}50{.}512 \dashrightarrow 00{:}33{:}52{.}772$  slides and we look forward to

NOTE Confidence: 0.942527464

 $00{:}33{:}52.772 \dashrightarrow 00{:}33{:}54.792$  hearing about breast cancer surgery.

NOTE Confidence: 0.5556801

00:34:02.560 --> 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.

- NOTE Confidence: 0.67799021
- $00:34:11.126 \dashrightarrow 00:34:12.750$  You have advanced to the next slide.

00:34:14.990 --> 00:34:17.250 Great. And again, one more.

NOTE Confidence: 0.805293687777778

00:34:19.680 --> 00:34:20.200 Perfect. Yeah.

NOTE Confidence: 0.805293687777778

 $00:34:20.200 \rightarrow 00:34:22.020$  We got stuff at the surgical clinic.

NOTE Confidence: 0.805293687777778

00:34:22.020 --> 00:34:25.860 Yep. Next slide. Yeah.

NOTE Confidence: 0.805293687777778

00:34:25.860 --> 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: 0.805293687777778

 $00:34:34.233 \longrightarrow 00:34:36.669$  anesthesia 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 a tron 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

 $00{:}34{:}42.618 \dashrightarrow 00{:}34{:}44.750$  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

 $00{:}34{:}52.050 \dashrightarrow 00{:}34{:}53.850$  some women choose to have

NOTE Confidence: 0.805293687777778

 $00:34:53.850 \longrightarrow 00:34:54.570$  fibroadenomas removed.

NOTE Confidence: 0.805293687777778

 $00{:}34{:}54{.}570 \dashrightarrow 00{:}34{:}56{.}600$  These are benign tumors and so all

NOTE Confidence: 0.805293687777778

 $00{:}34{:}56.600 \dashrightarrow 00{:}34{:}59.186$  can be done here with with the

NOTE Confidence: 0.80529368777778

 $00:34:59.186 \dashrightarrow 00:35:00.830$  localization as doctor Philpotts.

NOTE Confidence: 0.805293687777778

 $00:35:00.830 \longrightarrow 00:35:02.759$  Mentioned or without.

NOTE Confidence: 0.805293687777778

 $00{:}35{:}02.759 \dashrightarrow 00{:}35{:}05.974$  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

 $00:35:08.215 \rightarrow 00:35:10.450$  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

 $00:35:13.460 \rightarrow 00:35:16.100$  time for early stage breast cancer.

NOTE Confidence: 0.805293687777778

00:35:16.100 --> 00:35:17.094 Radiological localization,

NOTE Confidence: 0.805293687777778

 $00:35:17.094 \rightarrow 00:35:20.573$  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

 $00:35:27.520 \rightarrow 00:35:29.592$  you know bundled with you want Academy

NOTE Confidence: 0.80529368777778

 $00:35:29.592 \rightarrow 00:35:31.992$  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

 $00:35:33.810 \dashrightarrow 00:35:35.987$  Sleep on a separate day and then

NOTE Confidence: 0.805293687777778

 $00{:}35{:}35{.}987 \dashrightarrow 00{:}35{:}38{.}603$  do the going back to me as a first

NOTE Confidence: 0.805293687777778

 $00:35:38.603 \rightarrow 00:35:40.788$  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

 $00:35:41.896 \rightarrow 00:35:44.661$  things like Sentinel lymph node

NOTE Confidence: 0.805293687777778

 $00:35:44.661 \rightarrow 00:35:46.837$  biopsy routinely performed here

NOTE Confidence: 0.805293687777778

 $00:35:46.837 \rightarrow 00:35:48.585$  actually lymph node dissection

NOTE Confidence: 0.805293687777778

00:35:48.585 --> 00:35:51.368 or a lymph node excision biopsy

NOTE Confidence: 0.805293687777778

 $00{:}35{:}51{.}368 \dashrightarrow 00{:}35{:}53{.}988$  to help our hematologists and

NOTE Confidence: 0.805293687777778

 $00{:}35{:}53{.}988 \dashrightarrow 00{:}35{:}56{.}084$  on cologists 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 --> 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

 $00:36:06.106 \longrightarrow 00:36:08.689$  Doctor Greenup at Shoreline,

NOTE Confidence: 0.805293687777778

00:36:08.690 --> 00:36:10.580 Same Day mastectomies,

NOTE Confidence: 0.80529368777778

 $00:36:10.580 \longrightarrow 00:36:13.730$  possibly in the near future,

NOTE Confidence: 0.805293687777778

 $00{:}36{:}13.730 \dashrightarrow 00{:}36{:}16.034$  mast ectomies with immediate breast

NOTE Confidence: 0.805293687777778

 $00{:}36{:}16.034 \dashrightarrow 00{:}36{:}17.950$  reconstruction, implant based,

NOTE Confidence: 0.805293687777778

 $00:36:17.950 \longrightarrow 00:36:20.630$  possibly same day discharge.

NOTE Confidence: 0.805293687777778

 $00:36:20.630 \dashrightarrow 00:36:22.614$  It was working on that in New Haven.

NOTE Confidence: 0.805293687777778

 $00{:}36{:}22.620 \dashrightarrow 00{:}36{:}25.020$  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: 0.805293687777778

00:36:26.940 --> 00:36:28.880 And maybe even overnight stay

NOTE Confidence: 0.805293687777778

 $00{:}36{:}28.880 \dashrightarrow 00{:}36{:}30.432$  at Shoreline one day.

NOTE Confidence: 0.805293687777778

 $00:36:30.440 \longrightarrow 00:36:32.757$  So all these things are are being

- NOTE Confidence: 0.805293687777778
- $00{:}36{:}32{.}757 \dashrightarrow 00{:}36{:}34{.}742$  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
- $00:36:39.424 \rightarrow 00:36:41.277$  community and closer to the patient's
- NOTE Confidence: 0.805293687777778
- $00{:}36{:}41.277 \dashrightarrow 00{:}36{:}43.119$  home that the next slide please.
- NOTE Confidence: 0.8039096125
- $00{:}36{:}47{.}560 \dashrightarrow 00{:}36{:}49{.}920$  Yeah. This is again some of the localization.
- NOTE Confidence: 0.8039096125
- $00{:}36{:}49{.}920 \dashrightarrow 00{:}36{:}51{.}957$  I can see the two wires there.
- NOTE Confidence: 0.8039096125
- 00:36:51.960 --> 00:36:53.644 That's a bracketed lumpectomy.
- NOTE Confidence: 0.8039096125
- $00:36:53.644 \dashrightarrow 00:36:57.071$  And then the other image is what we
- NOTE Confidence: 0.8039096125
- $00:36:57.071 \rightarrow 00:36:59.448$  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
- $00{:}37{:}07{.}575 \dashrightarrow 00{:}37{:}09{.}780$  that are not palpable. Next slide.
- NOTE Confidence: 0.812327905555556
- $00:37:11.900 \rightarrow 00:37:13.600$  There's a picture of a
- NOTE Confidence: 0.812327905555556

00:37:13.600 --> 00:37:14.960 Sentinel lymph node biopsy.

NOTE Confidence: 0.812327905555556

 $00{:}37{:}14.960 \dashrightarrow 00{:}37{:}17.767$  I can see the tiny blue dye.

NOTE Confidence: 0.812327905555556

 $00:37:17.770 \longrightarrow 00:37:20.600$  We can do intraoperative injection

NOTE Confidence: 0.812327905555556

 $00:37:20.600 \rightarrow 00:37:24.359$  of the radioisotope or the blue dye.

NOTE Confidence: 0.812327905555556

 $00:37:24.360 \longrightarrow 00:37:26.929$  These are two markers that are injected

NOTE Confidence: 0.812327905555556

 $00{:}37{:}26{.}929 \dashrightarrow 00{:}37{:}29{.}305$  into the breast to help identify

NOTE Confidence: 0.812327905555556

00:37:29.305 --> 00:37:31.310 the Sentinel lymph node biopsy.

NOTE Confidence: 0.812327905555556

 $00:37:31.310 \rightarrow 00:37:35.478$  And that's part of a routine staging process.

NOTE Confidence: 0.812327905555556

00:37:35.480 --> 00:37:37.538 And as we are moving forward,

NOTE Confidence: 0.812327905555556

 $00:37:37.540 \longrightarrow 00:37:39.565$  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: 0.812327905555556

 $00:37:41.190 \longrightarrow 00:37:43.428$  Businesses from the Society of Surgical

NOTE Confidence: 0.812327905555556

 $00{:}37{:}43.428 \dashrightarrow 00{:}37{:}45.671$  Oncology and the American Board of

NOTE Confidence: 0.812327905555556

 $00{:}37{:}45.671 \dashrightarrow 00{:}37{:}47.391$  Internal Medicine where may be we

NOTE Confidence: 0.812327905555556

 $00{:}37{:}47{.}391 \dashrightarrow 00{:}37{:}49{.}839$  can dees calate and not have to do or

NOTE Confidence: 0.812327905555556

 $00:37:49.839 \rightarrow 00:37:51.579$  routinely do a Sentinel lymph node

- NOTE Confidence: 0.812327905555556
- $00:37:51.579 \rightarrow 00:37:55.080$  biopsy for our women who are 70 and above.
- NOTE Confidence: 0.812327905555556
- 00:37:55.080 00:37:57.740 Early stage breast cancer with
- NOTE Confidence: 0.812327905555556
- $00:37:57.740 \longrightarrow 00:37:59.336$  favorable biologic markers,
- NOTE Confidence: 0.812327905555556
- $00:37:59.340 \rightarrow 00:38:01.312$  meaning estrogen receptor positive,
- NOTE Confidence: 0.812327905555556
- $00:38:01.312 \longrightarrow 00:38:03.777$  her two negative patients are
- NOTE Confidence: 0.812327905555556
- $00{:}38{:}03{.}777 \dashrightarrow 00{:}38{:}06{.}607$  taking to this very strongly when we
- NOTE Confidence: 0.812327905555556
- $00{:}38{:}06{.}607 \dashrightarrow 00{:}38{:}08{.}786$  discuss this because what it's able
- NOTE Confidence: 0.812327905555556
- $00{:}38{:}08{.}786 \dashrightarrow 00{:}38{:}11{.}194$  to do is reduce the amount of side
- NOTE Confidence: 0.812327905555556
- $00:38:11.200 \rightarrow 00:38:13.384$  effects when the even though it's
- NOTE Confidence: 0.812327905555556
- $00:38:13.384 \rightarrow 00:38:15.619$  low risk with Sentinel and biopsy,
- NOTE Confidence: 0.812327905555556
- $00:38:15.620 \longrightarrow 00:38:17.396$  we're able to lower that even
- NOTE Confidence: 0.812327905555556
- $00:38:17.396 \rightarrow 00:38:19.209$  further by not removing lymph nodes
- NOTE Confidence: 0.812327905555556
- $00{:}38{:}19{.}209 \dashrightarrow 00{:}38{:}21{.}204$  and also a range of motion issues.
- NOTE Confidence: 0.812327905555556
- $00{:}38{:}21{.}210 \dashrightarrow 00{:}38{:}23{.}500$  So that's been a new,
- NOTE Confidence: 0.812327905555556
- $00:38:23.500 \longrightarrow 00:38:25.320$  a new approach in surgical.
- NOTE Confidence: 0.812327905555556

 $00:38:25.320 \longrightarrow 00:38:27.784$  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

 $00:38:35.230 \longrightarrow 00:38:36.790$  Uh, the machine in the back,

NOTE Confidence: 0.830154918

 $00{:}38{:}36{.}790 \dashrightarrow 00{:}38{:}39{.}088$  right when we do the lower

NOTE Confidence: 0.830154918

 $00{:}38{:}39{.}088 \dashrightarrow 00{:}38{:}41{.}230$  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

 $00{:}38{:}42.586 \dashrightarrow 00{:}38{:}45.750$  this is very good for confirming your

NOTE Confidence: 0.830154918

 $00:38:45.819 \rightarrow 00:38:48.475$  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 --> 00:38:51.590 helps us with margin status.

NOTE Confidence: 0.830154918

 $00:38:51.590 \dashrightarrow 00:38:54.606$  You know one of the big things with

NOTE Confidence: 0.830154918

00:38:54.606 --> 00:38:56.811 successful oncologic surgery is negative

NOTE Confidence: 0.830154918

 $00:38:56.811 \rightarrow 00:38:59.440$  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

- NOTE Confidence: 0.830154918
- $00:39:01.780 \rightarrow 00:39:03.659$  carcinoma in situ only lobectomies

 $00{:}39{:}03{.}659 \dashrightarrow 00{:}39{:}07{.}072$  and we're able to gain more a lot of

NOTE Confidence: 0.830154918

 $00:39:07.072 \rightarrow 00:39:08.956$  information with the intraoperative

NOTE Confidence: 0.830154918

 $00:39:08.956 \rightarrow 00:39:11.701$  specimen radiograph to look at the margins.

NOTE Confidence: 0.830154918

00:39:11.701 -> 00:39:13.136 To see as a surgeon,

NOTE Confidence: 0.830154918

 $00{:}39{:}13.140 \dashrightarrow 00{:}39{:}15.254$  you know are things looking very good

NOTE Confidence: 0.830154918

 $00{:}39{:}15{.}254 \dashrightarrow 00{:}39{:}17{.}802$  on that on that radio graph and to

NOTE Confidence: 0.830154918

 $00{:}39{:}17.802 \dashrightarrow 00{:}39{:}20.107$  take shave margins at that time of

NOTE Confidence: 0.830154918

00:39:20.107 $\operatorname{-->}$ 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

 $00{:}39{:}24{.}408 \dashrightarrow 00{:}39{:}27{.}618$  You know our goal is to keep that

NOTE Confidence: 0.830154918

 $00{:}39{:}27.618 \dashrightarrow 00{:}39{:}30.047$  and never we can never achieve 0,

NOTE Confidence: 0.830154918

 $00:39:30.050 \longrightarrow 00:39:31.986$  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

 $00:39:33.540 \rightarrow 00:39:34.221$  not too well,

- $00:39:34.221 \rightarrow 00:39:35.810$  so we can have good cosmetic outcome,
- NOTE Confidence: 0.830154918
- $00{:}39{:}35{.}810$  -->  $00{:}39{:}38{.}235$  good on cologic outcomes and that
- NOTE Confidence: 0.830154918
- $00:39:38.235 \rightarrow 00:39:40.175$  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 --> 00:39:47.558 Go back one here,
- NOTE Confidence: 0.771462525
- 00:39:47.990 00:39:51.868 yeah, back one more. There we are. Yeah.
- NOTE Confidence: 0.837919542857143
- $00:39:51.880 \rightarrow 00:39:54.456$  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
- $00:39:58.936 \rightarrow 00:40:01.520$  middle slide is a lymph node.
- NOTE Confidence: 0.837919542857143
- $00{:}40{:}01{.}520 \dashrightarrow 00{:}40{:}04{.}328$  You know the tiny lymph node with the
- NOTE Confidence: 0.837919542857143
- $00:40:04.328 \rightarrow 00:40:07.120$  biopsy clip in it here at at Yale over
- NOTE Confidence: 0.837919542857143
- $00{:}40{:}07{.}120 \dashrightarrow 00{:}40{:}10.255$ 2 routinely put a biopsy clip after a
- NOTE Confidence: 0.837919542857143
- 00:40:10.255 --> 00:40:13.057 lymph node has been radiologically biopsied.
- NOTE Confidence: 0.837919542857143
- $00{:}40{:}13.060 \dashrightarrow 00{:}40{:}15.112$  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

 $00:40:17.263 \rightarrow 00:40:19.393$  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 --> 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

 $00:40:28.352 \rightarrow 00:40:31.169$  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

 $00{:}40{:}35{.}790 \dashrightarrow 00{:}40{:}39{.}494$  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 --> 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

 $00{:}40{:}50{.}301 \dashrightarrow 00{:}40{:}52{.}683$  us at Shoreline and we're actively

NOTE Confidence: 0.815230736923077

 $00{:}40{:}52.683 \dashrightarrow 00{:}40{:}54.618$  recruiting within the comet trial.

00:40:54.620 --> 00:40:56.690 You know, we're asking ourselves.

NOTE Confidence: 0.815230736923077

 $00{:}40{:}56{.}690 \dashrightarrow 00{:}40{:}59{.}636$  Finally, believe it or not is

NOTE Confidence: 0.815230736923077

 $00:40:59.636 \rightarrow 00:41:02.120$  aggressive treatment as you know,

NOTE Confidence: 0.815230736923077

 $00:41:02.120 \rightarrow 00:41:04.775$  are invasive cancer type treatments

NOTE Confidence: 0.815230736923077

 $00{:}41{:}04.775 \dashrightarrow 00{:}41{:}06.899$  necessary for precancerous disease,

NOTE Confidence: 0.815230736923077

 $00{:}41{:}06{.}900 \dashrightarrow 00{:}41{:}09{.}096$  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

 $00:41:14.940 \rightarrow 00:41:18.820$  randomizing women with favorable DCIS,

NOTE Confidence: 0.815230736923077

 $00{:}41{:}18.820 \dashrightarrow 00{:}41{:}21.900$  meaning a low risk to surgery or no

NOTE Confidence: 0.815230736923077

 $00:41:21.900 \rightarrow 00:41:24.615$  surgery with the options of some

NOTE Confidence: 0.815230736923077

 $00:41:24.615 \longrightarrow 00:41:26.935$  of the other adjuvant the rapies.

NOTE Confidence: 0.815230736923077

 $00{:}41{:}26{.}940 \dashrightarrow 00{:}41{:}29{.}316$  Um, so we've recruited patients at

NOTE Confidence: 0.815230736923077

 $00:41:29.316 \rightarrow 00:41:31.440$  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

 $00:41:35.251 \rightarrow 00:41:37.445$  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

 $00{:}41{:}41{.}450 \dashrightarrow 00{:}41{:}42{.}248$  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

 $00:41:49.134 \rightarrow 00:41:51.669$  patients come in with newly diagnosed

NOTE Confidence: 0.803585498

 $00:41:51.669 \longrightarrow 00:41:54.369$  breast cancer or even high risk

NOTE Confidence: 0.803585498

00:41:54.369 --> 00:41:56.800 things like genetic counseling,

NOTE Confidence: 0.803585498

 $00:41:56.800 \rightarrow 00:42:00.314$  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

 $00:42:04.734 \rightarrow 00:42:06.190$  clinics with appropriate referrals

NOTE Confidence: 0.803585498

 $00{:}42{:}06{.}249 \dashrightarrow 00{:}42{:}08{.}009$  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

 $00{:}42{:}16{.}220 \dashrightarrow 00{:}42{:}18{.}966$  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

 $00{:}42{:}33.826 \dashrightarrow 00{:}42{:}36.166$  promptly and streamline them for

NOTE Confidence: 0.803585498

 $00:42:36.166 \longrightarrow 00:42:38.283$  various post surgical issues or

NOTE Confidence: 0.803585498

00:42:38.283 --> 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 --> 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,

- NOTE Confidence: 0.803585498
- $00:42:48.234 \rightarrow 00:42:50.824$  again um within the system,
- NOTE Confidence: 0.803585498
- $00{:}42{:}50{.}830 \dashrightarrow 00{:}42{:}53{.}385$  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
- $00:42:56.030 \rightarrow 00:42:58.190$  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
- $00:43:00.421 \rightarrow 00:43:02.546$  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 --> 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
- $00:43:11.570 \longrightarrow 00:43:13.460$  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 --> 00:43:17.900 You know, certainly I encourage anybody
- NOTE Confidence: 0.6733104828
- 00:43:17.900 --> 00:43:20.470 to e-mail me directly and certainly
- NOTE Confidence: 0.6733104828
- 00:43:20.470 --> 00:43:22.852 will provide my cell phone number
- NOTE Confidence: 0.6733104828
- $00{:}43{:}22{.}852 \dashrightarrow 00{:}43{:}25{.}532$  because a lot of the most difficult
- NOTE Confidence: 0.6733104828

 $00:43:25.532 \rightarrow 00:43:27.622$  discussions I think in the primary

NOTE Confidence: 0.6733104828

00:43:27.622 -> 00:43:30.070 care may very well be what do you do

NOTE Confidence: 0.6733104828

 $00:43:30.132 \rightarrow 00:43:32.418$  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

 $00{:}43{:}34{.}285 \dashrightarrow 00{:}43{:}35{.}404$  and answer those.

NOTE Confidence: 0.6733104828

 $00{:}43{:}35{.}410$  -->  $00{:}43{:}38{.}259$  Those questions, uh what types of follow-up 100 --> 100

NOTE Confidence: 0.6733104828

 $00{:}43{:}38{.}259 \dashrightarrow 00{:}43{:}40{.}139$  screening strategies for high risk.

NOTE Confidence: 0.6733104828

 $00:43:40.140 \rightarrow 00:43:42.460$  Um, you know all of those different things.

NOTE Confidence: 0.6733104828

 $00{:}43{:}42.460 \dashrightarrow 00{:}43{:}45.610$  So always happy to help problem solve

NOTE Confidence: 0.6733104828

 $00{:}43{:}45.610 \dashrightarrow 00{:}43{:}47.886$  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

 $00{:}43{:}50.664 \dashrightarrow 00{:}43{:}52.858$  certainly send an e-mail how can

NOTE Confidence: 0.6733104828

 $00{:}43{:}52.858 \dashrightarrow 00{:}43{:}55.461$  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

 $00{:}43{:}58.300 \dashrightarrow 00{:}44{:}01.280$  you know from Yale started in 2020 that

NOTE Confidence: 0.6733104828

 $00:44:01.280 \rightarrow 00:44:03.680$  was our first breast surgery there.

- NOTE Confidence: 0.6733104828
- $00{:}44{:}03.680 \dashrightarrow 00{:}44{:}05.712$  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 --> 00:44:11.803 your feedback on how we can help you
- NOTE Confidence: 0.6733104828
- 00:44:11.803 --> 00:44:13.650 navigate your patients view benign disease,
- NOTE Confidence: 0.6733104828
- 00:44:13.650 -> 00:44:16.320 high risk as well as malignancy.
- NOTE Confidence: 0.6733104828
- $00{:}44{:}16{.}320 \dashrightarrow 00{:}44{:}19{.}104$  And there's a a shout out to Doctor
- NOTE Confidence: 0.6733104828
- $00:44:19.104 \longrightarrow 00:44:21.130$  Horowitz who started the clinic
- NOTE Confidence: 0.6733104828
- $00{:}44{:}21{.}130 \dashrightarrow 00{:}44{:}23{.}510$  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
- $00:44:26.023 \rightarrow 00:44:28.418$  and we've since her retirement
- NOTE Confidence: 0.6733104828
- $00{:}44{:}28{.}418 \dashrightarrow 00{:}44{:}31{.}354$  we've added breast surgery and even
- NOTE Confidence: 0.6733104828
- $00:44:31.354 \rightarrow 00:44:33.242$  expanding to reconstruction under
- NOTE Confidence: 0.6733104828
- $00{:}44{:}33{.}242 \dashrightarrow 00{:}44{:}35{.}505$  the directorship of of Doctor.
- NOTE Confidence: 0.6733104828
- 00:44:35.505 --> 00:44:36.255 Or Salvador.
- NOTE Confidence: 0.6733104828

- $00:44:36.255 \rightarrow 00:44:37.380$  Great things there.
- NOTE Confidence: 0.6733104828
- $00{:}44{:}37{.}380 \dashrightarrow 00{:}44{:}38{.}529$  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
- $00{:}44{:}42.584 \dashrightarrow 00{:}44{:}45.398$  one of our our nurses and coordinators.
- NOTE Confidence: 0.6733104828
- $00{:}44{:}45{.}400 \dashrightarrow 00{:}44{:}45{.}667$  Again,
- NOTE Confidence: 0.6733104828
- 00:44:45.667 --> 00:44:47.536 feel free to always send an e-mail
- NOTE Confidence: 0.6733104828
- 00:44:47.536 --> 00:44:49.066 and happy to help in any way
- NOTE Confidence: 0.9562783175
- $00{:}44{:}49{.}080 \dashrightarrow 00{:}44{:}50{.}268$  we can. Thank you.
- NOTE Confidence: 0.95518799
- $00:44:51.410 \rightarrow 00:44:52.840$  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
- $00{:}44{:}55{.}500 \dashrightarrow 00{:}44{:}58{.}452$  concerns that we would not be able to
- NOTE Confidence: 0.95518799
- 00:44:58.452 --> 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
- $00:45:05.040 \rightarrow 00:45:06.664$  but we're doing our best to keep up.

- NOTE Confidence: 0.95518799
- $00{:}45{:}06.670 \dashrightarrow 00{:}45{:}09.743$  So we all prioritize access and a
- NOTE Confidence: 0.95518799
- 00:45:09.743 --> 00:45:12.061 high quality patient centered care
- NOTE Confidence: 0.95518799
- $00:45:12.061 \rightarrow 00:45:14.803$  and we're here to help anytime.
- NOTE Confidence: 0.95518799
- $00:45:14.810 \rightarrow 00:45:17.400$  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
- $00{:}45{:}24.570 \dashrightarrow 00{:}45{:}27.820$  next speaker known her for some time.
- NOTE Confidence: 0.90889765
- 00:45:27.820 --> 00:45:30.020 Sarah Sarah Mcgillion is an
- NOTE Confidence: 0.90889765
- $00{:}45{:}30{.}020 \dashrightarrow 00{:}45{:}31{.}780$  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 --> 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 --> 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
- NOTE Confidence: 0.90889765

- $00{:}45{:}48.160 \dashrightarrow 00{:}45{:}50.460$  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 --> 00:45:55.910 public policy and effective veness research,
- NOTE Confidence: 0.90889765
- $00:45:55.910 \longrightarrow 00:45:57.675$  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
- $00{:}45{:}59{.}090 \dashrightarrow 00{:}46{:}01{.}195$  with a specific interest in
- NOTE Confidence: 0.90889765
- $00:46:01.195 \rightarrow 00:46:03.300$  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 --> 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
- $00:46:12.110 \rightarrow 00:46:15.200$  So welcome everybody like Doctor Butler.
- NOTE Confidence: 0.69482982625
- 00:46:15.200 --> 00:46:18.060 I think that this is clearly a topic
- NOTE Confidence: 0.69482982625
- $00:46:18.060 \rightarrow 00:46:21.140$  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,

- NOTE Confidence: 0.69482982625
- 00:46:22.920 --> 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 --> 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
- $00:46:36.600 \rightarrow 00:46:38.490$  we can also do in Guildford and.
- NOTE Confidence: 0.69482982625
- $00{:}46{:}38{.}490 \dashrightarrow 00{:}46{:}41{.}028$  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 night mare.
- NOTE Confidence: 0.69482982625
- 00:46:46.430 --> 00:46:49.960 But I love the the group that we have out
- NOTE Confidence: 0.69482982625
- $00:46:50.047 \rightarrow 00:46:53.743$  here and I love my colleagues in Guildford.
- NOTE Confidence: 0.69482982625
- $00{:}46{:}53.750 \dashrightarrow 00{:}46{:}55.676$  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
- NOTE Confidence: 0.69482982625

 $00:46:57.827 \longrightarrow 00:47:00.203$  that really have very high level

NOTE Confidence: 0.69482982625

00:47:00.203 --> 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

 $00{:}47{:}04{.}841 \dashrightarrow 00{:}47{:}07{.}250$  Guildford that we can do in New Haven.

NOTE Confidence: 0.69482982625

 $00:47:07.250 \rightarrow 00:47:09.560$  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 --> 00:47:12.840 diagnosed with breast cancer,

NOTE Confidence: 0.69482982625

 $00:47:12.840 \rightarrow 00:47:15.680$  she's in for, she's in for a ride,

NOTE Confidence: 0.69482982625

 $00{:}47{:}15.680 \dashrightarrow 00{:}47{:}16.740$  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

 $00{:}47{:}21.800 \dashrightarrow 00{:}47{:}23.600$  consisting of a medical oncologist,

NOTE Confidence: 0.69482982625

00:47:23.600 --> 00:47:25.355 a radiation oncologist,

NOTE Confidence: 0.69482982625

 $00{:}47{:}25{.}355 \dashrightarrow 00{:}47{:}28{.}634$  a surgeon and those three different

NOTE Confidence: 0.69482982625

 $00:47:28.634 \rightarrow 00:47:30.502$  disciplines work closely with

- NOTE Confidence: 0.69482982625
- $00{:}47{:}30{.}502 \dashrightarrow 00{:}47{:}32{.}879$  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
- $00:47:35.084 \rightarrow 00:47:37.440$  appropriate imaging right off the bat.
- NOTE Confidence: 0.69482982625
- $00:47:37.440 \rightarrow 00:47:40.236$  We also have social work, physical therapy.
- NOTE Confidence: 0.69482982625
- $00{:}47{:}40{.}236 \dashrightarrow 00{:}47{:}41{.}592$  Nutrition, genetics,
- NOTE Confidence: 0.69482982625
- 00:47:41.592 --> 00:47:44.304 fertility and reproductive endocrinology,
- NOTE Confidence: 0.69482982625
- $00:47:44.310 \longrightarrow 00:47:46.634$  all prior to the patient who might
- NOTE Confidence: 0.69482982625
- $00:47:46.634 \rightarrow 00:47:48.777$  then have to undergo chemotherapy
- NOTE Confidence: 0.69482982625
- 00:47:48.777 --> 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
- $00{:}47{:}55.689 \dashrightarrow 00{:}47{:}57.705$  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
- $00{:}47{:}59{.}709 \dashrightarrow 00{:}48{:}01{.}328$  Doctor Butler have described.
- NOTE Confidence: 0.69482982625
- $00{:}48{:}01{.}330 \dashrightarrow 00{:}48{:}03{.}448$  They might continue on getting more
- NOTE Confidence: 0.69482982625

 $00:48:03.448 \rightarrow 00:48:05.695$  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

 $00:48:13.070 \longrightarrow 00:48:14.240$  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 - 00:48:19.640 way and then once the definitive

NOTE Confidence: 0.69482982625

00:48:19.640 --> 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

 $00:48:24.834 \rightarrow 00:48:28.200$  physical therapy and the list goes on and on.

NOTE Confidence: 0.69482982625

 $00:48:28.200 \rightarrow 00:48:30.034$  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

 $00:48:32.578 \rightarrow 00:48:35.510$  group of of clinicians who are working

NOTE Confidence: 0.69482982625

 $00:48:35.510 \rightarrow 00:48:38.219$  together to to provide the best care.

- NOTE Confidence: 0.69482982625
- $00:48:38.220 \longrightarrow 00:48:41.293$  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
- $00:48:50.516 \rightarrow 00:48:51.964$  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 --> 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 --> 00:48:59.740 and I don't want to steal
- NOTE Confidence: 0.69482982625
- $00:48:59.740 \longrightarrow 00:49:00.685$  Doctor Higgins's Thunder.
- NOTE Confidence: 0.69482982625
- 00:49:00.690 --> 00:49:01.146 However,
- NOTE Confidence: 0.69482982625
- $00{:}49{:}01{.}146 \dashrightarrow 00{:}49{:}02{.}970$  the goal of radiation,
- NOTE Confidence: 0.69482982625
- $00{:}49{:}02{.}970 \dashrightarrow 00{:}49{:}04{.}266$  as I like to describe it in clinic,
- NOTE Confidence: 0.69482982625

 $00{:}49{:}04{.}270 \dashrightarrow 00{:}49{:}06{.}270$  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

 $00:49:09.835 \rightarrow 00:49:11.780$  after lumpectomy and can be recommended

NOTE Confidence: 0.69482982625

 $00{:}49{:}11.780 \dashrightarrow 00{:}49{:}13.730$  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 --> 00:49:20.205 well surgery, radiation,

NOTE Confidence: 0.873352915

00:49:20.205 --> 00:49:21.585 breast is all clean.

NOTE Confidence: 0.873352915

 $00:49:21.590 \rightarrow 00:49:23.326$  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

 $00:49:27.960 \rightarrow 00:49:30.713$  is to mop up the microscopically

NOTE Confidence: 0.873352915

 $00:49:30.713 \rightarrow 00:49:32.909$  undetectable disease systemically.

NOTE Confidence: 0.873352915

00:49:32.910 --> 00:49:34.870 And our goal is to reduce the risk

NOTE Confidence: 0.873352915

 $00:49:34.870 \longrightarrow 00:49:36.389$  of distant recurrence to reduce

- NOTE Confidence: 0.873352915
- $00:49:36.389 \longrightarrow 00:49:38.321$  the the likelihood that a patient
- NOTE Confidence: 0.873352915
- $00{:}49{:}38{.}321 \dashrightarrow 00{:}49{:}40{.}228$  dies of metastatic breast cancer.
- NOTE Confidence: 0.4904061
- 00:49:42.330 --> 00:49:45.730 Umm. Nope. I'm going to do
- NOTE Confidence: 0.4904061
- $00{:}49{:}45{.}730 \dashrightarrow 00{:}49{:}46{.}830$  a little more animation.
- NOTE Confidence: 0.4904061
- $00{:}49{:}46.830 \dashrightarrow 00{:}49{:}49.785$  This is what happens when you oops,
- NOTE Confidence: 0.4904061
- $00:49:49.785 \rightarrow 00:49:52.970$  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
- $00:49:54.650 \rightarrow 00:49:55.770$  gets what medical treatment?
- NOTE Confidence: 0.4904061
- $00{:}49{:}55{.}770 \dashrightarrow 00{:}49{:}58{.}110$  It's a really complicated story.
- NOTE Confidence: 0.4904061
- $00:49:58.110 \longrightarrow 00:50:00.265$  It takes into account patient
- NOTE Confidence: 0.4904061
- $00:50:00.265 \longrightarrow 00:50:01.472$  characteristics, their age,
- NOTE Confidence: 0.4904061
- $00:50:01.472 \longrightarrow 00:50:02.630$  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
- $00:50:06.590 \rightarrow 00:50:08.306$  which is tumor size, nodal status,
- NOTE Confidence: 0.4904061

 $00:50:08.310 \longrightarrow 00:50:10.578$  and the presence or absence of metastatic

NOTE Confidence: 0.4904061

 $00{:}50{:}10.578 \dashrightarrow 00{:}50{:}12.446$  disease and tumor characteristics such

NOTE Confidence: 0.4904061

 $00:50:12.446 \rightarrow 00:50:14.432$  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

 $00:50:18.130 \longrightarrow 00:50:18.480$  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 --> 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

 $00{:}50{:}26{.}570 \dashrightarrow 00{:}50{:}28{.}628$  And based on that combination we

NOTE Confidence: 0.4904061

 $00:50:28.628 \rightarrow 00:50:30.570$  then choose a systemic therapy.

NOTE Confidence: 0.4904061

 $00{:}50{:}30{.}570 \dashrightarrow 00{:}50{:}32{.}600$  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

 $00:50:36.335 \rightarrow 00:50:38.287$  this is their number one question,

- NOTE Confidence: 0.4904061
- $00:50:38.290 \rightarrow 00:50:40.170$  what's my stage because apparently

 $00{:}50{:}40.170 \dashrightarrow 00{:}50{:}42.050$  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

 $00:50:45.924 \rightarrow 00:50:48.288$  is more than just the tumor,

NOTE Confidence: 0.4904061

 $00{:}50{:}48.290 \dashrightarrow 00{:}50{:}50.678$  the nodal status and the presence

NOTE Confidence: 0.4904061

 $00{:}50{:}50{.}678 \dashrightarrow 00{:}50{:}52{.}270$  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

 $00{:}50{:}54{.}286 \dashrightarrow 00{:}50{:}56{.}526$  incorporating some of these other.

NOTE Confidence: 0.4904061

 $00{:}50{:}56{.}530 \dashrightarrow 00{:}50{:}58{.}903$  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

 $00{:}51{:}01{.}159$  -->  $00{:}51{:}03{.}637$  the progesterone receptor and her two NOTE Confidence: 0.4904061

 $00:51:03.637 \rightarrow 00:51:06.277$  to come up with a more prognostic

NOTE Confidence: 0.4904061

 $00{:}51{:}06{.}277 \dashrightarrow 00{:}51{:}08{.}771$  stage that's really more aligned with

NOTE Confidence: 0.4904061

 $00:51:08.771 \dashrightarrow 00:51:10.735$  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

 $00{:}51{:}13.140 \dashrightarrow 00{:}51{:}15.086$  Well grade is a measure of how

NOTE Confidence: 0.4904061

 $00:51:15.086 \rightarrow 00:51:16.349$  aggressive the cancer appears

NOTE Confidence: 0.4904061

 $00{:}51{:}16{.}349 \dashrightarrow 00{:}51{:}18{.}219$  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

 $00:51:19.720 \longrightarrow 00:51:21.274$  And in general, the higher the grade,

NOTE Confidence: 0.4904061

 $00:51:21.280 \rightarrow 00:51:23.116$  the more aggressive the cancer and

NOTE Confidence: 0.4904061

00:51:23.116 --> 00:51:25.281 the more aggressive we have to be

NOTE Confidence: 0.4904061

 $00{:}51{:}25{.}281 \dashrightarrow 00{:}51{:}26{.}756$  to prevent a systemic recurrence.

NOTE Confidence: 0.4904061

 $00:51:26.760 \longrightarrow 00:51:29.042$  Then we get on to the estrogen

NOTE Confidence: 0.4904061

 $00{:}51{:}29{.}042 \dashrightarrow 00{:}51{:}30{.}020$  and progesterone receptors.

NOTE Confidence: 0.4904061

 $00:51:30.020 \rightarrow 00:51:32.636$  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

 $00{:}51{:}34{.}684 \dashrightarrow 00{:}51{:}36{.}825$  dirty way of thinking about these

NOTE Confidence: 0.4904061

 $00:51:36.825 \rightarrow 00:51:39.380$  is if the cancer expressed expresses

- NOTE Confidence: 0.4904061
- $00:51:39.380 \rightarrow 00:51:41.620$  estrogen or progesterone receptors,

 $00{:}51{:}41{.}620 \dashrightarrow 00{:}51{:}44{.}784$  it's fueled by hormones and so hormone

NOTE Confidence: 0.4904061

 $00{:}51{:}44{.}784 \dashrightarrow 00{:}51{:}46{.}641$  deprivation or interference with

NOTE Confidence: 0.4904061

 $00{:}51{:}46{.}641 \dashrightarrow 00{:}51{:}48{.}766$  that receptor and ligand interaction

NOTE Confidence: 0.4904061

 $00{:}51{:}48.766 \dashrightarrow 00{:}51{:}51.657$  can be a the rapeutic option and we NOTE Confidence: 0.4904061

 $00:51:51.657 \rightarrow 00:51:53.895$  have medications that do just that.

NOTE Confidence: 0.4904061

 $00{:}51{:}53{.}900 \dashrightarrow 00{:}51{:}56{.}412$  Her two is a member of the EGFR

NOTE Confidence: 0.4904061

00:51:56.412 --> 00:51:58.879 family of cell surface receptors,

NOTE Confidence: 0.4904061

 $00{:}51{:}58{.}880 \dashrightarrow 00{:}52{:}01{.}043$  and it can be overexpressed in some

NOTE Confidence: 0.4904061

 $00{:}52{:}01{.}043 \dashrightarrow 00{:}52{:}03{.}749$  of the most aggressive breast cancers.

NOTE Confidence: 0.859969678888889

 $00:52:05.850 \longrightarrow 00:52:07.620$  Her two positive or her her

NOTE Confidence: 0.859969678888889

 $00{:}52{:}07{.}620 \dashrightarrow 00{:}52{:}08{.}800$  two over expressing cancers are

NOTE Confidence: 0.859969678888889

 $00{:}52{:}08{.}853 \dashrightarrow 00{:}52{:}10{.}481$  often poorly differentiated and

NOTE Confidence: 0.859969678888889

 $00{:}52{:}10{.}481 \dashrightarrow 00{:}52{:}12{.}109$  require chemotherapy and really,

NOTE Confidence: 0.859969678888889

 $00{:}52{:}12.110 \dashrightarrow 00{:}52{:}16.250$  really aggressive and intense the rapy.

 $00:52:16.250 \rightarrow 00:52:18.490$  We also have gene expression

NOTE Confidence: 0.859969678888889

00:52:18.490 --> 00:52:20.730 profiles at our disposal that

NOTE Confidence: 0.859969678888889

00:52:20.815 --> 00:52:23.250 can help determine whether or

NOTE Confidence: 0.859969678888889

 $00:52:23.250 \rightarrow 00:52:25.685$  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

 $00{:}52{:}31{.}633 \dashrightarrow 00{:}52{:}34{.}313$  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

 $00:52:38.418 \rightarrow 00:52:40.430$  the higher the risk of the recurrence

NOTE Confidence: 0.859969678888889

 $00{:}52{:}40{.}430 \dashrightarrow 00{:}52{:}43{.}022$  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

 $00:52:48.820 \rightarrow 00:52:51.165$  dirty way of thinking about what's

NOTE Confidence: 0.859969678888889

 $00:52:51.165 \rightarrow 00:52:53.730$  the underlying biology of the cancer.

NOTE Confidence: 0.859969678888889

00:52:53.730 - > 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

 $00:53:01.834 \rightarrow 00:53:04.230$  the presence or absence of heart disease,

NOTE Confidence: 0.859969678888889

00:53:04.230 --> 00:53:06.302 diabetes, osteoporosis,

NOTE Confidence: 0.859969678888889

 $00:53:06.302 \rightarrow 00:53:09.410$  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

 $00:53:12.510 \rightarrow 00:53:14.466$  and we haven't mentioned this much,

NOTE Confidence: 0.859969678888889

 $00:53:14.470 \rightarrow 00:53:17.088$  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

 $00:53:18.998 \rightarrow 00:53:20.270$  genetic syndromes associated with

NOTE Confidence: 0.859969678888889

 $00:53:20.325 \rightarrow 00:53:21.987$  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 --> 00:53:25.888 May impact not only local therapy,

NOTE Confidence: 0.859969678888889

 $00{:}53{:}25{.}890 \dashrightarrow 00{:}53{:}27{.}682$  but it's becoming increasingly

NOTE Confidence: 0.859969678888889

 $00:53:27.682 \rightarrow 00:53:30.140$  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 00:53:36.805 These are all the chemotherapy
- NOTE Confidence: 0.859969678888889
- 00:53:36.805 --> 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
- $00{:}53{:}41{.}250 \dashrightarrow 00{:}53{:}42{.}580$  all have different side effects.
- NOTE Confidence: 0.859969678888889
- $00:53:42.580 \rightarrow 00:53:43.680$  They all have different schedules,
- NOTE Confidence: 0.859969678888889
- $00:53:43.680 \longrightarrow 00:53:45.140$  they all have different needs,
- NOTE Confidence: 0.859969678888889
- 00:53:45.140 --> 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
- $00{:}53{:}50{.}900 \dashrightarrow 00{:}53{:}52{.}262$  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
- $00:53:53.740 \rightarrow 00:53:58.420$  So, so not to not to make light of this,

- NOTE Confidence: 0.859969678888889
- $00{:}53{:}58{.}420 \dashrightarrow 00{:}54{:}00{.}355$  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
- $00:54:05.250 \rightarrow 00:54:07.586$  We use a lot of different chemotherapy drugs.
- NOTE Confidence: 0.859969678888889
- $00{:}54{:}07{.}590 \dashrightarrow 00{:}54{:}09{.}658$  Here are some common ones and
- NOTE Confidence: 0.859969678888889
- $00{:}54{:}09{.}658 \dashrightarrow 00{:}54{:}11{.}326$  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
- $00:54:12.590 \rightarrow 00:54:14.210$  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
- $00:54:15.830 \longrightarrow 00:54:17.244$  and it's great that they kill cancer,
- NOTE Confidence: 0.859969678888889
- $00:54:17.250 \rightarrow 00:54:19.834$  but they can cause other problems as well,
- NOTE Confidence: 0.859969678888889
- $00:54:19.840 \longrightarrow 00:54:21.481$  namely cardiomyopathy with
- NOTE Confidence: 0.859969678888889
- 00:54:21.481 -> 00:54:23.669 some of the anthracyclines,
- NOTE Confidence: 0.859969678888889
- $00{:}54{:}23.670 \dashrightarrow 00{:}54{:}25.866$  neuropathy with some of the taxanes,
- NOTE Confidence: 0.859969678888889
- $00:54:25.870 \rightarrow 00:54:27.235$  and and hypersensitivity
- NOTE Confidence: 0.859969678888889

 $00:54:27.235 \longrightarrow 00:54:29.055$  reactions across the board.

NOTE Confidence: 0.8808648844

 $00{:}54{:}31{.}700 \dashrightarrow 00{:}54{:}33{.}228$  Just really quickly, we,

NOTE Confidence: 0.8808648844

 $00:54:33.228 \rightarrow 00:54:34.756$  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

 $00{:}54{:}36{.}687 \dashrightarrow 00{:}54{:}38{.}913$  for a number of different clinical

NOTE Confidence: 0.8808648844

 $00{:}54{:}38{.}913 \dashrightarrow 00{:}54{:}40{.}980$  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

 $00:54:43.260 \rightarrow 00:54:45.198$  Is chemotherapy going first? Are we,

NOTE Confidence: 0.8808648844

 $00:54:45.200 \rightarrow 00:54:48.296$  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

 $00:54:50.432 \longrightarrow 00:54:52.564$  rationales for doing either.

NOTE Confidence: 0.8808648844

 $00:54:52.570 \longrightarrow 00:54:54.295$  It's called adjuvant systemic therapy

NOTE Confidence: 0.8808648844

 $00{:}54{:}54{.}295 \dashrightarrow 00{:}54{:}56{.}906$  when surgery is 1st and it's called

NOTE Confidence: 0.8808648844

 $00:54:56.906 \rightarrow 00:54:58.966$  neoadjuvant when chemotherapy is first.

NOTE Confidence: 0.8808648844

 $00:54:58.970 \rightarrow 00:55:00.257$  So if you ever see that in a note,

NOTE Confidence: 0.8808648844

 $00:55:00.260 \rightarrow 00:55:01.884$  that's kind of all that that's describing.

- NOTE Confidence: 0.8808648844
- $00:55:01.890 \longrightarrow 00:55:04.375$  But this really does require

00:55:04.375 --> 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

 $00:55:06.746 \rightarrow 00:55:08.810$  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

 $00{:}55{:}10.975 \dashrightarrow 00{:}55{:}13.698$  input as well as the reconstructive

NOTE Confidence: 0.8808648844

 $00:55:13.698 \rightarrow 00:55:17.016$  surgery input to to plan down the

NOTE Confidence: 0.8808648844

 $00:55:17.016 \rightarrow 00:55:20.090$  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

 $00{:}55{:}23.090 \dashrightarrow 00{:}55{:}26.446$  phase of cancer of many cancer treatments,

NOTE Confidence: 0.8808648844

 $00{:}55{:}26{.}450 \dashrightarrow 00{:}55{:}29{.}170$  we use a lot of anti estrogen the rapy,

NOTE Confidence: 0.8808648844

 $00{:}55{:}29{.}170 \dashrightarrow 00{:}55{:}31{.}642$  namely tamoxifen or other or aromatase

NOTE Confidence: 0.8808648844

 $00:55:31.642 \rightarrow 00:55:33.910$  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

 $00{:}55{:}35{.}575 \dashrightarrow 00{:}55{:}38{.}578$  of steroids into estrogen.

 $00:55:38.578 \rightarrow 00:55:42.226$  And they work in different ways.

NOTE Confidence: 0.8808648844

 $00{:}55{:}42{.}230 \dashrightarrow 00{:}55{:}44{.}638$  They have pretty nasty

NOTE Confidence: 0.8808648844

 $00:55:44.638 \longrightarrow 00:55:46.444$  potential side effects.

NOTE Confidence: 0.8808648844

 $00{:}55{:}46{.}450 \dashrightarrow 00{:}55{:}48{.}194$ Tamoxifen can cause va<br/>somotor

NOTE Confidence: 0.8808648844

 $00:55:48.194 \longrightarrow 00:55:49.938$  symptoms like hot flashes.

NOTE Confidence: 0.8808648844

 $00{:}55{:}49{.}940 \dashrightarrow 00{:}55{:}50{.}666$  Food changes.

NOTE Confidence: 0.8808648844

 $00:55:50.666 \rightarrow 00:55:52.844$  There's a small risk of blood

NOTE Confidence: 0.8808648844

 $00:55:52.844 \rightarrow 00:55:54.670$  clots and uterine cancer,

NOTE Confidence: 0.8808648844

 $00:55:54.670 \rightarrow 00:55:57.806$  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

 $00:56:03.054 \rightarrow 00:56:05.072$  postmenopausal women with a persistent

NOTE Confidence: 0.8808648844

 $00:56:05.072 \rightarrow 00:56:07.830$  or even more pronounced low estrogen state,

NOTE Confidence: 0.8808648844

 $00:56:07.830 \dashrightarrow 00:56:09.510$  and can cause vasomotor symptoms,

NOTE Confidence: 0.8808648844

 $00:56:09.510 \rightarrow 00:56:11.274$  accelerated bone loss,

- NOTE Confidence: 0.8808648844
- $00:56:11.274 \dashrightarrow 00:56:14.214$  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
- $00{:}56{:}16.824 \dashrightarrow 00{:}56{:}20.698$  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
- $00:56:22.608 \rightarrow 00:56:24.280$  to four times per year.
- NOTE Confidence: 0.8808648844
- $00:56:24.280 \rightarrow 00:56:26.800$  We do periodic screenings for family history.
- NOTE Confidence: 0.8808648844
- $00{:}56{:}26{.}800 \dashrightarrow 00{:}56{:}29{.}600$  We manage some of the acute and chronic
- NOTE Confidence: 0.8808648844
- $00:56:29.600 \rightarrow 00:56:31.819$  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 --> 00:56:35.900 I think it's important to note that
- NOTE Confidence: 0.8808648844
- $00:56:35.900 \rightarrow 00:56:37.780$  we're not doing routine surveillance
- NOTE Confidence: 0.8808648844
- $00{:}56{:}37.780 \dashrightarrow 00{:}56{:}40.154$  imaging in the absence of clinical
- NOTE Confidence: 0.8808648844
- $00:56:40.154 \rightarrow 00:56:42.578$  signs and symptoms that suggest recurrence.
- NOTE Confidence: 0.8808648844
- 00:56:42.580 --> 00:56:42.850 However,
- NOTE Confidence: 0.8808648844
- $00:56:42.850 \longrightarrow 00:56:43.930$  there may be a.
- NOTE Confidence: 0.8808648844

 $00:56:43.930 \longrightarrow 00:56:46.762$  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 --> 00:56:50.130 what I like to call the three P's

NOTE Confidence: 0.8808648844

 $00:56:50.130 \rightarrow 00:56:51.570$  symptoms that are perplexing,

NOTE Confidence: 0.8808648844

 $00{:}56{:}51{.}570 \dashrightarrow 00{:}56{:}53{.}121$  persistent or progressive.

NOTE Confidence: 0.8808648844

 $00{:}56{:}53.121 \dashrightarrow 00{:}56{:}55.706$  And that's that's where patients

NOTE Confidence: 0.8808648844

 $00{:}56{:}55{.}706 \dashrightarrow 00{:}56{:}59{.}179$  with a history of cancer may end up

NOTE Confidence: 0.8808648844

 $00:56:59.179 \dashrightarrow 00:57:01.770$  getting more scans as a result of.

NOTE Confidence: 0.8808648844

 $00{:}57{:}01{.}770 \dashrightarrow 00{:}57{:}04{.}066$  What may end up being being just NOTE Confidence: 0.8808648844

00:57:04.066 --> 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

 $00:57:07.870 \longrightarrow 00:57:10.460$  Unfortunately about 15% of the

NOTE Confidence: 0.8808648844

 $00{:}57{:}10.460 \dashrightarrow 00{:}57{:}13.050$  time are are curative treatments

NOTE Confidence: 0.8808648844

 $00{:}57{:}13{.}137 \dashrightarrow 00{:}57{:}16{.}197$  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

- NOTE Confidence: 0.8808648844
- $00:57:20.666 \rightarrow 00:57:22.010$  cancer metastases are bone,

00:57:22.010 --> 00:57:23.052 liver, lung,

NOTE Confidence: 0.8808648844

 $00:57:23.052 \rightarrow 00:57:26.178$  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

 $00{:}57{:}27{.}900 \dashrightarrow 00{:}57{:}29{.}620$  expectancy after a diagnosis of

NOTE Confidence: 0.8808648844

 $00{:}57{:}29.684 \dashrightarrow 00{:}57{:}31.580$  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 --> 00:57:41.309 of their their disease burden,

NOTE Confidence: 0.8808648844

 $00:57:41.310 \longrightarrow 00:57:42.255$  their performance status,

NOTE Confidence: 0.8808648844

00:57:42.255 - 00:57:44.460 what type of breast cancer they have,

NOTE Confidence: 0.8808648844

 $00{:}57{:}44{.}460 \dashrightarrow 00{:}57{:}47{.}178$  and then the the response

NOTE Confidence: 0.8808648844

 $00{:}57{:}47{.}178 \dashrightarrow 00{:}57{:}50{.}209$  that their cancer has to treatment.

NOTE Confidence: 0.8808648844

 $00{:}57{:}50{.}210 \dashrightarrow 00{:}57{:}52{.}072$  I wanted just to mention that this

 $00:57:52.072 \rightarrow 00:57:54.157$  is an area that breast cancer and

NOTE Confidence: 0.8808648844

00:57:54.157 --> 00:57:55.999 breast on<br/>cology 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

 $00{:}58{:}01{.}075 \dashrightarrow 00{:}58{:}05{.}513$  call and all of which can be either

NOTE Confidence: 0.880309991

 $00{:}58{:}05{.}513 \dashrightarrow 00{:}58{:}09{.}384$  administered IV IM subcutaneously or or

NOTE Confidence: 0.880309991

 $00{:}58{:}09{.}384 \dashrightarrow 00{:}58{:}12{.}606$  or ally 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

 $00{:}58{:}15{.}890 \dashrightarrow 00{:}58{:}19{.}880$  PI3 kinase inhibitors and antibody drug.

NOTE Confidence: 0.880309991

 $00{:}58{:}19{.}880 \dashrightarrow 00{:}58{:}21{.}572$  Projects, and I'm not gonna bore you with all NOTE Confidence: 0.880309991

 $00:58:21.572 \rightarrow 00:58:23.285$  of the mechanisms of all of those things,

NOTE Confidence: 0.880309991

 $00:58:23.290 \rightarrow 00:58:26.326$  but they are new and exciting,

NOTE Confidence: 0.880309991

 $00:58:26.330 \dashrightarrow 00:58:28.290$  and we're doing an even better job

NOTE Confidence: 0.880309991

 $00{:}58{:}28{.}290 \dashrightarrow 00{:}58{:}29{.}914$  keeping people with metastatic breast

NOTE Confidence: 0.880309991

 $00:58:29.914 \rightarrow 00:58:32.462$  cancer alive for longer, to enjoy more

NOTE Confidence: 0.880309991

 $00:58:32.462 \rightarrow 00:58:34.646$  quality life with their loved ones.

- NOTE Confidence: 0.880309991
- $00:58:34.650 \longrightarrow 00:58:37.728$  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 --> 00:58:40.785 I'll turn it back over
- NOTE Confidence: 0.880309991
- $00{:}58{:}40{.}785 \dashrightarrow 00{:}58{:}42{.}180$  to I think Doctor Zahir.
- NOTE Confidence: 0.7950448416666667
- 00:58:44.070 --> 00:58:45.408 Thank you, Sarah. That was wonderful.
- NOTE Confidence: 0.795044841666667
- $00{:}58{:}45{.}410 \dashrightarrow 00{:}58{:}47{.}520$  That was an excellent review of what we do in
- NOTE Confidence: 0.7950448416666667
- 00:58:47.570 --> 00:58:49.586 10 minutes and I completely agree with you.
- NOTE Confidence: 0.7950448416666667
- $00:58:49.590 \rightarrow 00:58:51.720$  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 and even more because of the very
- NOTE Confidence: 0.795044841666667
- $00:58:54.375 \rightarrow 00:58:56.626$  people that are presenting here tonight.
- NOTE Confidence: 0.795044841666667
- $00:58:56.630 \rightarrow 00:58:59.366$  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 --> 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 a fraid to ask
- NOTE Confidence: 0.795044841666667

 $00{:}59{:}06{.}970 \dashrightarrow 00{:}59{:}08{.}490$  and write them down.

NOTE Confidence: 0.7950448416666667

 $00:59:08.490 \dashrightarrow 00:59:10.749$  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 --> 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

 $00{:}59{:}19{.}310 \dashrightarrow 00{:}59{:}21{.}420$  She's a professor of the rapeutic

NOTE Confidence: 0.795044841666667

 $00:59:21.420 \rightarrow 00:59:23.108$  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

 $00{:}59{:}24.638 \dashrightarrow 00{:}59{:}26.930$  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

 $00:59:29.534 \rightarrow 00:59:31.806$  for the rapeutic radiology and she is

NOTE Confidence: 0.7950448416666667

 $00{:}59{:}31{.}806 \dashrightarrow 00{:}59{:}33{.}738$  a medical director for the radiation

NOTE Confidence: 0.795044841666667

 $00{:}59{:}33.738 \dashrightarrow 00{:}59{:}35.738$  Oncology at Shoreline Medical Center.

NOTE Confidence: 0.7950448416666667

 $00:59:35.740 \longrightarrow 00:59:37.930$  She completed her residency in

NOTE Confidence: 0.795044841666667

 $00:59:37.930 \rightarrow 00:59:40.120$  the rapeutic radiology at Yale and

- NOTE Confidence: 0.795044841666667
- 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
- $00{:}59{:}44.650 \dashrightarrow 00{:}59{:}46.984$  She for nearly 25 years has
- NOTE Confidence: 0.795044841666667
- $00{:}59{:}46{.}984 \dashrightarrow 00{:}59{:}49{.}310$  dedicated herself as an educator,
- NOTE Confidence: 0.7950448416666667
- $00:59:49.310 \longrightarrow 00:59:49.820$  mentor,
- NOTE Confidence: 0.795044841666667
- $00{:}59{:}49{.}820 \dashrightarrow 00{:}59{:}52{.}880$  researcher and above all a dedicated
- NOTE Confidence: 0.7950448416666667
- $00{:}59{:}52{.}880 \dashrightarrow 00{:}59{:}54{.}410$  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: 0.7950448416666667
- $00:59:57.070 \longrightarrow 00:59:57.906$  We all,
- NOTE Confidence: 0.795044841666667
- $00:59:57.906 \rightarrow 01:00:00.832$  the all the patients as well as
- NOTE Confidence: 0.795044841666667
- $01{:}00{:}00.832 \dashrightarrow 01{:}00{:}03.614$  the staff at at the shoreline are
- NOTE Confidence: 0.795044841666667
- $01{:}00{:}03.614 \dashrightarrow 01{:}00{:}05.840$  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.
- NOTE Confidence: 0.8753506

 $01:00:15.410 \longrightarrow 01:00:16.554$  Yep. Thank you Angie.

NOTE Confidence: 0.8753506

01:00:16.554 --> 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 slide show. OK.

NOTE Confidence: 0.83398247

 $01:00:29.030 \longrightarrow 01:00:30.694$  Hold on one second. OK.

NOTE Confidence: 0.83398247

 $01:00:30.694 \rightarrow 01:00:31.590$  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

 $01{:}00{:}35{.}172 \dashrightarrow 01{:}00{:}36{.}549$  do was just a little bit of a,

NOTE Confidence: 0.928922105

01:00:36.550 --> 01:00:39.374 a little bit of a historic overview before

NOTE Confidence: 0.928922105

 $01{:}00{:}39{.}374 \dashrightarrow 01{:}00{:}42{.}607$  I talk about radiation and and basically.

NOTE Confidence: 0.928922105

 $01{:}00{:}42.610 \dashrightarrow 01{:}00{:}44.374$  It continues on some of the themes

NOTE Confidence: 0.928922105

 $01:00:44.374 \dashrightarrow 01:00:46.068$  that others have talked about here.

NOTE Confidence: 0.928922105

 $01{:}00{:}46.070 \dashrightarrow 01{:}00{:}47.684$  But in terms of the regional

NOTE Confidence: 0.928922105

 $01:00:47.684 \rightarrow 01:00:49.310$  oncology services and the shoreline,

NOTE Confidence: 0.928922105

 $01:00:49.310 \rightarrow 01:00:51.608$  you know we started the Shoreline

 $01{:}00{:}51.608 \dashrightarrow 01{:}00{:}53.458$  Medical Center actually it's now

NOTE Confidence: 0.928922105

01:00:53.458 --> 01:00:55.434 about 18 years ago and it was one

NOTE Confidence: 0.928922105

 $01{:}00{:}55{.}434 \dashrightarrow 01{:}00{:}57{.}483$  of the first places where we were

NOTE Confidence: 0.928922105

 $01:00:57.483 \rightarrow 01:00:59.823$  able to get Yale medical Oncology,

NOTE Confidence: 0.928922105

 $01{:}00{:}59{.}823 \dashrightarrow 01{:}01{:}01{.}787$  radiation on cology 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 $\operatorname{-->}$ 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 --> 01:01:10.310 are all now sort of coming true.

NOTE Confidence: 0.928922105

01:01:10.310 --> 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

 $01{:}01{:}12.910 \dashrightarrow 01{:}01{:}16.134$  And Umm, we had served at this phase

NOTE Confidence: 0.928922105

01:01:16.134 --> 01:01:18.200 of the Yale New Haven Hospital,

NOTE Confidence: 0.928922105

01:01:18.200 $\operatorname{-->}$ 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
- $01{:}01{:}28.175 \dashrightarrow 01{:}01{:}29.790$  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
- $01{:}01{:}31{.}502 \dashrightarrow 01{:}01{:}34{.}070$  the investment in our infrastructure here
- NOTE Confidence: 0.928922105
- $01{:}01{:}34.142 \dashrightarrow 01{:}01{:}36.578$  with the renovation and expansion of
- NOTE Confidence: 0.928922105
- $01{:}01{:}36.578 \dashrightarrow 01{:}01{:}39.798$  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
- $01:01:47.010 \longrightarrow 01:01:48.642$  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
- $01:01:51.051 \rightarrow 01:01:52.603$  our medical oncology colleagues.
- NOTE Confidence: 0.928922105
- $01:01:52.610 \rightarrow 01:01:55.538$  And I think that you know we continue

- NOTE Confidence: 0.928922105
- $01:01:55.538 \rightarrow 01:01:58.908$  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
- $01:02:01.557 \rightarrow 01:02:03.879$  as my colleagues have spoken about
- NOTE Confidence: 0.928922105
- $01:02:03.879 \rightarrow 01:02:07.545$  is that we really have a truly
- NOTE Confidence: 0.928922105
- $01:02:07.545 \rightarrow 01:02:08.755$  comprehensive multidisciplinary
- NOTE Confidence: 0.928922105
- $01:02:08.755 \rightarrow 01:02:11.903$  oncology Center for breast care here
- NOTE Confidence: 0.928922105
- $01:02:11.903 \rightarrow 01:02:15.280$  and we are happy to see you know in our.
- NOTE Confidence: 0.928922105
- 01:02:15.280 --> 01:02:17.205 Our catchment area is expanding.
- NOTE Confidence: 0.928922105
- 01:02:17.210 --> 01:02:18.038 And you know,
- NOTE Confidence: 0.928922105
- 01:02:18.038 --> 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
- $01:02:23.630 \rightarrow 01:02:25.611$  We're seeing a lot of gratitude from
- NOTE Confidence: 0.928922105
- $01{:}02{:}25{.}611 \dashrightarrow 01{:}02{:}27{.}429$  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,
- NOTE Confidence: 0.928922105

- 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 $\operatorname{-->}$ 01:02:39.276 just I think if I get one point across
- NOTE Confidence: 0.846441477692308
- $01{:}02{:}39{.}276 \dashrightarrow 01{:}02{:}41{.}137$  is we're happy to see your patients,
- NOTE Confidence: 0.846441477692308
- $01:02:41.140 \longrightarrow 01:02:42.946$  we love working here and you know
- NOTE Confidence: 0.846441477692308
- 01:02:42.946 --> 01:02:44.716 it's one stop shopping for patients
- NOTE Confidence: 0.846441477692308
- $01{:}02{:}44.716 \dashrightarrow 01{:}02{:}46.907$  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
- $01:02:48.830 \longrightarrow 01:02:52.200$  So basically with regard to
- NOTE Confidence: 0.846441477692308
- $01:02:52.200 \rightarrow 01:02:53.548$  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
- $01:02:55.770 \rightarrow 01:02:57.520$  uh, people know a little less about
- NOTE Confidence: 0.846441477692308
- $01:02:57.520 \rightarrow 01:02:59.162$  radiation than they do about some
- NOTE Confidence: 0.846441477692308
- $01:02:59.162 \rightarrow 01:03:00.557$  of the other oncologic disciplines.

- NOTE Confidence: 0.846441477692308
- $01{:}03{:}00{.}560 \dashrightarrow 01{:}03{:}02{.}954$  So I'll just start with like a

 $01:03:02.954 \rightarrow 01:03:05.269$  little tiny intro of radiation 101,

NOTE Confidence: 0.846441477692308

 $01:03:05.270 \rightarrow 01:03:07.105$  then talk about radiation therapy

NOTE Confidence: 0.846441477692308

 $01:03:07.105 \rightarrow 01:03:08.573$  and the multidisciplinary treatment

NOTE Confidence: 0.846441477692308

 $01:03:08.573 \longrightarrow 01:03:09.710$  of breast cancer,

NOTE Confidence: 0.846441477692308

 $01:03:09.710 \longrightarrow 01:03:11.915$  both for breast conservation and

NOTE Confidence: 0.846441477692308

 $01:03:11.915 \rightarrow 01:03:15.070$  patients who have had a master tomy.

NOTE Confidence: 0.846441477692308

 $01{:}03{:}15{.}070 \dashrightarrow 01{:}03{:}17{.}286$  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

 $01:03:21.724 \rightarrow 01:03:23.820$  years ago that's at all of our sites.

NOTE Confidence: 0.846441477692308

01:03:23.820 --> 01:03:26.052 That has really changed what we do with

NOTE Confidence: 0.846441477692308

 $01{:}03{:}26.052 \dashrightarrow 01{:}03{:}28.705$  regard to treatment and that's the deep

NOTE Confidence: 0.846441477692308

 $01{:}03{:}28.705 \dashrightarrow 01{:}03{:}30.329$  inspiration breath hold technique.

NOTE Confidence: 0.846441477692308

 $01:03:30.330 \longrightarrow 01:03:31.020$  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 --> 01:03:33.923 speak about some of the things

NOTE Confidence: 0.846441477692308

 $01:03:33.923 \rightarrow 01:03:35.768$  that we do for our patients with

NOTE Confidence: 0.846441477692308

01:03:35.768 --> 01:03:37.378 metastatic disease because as our

NOTE Confidence: 0.846441477692308

 $01:03:37.378 \rightarrow 01:03:39.716$  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

 $01:03:44.226 \longrightarrow 01:03:46.785$  called upon now even more to help

NOTE Confidence: 0.846441477692308

01:03:46.785 --> 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 extra cranial

NOTE Confidence: 0.846441477692308

 $01{:}03{:}51{.}141 \dashrightarrow 01{:}03{:}53{.}116$  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

 $01{:}03{:}55{.}960 \dashrightarrow 01{:}03{:}57{.}645$  radiation therapy has been an

NOTE Confidence: 0.846441477692308

 $01{:}03{:}57.645 \dashrightarrow 01{:}03{:}59.330$  essential part of the oncologic

NOTE Confidence: 0.846441477692308

 $01:03:59.385 \rightarrow 01:04:01.180$  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

- NOTE Confidence: 0.846441477692308
- $01:04:03.640 \rightarrow 01:04:05.040$  receive radiation therapy during
- NOTE Confidence: 0.846441477692308
- $01:04:05.096 \longrightarrow 01:04:06.786$  their course of their illness.
- NOTE Confidence: 0.7669306066666667
- $01{:}04{:}09{.}230 \dashrightarrow 01{:}04{:}11{.}610$  And it's radiation is a key component
- NOTE Confidence: 0.7669306066666667
- $01:04:11.610 \longrightarrow 01:04:13.730$  of curative breast cancer treatment,
- NOTE Confidence: 0.7669306066666667
- $01:04:13.730 \longrightarrow 01:04:15.795$  both in breast conservation therapy
- NOTE Confidence: 0.7669306066666667
- $01{:}04{:}15.795 \dashrightarrow 01{:}04{:}17.860$  where patients who receive lumpectomy
- NOTE Confidence: 0.7669306066666667
- $01:04:17.921 \rightarrow 01:04:19.787$  in general with a few exceptions,
- NOTE Confidence: 0.7669306066666667
- $01:04:19.790 \rightarrow 01:04:21.764$  but most patients who get a lumpectomy.
- NOTE Confidence: 0.7669306066666667
- 01:04:21.770 --> 01:04:23.970 It's followed by as as
- NOTE Confidence: 0.7669306066666667
- 01:04:23.970 --> 01:04:25.730 Doctor Mccallion pointed out,
- NOTE Confidence: 0.7669306066666667
- $01:04:25.730 \longrightarrow 01:04:27.470$  we are the cleanup crew radiation
- NOTE Confidence: 0.7669306066666667
- $01{:}04{:}27{.}470 \dashrightarrow 01{:}04{:}29{.}211$  the rapies used to take care of
- NOTE Confidence: 0.7669306066666667
- 01:04:29.211 --> 01:04:30.531 microscopic cells that might be
- NOTE Confidence: 0.7669306066666667
- $01{:}04{:}30{.}531 \dashrightarrow 01{:}04{:}32{.}853$  left in the breast or nodes and
- NOTE Confidence: 0.7669306066666667
- $01:04:32.853 \rightarrow 01:04:34.329$  following mastectomy select patients,
- NOTE Confidence: 0.7669306066666667

01:04:34.330 --> 01:04:37.708 not all, but many patients received

NOTE Confidence: 0.7669306066666667

01:04:37.708 --> 01:04:39.397 postmastectomy radiation therapy.

NOTE Confidence: 0.7669306066666667

 $01:04:39.400 \longrightarrow 01:04:41.770$  To reduce the risk of local

NOTE Confidence: 0.7669306066666667

 $01:04:41.770 \rightarrow 01:04:42.560$  regional recurrence.

NOTE Confidence: 0.7669306066666667

01:04:42.560 --> 01:04:45.570 In either case, radiation has been

NOTE Confidence: 0.7669306066666667

 $01:04:45.570 \rightarrow 01:04:47.320$  shown to be really safe and effective,

NOTE Confidence: 0.7669306066666667

 $01{:}04{:}47{.}320 \dashrightarrow 01{:}04{:}49{.}728$  and it can reduce the risk of local

NOTE Confidence: 0.7669306066666667

 $01:04:49.728 \longrightarrow 01:04:51.957$  and regional recurrences by 50 to 70%.

NOTE Confidence: 0.7669306066666667

 $01{:}04{:}51{.}960 \dashrightarrow 01{:}04{:}54{.}060$  And in certain patient subsets,

NOTE Confidence: 0.7669306066666667

 $01:04:54.060 \rightarrow 01:04:56.036$  radiation therapy is associated

NOTE Confidence: 0.7669306066666667

 $01:04:56.036 \longrightarrow 01:04:58.506$  with an increase in survival.

NOTE Confidence: 0.7669306066666667

 $01{:}04{:}58{.}510 \dashrightarrow 01{:}05{:}01{.}450$  And in general, um, this very,

NOTE Confidence: 0.7669306066666667

 $01:05:01.450 \longrightarrow 01:05:03.058$  very basic radiobiology.

NOTE Confidence: 0.7669306066666667

 $01{:}05{:}03.058 \dashrightarrow 01{:}05{:}05.738$  It's ionizing radiation causes damage

NOTE Confidence: 0.7669306066666667

 $01:05:05.738 \dashrightarrow 01:05:08.839$  to cellular DNA and in malignant cells.

NOTE Confidence: 0.7669306066666667

 $01:05:08.840 \longrightarrow 01:05:12.120$  They are not able to repair this DNA

- NOTE Confidence: 0.7669306066666667
- $01:05:12.120 \rightarrow 01:05:14.858$  damage and they cannot reproduce
- NOTE Confidence: 0.7669306066666667
- $01:05:14.860 \longrightarrow 01:05:15.733$  in normal cells.
- NOTE Confidence: 0.7669306066666667
- 01:05:15.733 --> 01:05:17.479 There's also damage to the DNA,
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}17{.}480 \dashrightarrow 01{:}05{:}20{.}560$  but it's normal cells are better able
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}20.560 \dashrightarrow 01{:}05{:}23.578$  to repair this type of DNA damage.
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}23.580 \dashrightarrow 01{:}05{:}25.455$  And radiation therapy is delivered
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}25{.}455 \dashrightarrow 01{:}05{:}26{.}955$  with the linear accelerator.
- NOTE Confidence: 0.7669306066666667
- $01:05:26.960 \longrightarrow 01:05:29.170$  We have two bays downstairs
- NOTE Confidence: 0.7669306066666667
- $01:05:29.170 \longrightarrow 01:05:30.496$  in our department,
- NOTE Confidence: 0.7669306066666667
- $01:05:30.500 \rightarrow 01:05:33.140$  we'd say emits high energy photon beams and
- NOTE Confidence: 0.7669306066666667
- $01:05:33.140 \longrightarrow 01:05:35.739$  we target the breast and regional nodes.
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}35{.}740 \dashrightarrow 01{:}05{:}37{.}444$  And what you see here is just a
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}37{.}444 \dashrightarrow 01{:}05{:}38{.}975$  schematic of a patient on the
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}38{.}975 \dashrightarrow 01{:}05{:}40{.}285$  treatment table getting what we
- NOTE Confidence: 0.7669306066666667
- $01{:}05{:}40.285 \dashrightarrow 01{:}05{:}41.620$  would call breast tangents.
- NOTE Confidence: 0.7669306066666667

 $01:05:41.620 \longrightarrow 01:05:42.957$  And in the upper right hand corner,

NOTE Confidence: 0.7669306066666667

 $01:05:42.960 \longrightarrow 01:05:45.360$  you can see that we're targeting

NOTE Confidence: 0.7669306066666667

 $01:05:45.360 \rightarrow 01:05:48.130$  the breast and we basically have a

NOTE Confidence: 0.7669306066666667

 $01:05:48.130 \rightarrow 01:05:50.100$  tangential field that comes across

NOTE Confidence: 0.7669306066666667

 $01{:}05{:}50{.}169 \dashrightarrow 01{:}05{:}52{.}085$  the chest wall and you can see that

NOTE Confidence: 0.7669306066666667

 $01:05:52.085 \rightarrow 01:05:53.839$  sometimes we have a little bit of underlying.

NOTE Confidence: 0.7669306066666667

 $01{:}05{:}53{.}840 \dashrightarrow 01{:}05{:}55{.}534$  Along in the field and we're going

NOTE Confidence: 0.7669306066666667

 $01:05:55.534 \rightarrow 01:05:57.180$  to talk about that in a minute.

NOTE Confidence: 0.7669306066666667

01:05:57.180 --> 01:05:57.976 But basically,

NOTE Confidence: 0.7669306066666667

 $01:05:57.976 \rightarrow 01:05:59.966$  as Doctor Magellan referred to,

NOTE Confidence: 0.7669306066666667

 $01{:}05{:}59{.}970 \dashrightarrow 01{:}06{:}02{.}105$  we do daily treatments and it's delivered

NOTE Confidence: 0.7669306066666667

01:06:02.105 - 01:06:04.260 over the course of three to six weeks,

NOTE Confidence: 0.7669306066666667

 $01:06:04.260 \longrightarrow 01:06:06.858$  so there is some time involved.

NOTE Confidence: 0.7669306066666667

 $01{:}06{:}06{.}860 \dashrightarrow 01{:}06{:}08{.}850$  Treatment again is directed at

NOTE Confidence: 0.7669306066666667

 $01:06:08.850 \longrightarrow 01:06:11.345$  the breast or chest wall with

NOTE Confidence: 0.7669306066666667

 $01:06:11.345 \longrightarrow 01:06:13.460$  or without the regional nodes.

- NOTE Confidence: 0.7669306066666667
- $01:06:13.460 \longrightarrow 01:06:15.259$  And the way it's done is in
- NOTE Confidence: 0.7669306066666667
- 01:06:15.259 --> 01:06:17.060 terms of the just logistics,
- NOTE Confidence: 0.7669306066666667
- $01:06:17.060 \rightarrow 01:06:18.520$  patients come in for something
- NOTE Confidence: 0.7669306066666667
- $01:06:18.520 \longrightarrow 01:06:19.396$  called the simulation,
- NOTE Confidence: 0.7669306066666667
- $01:06:19.400 \longrightarrow 01:06:21.052$  which is a CAT scan and they're
- NOTE Confidence: 0.7669306066666667
- $01:06:21.052 \rightarrow 01:06:22.371$  immobilized in the position that
- NOTE Confidence: 0.7669306066666667
- $01:06:22.371 \rightarrow 01:06:24.039$  we're going to use for treatment.
- NOTE Confidence: 0.7669306066666667
- 01:06:24.040 --> 01:06:25.860 And basically it's shown here
- NOTE Confidence: 0.7669306066666667
- $01:06:25.860 \rightarrow 01:06:27.680$  they're on a slant board.
- NOTE Confidence: 0.7669306066666667
- $01:06:27.680 \rightarrow 01:06:29.129$  The arms are over the head because
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}29{.}129 \dashrightarrow 01{:}06{:}30{.}958$  we need to have the arms out of the
- NOTE Confidence: 0.7669306066666667
- 01:06:30.958 --> 01:06:32.457 way when we treat the breast and
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}32{.}457 \dashrightarrow 01{:}06{:}34{.}032$  the nose with with fields that are
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}34.040 \dashrightarrow 01{:}06{:}36.836$  directed and those at the chest.
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}36{.}840 \dashrightarrow 01{:}06{:}38{.}910$  And what we get is a CT scan that
- NOTE Confidence: 0.7669306066666667

- $01:06:38.910 \longrightarrow 01:06:40.618$  shows us the patient's entire,
- NOTE Confidence: 0.7669306066666667
- 01:06:40.620 --> 01:06:41.104 you know,
- NOTE Confidence: 0.7669306066666667
- $01:06:41.104 \rightarrow 01:06:43.685$  body and we can do sort of a 3D
- NOTE Confidence: 0.7669306066666667
- $01:06:43.685 \rightarrow 01:06:46.108$  reconstruction. Of their body.
- NOTE Confidence: 0.7669306066666667
- $01:06:46.110 \longrightarrow 01:06:48.616$  And the doctor then goes to the
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}48.616$  -->  $01{:}06{:}51.162$  computer and we use that CT data
- NOTE Confidence: 0.7669306066666667
- $01:06:51.162 \longrightarrow 01:06:52.206$  set to contour.
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}52{.}210 \dashrightarrow 01{:}06{:}54{.}172$  We will contour out the targets
- NOTE Confidence: 0.7669306066666667
- $01{:}06{:}54{.}172 \dashrightarrow 01{:}06{:}56{.}586$  which are the breast and the nodes
- NOTE Confidence: 0.7669306066666667
- $01:06:56.586 \rightarrow 01:06:58.316$  and then the physician prescribes
- NOTE Confidence: 0.7669306066666667
- $01:06:58.316 \longrightarrow 01:07:00.459$  the the dose to those targets.
- NOTE Confidence: 0.7669306066666667
- 01:07:00.460 --> 01:07:02.700 Then then our sophisticated
- NOTE Confidence: 0.7669306066666667
- 01:07:02.700 --> 01:07:04.380 treatment planning system
- NOTE Confidence: 0.808383406
- $01:07:04.380 \longrightarrow 01:07:05.630$  comes up with what we
- NOTE Confidence: 0.808383406
- 01:07:05.630 --> 01:07:06.880 call a 3D conformal plan.
- NOTE Confidence: 0.808383406
- 01:07:06.880 01:07:09.124 It's a basically the optimal beam

- NOTE Confidence: 0.808383406
- $01:07:09.124 \rightarrow 01:07:11.021$  arrangement and the beam strength
- NOTE Confidence: 0.808383406
- 01:07:11.021 --> 01:07:13.324 and beam shape to maximize the dose
- NOTE Confidence: 0.808383406
- $01:07:13.324 \longrightarrow 01:07:15.791$  to the targets which breast in nodes
- NOTE Confidence: 0.808383406
- $01{:}07{:}15{.}791 \dashrightarrow 01{:}07{:}18{.}350$  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
- $01{:}07{:}21{.}190 \dashrightarrow 01{:}07{:}22{.}958$  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 --> 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 --> 01:07:34.747 my can you see my pointer here?
- NOTE Confidence: 0.808383406
- $01:07:34.750 \longrightarrow 01:07:37.366$  Probably not, but in the upper,
- NOTE Confidence: 0.808383406
- $01:07:37.370 \rightarrow 01:07:39.404$  you can't good in the upper left hand corner.
- NOTE Confidence: 0.808383406

- 01:07:39.410 --> 01:07:40.364 Thank you, Sarah.
- NOTE Confidence: 0.808383406
- $01:07:40.364 \rightarrow 01:07:42.590$  You can see there are two tangential
- NOTE Confidence: 0.808383406
- $01{:}07{:}42.650 \dashrightarrow 01{:}07{:}44.558$  fields and there's a green that
- NOTE Confidence: 0.808383406
- $01:07:44.558 \rightarrow 01:07:46.949$  represents the dose to the breast tissue.
- NOTE Confidence: 0.808383406
- $01:07:46.950 \rightarrow 01:07:48.646$  So this would be a right breast cancer,
- NOTE Confidence: 0.808383406
- $01:07:48.650 \rightarrow 01:07:50.484$  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 $\operatorname{-->}$ 01:07:56.610 single field that's pointed at the
- NOTE Confidence: 0.808383406
- $01:07:56.610 \rightarrow 01:07:58.350$  patient for the Super cloud fields.
- NOTE Confidence: 0.808383406
- $01{:}07{:}58{.}350 \dashrightarrow 01{:}08{:}00{.}526$  But this would be a typical sort of
- NOTE Confidence: 0.808383406
- $01:08:00.526 \rightarrow 01:08:01.947$  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 --> 01:08:07.548 Is going to you know devise in order
- NOTE Confidence: 0.808383406
- $01:08:07.548 \rightarrow 01:08:10.438$  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

- NOTE Confidence: 0.808383406
- $01:08:13.024 \rightarrow 01:08:15.602$  just to show you again this is a
- NOTE Confidence: 0.808383406
- $01:08:15.602 \dashrightarrow 01:08:17.950$  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
- $01{:}08{:}20.730 \dashrightarrow 01{:}08{:}22.340$  the actual treatment fields for
- NOTE Confidence: 0.808383406
- $01:08:22.340 \longrightarrow 01:08:23.628$  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
- $01{:}08{:}25{.}050 \dashrightarrow 01{:}08{:}27{.}538$  one would be a medial field and the
- NOTE Confidence: 0.808383406
- $01{:}08{:}27{.}538 \dashrightarrow 01{:}08{:}29{.}549$  beams basically treat the breast and
- NOTE Confidence: 0.808383406
- $01:08:29.549 \rightarrow 01:08:31.529$  just some of the underlying lung.
- NOTE Confidence: 0.853085722222222
- 01:08:33.540 --> 01:08:35.433 For postmastectomy radiation,
- NOTE Confidence: 0.853085722222222
- $01:08:35.433 \rightarrow 01:08:39.219$  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 --> 01:08:43.940 chest wall or a reconstructed breast,
- NOTE Confidence: 0.853085722222222
- $01{:}08{:}43{.}940 \dashrightarrow 01{:}08{:}46{.}832$  whether that's an implant or a
- NOTE Confidence: 0.853085722222222
- $01{:}08{:}46.832 \dashrightarrow 01{:}08{:}48.892$  deep flap and the regional notes.
- NOTE Confidence: 0.853085722222222

 $01:08:48.892 \rightarrow 01:08:51.138$  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

 $01{:}08{:}53{.}134 \dashrightarrow 01{:}08{:}55{.}374$  the clavicle area and under the arm are NOTE Confidence: 0.853085722222222

 $01:08:55.374 \rightarrow 01:08:57.558$  being treated along with the chest wall.

NOTE Confidence: 0.853085722222222

 $01:08:57.560 \rightarrow 01:09:00.696$  And not everyone who has a mastectomy

NOTE Confidence: 0.853085722222222

 $01:09:00.696 \rightarrow 01:09:02.040$  needs postmastectomy radiation.

NOTE Confidence: 0.853085722222222

 $01{:}09{:}02{.}040 \dashrightarrow 01{:}09{:}04{.}242$  We often have lots of discussions

NOTE Confidence: 0.853085722222222

 $01:09:04.242 \rightarrow 01:09:06.094$  with patients about whether they

NOTE Confidence: 0.853085722222222

 $01{:}09{:}06{.}094 \dashrightarrow 01{:}09{:}08{.}296$  fall into the category that is high

NOTE Confidence: 0.853085722222222

 $01:09:08.296 \rightarrow 01:09:09.786$  risk and that usually includes.

NOTE Confidence: 0.853085722222222

 $01{:}09{:}09{.}790 \dashrightarrow 01{:}09{:}13.018$  Patients with positive nodes AT3 or

NOTE Confidence: 0.853085722222222

 $01:09:13.018 \rightarrow 01:09:15.420$  larger tumor or a positive margin.

NOTE Confidence: 0.928653492142857

01:09:17.590 $\operatorname{-->}$ 01:09:20.229 So what has happened over the years

NOTE Confidence: 0.928653492142857

 $01{:}09{:}20{.}229 \dashrightarrow 01{:}09{:}23{.}428$  is that our technical advances have

NOTE Confidence: 0.928653492142857

 $01:09:23.428 \rightarrow 01:09:25.715$  basically been aimed at making this

NOTE Confidence: 0.928653492142857

 $01:09:25.715 \rightarrow 01:09:27.662$  a safer treatment, and that means

- NOTE Confidence: 0.928653492142857
- 01:09:27.662 $\operatorname{-->}$ 01:09:29.606 maximizing the dose of the target,
- NOTE Confidence: 0.928653492142857
- $01:09:29.610 \rightarrow 01:09:31.824$  minimizing the dose to the underlying
- NOTE Confidence: 0.928653492142857
- $01:09:31.824 \rightarrow 01:09:34.410$  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
- $01:09:35.960 \rightarrow 01:09:38.130$  trying to spare a lung and heart.
- NOTE Confidence: 0.928653492142857
- $01:09:38.130 \longrightarrow 01:09:40.216$  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
- $01{:}09{:}42.569 \dashrightarrow 01{:}09{:}45.244$  years is to address this with the
- NOTE Confidence: 0.928653492142857
- $01:09:45.244 \longrightarrow 01:09:46.840$  deep inspiration breath hold.
- NOTE Confidence: 0.928653492142857
- 01:09:46.840 --> 01:09:47.136 Technique.
- NOTE Confidence: 0.928653492142857
- $01:09:47.136 \longrightarrow 01:09:49.504$  But let me just show you what the
- NOTE Confidence: 0.928653492142857
- $01:09:49.504 \rightarrow 01:09:51.559$  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
- NOTE Confidence: 0.928653492142857
- $01{:}09{:}53.600 \dashrightarrow 01{:}09{:}55.180$  tangent fields that we're trying to
- NOTE Confidence: 0.928653492142857
- $01{:}09{:}55{.}180 \dashrightarrow 01{:}09{:}57{.}017$  use are coming across the chest wall
- NOTE Confidence: 0.928653492142857

 $01:09:57.017 \rightarrow 01:09:58.816$  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

 $01:10:02.840 \rightarrow 01:10:07.097$  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

 $01:10:08.620 \rightarrow 01:10:10.900$  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

 $01:10:12.420 \longrightarrow 01:10:13.716$  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

 $01:10:15.340 \rightarrow 01:10:16.804$  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

 $01{:}10{:}21{.}930 \dashrightarrow 01{:}10{:}24{.}266$  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

 $01:10:27.322 \rightarrow 01:10:29.238$  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

 $01:10:33.935 \rightarrow 01:10:35.795$  use in surface imaging system.

NOTE Confidence: 0.928653492142857

01:10:35.800 --> 01:10:36.040 Uh,

NOTE Confidence: 0.928653492142857

 $01:10:36.040 \rightarrow 01:10:37.240$  a specific surface imaging system

NOTE Confidence: 0.928653492142857

 $01:10:37.240 \longrightarrow 01:10:38.758$  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 --> 01:10:46.382 So the surface imaging system is

NOTE Confidence: 0.928653492142857

 $01:10:46.382 \rightarrow 01:10:49.608$  a new technology that allows us to

NOTE Confidence: 0.928653492142857

 $01:10:49.608 \rightarrow 01:10:52.457$  map out and actually in real time

NOTE Confidence: 0.928653492142857

 $01{:}10{:}52{.}547 \dashrightarrow 01{:}10{:}55{.}284$  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

 $01{:}10{:}56{.}910 \dashrightarrow 01{:}10{:}58{.}935$  there are three cameras and

NOTE Confidence: 0.928653492142857

 $01{:}10{:}58{.}935 \dashrightarrow 01{:}11{:}01{.}544$  we're able to check a patient's

01:11:01.544 --> 01:11:03.696 position prior to treatment.

NOTE Confidence: 0.928653492142857

 $01:11:03.700 \rightarrow 01:11:06.908$  And see if they're in the correct position.

NOTE Confidence: 0.928653492142857

 $01:11:06.910 \rightarrow 01:11:09.094$  By looking at the overlay of a pre

NOTE Confidence: 0.928653492142857

 $01:11:09.094 \rightarrow 01:11:11.662$  sort of pre recorded or pre obtained

NOTE Confidence: 0.928653492142857

 $01{:}11{:}11{.}662 \dashrightarrow 01{:}11{:}13.612$  body contour and basically when

NOTE Confidence: 0.928653492142857

 $01{:}11{:}13.686 \dashrightarrow 01{:}11{:}15.990$  blue and green coincide they're in

NOTE Confidence: 0.928653492142857

 $01{:}11{:}15{.}990 \dashrightarrow 01{:}11{:}17{.}826$  the exact right position position.

NOTE Confidence: 0.928653492142857

 $01:11:17.826 \rightarrow 01:11:20.490$  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

 $01:11:23.110 \longrightarrow 01:11:25.614$  but if you see red or yellow that

NOTE Confidence: 0.928653492142857

 $01:11:25.614 \rightarrow 01:11:28.201$  means that body part is in or out of

NOTE Confidence: 0.928653492142857

 $01:11:28.201 \rightarrow 01:11:30.349$  the plane of the field and basically

NOTE Confidence: 0.928653492142857

 $01{:}11{:}30{.}349 \dashrightarrow 01{:}11{:}33{.}061$  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

 $01{:}11{:}35{.}230 \dashrightarrow 01{:}11{:}36{.}910$  which is really important again

NOTE Confidence: 0.928653492142857

 $01:11:36.910 \longrightarrow 01:11:38.254$  when we're trying to.

- NOTE Confidence: 0.928653492142857
- 01:11:38.260 --> 01:11:39.980 Deliver with, you know,
- NOTE Confidence: 0.928653492142857
- $01:11:39.980 \rightarrow 01:11:42.130$  sub millimeter to millimeter accuracy.
- NOTE Confidence: 0.928653492142857
- $01:11:42.130 \rightarrow 01:11:43.999$  The other thing this does is allows
- NOTE Confidence: 0.928653492142857
- $01:11:43.999 \longrightarrow 01:11:46.174$  us to track in real time this these
- NOTE Confidence: 0.928653492142857
- $01{:}11{:}46{.}174 \dashrightarrow 01{:}11{:}48{.}177$  cameras are on in real time and
- NOTE Confidence: 0.928653492142857
- 01:11:48.177 $\operatorname{-->}$ 01:11:50.403 giving constant feedback so that as a
- NOTE Confidence: 0.928653492142857
- $01{:}11{:}50{.}403 \dashrightarrow 01{:}11{:}52{.}795$  patient's chest wall changes in the
- NOTE Confidence: 0.928653492142857
- $01:11:52.795 \rightarrow 01:11:56.070$  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
- $01{:}12{:}00{.}632 \dashrightarrow 01{:}12{:}02{.}709$  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
- $01{:}12{:}04.726 \dashrightarrow 01{:}12{:}06.879$  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
- NOTE Confidence: 0.928653492142857

 $01:12:09.093 \rightarrow 01:12:11.523$  radiation beam stopped and we call

NOTE Confidence: 0.928653492142857

 $01:12:11.523 \longrightarrow 01:12:12.738$  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

 $01{:}12{:}15{.}880 \dashrightarrow 01{:}12{:}17{.}987$  So when they come in for simulation

NOTE Confidence: 0.855748158

 $01{:}12{:}17{.}987 \dashrightarrow 01{:}12{:}19{.}804$  and we used a basically a

NOTE Confidence: 0.855748158

01:12:19.804 --> 01:12:21.778 just a mockup of a torso here.

NOTE Confidence: 0.855748158

 $01:12:21.780 \longrightarrow 01:12:22.590$  But when they come in,

NOTE Confidence: 0.855748158

 $01{:}12{:}22{.}590 \dashrightarrow 01{:}12{:}24{.}888$  there's a a camera here that

NOTE Confidence: 0.855748158

 $01{:}12{:}24.888 \dashrightarrow 01{:}12{:}27.223$  actually starts to collect this data

NOTE Confidence: 0.855748158

 $01:12:27.223 \longrightarrow 01:12:29.413$  on their surface of the patient,

NOTE Confidence: 0.855748158

 $01{:}12{:}29{.}420 \dashrightarrow 01{:}12{:}31{.}090$  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

 $01{:}12{:}33.691 \dashrightarrow 01{:}12{:}35.407$  their chest wall motion.

NOTE Confidence: 0.855748158

 $01:12:35.410 \longrightarrow 01:12:39.618$  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

- NOTE Confidence: 0.855748158
- $01:12:41.528 \rightarrow 01:12:43.451$  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
- $01:12:45.230 \longrightarrow 01:12:46.658$  the patients actually in,
- NOTE Confidence: 0.855748158
- $01:12:46.658 \rightarrow 01:12:49.460$  let's imagine this patients in the simulator.
- NOTE Confidence: 0.855748158
- $01:12:49.460 \rightarrow 01:12:51.140$  And we're tracking this position on
- NOTE Confidence: 0.855748158
- $01:12:51.140 \rightarrow 01:12:54.350$  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 01:13:04.418 breath and then we exhale and
- NOTE Confidence: 0.855748158
- $01{:}13{:}04{.}418 \dashrightarrow 01{:}13{:}05{.}986$  the baseline breathing in hale.
- NOTE Confidence: 0.855748158
- 01:13:05.990 --> 01:13:08.279 What we're trying to do is figure
- NOTE Confidence: 0.855748158
- $01{:}13{:}08{.}279 \dashrightarrow 01{:}13{:}10{.}794$  out exactly what position can they
- NOTE Confidence: 0.855748158
- $01:13:10.794 \rightarrow 01:13:13.154$  sort of reproducibly obtain with,
- NOTE Confidence: 0.855748158

- 01:13:13.160 --> 01:13:14.660 you know, expanding their chest.
- NOTE Confidence: 0.855748158
- 01:13:14.660 01:13:15.959 In other words,
- NOTE Confidence: 0.855748158
- $01{:}13{:}15{.}959 \dashrightarrow 01{:}13{:}18{.}124$  what's their kind of comfortable
- NOTE Confidence: 0.855748158
- $01:13:18.124 \longrightarrow 01:13:19.570$  breath hold volume?
- NOTE Confidence: 0.855748158
- $01{:}13{:}19{.}570 \dashrightarrow 01{:}13{:}21{.}236$  And it's really cool because what was
- NOTE Confidence: 0.855748158
- $01:13:21.236 \rightarrow 01:13:22.730$  really interesting about this is we thought,
- NOTE Confidence: 0.855748158
- $01:13:22.730 \longrightarrow 01:13:22.882$  oh,
- NOTE Confidence: 0.855748158
- $01:13:22.882 \rightarrow 01:13:24.250$  this is going to be too much for patients.
- NOTE Confidence: 0.855748158
- $01{:}13{:}24{.}250 \dashrightarrow 01{:}13{:}26{.}105$  It's going to make them really nervous.
- NOTE Confidence: 0.855748158
- $01:13:26.110 \rightarrow 01:13:27.832$  But what was really cool about it
- NOTE Confidence: 0.855748158
- $01:13:27.832 \longrightarrow 01:13:29.778$  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
- $01:13:31.850 \rightarrow 01:13:34.874$  sort of like A to insulate them from other,
- NOTE Confidence: 0.866093403333334
- 01:13:34.880 --> 01:13:35.430 like, distractors.
- NOTE Confidence: 0.866093403333334
- $01{:}13{:}35{.}430 \dashrightarrow 01{:}13{:}37{.}630$  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.

- NOTE Confidence: 0.866093403333334
- $01:13:39.260 \longrightarrow 01:13:40.760$  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
- $01:13:42.937 \rightarrow 01:13:44.456$  what can I do to help myself?
- NOTE Confidence: 0.866093403333334
- $01:13:44.460 \rightarrow 01:13:46.076$  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
- $01:13:49.590 \rightarrow 01:13:53.132$  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
- $01:13:54.524 \rightarrow 01:13:56.050$  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
- $01{:}13{:}57{.}390 \dashrightarrow 01{:}13{:}58{.}332$  and we'll look at what their
- NOTE Confidence: 0.866093403333334
- $01{:}13{:}58{.}332 \dashrightarrow 01{:}13{:}59{.}230$  chest looks like in breath.
- NOTE Confidence: 0.866093403333334
- 01:13:59.230 --> 01:14:00.618 Hold on the left.
- NOTE Confidence: 0.866093403333334
- $01{:}14{:}00.618 \dashrightarrow 01{:}14{:}03.940$  You can see this patient in free breathing.
- NOTE Confidence: 0.866093403333334

 $01:14:03.940 \longrightarrow 01:14:05.578$  The chest is right up against,

NOTE Confidence: 0.866093403333334

 $01:14:05.580 \rightarrow 01:14:06.884$  I'm sorry, the the.

NOTE Confidence: 0.866093403333334

 $01{:}14{:}06{.}884 \dashrightarrow 01{:}14{:}09{.}650$  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 --> 01:14:14.541 diaphragm on the right when they expand

NOTE Confidence: 0.866093403333334

 $01:14:14.541 \rightarrow 01:14:16.989$  their chest and the diaphragm moves down.

NOTE Confidence: 0.866093403333334

01:14:16.990 $\operatorname{-->}$ 01:14:19.153 The heart that creates a little space

NOTE Confidence: 0.866093403333334

 $01{:}14{:}19{.}153 \dashrightarrow 01{:}14{:}21{.}209$  between the heart and the chest wall.

NOTE Confidence: 0.866093403333334

 $01{:}14{:}21{.}210 \dashrightarrow 01{:}14{:}23{.}450$  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

 $01:14:28.480 \longrightarrow 01:14:29.260$  So Step 2,

NOTE Confidence: 0.866093403333334

01:14:29.260 --> 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 --> 01:14:32.940 do your treatment plan.

NOTE Confidence: 0.866093403333334

 $01:14:32.940 \rightarrow 01:14:35.496$  And on the left you could see free breathing.

- NOTE Confidence: 0.866093403333334
- $01:14:35.500 \longrightarrow 01:14:37.756$  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
- $01{:}14{:}38{.}604 \dashrightarrow 01{:}14{:}40{.}283$  That little green line is where we'd like
- NOTE Confidence: 0.866093403333334
- $01:14:40.283 \rightarrow 01:14:41.779$  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
- $01:14:42.760 \rightarrow 01:14:44.765$  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: 0.866093403333334
- $01{:}14{:}52.786 \dashrightarrow 01{:}14{:}54.641$  contents of the chest such that
- NOTE Confidence: 0.866093403333334
- $01{:}14{:}54{.}641 \dashrightarrow 01{:}14{:}56{.}615$  the heart is now moved away from
- NOTE Confidence: 0.866093403333334
- $01{:}14{:}56.615 \dashrightarrow 01{:}14{:}58.651$  the field and a smaller portion of
- NOTE Confidence: 0.866093403333334

 $01:14:58.651 \rightarrow 01:15:00.344$  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

 $01:15:08.510 \rightarrow 01:15:10.570$  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

 $01:15:13.348 \rightarrow 01:15:14.860$  when they get on the treatment machine,

NOTE Confidence: 0.866093403333334

 $01:15:14.860 \longrightarrow 01:15:16.252$  you have to have what's called

NOTE Confidence: 0.866093403333334

 $01{:}15{:}16.252 \dashrightarrow 01{:}15{:}17.180$  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

 $01:15:19.590 \rightarrow 01:15:21.126$  They know what to do with the goggles,

NOTE Confidence: 0.866093403333334

 $01:15:21.130 \rightarrow 01:15:22.708$  but when you actually deliver radiation,

NOTE Confidence: 0.866093403333334

 $01:15:22.710 \longrightarrow 01:15:24.859$  you have to have a system that

NOTE Confidence: 0.866093403333334

 $01:15:24.859 \rightarrow 01:15:26.565$  basically will only give the

- NOTE Confidence: 0.866093403333334
- $01:15:26.565 \rightarrow 01:15:28.375$  radiation when they're in the
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}28{.}375 \dashrightarrow 01{:}15{:}30{.}042$  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
- $01:15:32.552 \rightarrow 01:15:34.869$  because they all get nervous about that.
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}34.870 \dashrightarrow 01{:}15{:}36.872$  But basically we have three cameras in
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}36.872 \dashrightarrow 01{:}15{:}39.156$  the room and the three cameras again
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}39{.}156 \dashrightarrow 01{:}15{:}41.660$  are tracking the patient's chest wall motion.
- NOTE Confidence: 0.866093403333334
- $01:15:41.660 \rightarrow 01:15:42.638$  And we have,
- NOTE Confidence: 0.866093403333334
- $01:15:42.638 \rightarrow 01:15:45.520$  the patient has their goggles in the goggles,
- NOTE Confidence: 0.866093403333334
- $01:15:45.520 \longrightarrow 01:15:47.080$  they see this little green box
- NOTE Confidence: 0.866093403333334
- $01:15:47.080 \rightarrow 01:15:48.989$  and the orange is like sort of a,
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}48.990 \dashrightarrow 01{:}15{:}50.486$  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
- $01{:}15{:}52{.}380 \dashrightarrow 01{:}15{:}54{.}674$  to position their chest in exactly
- NOTE Confidence: 0.866093403333334
- $01{:}15{:}54.674 \dashrightarrow 01{:}15{:}56.672$  the right spot and when they're
- NOTE Confidence: 0.866093403333334

- $01:15:56.672 \longrightarrow 01:15:57.671$  in that spot
- NOTE Confidence: 0.817686503461538
- $01:15:57.742 \rightarrow 01:15:59.860$  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
- $01{:}16{:}02.760 \dashrightarrow 01{:}16{:}05.427$  30 seconds at a time and when
- NOTE Confidence: 0.817686503461538
- $01:16:05.427 \rightarrow 01:16:07.840$  they exhale the beam goes off.
- NOTE Confidence: 0.817686503461538
- $01:16:07.840 \longrightarrow 01:16:09.784$  So this is a way that you know
- NOTE Confidence: 0.817686503461538
- $01{:}16{:}09{.}784 \dashrightarrow 01{:}16{:}11{.}852$  again with this system that we use
- NOTE Confidence: 0.817686503461538
- $01{:}16{:}11.852 \dashrightarrow 01{:}16{:}13.282$  we can significantly reduce the
- NOTE Confidence: 0.817686503461538
- $01:16:13.282 \rightarrow 01:16:15.290$  the dose to the heart and lung.
- NOTE Confidence: 0.817686503461538
- 01:16:15.290 --> 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
- $01:16:19.419 \rightarrow 01:16:21.238$  being used with lymphomas and other
- NOTE Confidence: 0.817686503461538
- $01:16:21.238 \rightarrow 01:16:22.630$  thoracic malignancies because now
- NOTE Confidence: 0.817686503461538
- $01:16:22.630 \rightarrow 01:16:24.758$  using breath hold we can actually
- NOTE Confidence: 0.817686503461538
- $01:16:24.758 \rightarrow 01:16:27.161$  change their anatomy to suit what

 $01:16:27.161 \rightarrow 01:16:30.388$  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

 $01:16:34.090 \rightarrow 01:16:36.142$  Now that we have such great

NOTE Confidence: 0.817686503461538

01:16:36.142 --> 01:16:36.826 systemic therapies,

NOTE Confidence: 0.817686503461538

 $01{:}16{:}36{.}830 \dashrightarrow 01{:}16{:}39{.}882$  we are seeing that we're using more

NOTE Confidence: 0.817686503461538

 $01:16:39.882 \rightarrow 01:16:42.831$  and more radiation therapy and a

NOTE Confidence: 0.817686503461538

 $01:16:42.831 \rightarrow 01:16:47.220$  stereotactic fashion to deliver radiation.

NOTE Confidence: 0.817686503461538

 $01{:}16{:}47.220 \dashrightarrow 01{:}16{:}49.500$  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

 $01{:}16{:}52{.}601 \dashrightarrow 01{:}16{:}55{.}262$  control of both intracranial and

NOTE Confidence: 0.817686503461538

01:16:55.262 --> 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 --> 01:17:02.784 we have the only gamma knife stereotactic

NOTE Confidence: 0.817686503461538

 $01:17:02.784 \longrightarrow 01:17:04.760$  radio surgery unit in the state.

 $01:17:04.760 \longrightarrow 01:17:07.196$  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 --> 01:17:09.765 I don't know how many thousands

NOTE Confidence: 0.817686503461538

 $01:17:09.765 \rightarrow 01:17:11.478$  of patients they see a year,

NOTE Confidence: 0.817686503461538

 $01{:}17{:}11{.}480 \dashrightarrow 01{:}17{:}13{.}472$  but it's I'd say the gamma knife is

NOTE Confidence: 0.817686503461538

 $01:17:13.472 \rightarrow 01:17:15.510$  pretty much running almost all the time.

NOTE Confidence: 0.817686503461538

01:17:15.510 $\operatorname{-->}$ 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

 $01{:}17{:}18.860 \dashrightarrow 01{:}17{:}22.658$  which is the Spine SRS program

NOTE Confidence: 0.817686503461538

 $01{:}17{:}22.660 \dashrightarrow 01{:}17{:}24.880$  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

 $01:17:27.100 \longrightarrow 01:17:27.976$  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

 $01:17:34.344 \rightarrow 01:17:36.651$  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 --> 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

 $01:17:42.743 \rightarrow 01:17:45.326$  we feel might be the only site or a

NOTE Confidence: 0.817686503461538

01:17:45.326 --> 01:17:47.076 limited site of extracranial metastatic

NOTE Confidence: 0.817686503461538

01:17:47.076 --> 01:17:50.500 disease. We can also do body SRS.

NOTE Confidence: 0.817686503461538

 $01:17:50.500 \rightarrow 01:17:53.302$  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

 $01{:}17{:}55{.}840 \dashrightarrow 01{:}17{:}58{.}008$  precise treatment and a

NOTE Confidence: 0.817686503461538

 $01:17:58.008 \longrightarrow 01:17:59.634$  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

 $01{:}18{:}00.820 \dashrightarrow 01{:}18{:}02.360$  that you can treat a large,

NOTE Confidence: 0.817686503461538

 $01:18:02.360 \longrightarrow 01:18:04.435$  a small target with extremely

NOTE Confidence: 0.817686503461538

 $01{:}18{:}04{.}435 \dashrightarrow 01{:}18{:}06{.}980$  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

 $01:18:10.129 \rightarrow 01:18:12.144$  surrounding tissue and it's typically

NOTE Confidence: 0.817686503461538

 $01:18:12.144 \rightarrow 01:18:14.159$  done in a single fraction.

NOTE Confidence: 0.817686503461538

 $01:18:14.160 \rightarrow 01:18:15.720$  This is actually being used very,

NOTE Confidence: 0.817686503461538

 $01:18:15.720 \rightarrow 01:18:17.540$  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

 $01{:}18{:}21.640 \dashrightarrow 01{:}18{:}23.936$  is that you can get more durable local

NOTE Confidence: 0.817686503461538

 $01{:}18{:}23.936 \dashrightarrow 01{:}18{:}26.008$  control and again in select patients.

NOTE Confidence: 0.80468742777778

01:18:28.290 --> 01:18:31.234 As they spoke about with the spine SBRT

NOTE Confidence: 0.804687427777778

01:18:31.234 $\operatorname{-->}$ 01:18:34.868 program, the spine SBRT, here's just a.

NOTE Confidence: 0.804687427777778

01:18:34.870 --> 01:18:36.914 Schematic that shows how precise it is.

NOTE Confidence: 0.80468742777778

 $01:18:36.920 \longrightarrow 01:18:39.404$  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: 0.804687427777778

01:18:41.678 --> 01:18:44.153 a very high dose around the vertebral

NOTE Confidence: 0.80468742777778

01:18:44.153 - 01:18:46.523 body while avoiding the spinal canal,

- NOTE Confidence: 0.804687427777778
- $01:18:46.530 \longrightarrow 01:18:50.002$  canal, spinal cord and that dose can be
- NOTE Confidence: 0.80468742777778
- $01:18:50.002 \rightarrow 01:18:52.850$  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: 0.804687427777778
- 01:18:54.110 --> 01:18:56.194 It requires milligrams, etcetera,
- NOTE Confidence: 0.80468742777778
- $01:18:56.194 \longrightarrow 01:18:58.799$  but very helpful for various
- NOTE Confidence: 0.804687427777778
- 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 --> 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: 0.804687427777778
- $01{:}19{:}07{.}220 \dashrightarrow 01{:}19{:}09{.}302$  Some people have a limited metastatic
- NOTE Confidence: 0.80468742777778
- $01:19:09.302 \longrightarrow 01:19:11.224$  lesion after a long interval
- NOTE Confidence: 0.80468742777778
- $01:19:11.224 \rightarrow 01:19:13.080$  from their primary diagnosis.
- NOTE Confidence: 0.804687427777778
- $01:19:13.080 \longrightarrow 01:19:16.224$  Or for people who have previously
- NOTE Confidence: 0.804687427777778
- $01:19:16.224 \longrightarrow 01:19:17.796$  radiated spine metastases,
- NOTE Confidence: 0.80468742777778
- $01:19:17.800 \rightarrow 01:19:19.500$  we've done maybe external beam,
- NOTE Confidence: 0.80468742777778

 $01:19:19.500 \rightarrow 01:19:21.336$  and then they have a recurrence,

NOTE Confidence: 0.80468742777778

01:19:21.340 --> 01:19:22.099 which is unusual,

NOTE Confidence: 0.804687427777778

 $01{:}19{:}22.099 \dashrightarrow 01{:}19{:}24.220$  but maybe a recurrence a few years later.

NOTE Confidence: 0.804687427777778

 $01:19:24.220 \rightarrow 01:19:26.676$  We can give this and spare the spinal

NOTE Confidence: 0.80468742777778

 $01{:}19{:}26.676$  -->  $01{:}19{:}29.028$  cord and treat the vertebral body.

NOTE Confidence: 0.804687427777778

 $01:19:29.030 \dashrightarrow 01:19:29.918$  And finally,

NOTE Confidence: 0.80468742777778

01:19:29.918 --> 01:19:32.582 just our gamma knife program and

NOTE Confidence: 0.80468742777778

 $01:19:32.582 \rightarrow 01:19:35.058$  especially in this era of very,

NOTE Confidence: 0.80468742777778

01:19:35.060 --> 01:19:37.800 very effective targeted therapies,

NOTE Confidence: 0.804687427777778

 $01:19:37.800 \longrightarrow 01:19:40.540$  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: 0.804687427777778

 $01:19:42.880 \longrightarrow 01:19:46.219$  We are still dealing with people who

NOTE Confidence: 0.80468742777778

 $01{:}19{:}46{.}219 \dashrightarrow 01{:}19{:}49{.}215$  have uncontrolled or come to us with

NOTE Confidence: 0.80468742777778

01:19:49.215 --> 01:19:50.436 uncontrolled intracranial disease.

NOTE Confidence: 0.804687427777778

 $01{:}19{:}50{.}440 \dashrightarrow 01{:}19{:}51{.}748$  And with our gamma knife program,

NOTE Confidence: 0.80468742777778

 $01:19:51.750 \rightarrow 01:19:54.262$  we're able to deliver very high doses of

- NOTE Confidence: 0.804687427777778
- $01:19:54.262 \rightarrow 01:19:56.498$  radiation to multiple brain metastases.
- NOTE Confidence: 0.804687427777778
- $01{:}19{:}56{.}500 \dashrightarrow 01{:}19{:}58{.}120$  It's a single treatment session.
- NOTE Confidence: 0.804687427777778
- $01:19:58.120 \longrightarrow 01:19:59.038$  People go home.
- NOTE Confidence: 0.80468742777778
- $01{:}19{:}59{.}038 \dashrightarrow 01{:}20{:}01{.}670$  I know that Doctor Bindra says his famous,
- NOTE Confidence: 0.804687427777778
- 01:20:01.670 --> 01:20:01.882 his,
- NOTE Confidence: 0.80468742777778
- $01:20:01.882 \rightarrow 01:20:03.790$  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: 0.80468742777778
- $01:20:04.240 \longrightarrow 01:20:06.040$  I just went golfing like the guys like
- NOTE Confidence: 0.80468742777778
- $01{:}20{:}06.092 \dashrightarrow 01{:}20{:}07.856$ 24 hours out and he gives him a follow
- NOTE Confidence: 0.804687427777778
- 01:20:07.856 --> 01:20:09.689 up call and the guy was out golfing.
- NOTE Confidence: 0.80468742777778
- $01:20:09.690 \longrightarrow 01:20:11.022$  It's a very,
- NOTE Confidence: 0.80468742777778
- 01:20:11.022 --> 01:20:11.910 very beneficial,
- NOTE Confidence: 0.80468742777778
- $01{:}20{:}11{.}910 \dashrightarrow 01{:}20{:}15{.}434$  very effective treatment and gives more
- NOTE Confidence: 0.804687427777778
- $01{:}20{:}15{.}434 \dashrightarrow 01{:}20{:}17{.}366$  durable local control for brain medicine,
- NOTE Confidence: 0.80468742777778
- 01:20:17.370 --> 01:20:18.930 significant decrease in morbidity
- NOTE Confidence: 0.80468742777778

- $01{:}20{:}18{.}930 \dashrightarrow 01{:}20{:}20{.}880$  when compared with our standard
- NOTE Confidence: 0.804687427777778
- $01:20:20.880 \longrightarrow 01:20:22.650$  whole brain radiation therapy.
- NOTE Confidence: 0.804687427777778
- 01:20:22.650 --> 01:20:23.676 And you know,
- NOTE Confidence: 0.804687427777778
- $01{:}20{:}23.676 \dashrightarrow 01{:}20{:}26.070$  Doctor Chang and my other colleagues are
- NOTE Confidence: 0.804687427777778
- $01{:}20{:}26.135 \dashrightarrow 01{:}20{:}28.263$  just always available and a doctor is
- NOTE Confidence: 0.804687427777778
- $01{:}20{:}28{.}263 \dashrightarrow 01{:}20{:}31{.}139$  here and I work really closely with them.
- NOTE Confidence: 0.80468742777778
- 01:20:31.140 --> 01:20:33.100 And and Doctor Mcgauley and we we can
- NOTE Confidence: 0.80468742777778
- $01:20:33.100 \longrightarrow 01:20:35.037$  get those patients to the gamma knife
- NOTE Confidence: 0.80468742777778
- $01{:}20{:}35{.}037 \dashrightarrow 01{:}20{:}36{.}765$  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
- $01:20:38.780 \longrightarrow 01:20:40.931$  So we we have a very like hand in
- NOTE Confidence: 0.80468742777778
- $01:20:40.931 \rightarrow 01:20:43.136$  glove type of relationship with them.
- NOTE Confidence: 0.80468742777778
- $01:20:43.140 \longrightarrow 01:20:45.040$  So basically radiation therapy
- NOTE Confidence: 0.804687427777778
- $01{:}20{:}45.040 \dashrightarrow 01{:}20{:}47.415$  to summarize is an essential
- NOTE Confidence: 0.804687427777778
- 01:20:47.415 --> 01:20:49.818 part of the multidisciplinary.
- NOTE Confidence: 0.80468742777778
- $01:20:49.820 \longrightarrow 01:20:51.248$  Treatment for breast cancer,

NOTE Confidence: 0.804687427777778

 $01{:}20{:}51{.}248 \dashrightarrow 01{:}20{:}53{.}390$  it's very safe and effective and

NOTE Confidence: 0.80468742777778

 $01:20:53.452 \rightarrow 01:20:55.420$  you know I think the DBH is making

NOTE Confidence: 0.80468742777778

 $01{:}20{:}55{.}420 \dashrightarrow 01{:}20{:}57{.}431$  it even more safe and effective and

NOTE Confidence: 0.804687427777778

 $01:20:57.431 \longrightarrow 01:20:59.654$  it reduces the risk of local and

NOTE Confidence: 0.804687427777778

 $01:20:59.654 \rightarrow 01:21:01.916$  regional recurrence by 50 to 70%.

NOTE Confidence: 0.80468742777778

 $01:21:01.920 \longrightarrow 01:21:03.999$  And you know what's really I think

NOTE Confidence: 0.80468742777778

 $01:21:03.999 \rightarrow 01:21:06.285$  going to help in the future with

NOTE Confidence: 0.80468742777778

01:21:06.285 --> 01:21:07.940 quality of life for patients,

NOTE Confidence: 0.80468742777778

01:21:07.940 $\operatorname{-->}$ 01:21:10.406 especially for gamma knife is the

NOTE Confidence: 0.804687427777778

 $01{:}21{:}10.406 \dashrightarrow 01{:}21{:}12.621$  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: 0.80468742777778

 $01{:}21{:}15.096 \dashrightarrow 01{:}21{:}17.076$  disease and metastatic disease.

NOTE Confidence: 0.80468742777778

01:21:17.080 --> 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,

NOTE Confidence: 0.807927305

 $01:21:27.240 \longrightarrow 01:21:29.478$  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 --> 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 --> 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 --> 01:21:46.682 So thank you very much for every<br/>body

NOTE Confidence: 0.807927305

 $01:21:46.682 \longrightarrow 01:21:48.781$  to to join us today and I just

NOTE Confidence: 0.807927305

01:21:48.781 --> 01:21:50.456 was hoping we would have some

NOTE Confidence: 0.807927305

 $01{:}21{:}50.456 \dashrightarrow 01{:}21{:}51.948$  questions from the audience.

NOTE Confidence: 0.863517245

01:21:54.280 --> 01:21:55.570 I had. I don't see any.

NOTE Confidence: 0.863517245

 $01:21:55.570 \rightarrow 01:21:57.640$  No, there is one question here.

NOTE Confidence: 0.890116198

 $01{:}21{:}57{.}710 \dashrightarrow 01{:}21{:}59{.}418$  I'm going to stop sharing. There we go.

NOTE Confidence: 0.88826765375

01:22:01.930 --> 01:22:03.274 I don't know how do they ask

- NOTE Confidence: 0.88826765375
- 01:22:03.274 --> 01:22:04.130 questions, I'm not sure.
- NOTE Confidence: 0.8980975363636363
- $01:22:05.820 \longrightarrow 01:22:06.980$  I'm looking at the question
- NOTE Confidence: 0.8980975363636363
- $01:22:06.980 \longrightarrow 01:22:08.440$  answer in the in the chat,
- NOTE Confidence: 0.898097536363636
- 01:22:08.440 --> 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: 0.8980975363636363
- $01:22:14.340 \longrightarrow 01:22:16.140$  you know, all the speakers
- NOTE Confidence: 0.898097536363636
- $01:22:16.140 \longrightarrow 01:22:17.940$  to night and anyone can answer.
- NOTE Confidence: 0.89809753636363636
- 01:22:17.940 --> 01:22:20.916 Umm, it's a very simple question.
- NOTE Confidence: 0.8980975363636363
- $01:22:20.920 \longrightarrow 01:22:22.915$  What do you think is the most
- NOTE Confidence: 0.898097536363636
- $01{:}22{:}22{.}915 \dashrightarrow 01{:}22{:}24{.}355$  important advance in breast cancer
- NOTE Confidence: 0.898097536363636
- $01:22:24.355 \longrightarrow 01:22:26.451$  over the past year and it can be
- NOTE Confidence: 0.8980975363636363
- $01{:}22{:}26.514 \dashrightarrow 01{:}22{:}28.348$  one or two sentences and we can
- NOTE Confidence: 0.89809753636363636
- $01:22:28.348 \rightarrow 01:22:30.199$  finish up this meeting this evening.
- NOTE Confidence: 0.8980975363636363
- $01:22:30.199 \longrightarrow 01:22:31.964$  Sarah, you want to start.
- NOTE Confidence: 0.750245201666667
- 01:22:32.740 --> 01:22:34.996 So in in breast medical oncology,
- NOTE Confidence: 0.750245201666667

 $01{:}22{:}35{.}000 \dashrightarrow 01{:}22{:}37{.}177$  I think the the biggest break through was

NOTE Confidence: 0.7502452016666667

01:22:37.177 --> 01:22:39.817 the use of an antibody drug conjugate,

NOTE Confidence: 0.750245201666667

 $01{:}22{:}39{.}820 \dashrightarrow 01{:}22{:}42{.}190$  which is kind of like a.

NOTE Confidence: 0.7502452016666667

 $01:22:42.190 \rightarrow 01:22:44.240$  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

 $01:22:47.036 \rightarrow 01:22:48.877$  effective in not just people who have NOTE Confidence: 0.750245201666667

 $01:22:48.877 \rightarrow 01:22:50.770$  truly hurt to overexpressing cancers,

NOTE Confidence: 0.750245201666667

 $01{:}22{:}50{.}770 \dashrightarrow 01{:}22{:}52{.}800$  but lots of different other kinds that

NOTE Confidence: 0.750245201666667

 $01:22:52.800 \rightarrow 01:22:54.908$  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

 $01{:}22{:}56{.}720 \dashrightarrow 01{:}22{:}58{.}530$  treatment of metastatic disease waji.

NOTE Confidence: 0.7502452016666667

 $01{:}22{:}58{.}530 \dashrightarrow 01{:}23{:}00{.}978$  I would point out that there is a

NOTE Confidence: 0.750245201666667

 $01{:}23{:}00{.}978 \dashrightarrow 01{:}23{:}03{.}152$  question that asks about the best way to

NOTE Confidence: 0.7502452016666667

 $01{:}23{:}03{.}152 \dashrightarrow 01{:}23{:}04{.}999$  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

- NOTE Confidence: 0.90554838
- $01:23:11.810 \longrightarrow 01:23:13.900$  through any referrals to breast
- NOTE Confidence: 0.90554838
- 01:23:13.900 --> 01:23:15.990 surgery can be breast surgery.
- NOTE Confidence: 0.90554838
- $01{:}23{:}15{.}990 \dashrightarrow 01{:}23{:}18{.}384$  Guildford can be breast surgery New Haven.
- NOTE Confidence: 0.90554838
- $01{:}23{:}18{.}390 \dashrightarrow 01{:}23{:}20{.}154$  And a part of our process is to try
- NOTE Confidence: 0.90554838
- $01:23:20.154 \rightarrow 01:23:22.136$  to make sure that we're accommodating
- NOTE Confidence: 0.90554838
- $01{:}23{:}22{.}136 \dashrightarrow 01{:}23{:}23{.}866$  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
- $01:23:25.232 \longrightarrow 01:23:26.140$  located on the shoreline,
- NOTE Confidence: 0.90554838
- $01:23:26.140 \longrightarrow 01:23:27.820$  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
- $01{:}23{:}30.755 \dashrightarrow 01{:}23{:}32.067$  tolerate the air rights garage.
- NOTE Confidence: 0.90616145375
- $01:23:33.600 \rightarrow 01:23:35.360$  And you know, if there's ever any question,
- NOTE Confidence: 0.90616145375
- $01{:}23{:}35{.}360 \dashrightarrow 01{:}23{:}36{.}540$  you're welcome to call us.
- NOTE Confidence: 0.90616145375
- $01:23:36.540 \rightarrow 01:23:38.157$  Any one of us call me especially
- NOTE Confidence: 0.90616145375

- 01:23:38.157 --> 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 --> 01:23:46.288 they can make space.
- NOTE Confidence: 0.91908164444445
- $01{:}23{:}49{.}020 \dashrightarrow 01{:}23{:}50{.}940$  I happen to know that people sit in
- NOTE Confidence: 0.919081644444445
- $01{:}23{:}50{.}940 \dashrightarrow 01{:}23{:}52{.}838$  the queue for our referrals for less
- NOTE Confidence: 0.91908164444445
- $01:23:52.838 \rightarrow 01:23:54.950$  than 24 hours, so we usually make those
- NOTE Confidence: 0.91908164444445
- $01{:}23{:}54{.}950 \dashrightarrow 01{:}23{:}56{.}240$  appointments within one business day.
- NOTE Confidence: 0.854417813571428
- $01{:}24{:}00{.}280 \dashrightarrow 01{:}24{:}02{.}224$  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
- $01:24:03.812 \rightarrow 01:24:07.120$  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 --> 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.

- NOTE Confidence: 0.9131738125
- $01{:}24{:}17.860 \dashrightarrow 01{:}24{:}20.644$  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
- $01{:}24{:}22.036 \dashrightarrow 01{:}24{:}24.099$  taking off in breast imaging.
- NOTE Confidence: 0.9131738125
- $01{:}24{:}24{.}100 \dashrightarrow 01{:}24{:}25{.}445$  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 --> 01:24:38.229 us some you know hopefully improve
- NOTE Confidence: 0.9131738125
- $01{:}24{:}38{.}229 \dashrightarrow 01{:}24{:}40{.}139$  our accuracy and reduce again
- NOTE Confidence: 0.9131738125
- $01{:}24{:}40{.}139 \dashrightarrow 01{:}24{:}42{.}377$  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
- $01{:}24{:}43.860 \dashrightarrow 01{:}24{:}46.348$  it helping a lot.
- NOTE Confidence: 0.9131738125
- 01:24:46.350 --> 01:24:47.700 I can't share any more slides
- NOTE Confidence: 0.9131738125

- $01:24:47.700 \longrightarrow 01:24:48.375$  on Thomas synthesis,
- NOTE Confidence: 0.9131738125
- $01{:}24{:}48{.}380 \dashrightarrow 01{:}24{:}50{.}228$  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
- $01:24:51.467 \longrightarrow 01:24:52.081$  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
- $01{:}24{:}56{.}189 \dashrightarrow 01{:}24{:}57{.}848$  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
- $01{:}24{:}59{.}994 \dashrightarrow 01{:}25{:}02{.}076$  mammography and we are finding a
- NOTE Confidence: 0.9131738125
- $01{:}25{:}02.076 \dashrightarrow 01{:}25{:}04.000$  difference in the advanced cancers,
- NOTE Confidence: 0.9131738125
- $01:25:04.000 \rightarrow 01:25:09.140$  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 --> 01:25:13.499 because we just don't want
- NOTE Confidence: 0.9131738125
- $01{:}25{:}13.499 \dashrightarrow 01{:}25{:}14.360$  to find more cancers,
- NOTE Confidence: 0.9131738125
- $01:25:14.360 \rightarrow 01:25:16.448$  we want to find the bad cancers and we're

- NOTE Confidence: 0.9131738125
- $01:25:16.448 \rightarrow 01:25:18.400$  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
- $01:25:21.660 \longrightarrow 01:25:22.644$  So, you know,
- NOTE Confidence: 0.9131738125
- $01:25:22.644 \rightarrow 01:25:24.940$  definitely tomosynthesis is here to stay,
- NOTE Confidence: 0.9131738125
- $01{:}25{:}24{.}940 \dashrightarrow 01{:}25{:}26{.}130$  there's no doubt about that.
- NOTE Confidence: 0.9131738125
- 01:25:26.130 --> 01:25:26.578 But yeah,
- NOTE Confidence: 0.9131738125
- $01:25:26.578 \longrightarrow 01:25:27.922$  I think AI is going to
- NOTE Confidence: 0.9131738125
- $01{:}25{:}27{.}922 \dashrightarrow 01{:}25{:}29{.}299$  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
- $01:25:36.170 \longrightarrow 01:25:38.890$  I would say in the in the plastic
- NOTE Confidence: 0.790515968333333
- $01{:}25{:}38{.}890 \dashrightarrow 01{:}25{:}40{.}559$  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
- $01{:}25{:}42.650 \dashrightarrow 01{:}25{:}44.239$  the implants they get better and better.
- NOTE Confidence: 0.790515968333333
- $01{:}25{:}44{.}240 \dashrightarrow 01{:}25{:}45{.}944$  We're on our fifth generation of
- NOTE Confidence: 0.790515968333333

 $01:25:45.944 \rightarrow 01:25:48.018$  implants at this point in time and

NOTE Confidence: 0.790515968333333

 $01:25:48.018 \rightarrow 01:25:49.776$  they they increasingly get more sturdy.

NOTE Confidence: 0.790515968333333

01:25:49.780 --> 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

 $01:25:53.705 \longrightarrow 01:25:54.749$  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

 $01{:}25{:}56{.}040 \dashrightarrow 01{:}25{:}58{.}287$  And that first generation and even second

NOTE Confidence: 0.790515968333333

 $01{:}25{:}58{.}287 \dashrightarrow 01{:}26{:}00{.}276$  generation when they ruptured it was it

NOTE Confidence: 0.790515968333333

01:26:00.276 --> 01:26:02.379 was a night mare to to remove them and I

NOTE Confidence: 0.790515968333333

 $01{:}26{:}02{.}379 \dashrightarrow 01{:}26{:}05{.}072$  I've had to do more than my fair share.

NOTE Confidence: 0.790515968333333

 $01:26:05.072 \longrightarrow 01:26:07.626$  This fifth generation they

NOTE Confidence: 0.790515968333333

 $01{:}26{:}07.626 \dashrightarrow 01{:}26{:}10.556$  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 --> 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

 $01:26:14.130 \rightarrow 01:26:14.805$  nothing leaks out.

- NOTE Confidence: 0.790515968333333
- $01:26:14.805 \longrightarrow 01:26:15.930$  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
- $01:26:19.910 \longrightarrow 01:26:21.046$  many ways.
- NOTE Confidence: 0.790515968333333
- $01:26:21.046 \rightarrow 01:26:25.590$  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
- $01:26:33.106 \longrightarrow 01:26:35.162$  of the year this most recent
- NOTE Confidence: 0.790515968333333
- $01:26:35.162 \longrightarrow 01:26:37.316$  generations kind of come out and
- NOTE Confidence: 0.790515968333333
- $01{:}26{:}37{.}387 \dashrightarrow 01{:}26{:}39{.}447$  really has become very popular.
- NOTE Confidence: 0.790515968333333
- $01:26:39.450 \longrightarrow 01:26:39.800$  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,
- NOTE Confidence: 0.8004077666666667

 $01:26:47.180 \longrightarrow 01:26:48.545$  you know through residency and

NOTE Confidence: 0.8004077666666667

 $01{:}26{:}48{.}545 \dashrightarrow 01{:}26{:}50{.}738$  fellowship I think and also the the

NOTE Confidence: 0.8004077666666667

01:26:50.740 --> 01:26:53.040 menu clinical trials we see at breast.

NOTE Confidence: 0.8004077666666667

 $01:26:53.040 \longrightarrow 01:26:55.501$  I think I think what I've seen the

NOTE Confidence: 0.8004077666666667

01:26:55.501 --> 01:26:57.583 most is the patients now inactive

NOTE Confidence: 0.783563756

 $01:26:57.600 \longrightarrow 01:27:00.610$  participant. Yeah, 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

 $01{:}27{:}04.600 \dashrightarrow 01{:}27{:}07.176$  how much treatment they want to do.

NOTE Confidence: 0.889677626428572

 $01:27:07.180 \longrightarrow 01:27:09.112$  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

 $01{:}27{:}13{.}294 \dashrightarrow 01{:}27{:}15{.}558$  with the help of plastic surgery.

NOTE Confidence: 0.889677626428572

 $01{:}27{:}15{.}560 \dashrightarrow 01{:}27{:}17{.}205$  You know we're able to give them

NOTE Confidence: 0.889677626428572

 $01{:}27{:}17.205 \dashrightarrow 01{:}27{:}18.806$  more options and and I think what

NOTE Confidence: 0.889677626428572

 $01:27:18.806 \rightarrow 01:27:20.384$  we're going to see more and more

- NOTE Confidence: 0.889677626428572
- $01:27:20.384 \rightarrow 01:27:21.944$  is more options of de escalation.
- NOTE Confidence: 0.889677626428572
- 01:27:21.950 --> 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
- $01{:}27{:}26.016 \dashrightarrow 01{:}27{:}28.308$  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
- $01:27:29.638 \longrightarrow 01:27:31.218$  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
- $01{:}27{:}32{.}560 \dashrightarrow 01{:}27{:}35{.}916$  We have a lot of trials that have met
- NOTE Confidence: 0.889677626428572
- $01{:}27{:}35{.}916 \dashrightarrow 01{:}27{:}39{.}004$  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
- $01{:}27{:}41{.}229 \dashrightarrow 01{:}27{:}43{.}727$  and I think it's nice to see
- NOTE Confidence: 0.889677626428572
- $01{:}27{:}43.727 \dashrightarrow 01{:}27{:}45.567$  you know the patient advocacy.
- NOTE Confidence: 0.889677626428572
- $01:27:45.570 \longrightarrow 01:27:47.844$  For themselves and and they've really
- NOTE Confidence: 0.889677626428572
- $01{:}27{:}47.844 \dashrightarrow 01{:}27{:}50.002$  been an active participant and you
- NOTE Confidence: 0.889677626428572
- $01{:}27{:}50{.}002 \dashrightarrow 01{:}27{:}51{.}742$  know it's nice to see physicians
- NOTE Confidence: 0.889677626428572

 $01:27:51.742 \longrightarrow 01:27:54.331$  who have had an open year and a lot

NOTE Confidence: 0.889677626428572

 $01:27:54.331 \rightarrow 01:27:55.959$  of our conversations are are really

NOTE Confidence: 0.889677626428572

 $01:27:55.959 \rightarrow 01:27:57.800$  you know geared toward them and and NOTE Confidence: 0.889677626428572

 $01:27:57.862 \rightarrow 01:27:59.956$  we're happy to provide all those

NOTE Confidence: 0.889677626428572

 $01{:}27{:}59{.}956 \dashrightarrow 01{:}28{:}01{.}460$  different operations different options.

NOTE Confidence: 0.889677626428572

 $01{:}28{:}01{.}460 \dashrightarrow 01{:}28{:}03{.}060$  So it's really been enlight ening.

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

 $01{:}28{:}07{.}550 \dashrightarrow 01{:}28{:}09{.}454$  I I would say that the thing I've

NOTE Confidence: 0.866679508888889

 $01{:}28{:}09{.}454 \dashrightarrow 01{:}28{:}11{.}514$  seen over the last few years that's

NOTE Confidence: 0.866679508888889

 $01{:}28{:}11{.}514 \dashrightarrow 01{:}28{:}13{.}379$  been gratifying on a personal level

NOTE Confidence: 0.866679508888889

 $01:28:13.379 \rightarrow 01:28:15.089$  and I think my colleagues are,

NOTE Confidence: 0.866679508888889

 $01:28:15.090 \rightarrow 01:28:17.922$  we're just enjoying working with our

NOTE Confidence: 0.866679508888889

 $01{:}28{:}17{.}922 \dashrightarrow 01{:}28{:}20{.}488$  plastics colleagues and making sort

NOTE Confidence: 0.866679508888889

 $01:28:20.488 \rightarrow 01:28:23.559$  of this I think multidisciplinary

NOTE Confidence: 0.866679508888889

 $01:28:23.559 \rightarrow 01:28:26.072$  efforts of knowing when and how to

- NOTE Confidence: 0.866679508888889
- $01:28:26.072 \rightarrow 01:28:28.140$  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
- $01{:}28{:}32{.}335 \dashrightarrow 01{:}28{:}34{.}567$  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
- $01{:}28{:}35{.}658 \dashrightarrow 01{:}28{:}38{.}260$  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
- $01:28:41.600 \rightarrow 01:28:43.712$  radiation therapy in the post mastectomy
- NOTE Confidence: 0.866679508888889
- $01:28:43.712 \rightarrow 01:28:46.119$  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
- $01{:}28{:}50.072 \dashrightarrow 01{:}28{:}52.318$  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 $\operatorname{-->}$ 01:28:57.588 the issues that I think may<br/>be in the
- NOTE Confidence: 0.866679508888889
- $01{:}28{:}57{.}588 \dashrightarrow 01{:}29{:}00{.}505$  beginning of many years ago when we
- NOTE Confidence: 0.866679508888889

01:29:00.505 --> 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 --> 01:29:07.352 But now I think we have a really

NOTE Confidence: 0.866679508888889

 $01{:}29{:}07{.}352 \dashrightarrow 01{:}29{:}08{.}990$  great workflow for communicating

NOTE Confidence: 0.866679508888889

 $01{:}29{:}08{.}990 \dashrightarrow 01{:}29{:}11{.}140$  with their colleagues and patients

NOTE Confidence: 0.866679508888889

 $01{:}29{:}11{.}140 \dashrightarrow 01{:}29{:}13{.}528$  get really good on cologic as well

NOTE Confidence: 0.866679508888889

01:29:13.528 --> 01:29:15.353 as plastics outcomes because we're

NOTE Confidence: 0.866679508888889

01:29:15.353 --> 01:29:17.703 all sort of on the same page and

NOTE Confidence: 0.866679508888889

 $01{:}29{:}17.703 \dashrightarrow 01{:}29{:}18.794$  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 --> 01:29:23.834 I think all of us have a lot of

NOTE Confidence: 0.866679508888889

 $01{:}29{:}23.834 \dashrightarrow 01{:}29{:}25.064$  sort of satisfaction from that

NOTE Confidence: 0.866679508888889

01:29:25.064 --> 01:29:26.721 part of our job and it continues

NOTE Confidence: 0.866679508888889

 $01:29:26.721 \rightarrow 01:29:28.030$  to evolve and get better.

- NOTE Confidence: 0.9524630666666667
- 01:29:30.020 --> 01:29:31.280 Thank you. Thank you very much.
- NOTE Confidence: 0.9524630666666667
- $01:29:31.280 \longrightarrow 01:29:33.344$  I think we are just about to overtime
- NOTE Confidence: 0.9524630666666667
- $01{:}29{:}33{.}344 \dashrightarrow 01{:}29{:}35{.}246$  and I really greatly appreciate all
- NOTE Confidence: 0.9524630666666667
- 01:29:35.246 --> 01:29:37.617 of you for joining us and really
- NOTE Confidence: 0.9524630666666667
- $01:29:37.617 \rightarrow 01:29:39.885$  appreciate for what you do every day
- NOTE Confidence: 0.9524630666666667
- $01{:}29{:}39.885 \dashrightarrow 01{:}29{:}41.704$  and thanks every one for joining in.
- NOTE Confidence: 0.9524630666666667
- $01:29:41.704 \rightarrow 01:29:42.868$  Have a great night.
- NOTE Confidence: 0.8885793666666667
- 01:29:43.180 --> 01:29:45.850 Thanks very much. Thank you. Take care.