WEBVTT

NOTE duration:"01:02:21" NOTE recognizability:0.845

NOTE language:en-us

NOTE Confidence: 0.845096001764706

 $00:00:00.000 \longrightarrow 00:00:01.152$ Good evening everyone.

NOTE Confidence: 0.845096001764706

00:00:01.152 --> 00:00:03.840 I'm Doctor Mary I'm lost Burg and

NOTE Confidence: 0.845096001764706

00:00:03.914 --> 00:00:06.266 welcome to this edition of Smiley

NOTE Confidence: 0.845096001764706

 $00:00:06.266 \longrightarrow 00:00:09.300$ shares on breast Cancer Awareness Month.

NOTE Confidence: 0.845096001764706

 $00:00:09.300 \longrightarrow 00:00:13.024$ Our focus today will be on new

NOTE Confidence: 0.845096001764706

 $00{:}00{:}13.024 \dashrightarrow 00{:}00{:}15.930$ treatment advances and innovations.

NOTE Confidence: 0.845096001764706

 $00:00:15.930 \longrightarrow 00:00:18.849$ Please allow me to introduce our speakers.

NOTE Confidence: 0.845096001764706

 $00{:}00{:}18.850 \dashrightarrow 00{:}00{:}20.884$ Come and Mary M Lustberg and

NOTE Confidence: 0.845096001764706

 $00:00:20.884 \longrightarrow 00:00:22.950$ I'm chief of breast oncology.

NOTE Confidence: 0.845096001764706

 $00:00:22.950 \longrightarrow 00:00:24.590$ I'm here at Yale.

NOTE Confidence: 0.845096001764706

 $00{:}00{:}24.590 \dashrightarrow 00{:}00{:}27.050$ Joining me to night is Doctor Tristan.

NOTE Confidence: 0.845096001764706

 $00{:}00{:}27.050 \dashrightarrow 00{:}00{:}30.050$ Park is an assistant professor of

NOTE Confidence: 0.845096001764706

 $00:00:30.050 \longrightarrow 00:00:33.350$ surgery and in addition we have

 $00:00:33.350 \longrightarrow 00:00:35.900$ vector bookdown pomoc who is a

NOTE Confidence: 0.845096001764706

 $00{:}00{:}35.900 \dashrightarrow 00{:}00{:}39.572$ chief who's a chief of plastic and

NOTE Confidence: 0.845096001764706

 $00:00:39.572 \longrightarrow 00:00:41.259$ reconstructive surgery together,

NOTE Confidence: 0.845096001764706

00:00:41.259 --> 00:00:43.404 will present three talks to

NOTE Confidence: 0.845096001764706

 $00:00:43.404 \longrightarrow 00:00:45.909$ you that focus on the most.

NOTE Confidence: 0.845096001764706

00:00:45.910 --> 00:00:48.694 Recent advances in multidisciplinary

NOTE Confidence: 0.845096001764706

00:00:48.694 --> 00:00:51.478 management of breast cancer.

NOTE Confidence: 0.876345403

 $00:00:53.580 \longrightarrow 00:00:55.926$ To start with, in honor of

NOTE Confidence: 0.876345403

 $00{:}00{:}55.926 \dashrightarrow 00{:}00{:}57.490$ breast Cancer Awareness Month,

NOTE Confidence: 0.876345403

00:00:57.490 --> 00:00:59.716 I wanted to just briefly recap

NOTE Confidence: 0.876345403

 $00{:}00{:}59.716 \dashrightarrow 00{:}01{:}02.360$ where we are with breast cancer.

NOTE Confidence: 0.876345403

 $00:01:02.360 \longrightarrow 00:01:05.110$ As you can see here.

NOTE Confidence: 0.876345403

 $00:01:05.110 \longrightarrow 00:01:08.206$ Breast cancer is diagnosed in all ages now.

NOTE Confidence: 0.876345403

 $00{:}01{:}08.210 \dashrightarrow 00{:}01{:}13.146$ It tends to peak in in in the 6th decade.

NOTE Confidence: 0.876345403

00:01:13.150 --> 00:01:16.360 However, younger women and older women

NOTE Confidence: 0.876345403

 $00:01:16.360 \longrightarrow 00:01:19.580$ can still be diagnosed with breast cancer.

 $00:01:19.580 \longrightarrow 00:01:21.890$ In addition, men can also be diagnosed

NOTE Confidence: 0.876345403

 $00{:}01{:}21.890 \longrightarrow 00{:}01{:}23.928$ with breast cancer and they comprise

NOTE Confidence: 0.876345403

 $00:01:23.930 \longrightarrow 00:01:28.030 1\%$ approximately of all diagnosis when

NOTE Confidence: 0.876345403

00:01:28.030 --> 00:01:31.670 their right hand graph you can see

NOTE Confidence: 0.876345403

 $00{:}01{:}31.670 \dashrightarrow 00{:}01{:}35.216$ differences and outcomes based on race.

NOTE Confidence: 0.876345403

 $00:01:35.220 \longrightarrow 00:01:37.614$ And this is an area of active

NOTE Confidence: 0.876345403

00:01:37.614 --> 00:01:39.906 advocacy and effort here at Yale

NOTE Confidence: 0.876345403

 $00:01:39.906 \longrightarrow 00:01:42.294$ as well as nationally to improve

NOTE Confidence: 0.876345403

 $00:01:42.294 \longrightarrow 00:01:43.948$ disparities in breast cancer.

NOTE Confidence: 0.909790707857143

 $00:01:45.990 \longrightarrow 00:01:48.354$ Who's at risk? The biggest risk

NOTE Confidence: 0.909790707857143

 $00:01:48.354 \longrightarrow 00:01:51.608$ factor is is is is being female.

NOTE Confidence: 0.909790707857143

 $00:01:51.610 \longrightarrow 00:01:55.845$ Advancing age, family history and there are

NOTE Confidence: 0.909790707857143

 $00:01:55.845 \longrightarrow 00:01:59.108$ other risk factors that are listed here,

NOTE Confidence: 0.909790707857143

 $00{:}01{:}59.110 \dashrightarrow 00{:}02{:}02{:}534$ including exposure to radiation,

NOTE Confidence: 0.909790707857143

 $00:02:02.534 \longrightarrow 00:02:06.548$ abnormal biopsies, post menopausal obesity,

 $00:02:06.548 \longrightarrow 00:02:10.305$ excessive alcohol use as well as

NOTE Confidence: 0.909790707857143

 $00{:}02{:}10.305 \dashrightarrow 00{:}02{:}12.245$ hormonal features including early

NOTE Confidence: 0.909790707857143

 $00:02:12.245 \longrightarrow 00:02:16.160$ age of man are late age of menopause.

NOTE Confidence: 0.909790707857143

 $00:02:16.160 \longrightarrow 00:02:17.170$ Late pregnancy.

NOTE Confidence: 0.909072320666667

 $00:02:19.350 \longrightarrow 00:02:21.204$ We have identified a number of

NOTE Confidence: 0.909072320666667

 $00:02:21.204 \longrightarrow 00:02:22.850$ different genetic factors that are

NOTE Confidence: 0.909072320666667

 $00:02:22.850 \longrightarrow 00:02:24.270$ associated with breast cancers.

NOTE Confidence: 0.909072320666667

 $00{:}02{:}24.270 \dashrightarrow 00{:}02{:}26.220$ Some of them are associated with

NOTE Confidence: 0.909072320666667

00:02:26.220 --> 00:02:28.157 higher risk of breast cancer and

NOTE Confidence: 0.909072320666667

 $00:02:28.157 \longrightarrow 00:02:30.461$ these are things that we can test for

NOTE Confidence: 0.909072320666667

 $00:02:30.470 \longrightarrow 00:02:32.382$ in the majority of cases, though,

NOTE Confidence: 0.909072320666667

 $00:02:32.382 \longrightarrow 00:02:35.616$ we do not find an identifiable genetic

NOTE Confidence: 0.909072320666667

 $00:02:35.616 \longrightarrow 00:02:38.138$ factor that tells us why an individual is

NOTE Confidence: 0.909072320666667

 $00:02:38.138 \longrightarrow 00:02:40.030$ diagnosed with breast cancer versus not.

NOTE Confidence: 0.909072320666667

 $00:02:40.030 \longrightarrow 00:02:44.118$ This is also an area of active investigation.

NOTE Confidence: 0.909072320666667

 $00:02:44.120 \longrightarrow 00:02:47.047$ The number one message to night is that the

 $00:02:47.047 \longrightarrow 00:02:50.303$ diagnosis of breast cancer is no one's fault.

NOTE Confidence: 0.909072320666667

 $00:02:50.310 \longrightarrow 00:02:51.790$ Certainly there are risk

NOTE Confidence: 0.909072320666667

 $00:02:51.790 \longrightarrow 00:02:53.640$ factors that we cannot change.

NOTE Confidence: 0.909072320666667

 $00:02:53.640 \longrightarrow 00:02:55.890$ There are certain modifiable risk

NOTE Confidence: 0.909072320666667

 $00{:}02{:}55.890 \dashrightarrow 00{:}02{:}59.301$ factors that can reduce risk and that

NOTE Confidence: 0.909072320666667

 $00:02:59.301 \longrightarrow 00:03:01.477$ includes weight management exercise.

NOTE Confidence: 0.909072320666667

 $00:03:01.480 \longrightarrow 00:03:03.795$ However, none of these factors

NOTE Confidence: 0.909072320666667

 $00:03:03.795 \longrightarrow 00:03:06.300 \ 100\%$ takes away the risk.

NOTE Confidence: 0.909072320666667

 $00:03:06.300 \longrightarrow 00:03:08.340$ We strongly recommend following

NOTE Confidence: 0.909072320666667

 $00:03:08.340 \longrightarrow 00:03:10.444$ breast imaging screening guidelines

NOTE Confidence: 0.909072320666667

 $00:03:10.444 \longrightarrow 00:03:13.468$ starting at age 40 and annually.

NOTE Confidence: 0.909072320666667 00:03:13.470 --> 00:03:13.903 However, NOTE Confidence: 0.909072320666667

 $00{:}03{:}13.903 \dashrightarrow 00{:}03{:}16.501$ I just wanted to re emphasize

NOTE Confidence: 0.909072320666667

 $00:03:16.501 \longrightarrow 00:03:19.118$ that we can do all these things

NOTE Confidence: 0.909072320666667

 $00:03:19.120 \longrightarrow 00:03:21.688$ even with regular screening.

 $00:03:21.690 \longrightarrow 00:03:22.170$ Uhm?

NOTE Confidence: 0.909072320666667

 $00:03:22.170 \longrightarrow 00:03:25.050$ Now where women and men can

NOTE Confidence: 0.909072320666667

 $00:03:25.050 \longrightarrow 00:03:27.250$ count about breast cancer,

NOTE Confidence: 0.909072320666667

00:03:27.250 --> 00:03:29.100 and again it's nobody's fault,

NOTE Confidence: 0.909072320666667

 $00:03:29.100 \longrightarrow 00:03:31.972$ and the focus of to night is once a

NOTE Confidence: 0.909072320666667

00:03:31.972 --> 00:03:34.119 breast cancer diagnosis happens.

NOTE Confidence: 0.909072320666667

 $00:03:34.120 \longrightarrow 00:03:37.108$ What are the latest ways that we are learning

NOTE Confidence: 0.909072320666667

00:03:37.108 --> 00:03:40.217 to manage it better and more successfully?

NOTE Confidence: 0.909072320666667

 $00:03:40.220 \longrightarrow 00:03:43.001$ So the first talk will be the one I

NOTE Confidence: 0.909072320666667

 $00:03:43.001 \longrightarrow 00:03:45.661$ will give focusing on personalizing

NOTE Confidence: 0.909072320666667

 $00{:}03{:}45.661 \dashrightarrow 00{:}03{:}48.496$ and right sizing rest oncology care.

NOTE Confidence: 0.909072320666667

 $00:03:48.500 \longrightarrow 00:03:50.712$ The outline is to focus on personalized

NOTE Confidence: 0.909072320666667 00:03:50.712 --> 00:03:51.028 medicine, NOTE Confidence: 0.909072320666667

 $00:03:51.030 \longrightarrow 00:03:52.530$ explain what it is,

NOTE Confidence: 0.909072320666667

00:03:52.530 --> 00:03:55.293 what does it mean with respect to

NOTE Confidence: 0.909072320666667

 $00:03:55.293 \longrightarrow 00:03:57.903$ breast oncology and review a few

 $00:03:57.903 \longrightarrow 00:03:59.826$ current strategies for personalizing

NOTE Confidence: 0.909072320666667

00:03:59.826 --> 00:04:03.066 breast oncology care and wrap up

NOTE Confidence: 0.909072320666667

 $00{:}04{:}03.066 \dashrightarrow 00{:}04{:}05.630$ with future opportunities so the

NOTE Confidence: 0.909072320666667

 $00:04:05.630 \longrightarrow 00:04:07.980$ short version of what personalized

NOTE Confidence: 0.909072320666667

 $00:04:07.980 \longrightarrow 00:04:10.172$ medicine or precision medicine that

NOTE Confidence: 0.909072320666667

 $00:04:10.172 \longrightarrow 00:04:12.980$ you have heard a lot in the news.

NOTE Confidence: 0.909072320666667

 $00:04:12.980 \longrightarrow 00:04:14.668$ The best way that I find to describe

NOTE Confidence: 0.909072320666667

00:04:14.668 --> 00:04:16.498 it is the right treatment for the

NOTE Confidence: 0.909072320666667

 $00{:}04{:}16.498 \dashrightarrow 00{:}04{:}18.123$ right patient at the right time

NOTE Confidence: 0.909072320666667

 $00:04:18.123 \longrightarrow 00:04:19.614$ and this is what we focus on.

NOTE Confidence: 0.909072320666667

 $00:04:19.620 \longrightarrow 00:04:21.930$ And Breast Cancer Care as well.

NOTE Confidence: 0.909072320666667

 $00:04:21.930 \longrightarrow 00:04:24.342$ And so how are we personalizing

NOTE Confidence: 0.909072320666667

 $00:04:24.342 \longrightarrow 00:04:25.548$ Breast Cancer Care?

NOTE Confidence: 0.909072320666667

 $00:04:25.550 \longrightarrow 00:04:28.529$ And I think as you can see to night with

NOTE Confidence: 0.909072320666667

00:04:28.529 --> 00:04:31.790 our panel of having a medical oncologist,

 $00:04:31.790 \longrightarrow 00:04:34.315$ a surgeon and a reconstruction

NOTE Confidence: 0.909072320666667

00:04:34.315 --> 00:04:35.325 surgeon altogether,

NOTE Confidence: 0.909072320666667

 $00:04:35.330 \longrightarrow 00:04:37.210$ is that ultimately the best

NOTE Confidence: 0.909072320666667

 $00:04:37.210 \longrightarrow 00:04:38.714$ personalization or Breast Cancer

NOTE Confidence: 0.909072320666667

 $00:04:38.714 \longrightarrow 00:04:40.722$ Care is multidisciplinary management.

NOTE Confidence: 0.909072320666667

 $00{:}04{:}40.722 \dashrightarrow 00{:}04{:}43.442$ I'm really working together as

NOTE Confidence: 0.909072320666667

 $00:04:43.442 \longrightarrow 00:04:46.547$ a team to deliver the best care.

NOTE Confidence: 0.909072320666667

 $00{:}04{:}46.550 \dashrightarrow 00{:}04{:}50.372$ So in most recent years we have

NOTE Confidence: 0.909072320666667

 $00:04:50.372 \longrightarrow 00:04:53.232$ seen greater use of neoadjuvant.

NOTE Confidence: 0.909072320666667

 $00:04:53.232 \longrightarrow 00:04:56.122$ Also known as preoperative chemotherapy

NOTE Confidence: 0.909072320666667

 $00{:}04{:}56.122 \to 00{:}04{:}59.836$ or the rapy that we get prior to surgery.

NOTE Confidence: 0.909072320666667

 $00:04:59.840 \longrightarrow 00:05:02.738$ You will hear tonight about advances

NOTE Confidence: 0.909072320666667

 $00:05:02.738 \longrightarrow 00:05:04.670$ in surgery and reconstruction.

NOTE Confidence: 0.909072320666667

 $00:05:04.670 \longrightarrow 00:05:07.393$ And then I will cover the therapies

NOTE Confidence: 0.909072320666667

 $00:05:07.393 \longrightarrow 00:05:10.520$ that we give throughout the whole body

NOTE Confidence: 0.909072320666667

 $00{:}05{:}10.520 \dashrightarrow 00{:}05{:}12.970$ or systemic therapy to personalize

 $00{:}05{:}12.970 \dashrightarrow 00{:}05{:}15.700$ treatment and a lot of a lot of

NOTE Confidence: 0.909072320666667

 $00:05:15.700 \longrightarrow 00:05:18.582$ work has gone into better matching

NOTE Confidence: 0.909072320666667

 $00:05:18.582 \longrightarrow 00:05:21.617$ patients to the right treatment.

NOTE Confidence: 0.909072320666667

 $00:05:21.620 \longrightarrow 00:05:23.572$ And throughout this process.

NOTE Confidence: 0.909072320666667

 $00:05:23.572 \longrightarrow 00:05:26.850$ Our goal is to partner with you

NOTE Confidence: 0.909072320666667

 $00:05:26.850 \longrightarrow 00:05:29.041$ as key stakeholders as we help you

NOTE Confidence: 0.909072320666667

 $00:05:29.041 \longrightarrow 00:05:30.969$ make the decisions that are best

NOTE Confidence: 0.909072320666667

 $00:05:30.969 \longrightarrow 00:05:32.519$ for your Breast Cancer Care.

NOTE Confidence: 0.896635948333334

 $00{:}05{:}34.570 \dashrightarrow 00{:}05{:}36.739$ So one of the key points of to night in

NOTE Confidence: 0.896635948333334

 $00:05:36.739 \longrightarrow 00:05:38.596$ terms of personalized medicine on breast

NOTE Confidence: 0.896635948333334

 $00:05:38.596 \longrightarrow 00:05:40.773$ cancer is that not all breast cancer

NOTE Confidence: 0.896635948333334

00:05:40.773 --> 00:05:43.005 is the same and that we actually have

NOTE Confidence: 0.896635948333334

 $00:05:43.010 \longrightarrow 00:05:45.370$ multiple subtypes of breast cancer.

NOTE Confidence: 0.896635948333334

00:05:45.370 --> 00:05:47.519 And this is the major advance that

NOTE Confidence: 0.896635948333334

 $00:05:47.519 \longrightarrow 00:05:49.879$ we've had in the last two decades.

 $00:05:49.880 \longrightarrow 00:05:52.640$ Many breast cancers are estrogen

NOTE Confidence: 0.896635948333334

00:05:52.640 --> 00:05:54.900 receptor positive, but not all of them,

NOTE Confidence: 0.896635948333334

 $00:05:54.900 \longrightarrow 00:05:57.434$ and not even all estrogen receptor positive

NOTE Confidence: 0.896635948333334

 $00:05:57.434 \longrightarrow 00:05:59.609$ breast cancer is created the same.

NOTE Confidence: 0.896635948333334

00:05:59.610 --> 00:06:01.350 We sometimes further classify

NOTE Confidence: 0.896635948333334

 $00:06:01.350 \longrightarrow 00:06:03.960$ them as Lumina lay and aluminum.

NOTE Confidence: 0.896635948333334

 $00:06:03.960 \longrightarrow 00:06:06.186$ We we also have a unique subset

NOTE Confidence: 0.896635948333334

 $00:06:06.186 \longrightarrow 00:06:08.373$ of breast cancers known as her

NOTE Confidence: 0.896635948333334

 $00:06:08.373 \longrightarrow 00:06:09.929$ two overexpressing breast cancers

NOTE Confidence: 0.896635948333334

 $00:06:09.929 \longrightarrow 00:06:12.400$ and these are approximately about

NOTE Confidence: 0.896635948333334

 $00:06:12.400 \longrightarrow 00:06:14.780$ 15% of our breast cancers.

NOTE Confidence: 0.896635948333334

 $00:06:14.780 \longrightarrow 00:06:18.532$ And then we have another category of

NOTE Confidence: 0.896635948333334

00:06:18.532 --> 00:06:21.546 breast tumors, approximately 15% as well,

NOTE Confidence: 0.896635948333334

 $00:06:21.546 \longrightarrow 00:06:24.450$ which are known as triple negative.

NOTE Confidence: 0.89663594833333400:06:24.450 --> 00:06:24.964 However, NOTE Confidence: 0.896635948333334

 $00:06:24.964 \longrightarrow 00:06:28.048$ even these can be further subdivided

00:06:28.048 --> 00:06:30.580 into multiple sub categories,

NOTE Confidence: 0.896635948333334

 $00:06:30.580 \longrightarrow 00:06:32.800$ sometimes up to eight different categories.

NOTE Confidence: 0.896635948333334

 $00{:}06{:}32.800 \dashrightarrow 00{:}06{:}35.368$ So really this slide is meant

NOTE Confidence: 0.896635948333334

 $00:06:35.368 \longrightarrow 00:06:38.670$ to show you how.

NOTE Confidence: 0.896635948333334

 $00:06:38.670 \longrightarrow 00:06:40.776$ Breast cancer can be quite different

NOTE Confidence: 0.896635948333334

 $00:06:40.776 \longrightarrow 00:06:42.750$ from one patient to another,

NOTE Confidence: 0.896635948333334

 $00:06:42.750 \longrightarrow 00:06:44.988$ and it's so important to understand

NOTE Confidence: 0.896635948333334

 $00:06:44.988 \longrightarrow 00:06:46.940$ the biology of breast cancer

NOTE Confidence: 0.896635948333334

 $00:06:46.940 \longrightarrow 00:06:50.080$ and target other treatments.

NOTE Confidence: 0.896635948333334

 $00{:}06{:}50.080 \dashrightarrow 00{:}06{:}52.450$ Soum further emphasizing this point that

NOTE Confidence: 0.896635948333334

 $00:06:52.450 \longrightarrow 00:06:55.494$ a lot of our treatments are focused

NOTE Confidence: 0.896635948333334

 $00:06:55.494 \longrightarrow 00:06:58.272$ on this subtype of breast cancer.

NOTE Confidence: 0.896635948333334

 $00{:}06{:}58.280 \dashrightarrow 00{:}07{:}01.004$ We also look at the pathology

NOTE Confidence: 0.896635948333334

 $00:07:01.004 \longrightarrow 00:07:02.366$ or tumor characteristics.

NOTE Confidence: 0.896635948333334

00:07:02.370 --> 00:07:04.862 Looking at the Histology,

00:07:04.862 --> 00:07:08.510 the grade, the stage of the tumors,

NOTE Confidence: 0.896635948333334

 $00:07:08.510 \longrightarrow 00:07:12.476$ and we also really look at molecular

NOTE Confidence: 0.896635948333334

00:07:12.476 --> 00:07:13.934 and genomic characteristics,

NOTE Confidence: 0.896635948333334

00:07:13.934 --> 00:07:17.309 which I'll cover in the upcoming slides

NOTE Confidence: 0.896635948333334

 $00:07:17.309 \longrightarrow 00:07:20.396$ and all of this information helps us.

NOTE Confidence: 0.896635948333334

00:07:20.396 --> 00:07:24.407 Taylor, the best systemic therapy for you.

NOTE Confidence: 0.896635948333334

 $00:07:24.410 \longrightarrow 00:07:27.777$ So more information on this coming up.

NOTE Confidence: 0.896635948333334

 $00{:}07{:}27.780 \dashrightarrow 00{:}07{:}30.888$ So what are our current strategies for

NOTE Confidence: 0.896635948333334

 $00:07:30.888 \longrightarrow 00:07:33.490$ personalizing our breast cancer therapies?

NOTE Confidence: 0.896635948333334

 $00:07:33.490 \longrightarrow 00:07:35.818$ This is a big topic and could be

NOTE Confidence: 0.896635948333334

 $00{:}07{:}35.818 \dashrightarrow 00{:}07{:}38.147$ an hour long lecture in itself.

NOTE Confidence: 0.896635948333334

 $00:07:38.150 \longrightarrow 00:07:40.516$ However, for the purposes of this talk,

NOTE Confidence: 0.896635948333334

 $00:07:40.520 \longrightarrow 00:07:44.896$ I have divided it into three sub categories.

NOTE Confidence: 0.896635948333334

 $00:07:44.900 \longrightarrow 00:07:47.870$ One is targets and targeted therapy.

NOTE Confidence: 0.896635948333334

 $00:07:47.870 \longrightarrow 00:07:50.145$ Less is more, and more is more,

NOTE Confidence: 0.896635948333334

 $00:07:50.150 \longrightarrow 00:07:52.886$ so you'll hear each of these

00:07:52.886 --> 00:07:54.710 mini chapters coming up,

NOTE Confidence: 0.896635948333334

 $00:07:54.710 \longrightarrow 00:07:58.088$ so targeted targets and targeted therapy.

NOTE Confidence: 0.896635948333334

 $00:07:58.090 \longrightarrow 00:08:00.310$ So we are understanding more and

NOTE Confidence: 0.896635948333334

 $00:08:00.310 \longrightarrow 00:08:02.653$ more about the various targets that

NOTE Confidence: 0.896635948333334

 $00:08:02.653 \longrightarrow 00:08:05.023$ are present in breast tumor cells.

NOTE Confidence: 0.896635948333334

 $00:08:05.030 \longrightarrow 00:08:07.466$ In this schema you can see a

NOTE Confidence: 0.896635948333334

 $00:08:07.466 \longrightarrow 00:08:09.170$ number of different targets,

NOTE Confidence: 0.896635948333334

00:08:09.170 --> 00:08:11.924 including the PDL pathway which we

NOTE Confidence: 0.896635948333334

00:08:11.924 --> 00:08:13.760 are targeting with immunotherapy.

NOTE Confidence: 0.896635948333334

 $00{:}08{:}13.760 \dashrightarrow 00{:}08{:}16.161$ The EGFR and her two pathways are

NOTE Confidence: 0.896635948333334

00:08:16.161 --> 00:08:18.200 targeted with her two directive.

NOTE Confidence: 0.896635948333334

 $00:08:18.200 \longrightarrow 00:08:21.668$ Therapies and a whole new emerging

NOTE Confidence: 0.896635948333334

 $00{:}08{:}21.668 \dashrightarrow 00{:}08{:}25.573$ area of Turkey targeting DNA DNA

NOTE Confidence: 0.896635948333334

 $00:08:25.573 \longrightarrow 00:08:29.178$ repair pathways through very precise

NOTE Confidence: 0.896635948333334

 $00:08:29.178 \longrightarrow 00:08:32.304$ on targeted therapies that have

 $00:08:32.304 \longrightarrow 00:08:34.056$ been shown to be very effective.

NOTE Confidence: 0.896635948333334

 $00{:}08{:}34.060 \dashrightarrow 00{:}08{:}37.850$ I will show you some saw some data on those.

NOTE Confidence: 0.896635948333334

 $00:08:37.850 \longrightarrow 00:08:39.806$ And so we've begun to test,

NOTE Confidence: 0.896635948333334

 $00:08:39.810 \longrightarrow 00:08:42.050$ uhm, in the last decade,

NOTE Confidence: 0.896635948333334

 $00:08:42.050 \longrightarrow 00:08:44.190$ both the tumor tissue for

NOTE Confidence: 0.896635948333334

 $00:08:44.190 \longrightarrow 00:08:46.750$ genomic targets as well as you.

NOTE Confidence: 0.896635948333334

00:08:46.750 --> 00:08:49.305 So your germline DNA, what makes you,

NOTE Confidence: 0.896635948333334

 $00:08:49.310 \longrightarrow 00:08:52.148$ you and eat many of these,

NOTE Confidence: 0.896635948333334

 $00{:}08{:}52.150 \dashrightarrow 00{:}08{:}54.158$ actually have targetable drugs,

NOTE Confidence: 0.896635948333334

 $00:08:54.158 \longrightarrow 00:08:56.668$ for example patients with germline

NOTE Confidence: 0.896635948333334

 $00{:}08{:}56.668 \dashrightarrow 00{:}08{:}59.970$ BRCA one and two or bracket one and

NOTE Confidence: 0.896635948333334

 $00:08:59.970 \longrightarrow 00:09:02.095$ two alterations actually have very

NOTE Confidence: 0.896635948333334

 $00:09:02.095 \longrightarrow 00:09:04.747$ specific drugs known as PARP inhibitors.

NOTE Confidence: 0.896635948333334

 $00:09:04.750 \longrightarrow 00:09:06.878$ These are pills that you can take

NOTE Confidence: 0.896635948333334

 $00:09:06.878 \longrightarrow 00:09:08.678$ in the comfort of your home.

NOTE Confidence: 0.896635948333334

 $00:09:08.680 \longrightarrow 00:09:10.606$ And they've been shown to be

00:09:10.610 --> 00:09:11.710 very effective.

NOTE Confidence: 0.852799892307692

 $00:09:11.710 \longrightarrow 00:09:15.560$ We're also beginning to find very specific

NOTE Confidence: 0.852799892307692

 $00:09:15.560 \longrightarrow 00:09:18.359$ markers of immunotherapy response,

NOTE Confidence: 0.852799892307692

00:09:18.360 --> 00:09:20.064 including tumor mutation burden.

NOTE Confidence: 0.852799892307692

 $00:09:20.064 \longrightarrow 00:09:22.620$ Breast cancer was one of the

NOTE Confidence: 0.852799892307692

 $00:09:22.695 \longrightarrow 00:09:25.083$ later tumor types to enter what

NOTE Confidence: 0.852799892307692

 $00:09:25.083 \longrightarrow 00:09:27.030$ we call the immunotherapy age.

NOTE Confidence: 0.852799892307692

 $00:09:27.030 \longrightarrow 00:09:29.564$ However, just in the last few years,

NOTE Confidence: 0.852799892307692

 $00:09:29.570 \longrightarrow 00:09:32.705$ we've had several approvals for

NOTE Confidence: 0.852799892307692

 $00:09:32.705 \longrightarrow 00:09:35.213$ different indications for immunotherapy,

NOTE Confidence: 0.852799892307692

00:09:35.220 --> 00:09:37.720 particularly in the setting of

NOTE Confidence: 0.852799892307692

 $00{:}09{:}37.720 \dashrightarrow 00{:}09{:}39.720$ triple negative breast cancer.

NOTE Confidence: 0.852799892307692

 $00:09:39.720 \dashrightarrow 00:09:42.816$ So back to the burqa or Bronco story

NOTE Confidence: 0.852799892307692

 $00{:}09{:}42.816 \dashrightarrow 00{:}09{:}46.560$ on these drugs were first approved in

NOTE Confidence: 0.852799892307692

 $00:09:46.560 \longrightarrow 00:09:49.440$ patients with metastatic breast cancer

00:09:49.535 --> 00:09:52.504 who had a BRCA one or two alteration,

NOTE Confidence: 0.852799892307692

 $00:09:52.504 \longrightarrow 00:09:55.654$ and both these studies showed that if

NOTE Confidence: 0.852799892307692

00:09:55.654 --> 00:09:58.580 you took these oral drugs and actually

NOTE Confidence: 0.852799892307692

00:09:58.580 --> 00:10:01.669 compare them to traditional chemotherapy,

NOTE Confidence: 0.852799892307692

 $00:10:01.670 \longrightarrow 00:10:05.566$ you can see in the Burgundy line here.

NOTE Confidence: 0.852799892307692

00:10:05.570 --> 00:10:08.270 The targeted therapy actually

NOTE Confidence: 0.852799892307692

00:10:08.270 --> 00:10:09.620 outperformed chemotherapy,

NOTE Confidence: 0.852799892307692

 $00{:}10{:}09.620 \dashrightarrow 00{:}10{:}12.431$ so this led to the FDA approval

NOTE Confidence: 0.852799892307692

 $00:10:12.431 \longrightarrow 00:10:14.264$ of these agents.

NOTE Confidence: 0.852799892307692

00:10:14.264 --> 00:10:16.708 And then most recently,

NOTE Confidence: 0.852799892307692

 $00{:}10{:}16.710 \dashrightarrow 00{:}10{:}20.385$ we actually just just this past summer.

NOTE Confidence: 0.852799892307692

 $00:10:20.390 \longrightarrow 00:10:22.040$ Just a few months ago,

NOTE Confidence: 0.852799892307692

 $00:10:22.040 \longrightarrow 00:10:24.770$ we received news of a major

NOTE Confidence: 0.852799892307692

 $00:10:24.770 \longrightarrow 00:10:26.135$ international collaboration looking

NOTE Confidence: 0.852799892307692

00:10:26.135 --> 00:10:28.835 at oral PARP inhibitors and early

NOTE Confidence: 0.852799892307692

 $00{:}10{:}28.835 \dashrightarrow 00{:}10{:}31.005$ stage breast cancer patients who

 $00{:}10{:}31.082 \dashrightarrow 00{:}10{:}33.357$ had a BRCA one or two alteration,

NOTE Confidence: 0.852799892307692

 $00:10:33.360 \longrightarrow 00:10:35.978$ and this included patients both with triple.

NOTE Confidence: 0.852799892307692

 $00:10:35.980 \longrightarrow 00:10:39.280$ Negative as well as.

NOTE Confidence: 0.852799892307692

00:10:39.280 --> 00:10:41.326 You're positive, high risk breast cancer,

NOTE Confidence: 0.852799892307692

00:10:41.330 --> 00:10:44.126 and again the addition of targeted

NOTE Confidence: 0.852799892307692

 $00{:}10{:}44.126 \dashrightarrow 00{:}10{:}46.970$ the rapy led to improvements in outcomes,

NOTE Confidence: 0.852799892307692

00:10:46.970 --> 00:10:49.728 so this again highlights the importance of

NOTE Confidence: 0.852799892307692

 $00:10:49.728 \longrightarrow 00:10:52.318$ knowing our targets and going after them.

NOTE Confidence: 0.852799892307692

 $00:10:52.320 \longrightarrow 00:10:53.886$ The next chapter is about less,

NOTE Confidence: 0.852799892307692 00:10:53.890 --> 00:10:54.624 is more, NOTE Confidence: 0.852799892307692

 $00{:}10{:}54.624 --> 00{:}10{:}54.991~\mathrm{UM},$

NOTE Confidence: 0.852799892307692

 $00{:}10{:}54.991 \dashrightarrow 00{:}10{:}58.059$ and we've made a number of advances in

NOTE Confidence: 0.852799892307692

 $00{:}10{:}58.059 \dashrightarrow 00{:}11{:}00.579$ terms of actually testing the tumor

NOTE Confidence: 0.852799892307692

00:11:00.579 --> 00:11:03.988 tissue through a number of validated assays,

NOTE Confidence: 0.852799892307692

 $00:11:03.990 \longrightarrow 00:11:07.050$ and these may include Oncotype or

00:11:07.050 --> 00:11:09.483 Mammaprint mammaprint and select for

NOTE Confidence: 0.852799892307692

00:11:09.483 --> 00:11:12.309 patients who need chemotherapy and avoid

NOTE Confidence: 0.852799892307692

 $00:11:12.309 \longrightarrow 00:11:14.868$ chemotherapy and those that don't need it.

NOTE Confidence: 0.852799892307692

 $00:11:14.870 \longrightarrow 00:11:17.439$ And we this is already in routine

NOTE Confidence: 0.852799892307692

00:11:17.439 --> 00:11:19.810 practice and we're we're doing this,

NOTE Confidence: 0.852799892307692

00:11:19.810 --> 00:11:21.691 something that's evolving.

NOTE Confidence: 0.852799892307692

00:11:21.691 --> 00:11:25.453 And not quite ready outside of

NOTE Confidence: 0.852799892307692

 $00:11:25.453 \longrightarrow 00:11:27.678$ research is actually testing the

NOTE Confidence: 0.852799892307692

00:11:27.678 --> 00:11:30.294 tumor tissue for what we call

NOTE Confidence: 0.852799892307692

 $00:11:30.294 \longrightarrow 00:11:32.760$ tumor infiltrating lymphocytes.

NOTE Confidence: 0.852799892307692

 $00{:}11{:}32.760 \dashrightarrow 00{:}11{:}35.896$ And these are cells that actually leave

NOTE Confidence: 0.852799892307692

 $00:11:35.896 \longrightarrow 00:11:38.768$ the bloodstream and enter tumor tissue.

NOTE Confidence: 0.852799892307692

 $00:11:38.770 \longrightarrow 00:11:40.891$ And what we have found is that

NOTE Confidence: 0.852799892307692

 $00{:}11{:}40.891 \dashrightarrow 00{:}11{:}42.999$ tumors that actually have a lot of

NOTE Confidence: 0.852799892307692

00:11:42.999 --> 00:11:44.709 these tills or tumor and filtering

NOTE Confidence: 0.852799892307692

00:11:44.770 --> 00:11:46.786 left side actually do really well,

 $00:11:46.790 \longrightarrow 00:11:49.574$ and so a number of studies are looking

NOTE Confidence: 0.852799892307692

 $00:11:49.574 \longrightarrow 00:11:51.618$ at well, can we spare chemotherapy?

NOTE Confidence: 0.852799892307692

00:11:51.618 --> 00:11:53.640 In patients that have high tails

NOTE Confidence: 0.852799892307692

 $00:11:53.698 \longrightarrow 00:11:55.634$ and so this is a work in progress,

NOTE Confidence: 0.852799892307692

00:11:55.640 --> 00:11:59.048 not not in not ready for prime time,

NOTE Confidence: 0.852799892307692

 $00:11:59.050 \longrightarrow 00:12:02.190$ however is being actively researched.

NOTE Confidence: 0.852799892307692 00:12:02.190 --> 00:12:02.449 Again, NOTE Confidence: 0.852799892307692

 $00:12:02.449 \longrightarrow 00:12:04.780$ the FEMA is if we can select the tumors

NOTE Confidence: 0.852799892307692

 $00:12:04.842 \longrightarrow 00:12:06.760$ that are more likely to do better.

NOTE Confidence: 0.852799892307692

 $00{:}12{:}06.760 \dashrightarrow 00{:}12{:}10.600$ We can scare toxic treatments.

NOTE Confidence: 0.852799892307692

 $00{:}12{:}10.600 \dashrightarrow 00{:}12{:}12.870$ Those patients.

NOTE Confidence: 0.852799892307692

 $00:12:12.870 \longrightarrow 00:12:14.585$ And then the last chapter is more,

NOTE Confidence: 0.852799892307692

 $00:12:14.590 \longrightarrow 00:12:16.705$ is more up and the idea is if we

NOTE Confidence: 0.852799892307692

 $00{:}12{:}16.705 --> 00{:}12{:}18.968$ can pluck out the tumor types

NOTE Confidence: 0.852799892307692

 $00:12:18.968 \longrightarrow 00:12:20.928$ that actually need more treatment,

 $00:12:20.930 \longrightarrow 00:12:23.670$ we can improve our outcomes,

NOTE Confidence: 0.852799892307692

 $00:12:23.670 \longrightarrow 00:12:25.938$ and so the best way that we know how

NOTE Confidence: 0.852799892307692

 $00:12:25.938 \longrightarrow 00:12:28.163$ to do this is through preoperative

NOTE Confidence: 0.852799892307692

00:12:28.163 --> 00:12:29.795 or pre surgery, chemotherapy.

NOTE Confidence: 0.852799892307692

 $00:12:29.795 \longrightarrow 00:12:32.705$ So by using these treatments upfront

NOTE Confidence: 0.852799892307692

00:12:32.705 --> 00:12:35.333 before surgery we can decide if

NOTE Confidence: 0.852799892307692

00:12:35.333 --> 00:12:37.517 more therapy is needed after and

NOTE Confidence: 0.852799892307692

00:12:37.517 --> 00:12:39.742 it's a type of precision medicine

NOTE Confidence: 0.852799892307692

 $00:12:39.742 \longrightarrow 00:12:42.290$ because we can see in real time.

NOTE Confidence: 0.852799892307692

00:12:42.290 --> 00:12:43.810 How you actually responded

NOTE Confidence: 0.852799892307692

 $00:12:43.810 \longrightarrow 00:12:45.330$ to your treatment and

NOTE Confidence: 0.888794134

 $00:12:45.403 \longrightarrow 00:12:48.083$ I'll give you just a few examples before

NOTE Confidence: 0.888794134

 $00:12:48.083 \longrightarrow 00:12:51.225$ wrapping up in her two positive breast

NOTE Confidence: 0.888794134

00:12:51.225 --> 00:12:53.690 cancer after using traditional chemotherapy,

NOTE Confidence: 0.888794134

 $00:12:53.690 \longrightarrow 00:12:55.670$ there was a groundbreaking study that

NOTE Confidence: 0.888794134

 $00:12:55.670 \longrightarrow 00:12:58.040$ if there was any remaining tumor,

00:12:58.040 --> 00:13:03.268 using a smart therapy called Tyler or TDM,

NOTE Confidence: 0.888794134

 $00:13:03.268 \longrightarrow 00:13:06.078$ one actually dramatically improve outcomes.

NOTE Confidence: 0.888794134

 $00:13:06.080 \longrightarrow 00:13:08.896$ So it really allows us to tailor your

NOTE Confidence: 0.888794134

 $00:13:08.896 \longrightarrow 00:13:11.300$ treatment in triple negative breast cancer.

NOTE Confidence: 0.888794134

 $00:13:11.300 \longrightarrow 00:13:12.748$ We we also have.

NOTE Confidence: 0.888794134

 $00:13:12.748 \longrightarrow 00:13:15.565$ Good data that if we use preoperative

NOTE Confidence: 0.888794134

 $00:13:15.565 \longrightarrow 00:13:20.019$ chemo and there is remaining risk visual

NOTE Confidence: 0.888794134

00:13:20.019 --> 00:13:24.456 disease using a pill therapy known as

NOTE Confidence: 0.888794134

00:13:24.456 --> 00:13:26.454 the Lodha can also improve outcomes,

NOTE Confidence: 0.888794134

 $00{:}13{:}26.460 \dashrightarrow 00{:}13{:}28.620$ but it's not perfect so there's a lot

NOTE Confidence: 0.888794134

00:13:28.620 --> 00:13:30.519 of work being done with immunotherapy

NOTE Confidence: 0.888794134

 $00:13:30.519 \longrightarrow 00:13:33.678$ in the setting to see if we can further

NOTE Confidence: 0.888794134

 $00{:}13{:}33.678 \dashrightarrow 00{:}13{:}35.598$ improve outcomes in triple negative

NOTE Confidence: 0.888794134

00:13:35.598 --> 00:13:37.410 breast cancer and in high risk,

NOTE Confidence: 0.888794134

00:13:37.410 --> 00:13:38.842 ER, positive disease.

 $00:13:38.842 \longrightarrow 00:13:41.772$ We're looking at using oral

NOTE Confidence: 0.888794134

 $00{:}13{:}41.772 \dashrightarrow 00{:}13{:}44.120$ targeted the rapies these drugs.

NOTE Confidence: 0.888794134

 $00:13:44.120 \longrightarrow 00:13:46.311$ We like to describe them as things

NOTE Confidence: 0.888794134

00:13:46.311 --> 00:13:48.793 that put the brakes on tumor growth

NOTE Confidence: 0.888794134

 $00:13:48.793 \longrightarrow 00:13:50.995$ and by slowing down any residual

NOTE Confidence: 0.888794134

 $00:13:51.064 \longrightarrow 00:13:52.996$ tumor cells that may be left,

NOTE Confidence: 0.888794134

 $00:13:53.000 \longrightarrow 00:13:54.488$ the anti estrogen therapy

NOTE Confidence: 0.888794134

 $00:13:54.488 \longrightarrow 00:13:55.976$ can actually work better.

NOTE Confidence: 0.888794134

 $00:13:55.980 \longrightarrow 00:13:59.115$ So these three examples are examples

NOTE Confidence: 0.888794134

00:13:59.115 --> 00:14:02.145 of how by adding more treatments,

NOTE Confidence: 0.888794134

 $00:14:02.150 \longrightarrow 00:14:04.880$ that's precise we can actually

NOTE Confidence: 0.888794134

 $00:14:04.880 \longrightarrow 00:14:07.610$ improve outcomes and breast cancer.

NOTE Confidence: 0.888794134

00:14:07.610 --> 00:14:08.678 Lastly, future opportunities.

NOTE Confidence: 0.888794134

 $00:14:08.678 \longrightarrow 00:14:10.814$ There are lots of new smarter

NOTE Confidence: 0.888794134

 $00:14:10.814 \longrightarrow 00:14:12.548$ drugs that are in the horizon,

NOTE Confidence: 0.888794134

 $00:14:12.550 \longrightarrow 00:14:13.890$ and they're actually here.

 $00:14:13.890 \longrightarrow 00:14:16.445$ I think this is the future of

NOTE Confidence: 0.888794134

00:14:16.445 --> 00:14:17.870 breast cancer chemotherapy.

NOTE Confidence: 0.888794134

00:14:17.870 --> 00:14:21.200 They're known as antibody drug conjugates,

NOTE Confidence: 0.888794134

 $00:14:21.200 \longrightarrow 00:14:23.348$ and essentially what it is is

NOTE Confidence: 0.888794134

 $00:14:23.348 \longrightarrow 00:14:25.570$ there is an antibody component.

NOTE Confidence: 0.888794134

 $00:14:25.570 \longrightarrow 00:14:27.110$ And then there's a linker.

NOTE Confidence: 0.888794134

 $00:14:27.110 \longrightarrow 00:14:29.630$ And then the chemo is actually

NOTE Confidence: 0.888794134

00:14:29.630 --> 00:14:30.890 very precisely linked,

NOTE Confidence: 0.888794134

 $00:14:30.890 \longrightarrow 00:14:33.879$ and so the drug can actually be

NOTE Confidence: 0.888794134

 $00:14:33.879 \longrightarrow 00:14:36.415$ very precisely delivered to to the

NOTE Confidence: 0.888794134

 $00:14:36.415 \longrightarrow 00:14:38.755$ cells that actually have the target.

NOTE Confidence: 0.888794134

 $00:14:38.760 \longrightarrow 00:14:41.340$ And they're actually here today.

NOTE Confidence: 0.888794134

 $00{:}14{:}41.340 \dashrightarrow 00{:}14{:}44.000$ I mean that this is something that

NOTE Confidence: 0.888794134

 $00:14:44.000 \longrightarrow 00:14:46.079$ we're actually using and in the

NOTE Confidence: 0.888794134

 $00:14:46.079 \longrightarrow 00:14:48.105$ clinic now there are a number of

 $00{:}14{:}48.105 \dashrightarrow 00{:}14{:}49.854$ them I've chosen to highlight them

NOTE Confidence: 0.888794134

 $00:14:49.854 \longrightarrow 00:14:51.814$ for two drug known as and her two.

NOTE Confidence: 0.888794134

 $00:14:51.820 \longrightarrow 00:14:54.200$ This was just presented and

NOTE Confidence: 0.888794134

 $00:14:54.200 \longrightarrow 00:14:56.104$ dramatic improvement over some

NOTE Confidence: 0.888794134

 $00:14:56.104 \longrightarrow 00:14:58.378$ of our traditional drugs.

NOTE Confidence: 0.888794134

 $00:14:58.380 \longrightarrow 00:15:01.040$ So I think what we'll see is

NOTE Confidence: 0.888794134

 $00:15:01.040 \longrightarrow 00:15:04.255$ earlier use of these antibody drug

NOTE Confidence: 0.888794134

 $00:15:04.255 \longrightarrow 00:15:06.824$ conjugates in breast cancer with

NOTE Confidence: 0.888794134

 $00{:}15{:}06.824 \dashrightarrow 00{:}15{:}09.204$ the hope of improving outcomes.

NOTE Confidence: 0.888794134

00:15:09.210 --> 00:15:10.173 So in summary,

NOTE Confidence: 0.888794134

 $00{:}15{:}10.173 \dashrightarrow 00{:}15{:}12.099$ we have lots of biomarkers and

NOTE Confidence: 0.888794134

 $00:15:12.099 \longrightarrow 00:15:13.910$ more targeted therapeutics.

NOTE Confidence: 0.888794134

 $00:15:13.910 \longrightarrow 00:15:15.875$ We need to address equity

NOTE Confidence: 0.888794134

 $00:15:15.875 \longrightarrow 00:15:17.447$ issues and breast cancer.

NOTE Confidence: 0.888794134

 $00:15:17.450 \longrightarrow 00:15:20.726$ Lots of multi deep collaborations and whole

NOTE Confidence: 0.888794134

 $00:15:20.726 \longrightarrow 00:15:22.735$ system thinking and rightsizing therapy.

00:15:22.735 --> 00:15:24.865 Some people will need less therapy

NOTE Confidence: 0.888794134

 $00{:}15{:}24.865 \dashrightarrow 00{:}15{:}26.798$ and some people will need more.

NOTE Confidence: 0.888794134

 $00:15:26.800 \longrightarrow 00:15:29.170$ And throughout all this we want

NOTE Confidence: 0.888794134

00:15:29.170 --> 00:15:31.810 to partner with you hear your

NOTE Confidence: 0.888794134

 $00:15:31.810 \longrightarrow 00:15:33.762$ thoughts and impressions where

NOTE Confidence: 0.888794134

 $00:15:33.762 \longrightarrow 00:15:36.419$ one team together with you and.

NOTE Confidence: 0.888794134

 $00:15:36.420 \longrightarrow 00:15:36.831$ Ultimately,

NOTE Confidence: 0.888794134

 $00:15:36.831 \longrightarrow 00:15:39.297$ all of these efforts will help

NOTE Confidence: 0.888794134

00:15:39.297 --> 00:15:41.340 us improve patient experience,

NOTE Confidence: 0.888794134

 $00:15:41.340 \longrightarrow 00:15:42.466$ patient outcomes,

NOTE Confidence: 0.888794134

00:15:42.466 --> 00:15:45.281 and have a more efficient

NOTE Confidence: 0.888794134

00:15:45.281 --> 00:15:46.970 health delivery system.

NOTE Confidence: 0.888794134

00:15:46.970 --> 00:15:48.895 Feel free to put your questions in

NOTE Confidence: 0.888794134

00:15:48.895 --> 00:15:50.989 the chat will have time at the end,

NOTE Confidence: 0.888794134

 $00{:}15{:}50.990 \dashrightarrow 00{:}15{:}52.894$ but at this point I will turn

 $00:15:52.894 \longrightarrow 00:15:54.670$ it over to my colleague,

NOTE Confidence: 0.888794134

 $00{:}15{:}54.670 \dashrightarrow 00{:}15{:}57.250$ Dr Park who will speak about

NOTE Confidence: 0.888794134

 $00:15:57.250 \longrightarrow 00:15:59.730$ the latest advances in surgery.

NOTE Confidence: 0.697337056

00:16:02.710 --> 00:16:05.720 Hello I am Tristan Park,

NOTE Confidence: 0.697337056

 $00:16:05.720 \longrightarrow 00:16:07.970$ I'm a breast surgical oncologist.

NOTE Confidence: 0.697337056

00:16:07.970 --> 00:16:12.330 I'm I will be sharing with you today.

NOTE Confidence: 0.697337056

 $00{:}16{:}12.330 \dashrightarrow 00{:}16{:}14.050$ Advances in the surgical management

NOTE Confidence: 0.697337056

 $00{:}16{:}14.050 \dashrightarrow 00{:}16{:}16.240$ of the axilla in breast cancer.

NOTE Confidence: 0.818368976153846

 $00{:}16{:}18.920 \to 00{:}16{:}21.980$ So when a woman comes to me to get

NOTE Confidence: 0.818368976153846

 $00:16:21.980 \longrightarrow 00:16:24.677$ her breast cancer treated, there's

NOTE Confidence: 0.818368976153846

 $00{:}16{:}24.677 \dashrightarrow 00{:}16{:}27.053$ two parts that we have to think about.

NOTE Confidence: 0.818368976153846

00:16:27.060 --> 00:16:29.913 One is the cancer that exists in the breast,

NOTE Confidence: 0.818368976153846

 $00:16:29.920 \longrightarrow 00:16:30.920$ and then they're great.

NOTE Confidence: 0.818368976153846

 $00:16:30.920 \longrightarrow 00:16:32.815$ And then we also have to address

NOTE Confidence: 0.818368976153846

 $00:16:32.815 \longrightarrow 00:16:34.187$ the draining lymph nodes.

NOTE Confidence: 0.818368976153846

 $00:16:34.190 \longrightarrow 00:16:36.920$ So there's two things that

 $00:16:36.920 \longrightarrow 00:16:37.742$ are generally done.

NOTE Confidence: 0.818368976153846

00:16:37.742 --> 00:16:39.386 If they don't think that they

NOTE Confidence: 0.818368976153846

 $00:16:39.386 \longrightarrow 00:16:41.186$ have any cancer in the left notes,

NOTE Confidence: 0.818368976153846

00:16:41.190 --> 00:16:43.360 that's obvious we have to do something

NOTE Confidence: 0.818368976153846

 $00:16:43.360 \longrightarrow 00:16:45.430$ called a staging study or assessing.

NOTE Confidence: 0.818368976153846

 $00:16:45.430 \longrightarrow 00:16:47.278$ If there's cancer there, or if there's

NOTE Confidence: 0.818368976153846

 $00:16:47.278 \longrightarrow 00:16:49.429$ or we have high level of suspicion.

NOTE Confidence: 0.818368976153846

 $00{:}16{:}49.430 \dashrightarrow 00{:}16{:}50.966$ That the lymph nodes are involved.

NOTE Confidence: 0.818368976153846

 $00:16:50.970 \longrightarrow 00:16:53.000$ Then we need to address the lymph

NOTE Confidence: 0.818368976153846

 $00:16:53.000 \longrightarrow 00:16:55.260$ nodes in a therapeutic fashion.

NOTE Confidence: 0.818368976153846

00:16:55.260 --> 00:16:58.844 Remove the cancer and and treat it so

NOTE Confidence: 0.818368976153846

 $00:16:58.850 \longrightarrow 00:17:04.415$ it's like a two part surgical treatment.

NOTE Confidence: 0.818368976153846

 $00{:}17{:}04.420 --> 00{:}17{:}05.804 \ Historically, \ many,$

NOTE Confidence: 0.818368976153846

 $00:17:05.804 \longrightarrow 00:17:07.880$ many decades ago,

NOTE Confidence: 0.818368976153846

 $00:17:07.880 \longrightarrow 00:17:09.984$ the only way to figure out what was

00:17:09.984 --> 00:17:12.293 going on in the axilla was by doing

NOTE Confidence: 0.818368976153846

00:17:12.293 --> 00:17:14.160 a complete lymph node dissection.

NOTE Confidence: 0.818368976153846

00:17:14.160 --> 00:17:16.500 So that's removing many lymph nodes.

NOTE Confidence: 0.818368976153846

 $00:17:16.500 \longrightarrow 00:17:18.663$ All the lymph nodes in the axilla

NOTE Confidence: 0.818368976153846

 $00:17:18.663 \longrightarrow 00:17:20.449$ at the levels one and two.

NOTE Confidence: 0.818368976153846

 $00:17:20.450 \longrightarrow 00:17:22.658$ So level one is this green area here,

NOTE Confidence: 0.818368976153846

 $00:17:22.660 \longrightarrow 00:17:24.620$ level 2 is this blue area here.

NOTE Confidence: 0.818368976153846

 $00:17:24.620 \longrightarrow 00:17:26.580$ That's all in relation to one of

NOTE Confidence: 0.818368976153846

 $00{:}17{:}26.580 \dashrightarrow 00{:}17{:}28.319$ your chest wall muscles called

NOTE Confidence: 0.818368976153846

 $00:17:28.319 \longrightarrow 00:17:29.579$ the pectoralis minor.

NOTE Confidence: 0.818368976153846

 $00:17:29.580 \longrightarrow 00:17:32.201$ So way back when in the 1970s and 80s,

NOTE Confidence: 0.818368976153846

 $00:17:32.201 \longrightarrow 00:17:33.986$ this was the only way to figure out what

NOTE Confidence: 0.818368976153846

 $00:17:33.986 \longrightarrow 00:17:35.477$ was going on in the axilla everything.

NOTE Confidence: 0.818368976153846

 $00:17:35.480 \longrightarrow 00:17:38.032$ Was taken out each and every left node

NOTE Confidence: 0.818368976153846

00:17:38.032 --> 00:17:40.661 was looked at carefully and we could

NOTE Confidence: 0.818368976153846

 $00:17:40.661 \longrightarrow 00:17:42.995$ determine nodes were not involved or

 $00:17:42.995 \longrightarrow 00:17:45.715$ there was some cancer involved in the nodes.

NOTE Confidence: 0.818368976153846 00:17:45.720 --> 00:17:46.228 Uhm,

NOTE Confidence: 0.81836897615384600:17:46.228 --> 00:17:47.244 there was. NOTE Confidence: 0.818368976153846

 $00:17:47.244 \longrightarrow 00:17:50.252$ There is a significant and definite

NOTE Confidence: 0.818368976153846

 $00{:}17{:}50.252 \dashrightarrow 00{:}17{:}52.100$ morbidity and complication rate

NOTE Confidence: 0.818368976153846

 $00:17:52.100 \longrightarrow 00:17:54.818$ with this type of surgery and

NOTE Confidence: 0.818368976153846

 $00:17:54.818 \longrightarrow 00:17:56.858$ there's blood like blood vessels,

NOTE Confidence: 0.81836897615384600:17:56.860 --> 00:17:57.244 nerves,

NOTE Confidence: 0.818368976153846

00:17:57.244 --> 00:17:59.548 arteries and veins to be wary

NOTE Confidence: 0.818368976153846

 $00:17:59.548 \longrightarrow 00:18:01.180$ of in this area.

NOTE Confidence: 0.818368976153846

00:18:01.180 --> 00:18:03.399 And most people have a drain placed

NOTE Confidence: 0.818368976153846

 $00:18:03.399 \longrightarrow 00:18:05.590$ and they have to stay overnight.

NOTE Confidence: 0.818368976153846

 $00:18:05.590 \longrightarrow 00:18:08.326$ So it later on in the 19 around like

NOTE Confidence: 0.818368976153846

 $00:18:08.326 \longrightarrow 00:18:11.079$ the 70s and 80s people were thinking

NOTE Confidence: 0.818368976153846

 $00:18:11.079 \longrightarrow 00:18:14.018$ maybe there's a way to assess the

00:18:14.018 --> 00:18:16.574 lymph nodes in the axilla without

NOTE Confidence: 0.818368976153846

00:18:16.574 --> 00:18:17.960 removing all of the lymph nodes,

NOTE Confidence: 0.818368976153846

00:18:17.960 --> 00:18:19.790 like not removing like every.

NOTE Confidence: 0.871761985833333

 $00:18:22.780 \longrightarrow 00:18:24.558$ I could, you know, sometimes be up

NOTE Confidence: 0.871761985833333

 $00:18:24.558 \longrightarrow 00:18:27.098$ to 20 to 30 efforts so the this was

NOTE Confidence: 0.871761985833333

 $00:18:27.098 \longrightarrow 00:18:29.310$ the era of the Sentinel node biopsy.

NOTE Confidence: 0.871761985833333

 $00:18:29.310 \longrightarrow 00:18:31.702$ So the way that this was done is

NOTE Confidence: 0.871761985833333

 $00:18:31.702 \longrightarrow 00:18:34.500$ that the breast is injected with a

NOTE Confidence: 0.871761985833333

 $00{:}18{:}34.500 \dashrightarrow 00{:}18{:}37.067$ special material called either a blue

NOTE Confidence: 0.871761985833333

 $00:18:37.067 \longrightarrow 00:18:39.685$ dye or a radioactive tracer or both.

NOTE Confidence: 0.871761985833333

 $00{:}18{:}39.690 \dashrightarrow 00{:}18{:}41.300$ And then it's quite miraculous.

NOTE Confidence: 0.871761985833333

 $00:18:41.300 \longrightarrow 00:18:43.060$ 'cause as a surgeon I'm the one that

NOTE Confidence: 0.871761985833333

 $00:18:43.060 \longrightarrow 00:18:44.523$ injects the breast prior to surgery

NOTE Confidence: 0.871761985833333

 $00:18:44.523 \longrightarrow 00:18:46.269$ and it's better like this and every

NOTE Confidence: 0.871761985833333

 $00:18:46.269 \longrightarrow 00:18:47.935$ time within 30 seconds the die has

NOTE Confidence: 0.871761985833333

 $00:18:47.935 \longrightarrow 00:18:49.422$ reached the most important nodes

 $00:18:49.422 \longrightarrow 00:18:51.760$ in the axilla or the Sentinel left

NOTE Confidence: 0.871761985833333

 $00:18:51.830 \longrightarrow 00:18:53.840$ nodes or the first training left.

NOTE Confidence: 0.871761985833333

 $00:18:53.840 \longrightarrow 00:18:56.042$ Uhm, so then these first rating

NOTE Confidence: 0.871761985833333

 $00:18:56.042 \longrightarrow 00:18:58.200$ left nodes is on average,

NOTE Confidence: 0.871761985833333

00:18:58.200 --> 00:19:00.503 it's it's two or three is identified

NOTE Confidence: 0.871761985833333

 $00:19:00.503 \longrightarrow 00:19:02.846$ by looking for a blue color or

NOTE Confidence: 0.871761985833333

00:19:02.846 --> 00:19:04.778 using a special probe that detects

NOTE Confidence: 0.871761985833333

 $00{:}19{:}04.851 \dashrightarrow 00{:}19{:}07.236$ radioactive dye that's also injected.

NOTE Confidence: 0.871761985833333

 $00{:}19{:}07.240 \dashrightarrow 00{:}19{:}08.860$ And then you know small incision

NOTE Confidence: 0.871761985833333

 $00:19:08.860 \longrightarrow 00:19:10.945$ is made and a couple of lymph

NOTE Confidence: 0.871761985833333

 $00:19:10.945 \longrightarrow 00:19:12.823$ nodes are removed and looked at.

NOTE Confidence: 0.871761985833333

 $00:19:12.830 \longrightarrow 00:19:16.484$ Looked at carefully so this is clearly a big.

NOTE Confidence: 0.871761985833333

 $00{:}19{:}16.490 --> 00{:}19{:}18.565$ Big switch from doing this

NOTE Confidence: 0.871761985833333

00:19:18.565 --> 00:19:20.225 actually left no dissection.

NOTE Confidence: 0.871761985833333

 $00:19:20.230 \longrightarrow 00:19:22.722$ Removing all these lymph nodes and all

 $00:19:22.722 \longrightarrow 00:19:24.380$ the complications associated with that,

NOTE Confidence: 0.871761985833333

 $00:19:24.380 \longrightarrow 00:19:26.452$ you could also do some preliminary assessment

NOTE Confidence: 0.871761985833333

 $00:19:26.452 \longrightarrow 00:19:28.614$ of these lymph nodes by the pathologist

NOTE Confidence: 0.871761985833333

00:19:28.614 --> 00:19:30.450 by something called a frozen section,

NOTE Confidence: 0.871761985833333

 $00:19:30.450 \longrightarrow 00:19:33.627$ which is kind of a looking at a couple

NOTE Confidence: 0.871761985833333

 $00{:}19{:}33.627 \dashrightarrow 00{:}19{:}36.740$ of slices of the left node to eye ball

NOTE Confidence: 0.871761985833333

 $00:19:36.740 \longrightarrow 00:19:39.320$ if there is any cancer involvement.

NOTE Confidence: 0.871761985833333

 $00:19:39.320 \longrightarrow 00:19:41.516$ So clearly these are two different

NOTE Confidence: 0.871761985833333

 $00:19:41.516 \longrightarrow 00:19:42.614$ types of surgeries,

NOTE Confidence: 0.871761985833333

 $00:19:42.620 \longrightarrow 00:19:44.835$ and there's complications related to

NOTE Confidence: 0.871761985833333

 $00{:}19{:}44.835 \dashrightarrow 00{:}19{:}47.755$ both that are shared lymph edema or

NOTE Confidence: 0.871761985833333

 $00:19:47.755 \longrightarrow 00:19:50.835$ swelling of the arm is the most kind of

NOTE Confidence: 0.871761985833333

 $00:19:50.835 \longrightarrow 00:19:52.758$ dreaded complication and intentional left.

NOTE Confidence: 0.871761985833333

 $00{:}19{:}52.758 \dashrightarrow 00{:}19{:}53.256$ No biopsy,

NOTE Confidence: 0.871761985833333

 $00:19:53.256 \longrightarrow 00:19:55.111$ which is just removal of few nodes

NOTE Confidence: 0.871761985833333

00:19:55.111 --> 00:19:56.676 versus axillary left node dissection,

 $00:19:56.680 \longrightarrow 00:19:58.784$ which is removal of all the left nodes.

NOTE Confidence: 0.871761985833333

 $00:19:58.790 \longrightarrow 00:20:00.175$ There's a lot more lymphoedema

NOTE Confidence: 0.871761985833333

 $00:20:00.175 \longrightarrow 00:20:01.966$ in the axillary if you get

NOTE Confidence: 0.871761985833333

 $00:20:01.966 \longrightarrow 00:20:03.350$ the full axillary dissection.

NOTE Confidence: 0.871761985833333

 $00:20:03.350 \longrightarrow 00:20:04.622$ The literature sites about

NOTE Confidence: 0.871761985833333

 $00:20:04.622 \longrightarrow 00:20:06.579 1$ to 3% in center left,

NOTE Confidence: 0.871761985833333

 $00:20:06.579 \longrightarrow 00:20:08.577$ no biopsy and up to 30%.

NOTE Confidence: 0.871761985833333

 $00:20:08.580 \longrightarrow 00:20:11.140$ If you get all of your left notes.

NOTE Confidence: 0.871761985833333

 $00:20:11.140 \longrightarrow 00:20:13.310$ These other complications hematoma injury

NOTE Confidence: 0.871761985833333

 $00:20:13.310 \longrightarrow 00:20:16.960$ to the nerves in the neighborhood Olympo.

NOTE Confidence: 0.871761985833333

 $00{:}20{:}16.960 \dashrightarrow 00{:}20{:}18.365$ See Laura would affection are

NOTE Confidence: 0.871761985833333

 $00:20:18.365 \longrightarrow 00:20:20.259$ all present and as you can see,

NOTE Confidence: 0.871761985833333

 $00{:}20{:}20{:}20{:}20{:}20{:}22{:}199$ although these numbers are very very low,

NOTE Confidence: 0.871761985833333

 $00:20:22.200 \longrightarrow 00:20:23.622$ it's always you know three or

NOTE Confidence: 0.871761985833333

 $00:20:23.622 \longrightarrow 00:20:24.333$ four times more.

 $00:20:24.340 \longrightarrow 00:20:27.586$ In the axillary livnot dissection group.

NOTE Confidence: 0.871761985833333

 $00:20:27.590 \longrightarrow 00:20:30.404$ So when I was doing this presentation,

NOTE Confidence: 0.871761985833333

00:20:30.410 --> 00:20:31.290 I was thinking, you know,

NOTE Confidence: 0.871761985833333

00:20:31.290 --> 00:20:32.390 maybe some people don't know

NOTE Confidence: 0.871761985833333

 $00:20:32.390 \longrightarrow 00:20:33.490$ exactly what the fadima is.

NOTE Confidence: 0.871761985833333

00:20:33.490 --> 00:20:34.848 They probably know that it means swelling,

NOTE Confidence: 0.871761985833333

 $00:20:34.850 \longrightarrow 00:20:37.098$ but you know, there's actually kind of a

NOTE Confidence: 0.871761985833333

00:20:37.098 --> 00:20:38.948 definition for it and different grades,

NOTE Confidence: 0.871761985833333

 $00:20:38.950 \longrightarrow 00:20:41.030$ so there's great stage one,

NOTE Confidence: 0.871761985833333

 $00:20:41.030 \longrightarrow 00:20:42.062$ which is up clinical.

NOTE Confidence: 0.871761985833333

 $00:20:42.062 \longrightarrow 00:20:44.100$ So there's no clinical signs of swelling,

NOTE Confidence: 0.871761985833333

 $00:20:44.100 \longrightarrow 00:20:45.678$ but there's a sensation of numbness,

NOTE Confidence: 0.871761985833333

 $00:20:45.680 \longrightarrow 00:20:48.368$ achiness and heaviness there stage two,

NOTE Confidence: 0.871761985833333

 $00:20:48.370 \longrightarrow 00:20:49.602$ which is mild lymphoedema,

NOTE Confidence: 0.871761985833333

 $00:20:49.602 \longrightarrow 00:20:51.830$ which results in a soft pitting edema.

NOTE Confidence: 0.871761985833333

00:20:51.830 --> 00:20:53.810 That's basically their arm looks swollen,

 $00:20:53.810 \longrightarrow 00:20:55.250$ and if you press your finger into it,

NOTE Confidence: 0.871761985833333

 $00:20:55.250 \longrightarrow 00:20:57.330$ it leaves an indentation, but.

NOTE Confidence: 0.871761985833333

00:20:57.330 --> 00:20:59.380 There's no fibrosis or scarring,

NOTE Confidence: 0.871761985833333

 $00:20:59.380 \longrightarrow 00:21:01.474$ and if you elevate the arm

NOTE Confidence: 0.871761985833333

 $00:21:01.474 \longrightarrow 00:21:03.300$ this the swelling goes away.

NOTE Confidence: 0.871761985833333

 $00:21:03.300 \longrightarrow 00:21:05.215$ Moderate or stage three lymph

NOTE Confidence: 0.871761985833333

 $00:21:05.215 \longrightarrow 00:21:06.747$ edema is more severe.

NOTE Confidence: 0.871761985833333

00:21:06.750 --> 00:21:10.830 There's more fibrous findings and scarring,

NOTE Confidence: 0.834070441428571

 $00:21:10.830 \longrightarrow 00:21:12.342$ and the limb elevation

NOTE Confidence: 0.834070441428571

 $00:21:12.342 \longrightarrow 00:21:13.476$ doesn't reverse anything.

NOTE Confidence: 0.834070441428571

 $00:21:13.480 \longrightarrow 00:21:14.804$ And then severe lymphoedema

NOTE Confidence: 0.834070441428571

 $00:21:14.804 \longrightarrow 00:21:16.884$ or stage four is, you know,

NOTE Confidence: 0.834070441428571

 $00{:}21{:}16.884 \dashrightarrow 00{:}21{:}19.523$ severe scarring and you get skin changes.

NOTE Confidence: 0.834070441428571

 $00:21:19.530 \longrightarrow 00:21:23.250$ And it's quite kind of irreversible

NOTE Confidence: 0.834070441428571

 $00:21:23.250 \longrightarrow 00:21:25.446$ and usually moderate to severe.

 $00:21:25.446 \longrightarrow 00:21:27.416$ Lymphoedema is the type that.

NOTE Confidence: 0.834070441428571

00:21:27.420 --> 00:21:29.142 Is permanent and is limiting to

NOTE Confidence: 0.834070441428571

 $00:21:29.142 \longrightarrow 00:21:30.919$ your ability to use the heart,

NOTE Confidence: 0.834070441428571

 $00:21:30.920 \longrightarrow 00:21:33.050$ which could be problematic if

NOTE Confidence: 0.834070441428571

 $00:21:33.050 \longrightarrow 00:21:35.450$ you're if that's your dominant arm.

NOTE Confidence: 0.834070441428571

 $00:21:35.450 \longrightarrow 00:21:36.766$ There's varying different definitions

NOTE Confidence: 0.834070441428571

00:21:36.766 --> 00:21:38.974 of exactly how to measure this,

NOTE Confidence: 0.834070441428571

 $00{:}21{:}38.980 \dashrightarrow 00{:}21{:}43.726$ but a lot of clinicians have reported.

NOTE Confidence: 0.834070441428571

 $00:21:43.730 \longrightarrow 00:21:44.951$ A circumference difference

NOTE Confidence: 0.834070441428571

 $00:21:44.951 \longrightarrow 00:21:46.986$ of two or more centimeters,

NOTE Confidence: 0.834070441428571

 $00{:}21{:}46.990 \dashrightarrow 00{:}21{:}49.294$ or a volume difference of 200

NOTE Confidence: 0.834070441428571

 $00{:}21{:}49.294 \dashrightarrow 00{:}21{:}51.643$ millimeters or more if you compare

NOTE Confidence: 0.834070441428571

 $00:21:51.643 \longrightarrow 00:21:53.857$ it to your non involved arm.

NOTE Confidence: 0.834070441428571 00:21:53.860 --> 00:21:55.202 So uhm, NOTE Confidence: 0.834070441428571

 $00:21:55.202 \longrightarrow 00:21:59.538$ basically this is the history of the central.

NOTE Confidence: 0.834070441428571

00:21:59.540 --> 00:22:01.120 If no biopsy versus actually

 $00:22:01.120 \longrightarrow 00:22:02.068$ left node dissection.

NOTE Confidence: 0.834070441428571

 $00{:}22{:}02.070 \dashrightarrow 00{:}22{:}05.054$ Overall the big picture is as time went

NOTE Confidence: 0.834070441428571

 $00:22:05.054 \longrightarrow 00:22:08.547$ on we replaced this lymph node biopsy.

NOTE Confidence: 0.834070441428571

 $00:22:08.550 \longrightarrow 00:22:09.750$ We've replaced that.

NOTE Confidence: 0.834070441428571

00:22:09.750 --> 00:22:11.350 Actually live dissection with

NOTE Confidence: 0.834070441428571

 $00:22:11.350 \longrightarrow 00:22:13.446$ this less invasive lymph node

NOTE Confidence: 0.834070441428571

 $00:22:13.446 \longrightarrow 00:22:15.110$ biopsy for multiple indications.

NOTE Confidence: 0.834070441428571

 $00:22:15.110 \longrightarrow 00:22:17.276$ So way back in the 1960s,

NOTE Confidence: 0.834070441428571

00:22:17.280 --> 00:22:18.548 Doctor Gould defined the

NOTE Confidence: 0.834070441428571

00:22:18.548 --> 00:22:19.816 term central lymph node,

NOTE Confidence: 0.834070441428571

00:22:19.820 --> 00:22:21.444 meaning the first draining

NOTE Confidence: 0.834070441428571

 $00:22:21.444 \longrightarrow 00:22:23.060$ lymph node in 1977.

NOTE Confidence: 0.834070441428571

 $00{:}22{:}23.060 \dashrightarrow 00{:}22{:}25.460$ This procedure of identifying the first

NOTE Confidence: 0.834070441428571

 $00{:}22{:}25.460 \dashrightarrow 00{:}22{:}27.844$ training left node was described by

NOTE Confidence: 0.834070441428571

00:22:27.844 --> 00:22:30.124 a doctor at Memorial Sloan Kettering,

00:22:30.130 --> 00:22:32.468 who was a fellow and was actually

NOTE Confidence: 0.834070441428571

 $00{:}22{:}32.468 \dashrightarrow 00{:}22{:}34.122$ studying penile cancers and trying

NOTE Confidence: 0.834070441428571

 $00:22:34.122 \longrightarrow 00:22:35.880$ to find the draining lymph nodes

NOTE Confidence: 0.834070441428571

 $00:22:35.880 \longrightarrow 00:22:38.524$ in the treatment of that in 1999.

NOTE Confidence: 0.834070441428571

 $00:22:38.524 \longrightarrow 00:22:41.506$ The use of the radioactive tracer

NOTE Confidence: 0.834070441428571

00:22:41.506 --> 00:22:44.129 was reported by Doctor Morton,

NOTE Confidence: 0.834070441428571

 $00:22:44.130 \longrightarrow 00:22:47.127$ a luminary in the field in the in the

NOTE Confidence: 0.834070441428571

00:22:47.127 --> 00:22:51.054 setting of Melanoma surgery in 1994.

NOTE Confidence: 0.834070441428571

 $00:22:51.054 \longrightarrow 00:22:53.168$ Doctor giuliano.

NOTE Confidence: 0.834070441428571

 $00:22:53.170 \longrightarrow 00:22:55.456$ Seminole figure in the role of

NOTE Confidence: 0.834070441428571

 $00{:}22{:}55.456 {\:{\mbox{--}}}{>}\ 00{:}22{:}57.570$ lymph nodes in breast cancer,

NOTE Confidence: 0.834070441428571

00:22:57.570 --> 00:22:59.306 described left no mapping and sent a

NOTE Confidence: 0.834070441428571

 $00:22:59.306 \longrightarrow 00:23:00.940$ love note biopsy for breast cancer.

NOTE Confidence: 0.834070441428571

 $00:23:00.940 \longrightarrow 00:23:03.012$ So all of this stuff from 1960

NOTE Confidence: 0.834070441428571

 $00:23:03.012 \longrightarrow 00:23:05.265$ to 1994 talks more about the

NOTE Confidence: 0.834070441428571

00:23:05.265 --> 00:23:06.829 central lymph node biopsy.

00:23:06.830 --> 00:23:08.138 Replacing axillary dissection for

NOTE Confidence: 0.834070441428571

 $00{:}23{:}08.138 \dashrightarrow 00{:}23{:}10.100$ staging or just kind of figuring

NOTE Confidence: 0.834070441428571

00:23:10.152 --> 00:23:11.916 out figuring out if the lymph nodes

NOTE Confidence: 0.834070441428571

 $00:23:11.916 \longrightarrow 00:23:13.414$ are involved or figure out what's

NOTE Confidence: 0.834070441428571

 $00:23:13.414 \longrightarrow 00:23:15.463$ going on in the in the lymph nodes.

NOTE Confidence: 0.834070441428571

00:23:15.463 --> 00:23:19.540 What I'd like to focus on this talk is

NOTE Confidence: 0.834070441428571

 $00:23:19.644 \longrightarrow 00:23:23.268$ the really kind of milestone mental.

NOTE Confidence: 0.834070441428571

 $00{:}23{:}23.270 \longrightarrow 00{:}23{:}25.568$ Cut a ground breaking changes in the

NOTE Confidence: 0.834070441428571

 $00{:}23{:}25.568 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}23{:}27.968$ past decade regarding the use of

NOTE Confidence: 0.834070441428571

 $00:23:27.968 \longrightarrow 00:23:29.978$ sentimental boxy as potential therapy

NOTE Confidence: 0.834070441428571

 $00:23:29.978 \longrightarrow 00:23:32.438$ to replace actually left no dissection.

NOTE Confidence: 0.834070441428571

 $00:23:32.440 \longrightarrow 00:23:34.300$ If you have known tumor.

NOTE Confidence: 0.834070441428571

 $00{:}23{:}34.300 \dashrightarrow 00{:}23{:}38.148$ Known cancer in cancer burden in your axilla.

NOTE Confidence: 0.834070441428571

00:23:38.150 --> 00:23:40.415 So I'll be talking about low

NOTE Confidence: 0.834070441428571

00:23:40.415 --> 00:23:41.945 volume of disease in your XL.

00:23:41.950 --> 00:23:44.886 A higher volume of disease in the axilla,

NOTE Confidence: 0.834070441428571

 $00{:}23{:}44.890 \dashrightarrow 00{:}23{:}46.318$ and then even more higher volume

NOTE Confidence: 0.834070441428571

00:23:46.318 --> 00:23:47.650 of disease in your axilla,

NOTE Confidence: 0.834070441428571

00:23:47.650 --> 00:23:49.250 and how we're continuously pushing

NOTE Confidence: 0.834070441428571

 $00:23:49.250 \longrightarrow 00:23:51.223$ the envelope and that you know

NOTE Confidence: 0.834070441428571

 $00:23:51.223 \longrightarrow 00:23:53.083$ things that were done that would

NOTE Confidence: 0.834070441428571

 $00{:}23{:}53.083 \dashrightarrow 00{:}23{:}54.710$ have been considered mal practice.

NOTE Confidence: 0.834070441428571

 $00{:}23{:}54.710 \dashrightarrow 00{:}23{:}56.761$ When I was a medical student is

NOTE Confidence: 0.834070441428571

00:23:56.761 --> 00:23:58.296 now considered well studied,

NOTE Confidence: 0.834070441428571

00:23:58.296 --> 00:24:01.134 safe and highly recommended in kind

NOTE Confidence: 0.834070441428571

 $00{:}24{:}01.134 \dashrightarrow 00{:}24{:}02.898$ of personalizing and downsizing the

NOTE Confidence: 0.834070441428571

00:24:02.898 --> 00:24:04.830 type of actuaries surgery you get

NOTE Confidence: 0.834070441428571

 $00{:}24{:}04.880 \rightarrow 00{:}24{:}06.536$ as a breast breast cancer patient.

NOTE Confidence: 0.783362613076923

 $00:24:09.130 \longrightarrow 00:24:10.506$ So milestone one do we have to do

NOTE Confidence: 0.783362613076923

00:24:10.506 --> 00:24:11.928 a full access right dissection?

NOTE Confidence: 0.783362613076923

 $00:24:11.930 \longrightarrow 00:24:14.050$ If we find cancer in the lymph nodes

 $00:24:14.050 \longrightarrow 00:24:15.913$ after surgery and this is in the setting

NOTE Confidence: 0.783362613076923

 $00:24:15.913 \longrightarrow 00:24:17.828$ of you have a small tumor burden.

NOTE Confidence: 0.783362613076923

 $00:24:17.830 \longrightarrow 00:24:18.730$ The left nodes.

NOTE Confidence: 0.783362613076923

 $00:24:18.730 \longrightarrow 00:24:20.830$ This is also called clinically no negative.

NOTE Confidence: 0.783362613076923

 $00:24:20.830 \longrightarrow 00:24:23.630$ This patient has a normal feeling axilla,

NOTE Confidence: 0.783362613076923

 $00:24:23.630 \longrightarrow 00:24:25.891$ the axillary left nose look normal on

NOTE Confidence: 0.783362613076923

00:24:25.891 --> 00:24:28.288 imaging and we go and do the surgery,

NOTE Confidence: 0.783362613076923

 $00:24:28.290 \longrightarrow 00:24:29.158$ and lo and behold,

NOTE Confidence: 0.783362613076923

 $00:24:29.158 \longrightarrow 00:24:30.590$ on the central lymph nodes there's a.

NOTE Confidence: 0.783362613076923

 $00:24:30.590 \longrightarrow 00:24:32.487$ There's a few lymph nodes at Farber,

NOTE Confidence: 0.783362613076923

 $00:24:32.490 \longrightarrow 00:24:33.438$ some cancer cells.

NOTE Confidence: 0.820846208461539

 $00:24:36.510 \longrightarrow 00:24:38.393$ So with the acceptance of Sentinel lymph

NOTE Confidence: 0.820846208461539

 $00{:}24{:}38.393 \dashrightarrow 00{:}24{:}40.239$ node biopsy as a staging technique,

NOTE Confidence: 0.820846208461539

00:24:40.240 --> 00:24:42.688 a lot of clinicians were thinking,

NOTE Confidence: 0.820846208461539

00:24:42.690 --> 00:24:44.064 you know, there's very low amount

 $00:24:44.064 \longrightarrow 00:24:45.560$ of cancer in these lymph nodes.

NOTE Confidence: 0.820846208461539

00:24:45.560 --> 00:24:47.882 Maybe we don't have to do a full actually

NOTE Confidence: 0.820846208461539

 $00:24:47.882 \longrightarrow 00:24:49.625$ dissection so they were just doing this.

NOTE Confidence: 0.820846208461539

00:24:49.630 --> 00:24:51.606 You know, even before the studies came out,

NOTE Confidence: 0.820846208461539

 $00:24:51.610 \longrightarrow 00:24:54.249$ so in the 1990s and early 2000s,

NOTE Confidence: 0.820846208461539

00:24:54.250 --> 00:24:56.875 almost 20\% of practitioners were doing this,

NOTE Confidence: 0.820846208461539

 $00:24:56.880 \longrightarrow 00:25:01.146$ kind of as a kind of.

NOTE Confidence: 0.820846208461539

 $00:25:01.150 \longrightarrow 00:25:03.400$ But by their own clinical judgment.

NOTE Confidence: 0.73307587875

 $00{:}25{:}07.660 \dashrightarrow 00{:}25{:}11.996$ So this, uh, this landmark trial Acogs 11,

NOTE Confidence: 0.73307587875

 $00:25:12.000 \longrightarrow 00:25:13.398$ was the trial that looked at

NOTE Confidence: 0.73307587875

 $00:25:13.398 \longrightarrow 00:25:14.780$ this in a rigorous fashion.

NOTE Confidence: 0.73307587875

00:25:14.780 --> 00:25:16.188 It was a multicenter,

NOTE Confidence: 0.73307587875

 $00:25:16.188 \longrightarrow 00:25:17.596$ randomized prospective trial which

NOTE Confidence: 0.73307587875

 $00:25:17.596 \longrightarrow 00:25:19.898$ is like the gold standard of trials,

NOTE Confidence: 0.73307587875

 $00:25:19.900 \longrightarrow 00:25:21.300$ and this definitively looked at.

NOTE Confidence: 0.73307587875

 $00{:}25{:}21.300 \dashrightarrow 00{:}25{:}22.740$ If you had very small amount

00:25:22.740 --> 00:25:24.390 of cancer in your lymph nodes,

NOTE Confidence: 0.73307587875

 $00:25:24.390 \longrightarrow 00:25:25.966$ do you really need a full extra lift?

NOTE Confidence: 0.73307587875

00:25:25.970 --> 00:25:26.518 No dissection?

NOTE Confidence: 0.73307587875

00:25:26.518 --> 00:25:28.710 Or is the lymph node biopsy enough so

NOTE Confidence: 0.73307587875

 $00{:}25{:}28.767 \dashrightarrow 00{:}25{:}30.885$ these folks had small breast cancers

NOTE Confidence: 0.73307587875

 $00:25:30.885 \longrightarrow 00:25:32.687$ are clinically negative axilla and

NOTE Confidence: 0.73307587875

 $00:25:32.687 \longrightarrow 00:25:34.679$ they were to undergo lumpectomy with

NOTE Confidence: 0.73307587875

00:25:34.679 --> 00:25:35.987 whole breast radiation therapy,

NOTE Confidence: 0.73307587875

 $00:25:35.987 \longrightarrow 00:25:37.522$ which is considered the definition

NOTE Confidence: 0.73307587875

 $00:25:37.522 \longrightarrow 00:25:38.443$ of breast cancer.

NOTE Confidence: 0.73307587875

 $00{:}25{:}38.450 \dashrightarrow 00{:}25{:}40.208$ Patient therapy they would get a

NOTE Confidence: 0.73307587875

 $00{:}25{:}40.208 \dashrightarrow 00{:}25{:}41.865$ Sentinel lymph node biopsy and if

NOTE Confidence: 0.73307587875

 $00{:}25{:}41.865 \dashrightarrow 00{:}25{:}43.363$ they had one to two lymph nodes

NOTE Confidence: 0.73307587875

00:25:43.363 --> 00:25:45.117 that harbored cancer cells in them,

NOTE Confidence: 0.73307587875

 $00:25:45.120 \longrightarrow 00:25:48.066$ they either got nothing else or

 $00:25:48.066 \longrightarrow 00:25:50.115$ they got the further surgery.

NOTE Confidence: 0.73307587875

 $00:25:50.115 \longrightarrow 00:25:51.535$ The complete axillary dissection.

NOTE Confidence: 0.871175820454545

 $00:25:53.820 \longrightarrow 00:25:56.036$ So this study showed that there was no

NOTE Confidence: 0.871175820454545

 $00:25:56.036 \longrightarrow 00:25:57.872$ difference if you got no further surgery

NOTE Confidence: 0.871175820454545

 $00:25:57.872 \longrightarrow 00:26:00.219$ or you got the full axillary dissection.

NOTE Confidence: 0.871175820454545

 $00:26:00.220 \longrightarrow 00:26:02.257$ There was no difference in local recurrence,

NOTE Confidence: 0.871175820454545

00:26:02.260 --> 00:26:04.370 meaning recurrence in your armpit,

NOTE Confidence: 0.871175820454545

 $00:26:04.370 \longrightarrow 00:26:05.994$ and there's no difference in how long

NOTE Confidence: 0.871175820454545

00:26:05.994 --> 00:26:07.999 you lived or five year overall survival.

NOTE Confidence: 0.871175820454545

00:26:08.000 --> 00:26:10.198 It was equivalent, and then they found

NOTE Confidence: 0.871175820454545

 $00{:}26{:}10.198 \dashrightarrow 00{:}26{:}12.604$ this study up in another nine years

NOTE Confidence: 0.871175820454545

 $00:26:12.604 \longrightarrow 00:26:14.704$ and the original findings held true.

NOTE Confidence: 0.871175820454545

 $00{:}26{:}14.710 \dashrightarrow 00{:}26{:}16.640$ Your local recurrence and your

NOTE Confidence: 0.871175820454545

 $00:26:16.640 \longrightarrow 00:26:18.184$ overall survival were similar.

NOTE Confidence: 0.873262554761905

 $00:26:21.550 \longrightarrow 00:26:23.107$ So take on point is if you have a

NOTE Confidence: 0.873262554761905

 $00:26:23.107 \longrightarrow 00:26:24.936$ small breast cancer that's going to be

 $00:26:24.936 \longrightarrow 00:26:26.500$ treated with lumpectomy and radiation.

NOTE Confidence: 0.873262554761905

00:26:26.500 --> 00:26:27.928 You could have up to two lymph

NOTE Confidence: 0.873262554761905

 $00:26:27.928 \longrightarrow 00:26:29.248$ nodes that have cancer in them,

NOTE Confidence: 0.873262554761905

 $00:26:29.250 \longrightarrow 00:26:30.450$ and you don't need a full,

NOTE Confidence: 0.873262554761905

00:26:30.450 --> 00:26:31.614 actually lift, no dissection,

NOTE Confidence: 0.873262554761905

 $00:26:31.614 \longrightarrow 00:26:33.360$ and you'll still get a great

NOTE Confidence: 0.873262554761905

 $00:26:33.420 \longrightarrow 00:26:35.150$ treatment that will render you

NOTE Confidence: 0.873262554761905

 $00:26:35.150 \longrightarrow 00:26:36.534$ with excellent Disease Control.

NOTE Confidence: 0.873262554761905

 $00{:}26{:}36.540 \dashrightarrow 00{:}26{:}37.524$ That's equivalent to getting

NOTE Confidence: 0.873262554761905

 $00:26:37.524 \longrightarrow 00:26:38.754$ all your left nodes out.

NOTE Confidence: 0.85726543625

 $00:26:41.520 \longrightarrow 00:26:42.900$ So that's milestone one.

NOTE Confidence: 0.85726543625

 $00:26:42.900 \longrightarrow 00:26:44.280$ There was a there's.

NOTE Confidence: 0.85726543625

 $00:26:44.280 \longrightarrow 00:26:46.093$ This was further kind of, UM,

NOTE Confidence: 0.85726543625

00:26:46.093 --> 00:26:48.144 supported by a study that was done

NOTE Confidence: 0.85726543625

00:26:48.144 --> 00:26:50.198 in Europe called the Amero study,

 $00:26:50.200 \longrightarrow 00:26:51.676$ which looked at instead of doing

NOTE Confidence: 0.85726543625

 $00{:}26{:}51.676 \dashrightarrow 00{:}26{:}53.210$ an axillary left node dissection.

NOTE Confidence: 0.85726543625

00:26:53.210 --> 00:26:56.338 They did actually radiation,

NOTE Confidence: 0.85726543625

 $00:26:56.338 \longrightarrow 00:26:58.536$ and can we wait for the milestone

NOTE Confidence: 0.85726543625

 $00:26:58.536 \longrightarrow 00:27:00.070$ was could we radiate the Excel

NOTE Confidence: 0.85726543625

 $00:27:00.070 \longrightarrow 00:27:01.420$ instead of doing more surgery?

NOTE Confidence: 0.85726543625

 $00:27:01.420 \longrightarrow 00:27:03.268$ If there's cancer in the left nodes,

NOTE Confidence: 0.85726543625

 $00:27:03.270 \longrightarrow 00:27:04.720$ the kind of the subtleties,

NOTE Confidence: 0.85726543625

00:27:04.720 --> 00:27:07.998 and this was you were not necessarily

NOTE Confidence: 0.85726543625

 $00:27:07.998 \longrightarrow 00:27:09.383$ getting lumpectomy and radiation as

NOTE Confidence: 0.85726543625

 $00:27:09.383 \longrightarrow 00:27:11.077$ part of your breast cancer treatment.

NOTE Confidence: 0.85726543625

00:27:11.080 --> 00:27:12.862 You could also be getting up stuck to me.

NOTE Confidence: 0.85726543625

 $00:27:12.870 \longrightarrow 00:27:14.676$ So that was also a variation,

NOTE Confidence: 0.85726543625

00:27:14.680 --> 00:27:17.362 and this study also showed basically

NOTE Confidence: 0.85726543625

00:27:17.362 --> 00:27:20.039 that your overall survival and you're

NOTE Confidence: 0.85726543625

 $00:27:20.039 \longrightarrow 00:27:22.469$ disease free survival with the same

 $00:27:22.469 \longrightarrow 00:27:25.265$ whether or not you've got all the lymph

NOTE Confidence: 0.85726543625

 $00:27:25.265 \longrightarrow 00:27:27.495$ nodes out or you got actually radiation.

NOTE Confidence: 0.85726543625

 $00:27:27.495 \longrightarrow 00:27:30.069$ And the nice thing was the rate of

NOTE Confidence: 0.85726543625

 $00:27:30.069 \longrightarrow 00:27:32.197$ lipedema and the radiation group was about

NOTE Confidence: 0.85726543625

 $00:27:32.197 \longrightarrow 00:27:34.990$ half of the axillary lymph node biopsy group.

NOTE Confidence: 0.85726543625

 $00:27:34.990 \longrightarrow 00:27:38.536$ So the most obvious one is at five years.

NOTE Confidence: 0.85726543625

00:27:38.540 --> 00:27:40.450 If you had actually radiation,

NOTE Confidence: 0.85726543625

 $00:27:40.450 \longrightarrow 00:27:43.026$ you had a 6% risk of lipedema.

NOTE Confidence: 0.85726543625

 $00{:}27{:}43.030 \dashrightarrow 00{:}27{:}44.798$ And if you had a full actually left

NOTE Confidence: 0.85726543625

 $00:27:44.798 \longrightarrow 00:27:46.472$ outer section here at 13% of us,

NOTE Confidence: 0.85726543625

 $00:27:46.472 \longrightarrow 00:27:51.530$ so clearly less that more than half decrease.

NOTE Confidence: 0.85726543625

00:27:51.530 --> 00:27:53.410 So take on point as if you have

NOTE Confidence: 0.85726543625

 $00{:}27{:}53.410 \dashrightarrow 00{:}27{:}55.097$ breast cancer not treated with

NOTE Confidence: 0.85726543625

 $00:27:55.097 \longrightarrow 00:27:56.649$ breast conservation i.e mastectomy,

NOTE Confidence: 0.85726543625

 $00:27:56.650 \longrightarrow 00:27:59.738$ so a more kind of loosening the surgical

00:27:59.738 --> 00:28:02.769 criteria and you have positive lymph nodes.

NOTE Confidence: 0.85726543625

 $00:28:02.770 \longrightarrow 00:28:03.481$ This can be.

NOTE Confidence: 0.85726543625

 $00:28:03.481 \longrightarrow 00:28:05.458$ This may be treated with radiation to axilla

NOTE Confidence: 0.85726543625

00:28:05.458 --> 00:28:07.570 and you may not need full axillary surgery,

NOTE Confidence: 0.85726543625

 $00:28:07.570 \longrightarrow 00:28:10.738$ so they were pushing the envelope some more.

NOTE Confidence: 0.85726543625

00:28:10.740 --> 00:28:13.678 And then milestone two was, you know,

NOTE Confidence: 0.85726543625

 $00:28:13.678 \longrightarrow 00:28:16.230$ let's see if we could push the envelope

NOTE Confidence: 0.85726543625

00:28:16.296 --> 00:28:18.584 some more and go even with a higher

NOTE Confidence: 0.85726543625

 $00{:}28{:}18.584 \dashrightarrow 00{:}28{:}21.176$ level of disease burden in your axilla.

NOTE Confidence: 0.85726543625

00:28:21.180 --> 00:28:24.600 Could you read this section if you

NOTE Confidence: 0.85726543625

 $00:28:24.600 \longrightarrow 00:28:26.219$ have known cancer in the left nodes?

NOTE Confidence: 0.85726543625

00:28:26.220 --> 00:28:27.572 AKA clinically node positive

NOTE Confidence: 0.85726543625

 $00:28:27.572 \longrightarrow 00:28:29.600$ more tumor in the lymph nodes,

NOTE Confidence: 0.85726543625

 $00:28:29.600 \longrightarrow 00:28:31.808$ hard burden of disease?

NOTE Confidence: 0.85726543625

 $00:28:31.810 \longrightarrow 00:28:34.546$ So if you have clinically node

NOTE Confidence: 0.85726543625

 $00{:}28{:}34.546 {\:\dashrightarrow\:} 00{:}28{:}36.848$ positive cancer like you go in

 $00:28:36.848 \longrightarrow 00:28:38.583$ your lymph nodes feel large.

NOTE Confidence: 0.85726543625

 $00:28:38.590 \longrightarrow 00:28:40.475$ They live large on imaging

NOTE Confidence: 0.85726543625

 $00:28:40.475 \longrightarrow 00:28:41.983$ biopsied and there's cancer.

NOTE Confidence: 0.85726543625

 $00:28:41.990 \longrightarrow 00:28:42.708$ There's obvious,

NOTE Confidence: 0.85726543625

00:28:42.708 --> 00:28:44.862 documented cancer in her left nodes

NOTE Confidence: 0.85726543625

 $00:28:44.862 \longrightarrow 00:28:47.110$ in this day and age we always

NOTE Confidence: 0.85726543625

 $00:28:47.110 \longrightarrow 00:28:49.630$ treated with chemotherapy first.

NOTE Confidence: 0.85726543625

 $00:28:49.630 \longrightarrow 00:28:51.534$ It's also called neoadjuvant

NOTE Confidence: 0.85726543625

 $00:28:51.534 \longrightarrow 00:28:52.604$ chemotherapy for the,

NOTE Confidence: 0.85726543625

 $00:28:52.604 \longrightarrow 00:28:54.683$ with the hopes that we could shrink

NOTE Confidence: 0.85726543625

00:28:54.683 --> 00:28:56.650 everything up to make the surgery minimized,

NOTE Confidence: 0.85726543625

 $00{:}28{:}56.650 \dashrightarrow 00{:}28{:}59.170$ and also it gives us great

NOTE Confidence: 0.85726543625

 $00:28:59.170 \longrightarrow 00:29:00.430$ prognostic information afterwards,

NOTE Confidence: 0.85726543625

 $00{:}29{:}00.430 \longrightarrow 00{:}29{:}02.355$ so folks that got chemotherapy

NOTE Confidence: 0.85726543625

 $00:29:02.355 \longrightarrow 00:29:04.280$ before surgery or new agent.

00:29:04.280 --> 00:29:04.820 Chemotherapy,

NOTE Confidence: 0.85726543625

 $00:29:04.820 \dashrightarrow 00:29:08.984$ it was noted that 40% of patients who were

NOTE Confidence: 0.85726543625

00:29:08.984 --> 00:29:11.180 initially tumor bearing in the axilla,

NOTE Confidence: 0.85726543625

00:29:11.180 --> 00:29:13.300 like became no negative after

NOTE Confidence: 0.85726543625

 $00:29:13.300 \longrightarrow 00:29:14.996$ this new regimen chemotherapy.

NOTE Confidence: 0.85726543625

 $00:29:15.000 \longrightarrow 00:29:16.812$ So we thought maybe if we

NOTE Confidence: 0.85726543625

00:29:16.812 --> 00:29:18.020 could identify these people,

NOTE Confidence: 0.85726543625

00:29:18.020 --> 00:29:20.442 they don't have to get the the

NOTE Confidence: 0.85726543625

 $00{:}29{:}20.442 \dashrightarrow 00{:}29{:}22.385$ final axillary surgery or the

NOTE Confidence: 0.85726543625

 $00:29:22.385 \longrightarrow 00:29:23.639$ full axillary dissection.

NOTE Confidence: 0.85726543625

 $00:29:23.640 \longrightarrow 00:29:27.028$ So this was the ECOSOC 1071 trial and

NOTE Confidence: 0.85726543625

 $00:29:27.028 \longrightarrow 00:29:28.708$ basically patients with known cancer

NOTE Confidence: 0.85726543625

 $00:29:28.708 \longrightarrow 00:29:30.898$ in their lymph nodes were enrolled.

NOTE Confidence: 0.85726543625

 $00:29:30.900 \longrightarrow 00:29:32.951$ They came with therapy first and then

NOTE Confidence: 0.85726543625

 $00:29:32.951 \longrightarrow 00:29:34.758$ they got surgery and then basically they

NOTE Confidence: 0.85726543625

 $00:29:34.758 \longrightarrow 00:29:36.799$ looked at something on a false negative rate.

 $00:29:36.800 \longrightarrow 00:29:39.590$ So basically.

NOTE Confidence: 0.766465408

 $00{:}29{:}39.590 \dashrightarrow 00{:}29{:}41.309$ Most negative rate is if you had a central

NOTE Confidence: 0.766465408

 $00:29:41.309 \longrightarrow 00:29:42.739$ lymph node biopsy that was negative,

NOTE Confidence: 0.766465408

 $00:29:42.740 \longrightarrow 00:29:44.315$ but then when you look further there

NOTE Confidence: 0.766465408

 $00:29:44.315 \longrightarrow 00:29:45.720$ is actually more cancer in there.

NOTE Confidence: 0.766465408

 $00:29:45.720 \longrightarrow 00:29:47.328$ So our goal false negative rate.

NOTE Confidence: 0.766465408

 $00:29:47.330 \longrightarrow 00:29:48.638$ For this to work was it

NOTE Confidence: 0.766465408

 $00:29:48.638 \longrightarrow 00:29:50.090$ had to be less than 10%.

NOTE Confidence: 0.766465408

 $00:29:50.090 \longrightarrow 00:29:53.240$ So 10% was like the key number and we

NOTE Confidence: 0.766465408

 $00:29:53.240 \longrightarrow 00:29:56.480$ were able to get that achieve that number

NOTE Confidence: 0.766465408

00:29:56.480 --> 00:29:59.553 by having a more stringent central

NOTE Confidence: 0.766465408

 $00{:}29{:}59.553 \dashrightarrow 00{:}30{:}02.523$ biopsy criteria using dual tracer.

NOTE Confidence: 0.766465408

 $00:30:02.530 \longrightarrow 00:30:03.986$ Meaning you had to use two different

NOTE Confidence: 0.766465408

 $00:30:03.986 \longrightarrow 00:30:05.190$ types of lymph node tracing,

NOTE Confidence: 0.766465408

 $00:30:05.190 \longrightarrow 00:30:07.265$ blue dye and technetium or

 $00:30:07.265 \longrightarrow 00:30:08.510$ the radioactive material.

NOTE Confidence: 0.766465408

 $00:30:08.510 \longrightarrow 00:30:09.986$ We had to remove at least.

NOTE Confidence: 0.766465408

 $00:30:09.990 \longrightarrow 00:30:11.034$ Three left nodes,

NOTE Confidence: 0.766465408

 $00:30:11.034 \longrightarrow 00:30:13.470$ and optimally we had to remove the

NOTE Confidence: 0.766465408

 $00:30:13.542 \longrightarrow 00:30:16.286$ initially diagnosed left node or the AKA.

NOTE Confidence: 0.766465408

 $00:30:16.290 \longrightarrow 00:30:19.610$ The clipped lived because we place the clip.

NOTE Confidence: 0.766465408

 $00:30:19.610 \longrightarrow 00:30:22.445$ In the lymph node that has the

NOTE Confidence: 0.766465408

00:30:22.445 --> 00:30:24.310 known biopsy proven cancer.

NOTE Confidence: 0.766465408

 $00:30:24.310 \longrightarrow 00:30:26.434$ So a series of studies demonstrated

NOTE Confidence: 0.766465408

 $00:30:26.434 \longrightarrow 00:30:29.200$ that we got this good false negative

NOTE Confidence: 0.766465408

 $00{:}30{:}29.200 \dashrightarrow 00{:}30{:}31.330$ rate or high sensitivity rate.

NOTE Confidence: 0.766465408

 $00:30:31.330 \longrightarrow 00:30:33.554$ Basically is another way to think about it.

NOTE Confidence: 0.766465408

00:30:33.560 --> 00:30:35.819 If you use the dual agent or got three

NOTE Confidence: 0.766465408

 $00{:}30{:}35.819 \dashrightarrow 00{:}30{:}37.950$ more than three central lymph nodes,

NOTE Confidence: 0.766465408

 $00:30:37.950 \longrightarrow 00:30:40.646$ the number was always around 10 or less,

NOTE Confidence: 0.766465408

 $00:30:40.650 \longrightarrow 00:30:42.888$ 10% or less and then further

 $00:30:42.888 \longrightarrow 00:30:44.380$ follow-up studies demonstrated that

NOTE Confidence: 0.766465408

 $00:30:44.444 \longrightarrow 00:30:46.364$ if you got the clip note as well,

NOTE Confidence: 0.766465408

 $00:30:46.370 \longrightarrow 00:30:48.392$ you could drop that false negative

NOTE Confidence: 0.766465408

 $00:30:48.392 \longrightarrow 00:30:55.930$ rate to 6.8%. And even down to 1.4%.

NOTE Confidence: 0.766465408

 $00:30:55.930 \dashrightarrow 00:30:58.946$ So the take home point for this was.

NOTE Confidence: 0.766465408

 $00:30:58.950 \longrightarrow 00:31:00.830$ Pushing the envelope some more.

NOTE Confidence: 0.766465408

 $00:31:00.830 \longrightarrow 00:31:03.170$ Now we have bulky disease or

NOTE Confidence: 0.766465408

00:31:03.170 --> 00:31:05.360 known disease in your axilla.

NOTE Confidence: 0.766465408

 $00{:}31{:}05.360 \dashrightarrow 00{:}31{:}08.338$ We could create your treatment so

NOTE Confidence: 0.766465408

 $00:31:08.338 \longrightarrow 00:31:10.424$ that you know you have the lymph

NOTE Confidence: 0.766465408

00:31:10.424 --> 00:31:12.517 nodes shrink up and then we could

NOTE Confidence: 0.766465408

 $00:31:12.517 \longrightarrow 00:31:14.072$ minimize your surgery and we could

NOTE Confidence: 0.766465408

 $00{:}31{:}14.072 \dashrightarrow 00{:}31{:}18.240$ do it in a safe and accurate manner.

NOTE Confidence: 0.766465408

00:31:18.240 --> 00:31:20.346 It's a much more stringent criteria,

NOTE Confidence: 0.766465408

 $00:31:20.350 \longrightarrow 00:31:22.240$ but the fact that we're able to

 $00:31:22.240 \longrightarrow 00:31:24.020$ identify this and get to this

NOTE Confidence: 0.766465408

 $00{:}31{:}24.020 \dashrightarrow 00{:}31{:}25.535$ point is like really remarkable.

NOTE Confidence: 0.896939166666667

 $00:31:27.940 \longrightarrow 00:31:30.088$ So finally that the third milestone,

NOTE Confidence: 0.896939166666667

 $00:31:30.090 \longrightarrow 00:31:31.590$ which is ongoing,

NOTE Confidence: 0.896939166666667

 $00:31:31.590 \longrightarrow 00:31:35.980$ is looking at even more levels of disease.

NOTE Confidence: 0.896939166666667

 $00:31:35.980 \longrightarrow 00:31:38.992$ People that have some response

NOTE Confidence: 0.896939166666667

 $00:31:38.992 \longrightarrow 00:31:40.300$ to the chemotherapy.

NOTE Confidence: 0.896939166666667

00:31:40.300 --> 00:31:41.640 They get their central dental

NOTE Confidence: 0.896939166666667

 $00:31:41.640 \longrightarrow 00:31:43.321$ biopsy and there still looks like

NOTE Confidence: 0.896939166666667

 $00:31:43.321 \longrightarrow 00:31:44.469$ there's some cancer there.

NOTE Confidence: 0.896939166666667

 $00{:}31{:}44.470 \dashrightarrow 00{:}31{:}46.936$ Do they really need axillary surgery

NOTE Confidence: 0.896939166666667

 $00:31:46.936 \longrightarrow 00:31:49.390$ or could we replace that with?

NOTE Confidence: 0.896939166666667

 $00:31:49.390 \longrightarrow 00:31:53.074$ Radiation, so those are ongoing studies

NOTE Confidence: 0.896939166666667

 $00:31:53.074 \longrightarrow 00:31:57.150$ by the alliance group as well as the.

NOTE Confidence: 0.896939166666667

 $00:31:57.150 \longrightarrow 00:32:00.865$ Nsap group so I just wanted to

NOTE Confidence: 0.896939166666667

00:32:00.865 --> 00:32:02.378 kind of press upon everyone that

 $00:32:02.378 \longrightarrow 00:32:03.718$ significant advances has been

NOTE Confidence: 0.896939166666667

 $00{:}32{:}03.718 \dashrightarrow 00{:}32{:}05.058$ made regarding our understanding

NOTE Confidence: 0.896939166666667

 $00:32:05.058 \longrightarrow 00:32:06.744$ of the treatment of breast cancer

NOTE Confidence: 0.896939166666667

 $00:32:06.744 \longrightarrow 00:32:09.695$ that spread to the left nodes.

NOTE Confidence: 0.896939166666667

00:32:09.695 --> 00:32:11.630 Uhm? Actually,

NOTE Confidence: 0.896939166666667

00:32:11.630 --> 00:32:13.590 there's no dissection which has removed many,

NOTE Confidence: 0.896939166666667

 $00:32:13.590 \longrightarrow 00:32:15.840$ many lymph nodes and has known

NOTE Confidence: 0.896939166666667

00:32:15.840 --> 00:32:17.340 morbidity and complications has

NOTE Confidence: 0.896939166666667

 $00:32:17.408 \dashrightarrow 00:32:19.586$ slowly been replaced over the years.

NOTE Confidence: 0.896939166666667

 $00:32:19.590 \longrightarrow 00:32:22.026$ By this much more targeted curated

NOTE Confidence: 0.896939166666667

00:32:22.026 --> 00:32:23.650 Sentinel lymph node biopsy.

NOTE Confidence: 0.896939166666667

 $00:32:23.650 \longrightarrow 00:32:26.149$ First for staging purposes in the 60s,

NOTE Confidence: 0.896939166666667

00:32:26.150 --> 00:32:27.077 Seventies, 80s nineties,

NOTE Confidence: 0.896939166666667

 $00:32:27.077 \longrightarrow 00:32:28.931$ and then more and more for

NOTE Confidence: 0.896939166666667

 $00:32:28.931 \longrightarrow 00:32:29.730$ therapeutic purposes.

 $00:32:29.730 \longrightarrow 00:32:32.047$ For tumors that were left node bearing

NOTE Confidence: 0.896939166666667

 $00{:}32{:}32.047 \dashrightarrow 00{:}32{:}34.230$ lymph nodes that are known to harbor

NOTE Confidence: 0.896939166666667

 $00:32:34.230 \longrightarrow 00:32:36.473$ or cancer cells in them and we're

NOTE Confidence: 0.896939166666667

 $00:32:36.473 \longrightarrow 00:32:38.397$ continuously pushing the envelope.

NOTE Confidence: 0.902932059230769

 $00:32:40.790 \longrightarrow 00:32:42.848$ So I feel like with the addition

NOTE Confidence: 0.902932059230769

 $00:32:42.848 \longrightarrow 00:32:44.929$ of all of this great data,

NOTE Confidence: 0.902932059230769

 $00:32:44.930 \longrightarrow 00:32:46.362$ we could make personalized

NOTE Confidence: 0.902932059230769

 $00:32:46.362 \longrightarrow 00:32:47.794$ care and decision making.

NOTE Confidence: 0.902932059230769

00:32:47.800 --> 00:32:50.926 This data helps us avoid axillary surgery

NOTE Confidence: 0.902932059230769

00:32:50.926 --> 00:32:53.922 in patients who may have risk factors

NOTE Confidence: 0.902932059230769

 $00:32:53.922 \longrightarrow 00:32:56.241$ that predispose them to infection,

NOTE Confidence: 0.902932059230769

 $00:32:56.241 \longrightarrow 00:32:57.744$ lymphoedema, and etc.

NOTE Confidence: 0.902932059230769

 $00:32:57.744 \longrightarrow 00:33:02.258$ And this is done as a kind of a collaborative

NOTE Confidence: 0.902932059230769

 $00:33:02.258 \longrightarrow 00:33:04.143$ conversation between the patient and

NOTE Confidence: 0.902932059230769

 $00:33:04.143 \longrightarrow 00:33:06.695$ their their doctors in a in a team setting.

NOTE Confidence: 0.902932059230769

 $00:33:06.700 \longrightarrow 00:33:09.550$ So we we I am.

 $00:33:11.560 \longrightarrow 00:33:13.856$ I'd like to come thank you for

NOTE Confidence: 0.919997267272727

 $00{:}33{:}13.856 \dashrightarrow 00{:}33{:}15.636$ listening and it's great to

NOTE Confidence: 0.919997267272727

 $00:33:15.636 \longrightarrow 00:33:17.808$ be part of this breast cancer

NOTE Confidence: 0.919997267272727

00:33:17.808 --> 00:33:19.740 Awareness Month outreach program,

NOTE Confidence: 0.919997267272727

 $00:33:19.740 \longrightarrow 00:33:23.324$ and I hope that all the wonderful

NOTE Confidence: 0.919997267272727

 $00:33:23.324 \longrightarrow 00:33:25.338$ advances and understanding that

NOTE Confidence: 0.919997267272727

 $00:33:25.338 \longrightarrow 00:33:27.678$ we have made in this field,

NOTE Confidence: 0.919997267272727

00:33:27.680 --> 00:33:28.868 particularly in surgery,

NOTE Confidence: 0.919997267272727

 $00:33:28.868 \longrightarrow 00:33:30.452$ where we're constantly learning

NOTE Confidence: 0.919997267272727

 $00:33:30.452 \longrightarrow 00:33:32.535$ more about the biology of the

NOTE Confidence: 0.919997267272727

 $00{:}33{:}32.535 \dashrightarrow 00{:}33{:}34.290$ disease and being able to mold

NOTE Confidence: 0.919997267272727

 $00:33:34.290 \longrightarrow 00:33:36.450$ the type of surgery that's needed

NOTE Confidence: 0.919997267272727

 $00{:}33{:}36.450 \dashrightarrow 00{:}33{:}39.098$ and still feel good about it and

NOTE Confidence: 0.919997267272727

 $00{:}33{:}39.098 \dashrightarrow 00{:}33{:}40.968$ know that we're rendering the

NOTE Confidence: 0.919997267272727

 $00:33:40.968 \longrightarrow 00:33:42.770$ patient with a good outcome.

 $00:33:42.770 \longrightarrow 00:33:44.458$ Is ongoing, thank you.

NOTE Confidence: 0.935595106

 $00:33:45.280 \longrightarrow 00:33:46.920$ Great, thank you so much.

NOTE Confidence: 0.935595106

 $00{:}33{:}46.920 \dashrightarrow 00{:}33{:}49.828$ Doctor Park and I think your talk

NOTE Confidence: 0.935595106

 $00:33:49.828 \longrightarrow 00:33:52.398$ really highlights just all the

NOTE Confidence: 0.935595106

 $00:33:52.398 \longrightarrow 00:33:54.660$ advances in personalized medicine

NOTE Confidence: 0.935595106

 $00:33:54.660 \longrightarrow 00:33:57.006$ that we've been able to achieve

NOTE Confidence: 0.935595106

 $00:33:57.006 \longrightarrow 00:33:58.570$ through dedicated clinical trials

NOTE Confidence: 0.935595106

00:33:58.632 --> 00:34:00.690 which would not have been possible

NOTE Confidence: 0.935595106

 $00:34:00.690 \longrightarrow 00:34:02.989$ with all the thousands of individuals

NOTE Confidence: 0.935595106

 $00:34:02.989 \longrightarrow 00:34:04.964$ who have participated with that.

NOTE Confidence: 0.935595106

 $00:34:04.964 \longrightarrow 00:34:07.323$ We will move on to our third

NOTE Confidence: 0.935595106

 $00:34:07.323 \longrightarrow 00:34:09.278$ talk with Doctor Pomahac.

NOTE Confidence: 0.935595106

 $00:34:09.280 \longrightarrow 00:34:09.770$ Thank you.

NOTE Confidence: 0.99029607

00:34:12.790 --> 00:34:14.665 Thank you very much and I

NOTE Confidence: 0.99029607

00:34:14.665 --> 00:34:16.290 couldn't stop thinking about all

NOTE Confidence: 0.896398489130435

 $00:34:16.362 \longrightarrow 00:34:18.595$ the aspects of Breast Cancer Care and

00:34:18.595 --> 00:34:20.998 how it starts with medical oncology.

NOTE Confidence: 0.896398489130435

00:34:21.000 --> 00:34:22.576 Goes through radiation oncology,

NOTE Confidence: 0.896398489130435

 $00:34:22.576 \longrightarrow 00:34:24.152$ surgical oncology and then

NOTE Confidence: 0.896398489130435

 $00:34:24.152 \longrightarrow 00:34:25.420$ finally plastic surgery.

NOTE Confidence: 0.896398489130435

 $00{:}34{:}25.420 \dashrightarrow 00{:}34{:}27.814$ But also the communication of the team.

NOTE Confidence: 0.896398489130435

00:34:27.820 --> 00:34:29.710 How much it may impact the

NOTE Confidence: 0.896398489130435

 $00:34:29.710 \longrightarrow 00:34:30.970$ choice of reconstruction and

NOTE Confidence: 0.896398489130435

 $00{:}34{:}31.028 \dashrightarrow 00{:}34{:}32.604$ the timing of reconstruction

NOTE Confidence: 0.896398489130435

00:34:32.604 --> 00:34:34.574 because the type of chemotherapy,

NOTE Confidence: 0.896398489130435

 $00:34:34.580 \longrightarrow 00:34:37.178$ the timing of chemotherapy as well

NOTE Confidence: 0.896398489130435

 $00:34:37.178 \longrightarrow 00:34:39.672$ as the presence of previous radiation

NOTE Confidence: 0.896398489130435

 $00:34:39.672 \longrightarrow 00:34:41.577$ or plan for future radiation.

NOTE Confidence: 0.896398489130435

00:34:41.580 --> 00:34:43.064 Those are all incredibly.

NOTE Confidence: 0.896398489130435

 $00{:}34{:}43.064 \dashrightarrow 00{:}34{:}44.548$ Important factors and beyond

NOTE Confidence: 0.896398489130435

 $00:34:44.548 \longrightarrow 00:34:46.570$ the scope of this presentation,

 $00:34:46.570 \longrightarrow 00:34:49.276$ but certainly document how we all

NOTE Confidence: 0.896398489130435

00:34:49.276 --> 00:34:51.530 communicate together as one team.

NOTE Confidence: 0.896398489130435

 $00:34:51.530 \longrightarrow 00:34:55.440$ I wanted to start with.

NOTE Confidence: 0.896398489130435

 $00:34:55.440 \longrightarrow 00:34:59.078$ With sort of the basics back in 1995,

NOTE Confidence: 0.896398489130435

 $00:34:59.078 \longrightarrow 00:35:01.142$ there were only 8% women receiving

NOTE Confidence: 0.896398489130435

 $00:35:01.142 \longrightarrow 00:35:03.222$ breast reconstruction and there was

NOTE Confidence: 0.896398489130435

 $00:35:03.222 \longrightarrow 00:35:05.520$ because largely this was viewed as

NOTE Confidence: 0.896398489130435

 $00:35:05.520 \longrightarrow 00:35:07.823$ esthetic surgery and out of pocket payment.

NOTE Confidence: 0.896398489130435 00:35:07.830 --> 00:35:08.860 In 1998, NOTE Confidence: 0.896398489130435

00:35:08.860 --> 00:35:11.950 the Women's Health and Cancer Rights

NOTE Confidence: 0.896398489130435

 $00:35:11.950 \longrightarrow 00:35:14.270$ Act actually allowed women to be

NOTE Confidence: 0.896398489130435

 $00:35:14.270 \longrightarrow 00:35:16.070$ eligible under in medical insurance

NOTE Confidence: 0.896398489130435

 $00:35:16.135 \longrightarrow 00:35:17.939$ to obtain breast reconstruction,

NOTE Confidence: 0.896398489130435

 $00{:}35{:}17.940 \dashrightarrow 00{:}35{:}19.996$ and from then we have had a steady

NOTE Confidence: 0.896398489130435

 $00:35:19.996 \longrightarrow 00:35:21.297$ rise in breast reconstruction

NOTE Confidence: 0.896398489130435

00:35:21.297 --> 00:35:23.463 numbers up to the COVID year

 $00:35:23.463 \longrightarrow 00:35:25.600$ where it plateaued and the pig.

NOTE Confidence: 0.896398489130435

 $00:35:25.600 \longrightarrow 00:35:28.264$ Was actually the year before or a couple

NOTE Confidence: 0.896398489130435

 $00:35:28.264 \longrightarrow 00:35:30.715$ years before around 43% of women,

NOTE Confidence: 0.896398489130435

 $00:35:30.715 \longrightarrow 00:35:32.940$ so women with invasive cancer.

NOTE Confidence: 0.896398489130435

 $00:35:32.940 \longrightarrow 00:35:35.558$ Almost half of them at the present

NOTE Confidence: 0.896398489130435

 $00:35:35.558 \longrightarrow 00:35:37.770$ time received breast reconstruction.

NOTE Confidence: 0.896398489130435

 $00:35:37.770 \longrightarrow 00:35:39.366$ Now the trends have also evolved

NOTE Confidence: 0.896398489130435

 $00:35:39.366 \longrightarrow 00:35:40.164$ over the time,

NOTE Confidence: 0.896398489130435

 $00:35:40.170 \longrightarrow 00:35:43.553$ and if you look at the early 1998,

NOTE Confidence: 0.896398489130435

 $00{:}35{:}43.553 \dashrightarrow 00{:}35{:}46.367$ which is when the Women's Care

NOTE Confidence: 0.896398489130435

 $00:35:46.367 \longrightarrow 00:35:48.458$ Act was approved,

NOTE Confidence: 0.896398489130435

 $00:35:48.460 \longrightarrow 00:35:51.491$ we had about the same amount of

NOTE Confidence: 0.896398489130435

 $00{:}35{:}51.491 \dashrightarrow 00{:}35{:}53.362$ autologous meaning using utilizing

NOTE Confidence: 0.896398489130435

 $00:35:53.362 \longrightarrow 00:35:55.867$ patient's own tissue type of

NOTE Confidence: 0.896398489130435

 $00:35:55.867 \longrightarrow 00:35:57.770$ reconstructions and the same amount

 $00:35:57.770 \longrightarrow 00:35:59.170$ of implant based reconstructions.

NOTE Confidence: 0.896398489130435

 $00{:}35{:}59.170 \dashrightarrow 00{:}36{:}01.277$ But over the years this trend has

NOTE Confidence: 0.896398489130435

 $00:36:01.277 \longrightarrow 00:36:03.117$ diverged and with the growing

NOTE Confidence: 0.896398489130435

00:36:03.117 --> 00:36:04.428 number of reconstruction,

NOTE Confidence: 0.896398489130435

 $00:36:04.430 \longrightarrow 00:36:07.220$ overall we have seen steady increase

NOTE Confidence: 0.896398489130435

 $00:36:07.220 \longrightarrow 00:36:09.080$ in implant based reconstruction.

NOTE Confidence: 0.846188244444444

 $00:36:11.210 \longrightarrow 00:36:13.850$ Now, why is it so well

NOTE Confidence: 0.846188244444444

 $00:36:13.850 \longrightarrow 00:36:15.170$ from patients perspective,

NOTE Confidence: 0.84618824444444

 $00:36:15.170 \longrightarrow 00:36:18.210$ a implant based reconstruction means

NOTE Confidence: 0.846188244444444

 $00:36:18.210 \longrightarrow 00:36:21.250$ shorter operation and faster recovery.

NOTE Confidence: 0.846188244444444

 $00:36:21.250 \longrightarrow 00:36:22.830$ Everything happens on the chest,

NOTE Confidence: 0.846188244444444

 $00:36:22.830 \longrightarrow 00:36:24.846$ whether it's one or both breasts.

NOTE Confidence: 0.84618824444444

 $00:36:24.850 \longrightarrow 00:36:26.608$ There is no additional donor site,

NOTE Confidence: 0.846188244444444

 $00:36:26.610 \longrightarrow 00:36:29.418$ and the healing is generally limited

NOTE Confidence: 0.846188244444444

 $00:36:29.418 \longrightarrow 00:36:31.380$ to probably two to four weeks

NOTE Confidence: 0.846188244444444

 $00{:}36{:}31.380 \dashrightarrow 00{:}36{:}33.410$ rather than four to six visitor.

 $00:36:33.410 \longrightarrow 00:36:37.076$ Even eight weeks with the autologous

NOTE Confidence: 0.84618824444444

 $00{:}36{:}37.076 \dashrightarrow 00{:}36{:}38.125$ reconstruction techniques.

NOTE Confidence: 0.846188244444444

 $00:36:38.125 \longrightarrow 00:36:40.735$ We have also seen increase in.

NOTE Confidence: 0.846188244444444

 $00:36:40.740 \longrightarrow 00:36:42.960$ The number of bilateral

NOTE Confidence: 0.846188244444444

 $00:36:42.960 \longrightarrow 00:36:44.625$ mastectomy both sides.

NOTE Confidence: 0.846188244444444

 $00:36:44.630 \longrightarrow 00:36:46.066$ Both breasts are removed,

NOTE Confidence: 0.846188244444444

 $00:36:46.066 \longrightarrow 00:36:47.861$ and that's because of the

NOTE Confidence: 0.846188244444444

 $00:36:47.861 \longrightarrow 00:36:49.699$ identification of some of the genes

NOTE Confidence: 0.846188244444444

 $00:36:49.699 \longrightarrow 00:36:51.114$ that predispose women to breast

NOTE Confidence: 0.84618824444444

 $00{:}36{:}51.174 \dashrightarrow 00{:}36{:}53.166$ cancer and and mast ectomies that we

NOTE Confidence: 0.846188244444444

00:36:53.166 --> 00:36:54.952 call prophylactic or also increased

NOTE Confidence: 0.846188244444444

 $00:36:54.952 \longrightarrow 00:36:57.212$ anxiety among patients to leave

NOTE Confidence: 0.84618824444444

 $00:36:57.212 \longrightarrow 00:36:59.836$ healthy breast in place when they

NOTE Confidence: 0.846188244444444

 $00:36:59.836 \longrightarrow 00:37:02.074$ suffered from cancer on one side.

NOTE Confidence: 0.846188244444444

00:37:02.080 --> 00:37:04.300 And although those are not generally

 $00:37:04.300 \longrightarrow 00:37:06.128$ recommended as medically appropriate, there

NOTE Confidence: 0.846188244444444

 $00:37:06.128 \dashrightarrow 00:37:08.912$ has been increase of those cases as well.

NOTE Confidence: 0.846188244444444

 $00:37:08.920 \longrightarrow 00:37:10.831$ Additionally, FDA has.

NOTE Confidence: 0.84618824444444

00:37:10.831 --> 00:37:14.653 Has triggers her their stance on

NOTE Confidence: 0.846188244444444

00:37:14.653 --> 00:37:17.318 moratorium on silicone implants

NOTE Confidence: 0.846188244444444

 $00:37:17.320 \longrightarrow 00:37:21.432$ in 2006 as they were found to be

NOTE Confidence: 0.84618824444444

 $00:37:21.432 \longrightarrow 00:37:23.378$ relatively safe and certainly

NOTE Confidence: 0.846188244444444

 $00:37:23.378 \longrightarrow 00:37:25.673$ not connected to the connective

NOTE Confidence: 0.84618824444444

 $00:37:25.673 \longrightarrow 00:37:28.049$ tissue disorders in large numbers

NOTE Confidence: 0.846188244444444

 $00:37:28.049 \longrightarrow 00:37:30.369$ and studies that were performed.

NOTE Confidence: 0.846188244444444

 $00{:}37{:}30.370 \dashrightarrow 00{:}37{:}32.325$ Another factor is what's called

NOTE Confidence: 0.846188244444444

 $00:37:32.325 \longrightarrow 00:37:33.528 ******$ sparing mastectomy,

NOTE Confidence: 0.84618824444444

 $00:37:33.528 \longrightarrow 00:37:35.952$ which is a technique of removing

NOTE Confidence: 0.846188244444444

00:37:35.952 --> 00:37:38.469 the breast gland and breast tissue

NOTE Confidence: 0.846188244444444

00:37:38.469 --> 00:37:40.444 without removing the ***** which

NOTE Confidence: 0.84618824444444

 $00{:}37{:}40.444 \dashrightarrow 00{:}37{:}42.114$ traditionally is viewed as as

 $00:37:42.114 \longrightarrow 00:37:44.817$ a part of the breast gland and

NOTE Confidence: 0.846188244444444

 $00:37:44.817 \longrightarrow 00:37:47.409$ traditionally was part of the operation.

NOTE Confidence: 0.846188244444444

 $00:37:47.410 \longrightarrow 00:37:49.580$ And then finally the surgical

NOTE Confidence: 0.846188244444444

00:37:49.580 --> 00:37:51.750 advance of structural fat grafting,

NOTE Confidence: 0.846188244444444

 $00{:}37{:}51.750 \dashrightarrow 00{:}37{:}53.460$ which is essentially a liposuction

NOTE Confidence: 0.846188244444444

 $00:37:53.460 \longrightarrow 00:37:55.913$ of area where the patients have a

NOTE Confidence: 0.846188244444444

 $00:37:55.913 \longrightarrow 00:37:57.965$ little bit of access and countering

NOTE Confidence: 0.846188244444444

 $00{:}37{:}57.965 \dashrightarrow 00{:}37{:}59.733$ the reconstruction with an implant

NOTE Confidence: 0.846188244444444

 $00:37:59.733 \longrightarrow 00:38:01.443$ has helped immensely to improve

NOTE Confidence: 0.84618824444444

00:38:01.443 --> 00:38:02.590 the aesthetic outcomes.

NOTE Confidence: 0.846188244444444

 $00:38:02.590 \longrightarrow 00:38:04.430$ On the other hand,

NOTE Confidence: 0.846188244444444

 $00{:}38{:}04.430 \dashrightarrow 00{:}38{:}06.518$ the autologous breast reconstruction

NOTE Confidence: 0.84618824444444

 $00{:}38{:}06.518 \dashrightarrow 00{:}38{:}09.128$ techniques using the patient's own

NOTE Confidence: 0.846188244444444

 $00:38:09.128 \longrightarrow 00:38:11.848$ body largely evolved into perforate,

NOTE Confidence: 0.84618824444444

 $00:38:11.850 \longrightarrow 00:38:12.414$ are based techniques,

00:38:12.414 --> 00:38:14.090 and I'll talk about it a little bit more,

NOTE Confidence: 0.846188244444444

 $00:38:14.090 \longrightarrow 00:38:16.022$ but it is essentially a technique

NOTE Confidence: 0.846188244444444

 $00:38:16.022 \longrightarrow 00:38:17.770$ where we try to spare.

NOTE Confidence: 0.84618824444444

 $00:38:17.770 \longrightarrow 00:38:20.330$ Muscles or deeper structures

NOTE Confidence: 0.846188244444444

 $00:38:20.330 \longrightarrow 00:38:23.530$ and just find vessels that.

NOTE Confidence: 0.846188244444444

00:38:23.530 --> 00:38:25.882 By skin and fat there will be ultimately

NOTE Confidence: 0.84618824444444

 $00:38:25.882 \longrightarrow 00:38:28.556$ used to replace the missing breast mound.

NOTE Confidence: 0.846188244444444

 $00:38:28.560 \longrightarrow 00:38:30.660$ These operations are quite sophisticated

NOTE Confidence: 0.84618824444444

00:38:30.660 --> 00:38:33.150 but tedious and take long time,

NOTE Confidence: 0.846188244444444

 $00:38:33.150 \longrightarrow 00:38:35.397$ and frankly there is really not enough

NOTE Confidence: 0.846188244444444

 $00{:}38{:}35.397 \dashrightarrow 00{:}38{:}37.509$ surgeons in the country that would

NOTE Confidence: 0.846188244444444

 $00:38:37.509 \longrightarrow 00:38:39.687$ be able to perform these operations.

NOTE Confidence: 0.84618824444444

 $00{:}38{:}39.690 \dashrightarrow 00{:}38{:}41.645$ That sometimes bilateral reconstruction can

NOTE Confidence: 0.846188244444444

00:38:41.645 --> 00:38:44.848 take a whole day in the operating room,

NOTE Confidence: 0.846188244444444

 $00:38:44.850 \longrightarrow 00:38:47.671$ and so the Community has also driven

NOTE Confidence: 0.846188244444444

00:38:47.671 --> 00:38:51.447 the need or the the rise in implant

 $00:38:51.447 \longrightarrow 00:38:53.427$ based reconstruction as well.

NOTE Confidence: 0.84618824444444

 $00:38:53.430 \longrightarrow 00:38:55.368$ Now when I'm talking about implant

NOTE Confidence: 0.846188244444444

 $00{:}38{:}55.368 \dashrightarrow 00{:}38{:}56.014$ based reconstruction,

NOTE Confidence: 0.846188244444444

00:38:56.020 --> 00:38:58.064 would I what I'm talking about is

NOTE Confidence: 0.846188244444444

 $00:38:58.064 \longrightarrow 00:38:59.506$ really these two circumstances

NOTE Confidence: 0.846188244444444

 $00:38:59.506 \longrightarrow 00:39:01.000$ release two options?

NOTE Confidence: 0.846188244444444

 $00:39:01.000 \longrightarrow 00:39:03.112$ In some instances we place at

NOTE Confidence: 0.846188244444444

 $00{:}39{:}03.112 \dashrightarrow 00{:}39{:}05.450$ the time of mastectomy and tissue

NOTE Confidence: 0.846188244444444

 $00:39:05.450 \longrightarrow 00:39:07.620$ expander and then later on come back

NOTE Confidence: 0.84618824444444

 $00:39:07.620 \longrightarrow 00:39:09.519$ to exchange the expander for implant

NOTE Confidence: 0.84618824444444

 $00:39:09.519 \longrightarrow 00:39:11.565$ and that's done for numerous reasons.

NOTE Confidence: 0.846188244444444

 $00:39{:}11.570 \dashrightarrow 00{:}39{:}13.400$ Sometimes it's concerned about the

NOTE Confidence: 0.84618824444444

 $00:39:13.400 \longrightarrow 00:39:15.589$ viability of the skin because the

NOTE Confidence: 0.846188244444444

00:39:15.589 --> 00:39:17.074 breast cancer surgeon has really

NOTE Confidence: 0.84618824444444

 $00:39:17.074 \longrightarrow 00:39:19.398$ the hard job to remove the breast

00:39:19.398 --> 00:39:21.183 gland without injuring the skin,

NOTE Confidence: 0.846188244444444

 $00:39:21.190 \dashrightarrow 00:39:23.578$ but the skin can be traumatized.

NOTE Confidence: 0.846188244444444

 $00:39:23.580 \longrightarrow 00:39:25.324$ Putting additional full size

NOTE Confidence: 0.84618824444444

00:39:25.324 --> 00:39:27.504 implant may cause additional trauma,

NOTE Confidence: 0.846188244444444

 $00:39:27.510 \longrightarrow 00:39:29.610$ so placing expander allowing the skin

NOTE Confidence: 0.846188244444444

 $00:39:29.610 \longrightarrow 00:39:31.761$ to heal and then gradually expand

NOTE Confidence: 0.846188244444444

 $00:39:31.761 \longrightarrow 00:39:34.505$ the skin is a safer way to perceive.

NOTE Confidence: 0.91036069

 $00:39:34.510 \longrightarrow 00:39:36.304$ Sometimes the patients want to be

NOTE Confidence: 0.91036069

 $00{:}39{:}36.304 \dashrightarrow 00{:}39{:}38.270$ larger than what they started with,

NOTE Confidence: 0.91036069

 $00:39:38.270 \longrightarrow 00:39:40.013$ and that's another reason to put an

NOTE Confidence: 0.91036069

 $00:39:40.013 \longrightarrow 00:39:42.137$ expander at the time of the reconstruction,

NOTE Confidence: 0.91036069

 $00:39:42.140 \longrightarrow 00:39:44.732$ but ultimately the expander is a

NOTE Confidence: 0.91036069

 $00:39:44.732 \longrightarrow 00:39:47.006$ temporary prosthetic prosthesis that's

NOTE Confidence: 0.91036069

 $00:39:47.006 \longrightarrow 00:39:50.066$ ultimately exchanged for an implant.

NOTE Confidence: 0.91036069

 $00:39:50.070 \longrightarrow 00:39:52.318$ Lately, though, we have been using more and

NOTE Confidence: 0.91036069

 $00:39:52.318 \longrightarrow 00:39:54.099$ more immediate implant reconstructions.

 $00:39:54.100 \longrightarrow 00:39:57.178$ Bad for proper patient can eliminate

NOTE Confidence: 0.91036069

00:39:57.178 --> 00:40:00.602 one of the operations and can lead

NOTE Confidence: 0.91036069

 $00:40:00.602 \longrightarrow 00:40:03.577$ to quite nice results in one stage.

NOTE Confidence: 0.91036069

 $00:40:03.580 \longrightarrow 00:40:05.435$ Now there are different nuances

NOTE Confidence: 0.91036069

 $00{:}40{:}05.435 \dashrightarrow 00{:}40{:}07.290$ where this implant ultimately can

NOTE Confidence: 0.91036069

 $00{:}40{:}07.349 \dashrightarrow 00{:}40{:}09.141$ be placed on the upper row you

NOTE Confidence: 0.91036069

 $00:40:09.141 \longrightarrow 00:40:11.059$ can see what's called subjectoral,

NOTE Confidence: 0.91036069

 $00{:}40{:}11.060 \dashrightarrow 00{:}40{:}13.292$ implant based reconstruction and

NOTE Confidence: 0.91036069

 $00:40:13.292 \longrightarrow 00:40:16.082$ different views of this reconstruction.

NOTE Confidence: 0.91036069

00:40:16.090 --> 00:40:16.661 Fundamentally,

NOTE Confidence: 0.91036069

 $00{:}40{:}16.661 \dashrightarrow 00{:}40{:}19.516$ the implant is placed underneath

NOTE Confidence: 0.91036069

 $00{:}40{:}19.516 \dashrightarrow 00{:}40{:}22.583$ the large chest muscle that covers

NOTE Confidence: 0.91036069

 $00:40:22.583 \longrightarrow 00:40:25.194$ the implant and prevents some of the

NOTE Confidence: 0.91036069

 $00{:}40{:}25.194 \dashrightarrow 00{:}40{:}27.258$ problems such as capsular contracture

NOTE Confidence: 0.91036069

00:40:27.258 --> 00:40:29.748 or tight scar around the implant,

00:40:29.750 --> 00:40:32.282 but it also creates natural sloping

NOTE Confidence: 0.91036069

00:40:32.282 --> 00:40:35.170 of the upper pole of the breast.

NOTE Confidence: 0.91036069

 $00:40:35.170 \longrightarrow 00:40:36.758$ On the other hand,

NOTE Confidence: 0.91036069

 $00:40:36.758 \longrightarrow 00:40:37.949$ because immediately superficial

NOTE Confidence: 0.91036069

 $00:40:37.949 \longrightarrow 00:40:39.820$ to this muscle is a skin,

NOTE Confidence: 0.91036069

 $00:40:39.820 \longrightarrow 00:40:41.508$ patients often develop what's

NOTE Confidence: 0.91036069

00:40:41.508 --> 00:40:42.774 called animation deformity,

NOTE Confidence: 0.91036069

00:40:42.780 --> 00:40:45.364 which is when you engage the chest muscle,

NOTE Confidence: 0.91036069

 $00{:}40{:}45.370 \dashrightarrow 00{:}40{:}46.940$ the skin suddenly moves and

NOTE Confidence: 0.91036069

00:40:46.940 --> 00:40:48.510 it can look quite abnormal,

NOTE Confidence: 0.91036069

00:40:48.510 --> 00:40:51.154 especially in dresses or

NOTE Confidence: 0.91036069

 $00:40:51.154 \longrightarrow 00:40:53.798$ or swimming swimming suit.

NOTE Confidence: 0.91036069

 $00:40:53.800 \longrightarrow 00:40:55.900$ That's one of the reasons why

NOTE Confidence: 0.91036069

 $00:40:55.900 \longrightarrow 00:40:57.300$ lately we have reverted,

NOTE Confidence: 0.91036069

00:40:57.300 --> 00:40:59.538 they were converted back to what's

NOTE Confidence: 0.91036069

00:40:59.538 --> 00:41:01.030 called prepectoral implant placement,

 $00:41:01.030 \longrightarrow 00:41:02.990$ which is placement of an implant in

NOTE Confidence: 0.91036069

 $00{:}41{:}02.990 \dashrightarrow 00{:}41{:}05.290$ front of the pectoral is major muscle.

NOTE Confidence: 0.91036069

 $00:41:05.290 \longrightarrow 00:41:06.517$ In this case,

NOTE Confidence: 0.91036069

00:41:06.517 --> 00:41:08.562 the implant has the disadvantage

NOTE Confidence: 0.91036069

 $00:41:08.562 \longrightarrow 00:41:10.630$ of having less protection,

NOTE Confidence: 0.91036069

00:41:10.630 --> 00:41:12.185 and sometimes the transition to

NOTE Confidence: 0.91036069

 $00:41:12.185 \longrightarrow 00:41:14.534$ the upper pole of the chest can

NOTE Confidence: 0.91036069

00:41:14.534 --> 00:41:15.626 be slightly abnormal,

NOTE Confidence: 0.91036069

 $00:41:15.630 \longrightarrow 00:41:17.904$ but that's where the structural fat

NOTE Confidence: 0.91036069

 $00:41:17.904 \longrightarrow 00:41:20.471$ grafting or injection of fat at later

NOTE Confidence: 0.91036069

00:41:20.471 --> 00:41:22.439 date can actually make a difference

NOTE Confidence: 0.91036069

 $00{:}41{:}22.439 \dashrightarrow 00{:}41{:}24.419$ and considerable improvement.

NOTE Confidence: 0.91036069

 $00{:}41{:}24.420 \dashrightarrow 00{:}41{:}26.706$ So let me show you some of the examples.

NOTE Confidence: 0.91036069

 $00:41:26.710 \longrightarrow 00:41:29.566$ This is a patient before and after

NOTE Confidence: 0.91036069

 $00:41:29.566 \longrightarrow 00:41:30.790$ bilateral implant reconstruction.

00:41:30.790 --> 00:41:32.548 She wanted to be considerably larger,

NOTE Confidence: 0.91036069

00:41:32.550 --> 00:41:34.485 so this was actually interim

NOTE Confidence: 0.91036069

 $00:41:34.485 \longrightarrow 00:41:36.420$ expander placement and then exchange

NOTE Confidence: 0.91036069

 $00:41:36.484 \longrightarrow 00:41:38.374$ of implant whenever there is a

NOTE Confidence: 0.91036069

00:41:38.374 --> 00:41:39.416 ***** sparing mastectomy,

NOTE Confidence: 0.91036069

00:41:39.416 --> 00:41:42.010 meaning the native ****** can be preserved,

NOTE Confidence: 0.91036069

 $00:41:42.010 \longrightarrow 00:41:43.910$ and even though the breast

NOTE Confidence: 0.91036069

 $00:41:43.910 \longrightarrow 00:41:45.430$ is largely insensate.

NOTE Confidence: 0.91036069

 $00:41:45.430 \longrightarrow 00:41:47.404$ As the nerves are removed along

NOTE Confidence: 0.91036069

 $00:41:47.404 \longrightarrow 00:41:49.613$ with the breast gland the the

NOTE Confidence: 0.91036069

 $00{:}41{:}49.613 \dashrightarrow 00{:}41{:}51.269$ result looks remarkably natural.

NOTE Confidence: 0.91036069

 $00:41:51.270 \longrightarrow 00:41:53.730$ Another example of patient who had

NOTE Confidence: 0.91036069

 $00:41:53.730 \longrightarrow 00:41:55.370$ the single stage reconstruction

NOTE Confidence: 0.91036069

 $00{:}41{:}55.439 {\:{\circ}{\circ}{\circ}}>00{:}41{:}57.623$ implants placed at the time of

NOTE Confidence: 0.91036069

 $00:41:57.623 \longrightarrow 00:42:00.638$ mastectomy with nice aesthetic result.

NOTE Confidence: 0.91036069

 $00:42:00.640 \longrightarrow 00:42:03.202$ Patient who had who had tissue

 $00{:}42{:}03.202 \rightarrow 00{:}42{:}05.379$ expanders first and then implant

NOTE Confidence: 0.91036069

 $00:42:05.379 \longrightarrow 00:42:07.707$ as she wanted to be larger.

NOTE Confidence: 0.91036069

 $00:42:07.710 \longrightarrow 00:42:09.681$ One of the things that you can see here

NOTE Confidence: 0.91036069

 $00:42:09.681 \longrightarrow 00:42:11.885$ is a little bit of rippling of the skin.

NOTE Confidence: 0.91036069

 $00:42:11.890 \longrightarrow 00:42:14.128$ So sometimes the implant in the

NOTE Confidence: 0.91036069

 $00:42:14.128 \longrightarrow 00:42:16.508$ prepectoral or in front of the

NOTE Confidence: 0.91036069

00:42:16.508 --> 00:42:18.543 muscle plane causes rippling or

NOTE Confidence: 0.91036069

 $00:42:18.543 \longrightarrow 00:42:20.449$ or visibility through the skin.

NOTE Confidence: 0.91036069

 $00:42:20.450 \longrightarrow 00:42:23.336$ A problem that's really very difficult

NOTE Confidence: 0.91036069

 $00:42:23.336 \longrightarrow 00:42:27.548$ to correct and can be really not correctable.

NOTE Confidence: 0.91036069

 $00:42:27.550 \longrightarrow 00:42:29.450$ Another example is patients that

NOTE Confidence: 0.91036069

 $00:42:29.450 \longrightarrow 00:42:31.350$ undergo only what's called skin,

NOTE Confidence: 0.91036069

 $00:42:31.350 \longrightarrow 00:42:32.200$ sparing mastectomy,

NOTE Confidence: 0.91036069

 $00:42:32.200 \longrightarrow 00:42:34.750$ so the mastectomy skin is spared,

NOTE Confidence: 0.91036069

 $00:42:34.750 \longrightarrow 00:42:36.090$ but ***** area is not.

 $00:42:36.090 \longrightarrow 00:42:37.970$ This invariably results in larger

NOTE Confidence: 0.91036069

 $00:42:37.970 \longrightarrow 00:42:40.370$ longer scars and then the ******

NOTE Confidence: 0.91036069

 $00:42:40.370 \longrightarrow 00:42:42.630$ have to be reconstructed later.

NOTE Confidence: 0.91036069

00:42:42.630 --> 00:42:44.786 Ultimately the shape can look quite natural,

NOTE Confidence: 0.91036069

 $00:42:44.790 \longrightarrow 00:42:48.503$ but it does never quite match the

NOTE Confidence: 0.91036069

00:42:48.503 --> 00:42:50.768 result of ***** sparing mastectomy.

NOTE Confidence: 0.838572509333333

 $00:42:50.770 \longrightarrow 00:42:53.003$ This is a patient who had skin

NOTE Confidence: 0.838572509333333

 $00:42:53.003 \longrightarrow 00:42:54.960$ sparing mastectomy and then following

NOTE Confidence: 0.838572509333333

 $00:42:54.960 \longrightarrow 00:42:56.807$ reconstruction of ***** areola.

NOTE Confidence: 0.838572509333333

 $00:42:56.807 \longrightarrow 00:42:59.429$ Which can be actually these days

NOTE Confidence: 0.838572509333333

 $00:42:59.429 \longrightarrow 00:43:01.400$ made fairly natural looking.

NOTE Confidence: 0.838572509333333

 $00:43:01.400 \longrightarrow 00:43:03.675$ We use 3D tattooing as well as

NOTE Confidence: 0.838572509333333

 $00:43:03.675 \longrightarrow 00:43:05.733$ reconstruction of the projecting part of

NOTE Confidence: 0.838572509333333

 $00:43:05.733 \longrightarrow 00:43:09.470$ a ***** to complete the reconstruction.

NOTE Confidence: 0.838572509333333

 $00:43:09.470 \longrightarrow 00:43:11.615$ In cases of significant ptosis

NOTE Confidence: 0.838572509333333

00:43:11.615 --> 00:43:13.760 or drooping of the breasts,

 $00:43:13.760 \longrightarrow 00:43:15.881$ the ***** are really not wise to

NOTE Confidence: 0.838572509333333

 $00:43:15.881 \longrightarrow 00:43:18.442$ save as there would end up in really

NOTE Confidence: 0.838572509333333

 $00{:}43{:}18.442 \dashrightarrow 00{:}43{:}20.659$ wrong position and in those cases we

NOTE Confidence: 0.838572509333333

00:43:20.659 --> 00:43:22.931 have to create a new unit process in

NOTE Confidence: 0.838572509333333

 $00:43:22.940 \longrightarrow 00:43:24.630$ proper relation and the mastectomy

NOTE Confidence: 0.838572509333333

00:43:24.630 --> 00:43:27.219 scars end up being low on the breast,

NOTE Confidence: 0.838572509333333

 $00:43:27.220 \longrightarrow 00:43:28.920$ not across the president from

NOTE Confidence: 0.838572509333333

 $00{:}43{:}28.920 \dashrightarrow 00{:}43{:}30.280$ the previous previous image.

NOTE Confidence: 0.838572509333333

 $00:43:30.280 \longrightarrow 00:43:32.950$ So the position of the mastectomy

NOTE Confidence: 0.838572509333333

 $00:43:32.950 \longrightarrow 00:43:35.680$ scar is really related to the

NOTE Confidence: 0.838572509333333

 $00:43:35.680 \longrightarrow 00:43:37.840$ position of the areola complex.

NOTE Confidence: 0.838572509333333

 $00:43:37.840 \longrightarrow 00:43:40.175$ Example of unilateral or one

NOTE Confidence: 0.838572509333333

 $00{:}43{:}40.175 \dashrightarrow 00{:}43{:}41.576$ sided reconstruction with

NOTE Confidence: 0.838572509333333

 $00:43:41.576 \longrightarrow 00:43:43.240$ contralateral symmetry procedures.

NOTE Confidence: 0.838572509333333

 $00:43:43.240 \longrightarrow 00:43:46.215$ So many patients that opt to proceed

00:43:46.215 --> 00:43:48.300 with only reconstruction of the

NOTE Confidence: 0.838572509333333

 $00:43:48.300 \longrightarrow 00:43:50.496$ breast which is affected by cancer,

NOTE Confidence: 0.838572509333333

00:43:50.500 --> 00:43:52.112 can undergo contralateral lift

NOTE Confidence: 0.838572509333333

 $00:43:52.112 \longrightarrow 00:43:54.530$ or small reduction to match the

NOTE Confidence: 0.838572509333333

00:43:54.598 --> 00:43:56.548 volume as as much as possible.

NOTE Confidence: 0.711922212

00:43:58.760 --> 00:44:01.775 So one of the scary parts lately in the

NOTE Confidence: 0.711922212

 $00:44:01.775 \longrightarrow 00:44:03.820$ literature has been an aplastic large

NOTE Confidence: 0.711922212

 $00:44:03.820 \longrightarrow 00:44:06.274$ cell lymphoma was also called alcl,

NOTE Confidence: 0.711922212

 $00:44:06.280 \longrightarrow 00:44:09.418$ associated with breast implants early on,

NOTE Confidence: 0.711922212

 $00:44:09.420 \longrightarrow 00:44:10.440$ the incidence was considered

NOTE Confidence: 0.711922212

 $00:44:10.440 \longrightarrow 00:44:11.900$ to be one in 500,000,

NOTE Confidence: 0.711922212

 $00:44:11.900 \longrightarrow 00:44:14.980$ but then later was thought that maybe

NOTE Confidence: 0.711922212

 $00:44:14.980 \longrightarrow 00:44:18.149$ even as frequent as in one in 1000.

NOTE Confidence: 0.711922212

 $00{:}44{:}18.150 \dashrightarrow 00{:}44{:}21.060$ Based on careful statistical analysis,

NOTE Confidence: 0.711922212

 $00:44:21.060 \longrightarrow 00:44:23.520$ the truth is probably somewhere around

NOTE Confidence: 0.711922212

 $00:44:23.520 \longrightarrow 00:44:27.497$ 1 to 30,000 patients and 90 or over 90.

 $00:44:27.500 \longrightarrow 00:44:29.400$ Percent of these are associated

NOTE Confidence: 0.711922212

 $00:44:29.400 \longrightarrow 00:44:30.540$ with textured implants.

NOTE Confidence: 0.711922212

 $00:44:30.540 \longrightarrow 00:44:32.152$ Textured implants were used

NOTE Confidence: 0.711922212

 $00{:}44{:}32.152 \dashrightarrow 00{:}44{:}34.167$ because of their anatomic shape

NOTE Confidence: 0.711922212

 $00:44:34.167 \longrightarrow 00:44:36.497$ and ability to hold the position,

NOTE Confidence: 0.711922212

 $00:44:36.500 \longrightarrow 00:44:39.461$ but also anatomically shape that we could

NOTE Confidence: 0.711922212

 $00:44:39.461 \longrightarrow 00:44:42.440$ create and less complications related to

NOTE Confidence: 0.711922212

 $00{:}44{:}42.440 \dashrightarrow 00{:}44{:}45.704$ a capsular scar formation or contracture.

NOTE Confidence: 0.711922212

 $00:44:45.710 \longrightarrow 00:44:48.006$ Now in those 10% of cases where

NOTE Confidence: 0.711922212

 $00{:}44{:}48.006 \dashrightarrow 00{:}44{:}49.884$ patients did not have textured

NOTE Confidence: 0.711922212

00:44:49.884 --> 00:44:52.344 implants at the time of diagnosis,

NOTE Confidence: 0.711922212

 $00:44:52.350 \longrightarrow 00:44:54.240$ it is unclear whether they may

NOTE Confidence: 0.711922212

 $00{:}44{:}54.240 \dashrightarrow 00{:}44{:}55.843$ have had textured expander or

NOTE Confidence: 0.711922212

 $00{:}44{:}55.843 \dashrightarrow 00{:}44{:}57.547$ other texture device in the past.

NOTE Confidence: 0.711922212

 $00:44:57.550 \longrightarrow 00:44:59.884$ So it appears to be strongly

 $00:44:59.884 \longrightarrow 00:45:01.440$ correlated with textured implants

NOTE Confidence: 0.711922212

 $00:45:01.440 \longrightarrow 00:45:03.010$ and even types of texturing.

NOTE Confidence: 0.711922212

 $00:45:03.010 \longrightarrow 00:45:05.426$ Certain manufacturers have seen

NOTE Confidence: 0.711922212

 $00:45:05.426 \longrightarrow 00:45:08.446$ larger incidents of anaplastic large

NOTE Confidence: 0.711922212

 $00:45:08.446 \longrightarrow 00:45:11.706$ cell lymphoma as compared to others.

NOTE Confidence: 0.711922212

 $00:45:11.710 \longrightarrow 00:45:14.212$ It is a scary disease that

NOTE Confidence: 0.711922212

00:45:14.212 --> 00:45:15.880 presents often with Blumberg,

NOTE Confidence: 0.711922212

 $00:45:15.880 \longrightarrow 00:45:18.045$ asymptomatic swelling of the breast

NOTE Confidence: 0.711922212

 $00{:}45{:}18.045 \dashrightarrow 00{:}45{:}20.923$ and treatment is really removal of an

NOTE Confidence: 0.711922212

 $00:45:20.923 \longrightarrow 00:45:22.861$ implant and complete removal of this

NOTE Confidence: 0.711922212

 $00{:}45{:}22.861 \dashrightarrow 00{:}45{:}25.318$ scar or capsule around the implant.

NOTE Confidence: 0.711922212

 $00:45:25.320 \longrightarrow 00:45:27.665$ In rare cases there is need for

NOTE Confidence: 0.711922212

 $00:45:27.665 \longrightarrow 00:45:30.069$ systemic therapy and there have been

NOTE Confidence: 0.711922212

00:45:30.069 --> 00:45:32.284 unfortunately cases reported of deaths,

NOTE Confidence: 0.711922212

 $00:45:32.290 \longrightarrow 00:45:34.768$ but the with transition to smooth

NOTE Confidence: 0.711922212

 $00:45:34.768 \longrightarrow 00:45:37.180$ implants and smooth tissue expanders.

 $00:45:37.180 \longrightarrow 00:45:39.770$ This should really be largely

NOTE Confidence: 0.711922212

 $00:45:39.770 \longrightarrow 00:45:43.900$ minimized if not. Almost eliminated.

NOTE Confidence: 0.711922212

 $00:45:43.900 \longrightarrow 00:45:46.448$ Now let's switch gears to tallages or

NOTE Confidence: 0.711922212

 $00:45:46.448 \longrightarrow 00:45:48.990$ patient's own tissue breast reconstruction.

NOTE Confidence: 0.711922212

 $00:45:48.990 \longrightarrow 00:45:50.634$ There are studies showing

NOTE Confidence: 0.711922212

 $00:45:50.634 \longrightarrow 00:45:52.278$ superior long term outcomes,

NOTE Confidence: 0.711922212

 $00:45:52.280 \longrightarrow 00:45:54.534$ so it's I always tell my patients

NOTE Confidence: 0.711922212

00:45:54.534 --> 00:45:56.230 there's big upfront investment,

NOTE Confidence: 0.711922212

00:45:56.230 --> 00:45:59.767 but the long term there is a better aging,

NOTE Confidence: 0.711922212

 $00:45:59.770 \longrightarrow 00:46:01.456$ less concerns about the exchange of

NOTE Confidence: 0.711922212

 $00{:}46{:}01.456 \dashrightarrow 00{:}46{:}03.309$ an implant in case they rupture,

NOTE Confidence: 0.711922212

 $00:46:03.310 \longrightarrow 00:46:06.070$ and any complications ready to the

NOTE Confidence: 0.711922212

 $00{:}46{:}06.070 \dashrightarrow 00{:}46{:}07.910$ implants are essentially eliminated,

NOTE Confidence: 0.711922212

 $00:46:07.910 \longrightarrow 00:46:09.130$ and in studies again,

NOTE Confidence: 0.711922212

 $00:46:09.130 \longrightarrow 00:46:11.449$ it's been shown that patients are satisfied

 $00:46:11.449 \longrightarrow 00:46:13.579$ more than with implants overwhelmed.

NOTE Confidence: 0.711922212

 $00:46:13.580 \longrightarrow 00:46:15.950$ Period of time now the donor

NOTE Confidence: 0.711922212

 $00:46:15.950 \longrightarrow 00:46:17.970$ site that's most commonly used.

NOTE Confidence: 0.711922212

 $00:46:17.970 \longrightarrow 00:46:20.526$ The workhorse is the lower abdomen

NOTE Confidence: 0.711922212

 $00:46:20.526 \longrightarrow 00:46:22.230$ and traditionally in back.

NOTE Confidence: 0.711922212

 $00:46:22.230 \longrightarrow 00:46:23.349$ In the 70s.

NOTE Confidence: 0.711922212

 $00:46:23.349 \longrightarrow 00:46:25.214$ Technique that utilized the detachment

NOTE Confidence: 0.711922212

 $00:46:25.214 \longrightarrow 00:46:27.573$ of the muscle and using an island

NOTE Confidence: 0.711922212

 $00:46:27.573 \longrightarrow 00:46:30.242$ that you see in this ellipse on the

NOTE Confidence: 0.711922212

00:46:30.242 --> 00:46:32.366 abdomen of skin and subcutaneous fat

NOTE Confidence: 0.711922212

 $00{:}46{:}32.366 {\:\dashrightarrow\:} 00{:}46{:}35.130$ to build the breast has sacrificed

NOTE Confidence: 0.711922212

 $00{:}46{:}35.130 \dashrightarrow 00{:}46{:}38.117$ one of the straight muscles of

NOTE Confidence: 0.711922212

00:46:38.117 --> 00:46:40.077 the abdomen rectus muscles.

NOTE Confidence: 0.711922212

 $00:46:40.080 \longrightarrow 00:46:42.720$ And that caused there is abdominal

NOTE Confidence: 0.711922212

 $00:46:42.720 \longrightarrow 00:46:44.998$ strength problems or even weakness

NOTE Confidence: 0.711922212

 $00:46:44.998 \longrightarrow 00:46:46.758$ or bulges or hernias.

 $00{:}46{:}46.760 \dashrightarrow 00{:}46{:}49.308$ This is why this what's called tram

NOTE Confidence: 0.711922212

 $00:46:49.308 \longrightarrow 00:46:51.489$ flap or transverse rectus abdominis

NOTE Confidence: 0.711922212

 $00:46:51.489 \longrightarrow 00:46:54.019$ muscular cutaneous flap was largely

NOTE Confidence: 0.711922212

 $00{:}46{:}54.019 \dashrightarrow 00{:}46{:}55.950$ replaced by perforator flap,

NOTE Confidence: 0.711922212

 $00{:}46{:}55.950 \dashrightarrow 00{:}46{:}58.212$ where we no longer sacrifice the

NOTE Confidence: 0.711922212

00:46:58.212 --> 00:47:00.628 muscle but rather split the muscle

NOTE Confidence: 0.711922212

 $00:47:00.628 \longrightarrow 00:47:02.718$ and find individual vessels that

NOTE Confidence: 0.711922212

00:47:02.718 --> 00:47:05.279 feed the overlying skin and fat in

NOTE Confidence: 0.711922212

00:47:05.279 --> 00:47:08.760 order to build the breast that way.

NOTE Confidence: 0.711922212

00:47:08.760 --> 00:47:09.124 Uhm,

NOTE Confidence: 0.711922212

 $00:47:09.124 \longrightarrow 00:47:10.580$ theoretically there should be

NOTE Confidence: 0.711922212

00:47:10.580 --> 00:47:12.036 intact much left behind,

NOTE Confidence: 0.711922212

 $00{:}47{:}12.040 \dashrightarrow 00{:}47{:}14.055$ although there's a certain degree

NOTE Confidence: 0.711922212

00:47:14.055 --> 00:47:16.655 of damage that occurs just by

NOTE Confidence: 0.711922212

 $00:47:16.655 \longrightarrow 00:47:18.699$ dissecting the perforating vessels.

00:47:18.700 --> 00:47:20.675 Results can be remarkably nice

NOTE Confidence: 0.711922212

00:47:20.675 --> 00:47:22.848 again in ***** sparing mastectomy,

NOTE Confidence: 0.711922212

 $00:47:22.848 \longrightarrow 00:47:25.318$ but more commonly these are

NOTE Confidence: 0.711922212

00:47:25.318 --> 00:47:26.800 skin sparing mastectomies

NOTE Confidence: 0.864866894705882

 $00:47:26.871 \longrightarrow 00:47:29.193$ that result in replacement of the

NOTE Confidence: 0.864866894705882

00:47:29.193 --> 00:47:31.385 ****** areola complex with skin coming

NOTE Confidence: 0.864866894705882

 $00:47:31.385 \longrightarrow 00:47:33.538$ from the abdominal flab and this

NOTE Confidence: 0.864866894705882

 $00:47:33.538 \longrightarrow 00:47:35.834$ is the score of the donor site and

NOTE Confidence: 0.864866894705882

 $00:47:35.834 \longrightarrow 00:47:37.838$ islands that come from the abdomen.

NOTE Confidence: 0.864866894705882

 $00:47:37.840 \longrightarrow 00:47:40.948$ These islands can be later changed or

NOTE Confidence: 0.864866894705882

 $00{:}47{:}40.948 \dashrightarrow 00{:}47{:}44.316$ reduced or made circular as as needed

NOTE Confidence: 0.864866894705882

 $00{:}47{:}44.316 \dashrightarrow 00{:}47{:}47.232$ and the revisions are fairly common.

NOTE Confidence: 0.864866894705882

 $00:47:47.240 \longrightarrow 00:47:49.900$ This is one of the such an example where the

NOTE Confidence: 0.864866894705882

 $00:47:49.965 \longrightarrow 00:47:52.629$ initial islands of skin were just too large.

NOTE Confidence: 0.864866894705882

 $00:47:52.630 \longrightarrow 00:47:54.748$ They're important early on for monitoring

NOTE Confidence: 0.864866894705882

 $00:47:54.748 \longrightarrow 00:47:56.889$ of the healthiness of the tissues,

 $00:47:56.890 \longrightarrow 00:48:00.022$ but later can be removed and the shape of

NOTE Confidence: 0.864866894705882

 $00{:}48{:}00.022 \dashrightarrow 00{:}48{:}03.090$ the breast can be remarkably improved.

NOTE Confidence: 0.864866894705882

00:48:03.090 --> 00:48:05.862 Now, in patients that don't have

NOTE Confidence: 0.864866894705882

00:48:05.862 --> 00:48:08.660 enough subcutaneous fat and often don't

NOTE Confidence: 0.864866894705882

 $00:48:08.660 \longrightarrow 00:48:12.072$ have enough even tissue on the chest

NOTE Confidence: 0.864866894705882

00:48:12.072 --> 00:48:14.557 to reconstruct with implant alone,

NOTE Confidence: 0.864866894705882

 $00:48:14.560 \longrightarrow 00:48:16.942$ we still use a combination of

NOTE Confidence: 0.864866894705882

00:48:16.942 --> 00:48:18.530 autologous or patients own.

NOTE Confidence: 0.864866894705882 00:48:18.530 --> 00:48:19.604 In this case,

NOTE Confidence: 0.864866894705882

 $00:48:19.604 \longrightarrow 00:48:21.036$ latissimus dorsi broad muscle

NOTE Confidence: 0.864866894705882

 $00:48:21.036 \longrightarrow 00:48:22.922$ of the back has brought.

NOTE Confidence: 0.864866894705882

 $00:48:22.922 \longrightarrow 00:48:25.358$ Forward and wrapped around an implant.

NOTE Confidence: 0.864866894705882

 $00:48:25.360 \longrightarrow 00:48:26.940$ So this is this.

NOTE Confidence: 0.864866894705882

 $00:48:26.940 \longrightarrow 00:48:29.310$ Is Miss Dorsey muscular cutaneous weapon

NOTE Confidence: 0.864866894705882

 $00:48:29.389 \longrightarrow 00:48:32.595$ implant and that allows us to reconstruct

 $00:48:32.595 \longrightarrow 00:48:34.540$ president is challenging patients

NOTE Confidence: 0.864866894705882

 $00:48:34.540 \longrightarrow 00:48:37.025$ with inadequate amount of tissues.

NOTE Confidence: 0.864866894705882

 $00:48:37.030 \longrightarrow 00:48:39.406$ Now we have heard a little bit about

NOTE Confidence: 0.864866894705882

 $00:48:39.406 \longrightarrow 00:48:41.471$ breast cancer related lymphoedema we

NOTE Confidence: 0.864866894705882

 $00:48:41.471 \longrightarrow 00:48:44.000$ are now and it's one of the new things

NOTE Confidence: 0.864866894705882

 $00:48:44.073 \longrightarrow 00:48:46.663$ that is very interesting and and the

NOTE Confidence: 0.864866894705882

00:48:46.663 --> 00:48:48.911 early results are just trickling in

NOTE Confidence: 0.864866894705882

 $00:48:48.911 \longrightarrow 00:48:51.173$ from all over the United States.

NOTE Confidence: 0.864866894705882

 $00:48:51.180 \longrightarrow 00:48:53.084$ There are new treatments that allow us,

NOTE Confidence: 0.864866894705882

 $00:48:53.090 \longrightarrow 00:48:55.070$ especially early on,

NOTE Confidence: 0.864866894705882

 $00{:}48{:}55.070 \dashrightarrow 00{:}48{:}57.050$ perform various interventions

NOTE Confidence: 0.864866894705882

 $00:48:57.050 \longrightarrow 00:48:59.690$ that bypass the obstructions.

NOTE Confidence: 0.864866894705882

 $00:48:59.690 \longrightarrow 00:49:02.075$ They're typically related to dissection

NOTE Confidence: 0.864866894705882

 $00:49:02.075 \longrightarrow 00:49:05.569$ of the armpit as well as radiation

NOTE Confidence: 0.864866894705882

 $00:49:05.569 \longrightarrow 00:49:08.139$ and treated by either connecting.

NOTE Confidence: 0.864866894705882

 $00:49:08.140 \longrightarrow 00:49:09.890$ Now the lymphatic vessels directly

 $00:49:09.890 \longrightarrow 00:49:10.940$ through the veins.

NOTE Confidence: 0.864866894705882

 $00:49:10.940 \longrightarrow 00:49:13.478$ What's called Lynn for the venous

NOTE Confidence: 0.864866894705882

 $00:49:13.478 \longrightarrow 00:49:15.620$ anastomosis or transfer of lymph

NOTE Confidence: 0.864866894705882

 $00:49:15.620 \longrightarrow 00:49:17.864$ nodes from elsewhere in the body

NOTE Confidence: 0.864866894705882

 $00:49:17.864 \longrightarrow 00:49:20.400$ to provide the breach of drainage.

NOTE Confidence: 0.864866894705882

 $00:49:20.400 \longrightarrow 00:49:22.696$ So if I were to summarize some of

NOTE Confidence: 0.864866894705882

 $00:49:22.696 \longrightarrow 00:49:24.120$ the new techniques,

NOTE Confidence: 0.864866894705882

 $00:49:24.120 \longrightarrow 00:49:26.205$ gradually replacing breast

NOTE Confidence: 0.864866894705882

00:49:26.205 --> 00:49:28.985 with structural fat grafting,

NOTE Confidence: 0.864866894705882

00:49:28.990 --> 00:49:30.442 removing implant or expander,

NOTE Confidence: 0.864866894705882

 $00{:}49{:}30.442 \dashrightarrow 00{:}49{:}33.537$ deflating it is one of the novel ways

NOTE Confidence: 0.864866894705882

 $00:49:33.537 \longrightarrow 00:49:35.647$ that we're looking at potentially

NOTE Confidence: 0.864866894705882

 $00{:}49{:}35.647 {\:\dashrightarrow\:} 00{:}49{:}37.655$ treating patients in order to

NOTE Confidence: 0.864866894705882

 $00{:}49{:}37.655 \dashrightarrow 00{:}49{:}39.677$ maximize the natural feel of the

NOTE Confidence: 0.864866894705882

 $00{:}49{:}39.677 \dashrightarrow 00{:}49{:}41.816$ breast and minimize the need for

 $00:49:41.816 \longrightarrow 00:49:44.558$ implant and in some cases the implant

NOTE Confidence: 0.864866894705882

 $00:49:44.558 \longrightarrow 00:49:46.498$ can be removed altogether.

NOTE Confidence: 0.864866894705882

 $00:49:46.500 \longrightarrow 00:49:48.858$ In cases where we really need,

NOTE Confidence: 0.864866894705882

 $00:49:48.860 \longrightarrow 00:49:51.226$ we don't have enough abdominal donor site.

NOTE Confidence: 0.864866894705882

 $00:49:51.230 \longrightarrow 00:49:53.495$ There are other potential donor

NOTE Confidence: 0.864866894705882

 $00:49:53.495 \longrightarrow 00:49:55.307$ sites for reconstructing breasts

NOTE Confidence: 0.864866894705882

 $00:49:55.307 \longrightarrow 00:49:57.742$ and outside of the stomach it can

NOTE Confidence: 0.864866894705882

 $00:49:57.742 \longrightarrow 00:49:59.960$ be hipped areas or inner thighs,

NOTE Confidence: 0.864866894705882

 $00{:}49{:}59.960 \dashrightarrow 00{:}50{:}02.240$ and then finally lymphatic surgery

NOTE Confidence: 0.864866894705882

 $00:50:02.240 \longrightarrow 00:50:04.064$ for upper extremity lymphoedema.

NOTE Confidence: 0.864866894705882

 $00:50:04.070 \longrightarrow 00:50:08.150$ Those are just some of these new advances.

NOTE Confidence: 0.864866894705882

 $00:50:08.150 \longrightarrow 00:50:08.963$ But in summary,

NOTE Confidence: 0.864866894705882

 $00:50:08.963 \longrightarrow 00:50:10.860$ I would say almost every patient has

NOTE Confidence: 0.864866894705882

 $00:50:10.914 \longrightarrow 00:50:12.739$ an option of breast reconstruction.

NOTE Confidence: 0.864866894705882

 $00:50:12.740 \longrightarrow 00:50:13.751$ There are very,

NOTE Confidence: 0.864866894705882

 $00:50:13.751 \longrightarrow 00:50:15.773$ very few exceptions where I would

00:50:15.773 --> 00:50:17.742 feel it's not recommended there.

NOTE Confidence: 0.864866894705882

 $00:50:17.742 \longrightarrow 00:50:18.990$ They should be tailored.

NOTE Confidence: 0.864866894705882

 $00:50:18.990 \longrightarrow 00:50:20.360$ All of those options should

NOTE Confidence: 0.864866894705882

 $00:50:20.360 \longrightarrow 00:50:21.730$ be tailored to each option,

NOTE Confidence: 0.864866894705882

00:50:21.730 --> 00:50:23.210 their overall medical status,

NOTE Confidence: 0.864866894705882 $00:50:23.210 \longrightarrow 00:50:23.950$ their body,

NOTE Confidence: 0.864866894705882

 $00:50:23.950 \longrightarrow 00:50:25.402$ and their personal preferences.

NOTE Confidence: 0.864866894705882

 $00{:}50{:}25.402 \to 00{:}50{:}27.580$ Not every body can invest the time

NOTE Confidence: 0.864866894705882

 $00:50:27.644 \longrightarrow 00:50:29.756$ of recovery to use their own

NOTE Confidence: 0.864866894705882

 $00:50:29.756 \longrightarrow 00:50:31.164$ tissues for breast reconstruction,

NOTE Confidence: 0.864866894705882

 $00{:}50{:}31.170 \dashrightarrow 00{:}50{:}33.786$ but it's always an option later.

NOTE Confidence: 0.864866894705882

 $00{:}50{:}33.790 \dashrightarrow 00{:}50{:}35.757$ I would say that more than half

NOTE Confidence: 0.864866894705882

 $00{:}50{:}35.757 \dashrightarrow 00{:}50{:}36.977$ of breast reconstructions require

NOTE Confidence: 0.864866894705882

00:50:36.977 --> 00:50:38.277 more than one operations.

NOTE Confidence: 0.864866894705882

 $00:50:38.280 \longrightarrow 00:50:39.765$ And that's important to remember

00:50:39.765 --> 00:50:41.087 whether it's ***** reconstruction

NOTE Confidence: 0.864866894705882

 $00{:}50{:}41.087 {\:\dashrightarrow\:} 00{:}50{:}43.222$ or revision revisions of shape

NOTE Confidence: 0.864866894705882

 $00:50:43.222 \longrightarrow 00:50:44.930$ for the two really

NOTE Confidence: 0.817295381875

 $00:50:45.002 \longrightarrow 00:50:47.738$ enhance the cosmetic appearance are very,

NOTE Confidence: 0.817295381875

00:50:47.740 --> 00:50:49.204 very common. And finally,

NOTE Confidence: 0.817295381875

 $00:50:49.204 \longrightarrow 00:50:51.034$ it's important to remember that

NOTE Confidence: 0.817295381875

 $00:50:51.034 \longrightarrow 00:50:52.507$ every reconstructive operation

NOTE Confidence: 0.817295381875

00:50:52.507 --> 00:50:54.599 ends as aesthetic operations,

NOTE Confidence: 0.817295381875

 $00{:}50{:}54.600 \dashrightarrow 00{:}50{:}57.576$ so the nice result is really

NOTE Confidence: 0.817295381875

 $00:50:57.576 \longrightarrow 00:50:59.560$ paramount of our efforts.

NOTE Confidence: 0.817295381875

 $00{:}50{:}59.560 \dashrightarrow 00{:}51{:}00.890$ And with that, thank you very much.

NOTE Confidence: 0.744379996666667

00:51:03.820 --> 00:51:06.886 Thank you so much Doctor Pomahac.

NOTE Confidence: 0.744379996666667

 $00:51:06.890 \longrightarrow 00:51:09.766$ We have a few questions in our chat

NOTE Confidence: 0.744379996666667

 $00:51:09.766 \longrightarrow 00:51:11.638$ box and to the audience members.

NOTE Confidence: 0.744379996666667

 $00:51:11.640 \longrightarrow 00:51:14.510$ Feel free to continue to put your

NOTE Confidence: 0.744379996666667

 $00{:}51{:}14.510 \dashrightarrow 00{:}51{:}17.350$ questions in the chat for Doctor Park

00:51:17.350 --> 00:51:20.150 and perhaps you also Dr Palmer height.

NOTE Confidence: 0.744379996666667

 $00:51:20.150 \longrightarrow 00:51:21.668$ There is a question about *****

NOTE Confidence: 0.744379996666667

00:51:21.670 --> 00:51:24.982 sparing procedures and if one of you or

NOTE Confidence: 0.744379996666667

 $00:51:24.982 \longrightarrow 00:51:28.459$ both of you would like to talk about.

NOTE Confidence: 0.744379996666667

00:51:28.460 --> 00:51:29.937 Who is a candidate for a ******

NOTE Confidence: 0.744379996666667

 $00:51:29.940 \longrightarrow 00:51:30.758$ sparing mastectomies?

NOTE Confidence: 0.744379996666667

00:51:30.758 --> 00:51:32.394 On what considerations should

NOTE Confidence: 0.744379996666667

 $00:51:32.394 \longrightarrow 00:51:34.030$ be taken for that?

NOTE Confidence: 0.940161596666667

 $00{:}51{:}34.500 \dashrightarrow 00{:}51{:}39.300$ Sure, so I think this is Carol's question.

NOTE Confidence: 0.940161596666667

 $00:51:39.300 \longrightarrow 00:51:41.274$ So what is the recurrence of disease

NOTE Confidence: 0.940161596666667

 $00:51:41.274 \longrightarrow 00:51:43.353$ in those that opt to spare their

NOTE Confidence: 0.940161596666667

 $00:51:43.353 \longrightarrow 00:51:44.820$ ****** and are they at higher risk?

NOTE Confidence: 0.940161596666667

 $00:51:44.820 \longrightarrow 00:51:46.145$ So there are indications for

NOTE Confidence: 0.940161596666667

00:51:46.145 --> 00:51:47.268 ***** sparing mastectomy.

NOTE Confidence: 0.940161596666667

00:51:47.268 --> 00:51:50.271 We really consider it like any other

00:51:50.271 --> 00:51:52.667 skin margin at this day and age.

NOTE Confidence: 0.940161596666667

 $00:51:52.670 \longrightarrow 00:51:55.620$ We also so as long as the cancer is not

NOTE Confidence: 0.940161596666667

00:51:55.695 --> 00:51:58.534 frankly right behind the ***** we think

NOTE Confidence: 0.940161596666667

 $00:51:58.534 \longrightarrow 00:52:00.263$ that you know uncle logically it's safe

NOTE Confidence: 0.940161596666667

00:52:00.263 --> 00:52:01.924 to do the ***** sparing mastectomy.

NOTE Confidence: 0.940161596666667

00:52:01.924 --> 00:52:05.604 We also also have a fail of a fail safe

NOTE Confidence: 0.940161596666667

 $00:52:05.604 \longrightarrow 00:52:08.436$ step in the operating room where we do

NOTE Confidence: 0.940161596666667

00:52:08.519 --> 00:52:11.078 a ****** core biopsy and make sure so

NOTE Confidence: 0.940161596666667

00:52:11.078 --> 00:52:13.934 you know we do the ***** sparing mastectomy.

NOTE Confidence: 0.940161596666667

 $00:52:13.934 \longrightarrow 00:52:16.016$ We take any tissue that's right

NOTE Confidence: 0.940161596666667

 $00:52:16.016 \longrightarrow 00:52:18.642$ behind the ***** and we had that

NOTE Confidence: 0.940161596666667

 $00:52:18.642 \longrightarrow 00:52:20.557$ specially tested by the pathologist

NOTE Confidence: 0.940161596666667

 $00:52:20.557 \longrightarrow 00:52:23.060$ with intraoperative frozen section.

NOTE Confidence: 0.940161596666667

 $00:52:23.060 \longrightarrow 00:52:25.562$ They look for any appearance of

NOTE Confidence: 0.940161596666667

 $00:52:25.562 \longrightarrow 00:52:28.443$ any cancer cells, and you know.

NOTE Confidence: 0.940161596666667

 $00:52:28.443 \longrightarrow 00:52:30.607$ So that's another safeguard.

 $00:52:30.610 \longrightarrow 00:52:31.834$ Other than that,

NOTE Confidence: 0.940161596666667

 $00:52:31.834 \longrightarrow 00:52:34.282$ the other kind of very conservative,

NOTE Confidence: 0.940161596666667

00:52:34.290 --> 00:52:37.796 but in more and more relaxing criteria

NOTE Confidence: 0.940161596666667

00:52:37.796 --> 00:52:39.926 for ****** sparing mastectomy generally,

NOTE Confidence: 0.940161596666667

 $00:52:39.930 \longrightarrow 00:52:42.100$ folks that are smaller breasted,

NOTE Confidence: 0.940161596666667

00:52:42.100 --> 00:52:44.728 have less risk of something called

NOTE Confidence: 0.940161596666667

 $00:52:44.728 \longrightarrow 00:52:47.490 ****** necrosis or ****** death.$

NOTE Confidence: 0.940161596666667

 $00:52:47.490 \longrightarrow 00:52:50.058$ And folks that have less breast

NOTE Confidence: 0.940161596666667

 $00{:}52{:}50.058 \dashrightarrow 00{:}52{:}52.528$ ptosis or droopiness of the breast

NOTE Confidence: 0.940161596666667

 $00:52:52.528 \longrightarrow 00:52:54.538$ basically also have less complications

NOTE Confidence: 0.940161596666667

 $00:52:54.538 \longrightarrow 00:52:56.374$ with their ****** potentially

NOTE Confidence: 0.940161596666667

 $00:52:56.374 \longrightarrow 00:52:58.790$ having issues post operatively.

NOTE Confidence: 0.940161596666667

 $00{:}52{:}58.790 \dashrightarrow 00{:}53{:}01.716$ But I always tell patients if this

NOTE Confidence: 0.940161596666667

 $00:53:01.716 \longrightarrow 00:53:04.143$ very important to you could always

NOTE Confidence: 0.940161596666667

00:53:04.143 --> 00:53:07.183 try it and you know if the ***** ends

 $00:53:07.183 \longrightarrow 00:53:08.941$ up being involved in the interrupter

NOTE Confidence: 0.940161596666667

00:53:08.941 --> 00:53:10.585 frozen section then we'll we'll deal

NOTE Confidence: 0.940161596666667

 $00:53:10.585 \longrightarrow 00:53:12.430$ with it at that point and remove it.

NOTE Confidence: 0.940161596666667

 $00:53:12.430 \longrightarrow 00:53:15.126$ But we could at least give it a

NOTE Confidence: 0.940161596666667

 $00:53:15.126 \longrightarrow 00:53:17.449$ good shot from the beginning.

NOTE Confidence: 0.940161596666667

 $00{:}53{:}17.450 \dashrightarrow 00{:}53{:}21.728$ Also, there's great data saying that.

NOTE Confidence: 0.940161596666667

 $00:53:21.730 \longrightarrow 00:53:24.490$ Even in patients that have.

NOTE Confidence: 0.940161596666667

 $00:53:24.490 \longrightarrow 00:53:27.766$ The. BRCA, one or two gene?

NOTE Confidence: 0.940161596666667

 $00:53:27.770 \longrightarrow 00:53:29.732$ So these are very high risk

NOTE Confidence: 0.940161596666667

00:53:29.732 --> 00:53:31.908 patients to develop breast cancer.

NOTE Confidence: 0.940161596666667

00:53:31.908 --> 00:53:33.854 ****** sparing procedure is considered

NOTE Confidence: 0.940161596666667

 $00:53:33.854 \longrightarrow 00:53:36.140$ very safe and that's actually a

NOTE Confidence: 0.940161596666667

 $00:53:36.140 \longrightarrow 00:53:38.290$ preferred method for for preventative

NOTE Confidence: 0.940161596666667

00:53:38.290 --> 00:53:40.400 surgery for ***** sparing mastectomy

NOTE Confidence: 0.940161596666667

 $00:53:40.400 \longrightarrow 00:53:42.450$ for these bracket 1/2 patients.

NOTE Confidence: 0.940161596666667

 $00:53:42.450 \longrightarrow 00:53:44.210$ These patients are generally younger

00:53:44.210 --> 00:53:47.001 in their 20s and they're doing this for

NOTE Confidence: 0.940161596666667

 $00{:}53{:}47.001 \dashrightarrow 00{:}53{:}49.049$ a preventative reason so we love to

NOTE Confidence: 0.940161596666667

00:53:49.049 --> 00:53:50.660 give them ***** sparing mastectomies

NOTE Confidence: 0.940161596666667

 $00:53:50.660 \longrightarrow 00:53:53.635$ so that they could continue on with

NOTE Confidence: 0.940161596666667

 $00:53:53.635 \longrightarrow 00:53:56.190$ their lives with with a good quality.

NOTE Confidence: 0.940161596666667

 $00:53:56.190 \longrightarrow 00:53:57.145$ Life.

NOTE Confidence: 0.940161596666667

 $00:53:57.145 \longrightarrow 00:53:58.100$ Great

NOTE Confidence: 0.76873288

00:53:58.230 --> 00:54:00.820 thank you Doctor Park Dr.

NOTE Confidence: 0.76873288

 $00:54:00.820 \longrightarrow 00:54:02.479$ Going to turn this one to you,

NOTE Confidence: 0.76873288

 $00:54:02.480 \longrightarrow 00:54:04.585$ which is one of the

NOTE Confidence: 0.76873288

 $00{:}54{:}04.585 \dashrightarrow 00{:}54{:}06.269$ audience members is asking.

NOTE Confidence: 0.76873288

 $00{:}54{:}06.270 \dashrightarrow 00{:}54{:}08.822$ I guess the broader issue of how we

NOTE Confidence: 0.76873288

 $00{:}54{:}08.822 \dashrightarrow 00{:}54{:}10.530$ present options to our patients.

NOTE Confidence: 0.76873288

 $00:54:10.530 \longrightarrow 00:54:12.714$ Obviously, we present reconstruction

NOTE Confidence: 0.76873288

 $00:54:12.714 \longrightarrow 00:54:16.707$ options and her point is can come

 $00:54:16.707 \longrightarrow 00:54:18.597$ non-surgical breast replacement

NOTE Confidence: 0.76873288

 $00{:}54{:}18.597 \dashrightarrow 00{:}54{:}21.747$ options such as external prostheses

NOTE Confidence: 0.76873288

00:54:21.747 --> 00:54:24.729 be also discussed prior to surgery,

NOTE Confidence: 0.76873288

 $00:54:24.729 \longrightarrow 00:54:26.544$ so essentially kind of presenting

NOTE Confidence: 0.76873288

 $00:54:26.544 \longrightarrow 00:54:28.937$ the whole gamut and spectrum of care.

NOTE Confidence: 0.80206711

00:54:29.310 --> 00:54:31.710 Yeah, no, I I think it's absolutely true.

NOTE Confidence: 0.80206711

 $00:54:31.710 \longrightarrow 00:54:33.450$ Breast reconstruction is an option.

NOTE Confidence: 0.80206711

 $00:54:33.450 \longrightarrow 00:54:36.397$ It's not a must, and it's always.

NOTE Confidence: 0.80206711

 $00:54:36.400 \longrightarrow 00:54:38.626$ An option to do nothing essentially

NOTE Confidence: 0.80206711

 $00:54:38.626 \longrightarrow 00:54:41.278$ allow the chest to be flat and

NOTE Confidence: 0.80206711

00:54:41.278 --> 00:54:43.098 and fit with matching prosthesis

NOTE Confidence: 0.80206711

 $00:54:43.098 \longrightarrow 00:54:45.382$ as close as it can go as close

NOTE Confidence: 0.80206711

 $00:54:45.382 \longrightarrow 00:54:47.664$ as it can to the natural side.

NOTE Confidence: 0.80206711

 $00:54:47.670 \longrightarrow 00:54:49.546$ The other thing that I would say

NOTE Confidence: 0.80206711

 $00:54:49.546 \longrightarrow 00:54:51.310$ is often the remaining one side

NOTE Confidence: 0.80206711

 $00:54:51.310 \longrightarrow 00:54:53.396$ can be too large or too droopy,

 $00:54:53.400 \longrightarrow 00:54:55.325$ so there are options to treat that

NOTE Confidence: 0.80206711

 $00{:}54{:}55.325 \dashrightarrow 00{:}54{:}57.302$ up that one residual healthy breast

NOTE Confidence: 0.80206711

00:54:57.302 --> 00:54:59.850 with either Lyft or reduction so that

NOTE Confidence: 0.80206711

 $00:54:59.917 \longrightarrow 00:55:02.065$ it's easier to match the prosthesis.

NOTE Confidence: 0.80206711

 $00:55:02.070 \longrightarrow 00:55:03.942$ So all of those are options that can

NOTE Confidence: 0.80206711

 $00:55:03.942 \longrightarrow 00:55:05.381$ be discussed and certainly should

NOTE Confidence: 0.80206711

 $00:55:05.381 \longrightarrow 00:55:06.906$ be discussed during the visit.

NOTE Confidence: 0.80206711

 $00{:}55{:}06.910 \dashrightarrow 00{:}55{:}08.840$ Whether it's with surgical oncologist

NOTE Confidence: 0.80206711

00:55:08.840 --> 00:55:09.998 or plastic surgeon.

NOTE Confidence: 0.80206062

 $00:55:10.910 \longrightarrow 00:55:14.949$ Great thank you all kind of pose.

NOTE Confidence: 0.80206062

 $00:55:14.950 \longrightarrow 00:55:17.180$ Pose a question to our

NOTE Confidence: 0.80206062

00:55:17.180 --> 00:55:18.964 panel members about age.

NOTE Confidence: 0.80206062

 $00:55:18.970 \longrightarrow 00:55:22.476$ We have come a long way to kind of

NOTE Confidence: 0.80206062

 $00:55:22.476 \longrightarrow 00:55:24.142$ as we kind of continue the theme

NOTE Confidence: 0.80206062

 $00:55:24.142 \longrightarrow 00:55:25.989$ of personalizing our therapies.

00:55:25.990 --> 00:55:28.104 Wanted to kind of get your thoughts

NOTE Confidence: 0.80206062

 $00{:}55{:}28.104 \dashrightarrow 00{:}55{:}30.984$ on the age of the patient and how

NOTE Confidence: 0.80206062

 $00:55:30.984 \longrightarrow 00:55:32.889$ that may impact or decision-making.

NOTE Confidence: 0.80206062

 $00:55:32.890 \longrightarrow 00:55:35.368$ I'll start with medical oncology by

NOTE Confidence: 0.80206062

 $00:55:35.368 \longrightarrow 00:55:38.569$ saying that we have really kind of kind

NOTE Confidence: 0.80206062

00:55:38.569 --> 00:55:41.380 of stopped thinking of an age cutoff.

NOTE Confidence: 0.80206062

 $00:55:41.380 \longrightarrow 00:55:43.515$ For certain treatments and medical

NOTE Confidence: 0.80206062

00:55:43.515 --> 00:55:46.117 oncology and really focus on looking

NOTE Confidence: 0.80206062

 $00{:}55{:}46.117 \dashrightarrow 00{:}55{:}48.475$ at the whole patient looking at

NOTE Confidence: 0.80206062

00:55:48.475 --> 00:55:50.778 how functional you are, what what,

NOTE Confidence: 0.80206062

 $00:55:50.778 \longrightarrow 00:55:52.723$ what other medical conditions you

NOTE Confidence: 0.80206062

 $00:55:52.723 \longrightarrow 00:55:55.388$ have and so typically do not have

NOTE Confidence: 0.80206062

 $00{:}55{:}55.388 \dashrightarrow 00{:}55{:}57.518$ an age cutoff for our medical

NOTE Confidence: 0.80206062

 $00{:}55{:}57.589 \dashrightarrow 00{:}55{:}59.188$ on cology treatments up.

NOTE Confidence: 0.80206062

00:55:59.190 --> 00:56:00.470 You know, with the exceptions,

NOTE Confidence: 0.80206062

 $00:56:00.470 \longrightarrow 00:56:01.226$ of course,

 $00:56:01.226 \longrightarrow 00:56:03.926$ maybe I'll turn it over to Doctor

NOTE Confidence: 0.80206062

 $00{:}56{:}03.926 \dashrightarrow 00{:}56{:}06.482$ Park in terms of age considerations

NOTE Confidence: 0.80206062

 $00:56:06.482 \longrightarrow 00:56:07.760$ and axilla management.

NOTE Confidence: 0.80206062

00:56:07.760 --> 00:56:09.314 And then we'll go to Doctor Palmer,

NOTE Confidence: 0.80206062 00:56:09.320 --> 00:56:09.810 so

NOTE Confidence: 0.820988114285714

00:56:09.820 --> 00:56:12.810 I completely echo Dr Lustberg

NOTE Confidence: 0.820988114285714

00:56:12.810 --> 00:56:15.654 statements about. Uhm, about age.

NOTE Confidence: 0.820988114285714

00:56:15.654 --> 00:56:18.942 I feel like the life expectancy

NOTE Confidence: 0.820988114285714

 $00{:}56{:}18.942 \dashrightarrow 00{:}56{:}22.787$ is getting more and more longer.

NOTE Confidence: 0.820988114285714

00:56:22.790 --> 00:56:23.906 You know, until level,

NOTE Confidence: 0.820988114285714

 $00:56:23.906 \longrightarrow 00:56:26.574$ I think like 70 is the new 50 because

NOTE Confidence: 0.820988114285714

 $00:56:26.574 \longrightarrow 00:56:28.434$ our ability to keep people alive

NOTE Confidence: 0.820988114285714

 $00{:}56{:}28.434 \dashrightarrow 00{:}56{:}30.664$ in a with a good quality of life.

NOTE Confidence: 0.820988114285714

00:56:30.670 --> 00:56:32.638 As is. You know it's not unusual to

NOTE Confidence: 0.820988114285714

 $00:56:32.638 \longrightarrow 00:56:34.390$ have people live to their late 90s.

 $00:56:34.390 \longrightarrow 00:56:36.145$ It's not surprising.

NOTE Confidence: 0.820988114285714

00:56:36.145 --> 00:56:39.070 So I myself also don't.

NOTE Confidence: 0.820988114285714

 $00:56:39.070 \longrightarrow 00:56:41.632$ I alter and curate the surgical

NOTE Confidence: 0.820988114285714

 $00:56:41.632 \longrightarrow 00:56:43.889$ treatment based on patients medical

NOTE Confidence: 0.820988114285714

 $00:56:43.889 \longrightarrow 00:56:46.751$ problems and they're kind of overall

NOTE Confidence: 0.820988114285714

 $00{:}56{:}46.751 \dashrightarrow 00{:}56{:}49.444$ functional status and sometimes on an

NOTE Confidence: 0.820988114285714

 $00:56:49.444 \longrightarrow 00:56:51.328$ older person has a great functional

NOTE Confidence: 0.820988114285714

 $00:56:51.328 \longrightarrow 00:56:53.290$ status and sometimes the person that's.

NOTE Confidence: 0.820988114285714

 $00:56:53.290 \longrightarrow 00:56:54.920$ Decades younger has a terrible

NOTE Confidence: 0.820988114285714

 $00:56:54.920 \longrightarrow 00:56:56.224$ functional status because they

NOTE Confidence: 0.820988114285714

 $00{:}56{:}56.224 \dashrightarrow 00{:}56{:}57.860$ have lots of comorbidities and

NOTE Confidence: 0.820988114285714

 $00:56:57.860 \longrightarrow 00:56:59.425$ lots of other medical problems.

NOTE Confidence: 0.820988114285714

 $00:56:59.430 \longrightarrow 00:57:01.140$ That kind of make them a

NOTE Confidence: 0.820988114285714

 $00{:}57{:}01.140 \dashrightarrow 00{:}57{:}01.995$ higher surgical risk.

NOTE Confidence: 0.820988114285714

 $00:57:02.000 \longrightarrow 00:57:04.304$ So I think about that versus

NOTE Confidence: 0.820988114285714

00:57:04.304 --> 00:57:05.456 actual chronological age.

 $00:57:06.540 \longrightarrow 00:57:08.034$ And I would. I would echo

NOTE Confidence: 0.811118226666667

 $00:57:08.034 \longrightarrow 00:57:09.640$ exactly what it was just said.

NOTE Confidence: 0.811118226666667

00:57:09.640 --> 00:57:12.328 It's a it's really tailored to the patient,

NOTE Confidence: 0.811118226666667

 $00:57:12.330 \longrightarrow 00:57:14.436$ not necessarily age of the patient.

NOTE Confidence: 0.811118226666667

 $00:57:14.440 \longrightarrow 00:57:16.808$ And we work with the patient to make

NOTE Confidence: 0.811118226666667

00:57:16.808 --> 00:57:19.331 sure that they choose option that they

NOTE Confidence: 0.811118226666667

 $00:57:19.331 \longrightarrow 00:57:21.780$ find most palatable and going forward.

NOTE Confidence: 0.811118226666667

 $00:57:21.780 \longrightarrow 00:57:24.660$ I think there's a huge future in in

NOTE Confidence: 0.811118226666667

 $00:57:24.660 \longrightarrow 00:57:26.440$ even specializing the postoperative

NOTE Confidence: 0.811118226666667

 $00:57:26.440 \longrightarrow 00:57:28.905$ protocols for patients above certain

NOTE Confidence: 0.811118226666667

 $00:57:28.905 \longrightarrow 00:57:32.130$ age so that we can we can minimize

NOTE Confidence: 0.811118226666667

 $00:57:32.130 \longrightarrow 00:57:34.231$ complications related to the smaller

NOTE Confidence: 0.811118226666667

 $00{:}57{:}34.231 \dashrightarrow 00{:}57{:}36.787$ reserve or certain of certain types.

NOTE Confidence: 0.811897795

00:57:38.170 --> 00:57:40.074 Doctor Park, I'm going to take this

NOTE Confidence: 0.811897795

 $00:57:40.074 \longrightarrow 00:57:43.454$ one to you. An audience member is

 $00:57:43.454 \longrightarrow 00:57:46.018$ asking about atypical hyperplasia.

NOTE Confidence: 0.811897795

 $00{:}57{:}46.020 \dashrightarrow 00{:}57{:}48.716$ UM and a risk factor for breast cancer.

NOTE Confidence: 0.812125860833333

 $00:57:49.550 \longrightarrow 00:57:51.886$ So atypical ductal hyperplasia,

NOTE Confidence: 0.812125860833333

 $00:57:51.886 \longrightarrow 00:57:55.390$ or atypical or kind of precancerous

NOTE Confidence: 0.812125860833333

 $00:57:55.483 \longrightarrow 00:57:57.705$ or cancerous duct cells that are in

NOTE Confidence: 0.812125860833333

 $00:57:57.705 \longrightarrow 00:58:00.490$ the breast duct, but at a very, very.

NOTE Confidence: 0.812125860833333

00:58:00.490 --> 00:58:03.250 Limited fashion, so we actually treat

NOTE Confidence: 0.812125860833333

 $00:58:03.250 \longrightarrow 00:58:06.510$ this in a outside because the best

NOTE Confidence: 0.812125860833333

 $00:58:06.510 \longrightarrow 00:58:09.611$ way would be like a holistic manner.

NOTE Confidence: 0.812125860833333

 $00:58:09.620 \longrightarrow 00:58:12.280$ We look at the patients risk factors.

NOTE Confidence: 0.812125860833333

 $00{:}58{:}12.280 \longrightarrow 00{:}58{:}14.702$ All of their other breast cancer risk

NOTE Confidence: 0.812125860833333

 $00:58:14.702 \longrightarrow 00:58:17.024$ factors which are many things as well

NOTE Confidence: 0.812125860833333

 $00:58:17.024 \longrightarrow 00:58:19.712$ as their family history and also how it

NOTE Confidence: 0.812125860833333

00:58:19.712 --> 00:58:22.214 looks like on mammography, if it looks.

NOTE Confidence: 0.812125860833333

00:58:22.214 --> 00:58:24.602 Very concerning on mammography and the

NOTE Confidence: 0.812125860833333

 $00:58:24.602 \longrightarrow 00:58:27.452$ vibes ended up being atypical ductal

 $00:58:27.452 \longrightarrow 00:58:29.827$ hyperplasia that would generally push

NOTE Confidence: 0.812125860833333

 $00:58:29.903 \longrightarrow 00:58:32.303$ us to excising it in case there is

NOTE Confidence: 0.812125860833333

 $00:58:32.303 \longrightarrow 00:58:34.554$ a hidden cancer in there somewhere.

NOTE Confidence: 0.812125860833333

 $00:58:34.554 \longrightarrow 00:58:39.579$ That's called upgrade. So that is.

NOTE Confidence: 0.812125860833333

00:58:39.580 --> 00:58:41.602 It's really a multi factorial thing

NOTE Confidence: 0.812125860833333

 $00.58:41.602 \longrightarrow 00.58:44.403$ so if you have a lot of family

NOTE Confidence: 0.812125860833333

 $00:58:44.403 \longrightarrow 00:58:45.783$ history of breast cancer,

NOTE Confidence: 0.812125860833333

 $00{:}58{:}45.790 \dashrightarrow 00{:}58{:}48.360$ other risk factors which include

NOTE Confidence: 0.812125860833333

 $00{:}58{:}48.360 \dashrightarrow 00{:}58{:}50.930$ your reproductive history as well

NOTE Confidence: 0.812125860833333

00:58:51.016 --> 00:58:54.028 as estrogen exposure as well as

NOTE Confidence: 0.812125860833333

00:58:54.028 --> 00:58:56.266 your mammographic findings is it

NOTE Confidence: 0.812125860833333

 $00:58:56.266 \longrightarrow 00:58:58.444$ kind of a suspicious looking masks?

NOTE Confidence: 0.812125860833333

 $00{:}58{:}58.450 --> 00{:}59{:}00.879$ Or is it just you know some

NOTE Confidence: 0.812125860833333

 $00{:}59{:}00.879 \dashrightarrow 00{:}59{:}01.920$ borderline looking calcifications?

NOTE Confidence: 0.812125860833333

 $00:59:01.920 \longrightarrow 00:59:03.648$ All of that is taken together

 $00:59:03.648 \longrightarrow 00:59:05.200$ as well as you know,

NOTE Confidence: 0.812125860833333

 $00:59:05.200 \longrightarrow 00:59:10.226$ age is also consideration to remove it.

NOTE Confidence: 0.812125860833333

 $00:59:10.230 \longrightarrow 00:59:11.628$ And to see if there's an

NOTE Confidence: 0.812125860833333

00:59:11.628 --> 00:59:12.560 underlying cancer in there.

NOTE Confidence: 0.833374845454545

 $00:59:14.850 \longrightarrow 00:59:16.955$ Great, we have one question

NOTE Confidence: 0.833374845454545

 $00{:}59{:}16.955 \dashrightarrow 00{:}59{:}19.550$ is being answered in the chat.

NOTE Confidence: 0.833374845454545

 $00:59:19.550 \longrightarrow 00:59:25.340$ UM so keep an eye on that up and then come.

NOTE Confidence: 0.833374845454545

 $00:59:25.340 \longrightarrow 00:59:26.908$ But this question I'm going to turn

NOTE Confidence: 0.833374845454545

 $00:59:26.908 \dashrightarrow 00:59:28.590$ over to you Doctor Park as well.

NOTE Confidence: 0.833374845454545

00:59:28.590 --> 00:59:33.158 It's about operating on stage zero and DCIS,

NOTE Confidence: 0.833374845454545

 $00{:}59{:}33.160 \dashrightarrow 00{:}59{:}35.290$ and considerations for that. So

NOTE Confidence: 0.599299804

00:59:35.300 --> 00:59:36.584 ductal carcinoma, insight,

NOTE Confidence: 0.599299804

 $00:59:36.584 \longrightarrow 00:59:39.260$ or DCIS, is a pre invasive cancer.

NOTE Confidence: 0.599299804

 $00:59:39.260 \longrightarrow 00:59:41.940$ This is like consider like a step multiple

NOTE Confidence: 0.599299804

 $00:59:41.940 \longrightarrow 00:59:44.448$ steps past atypical ductal hyperplasia.

NOTE Confidence: 0.599299804

00:59:44.450 --> 00:59:47.210 But before invasive breast cancer,

 $00:59:47.210 \longrightarrow 00:59:49.380$ as of now, the textbook treatment is

NOTE Confidence: 0.599299804

 $00{:}59{:}49.380 \dashrightarrow 00{:}59{:}51.449$ very similar to treating a cancer.

NOTE Confidence: 0.599299804

00:59:51.450 --> 00:59:53.052 You remove it where it's treated

NOTE Confidence: 0.599299804

 $00{:}59{:}53.052 \dashrightarrow 00{:}59{:}54.571$ with radiation and if it's

NOTE Confidence: 0.599299804

 $00:59:54.571 \longrightarrow 00:59:55.759$ estrogen receptor positive.

NOTE Confidence: 0.599299804

 $00:59:55.760 \longrightarrow 00:59:58.460$ Also treated with systemic type

NOTE Confidence: 0.599299804

00:59:58.460 --> 01:00:00.620 therapy like endocrine therapy.

NOTE Confidence: 0.599299804

 $01:00:00.620 \longrightarrow 01:00:05.618$ There is some thought that certain low grade.

NOTE Confidence: 0.599299804

01:00:05.620 --> 01:00:07.400 Types of DCIS that strongly

NOTE Confidence: 0.599299804

 $01:00:07.400 \longrightarrow 01:00:08.824$ estrogen receptor positive could

NOTE Confidence: 0.599299804

01:00:08.824 --> 01:00:10.598 be treated non operatively.

NOTE Confidence: 0.599299804

 $01:00:10.600 \longrightarrow 01:00:13.009$ That's an ongoing.

NOTE Confidence: 0.599299804

 $01{:}00{:}13.010 \dashrightarrow 01{:}00{:}16.094$ Point of study and trials are

NOTE Confidence: 0.599299804

01:00:16.094 --> 01:00:18.150 actively the comet trial.

NOTE Confidence: 0.599299804

 $01:00:18.150 \longrightarrow 01:00:20.082$ And a central are being actively done

 $01:00:20.082 \longrightarrow 01:00:22.587$ to see if we could identify a subgroup

NOTE Confidence: 0.599299804

 $01:00:22.587 \longrightarrow 01:00:24.886$ of patients that have DCIS that may

NOTE Confidence: 0.599299804

 $01:00:24.886 \longrightarrow 01:00:26.441$ never really progressed to cancer

NOTE Confidence: 0.599299804

 $01:00:26.441 \longrightarrow 01:00:29.716$ and may be a slow growing indolent

NOTE Confidence: 0.599299804

01:00:29.716 --> 01:00:32.636 static phenomenon for that cohort,

NOTE Confidence: 0.599299804

 $01:00:32.640 \longrightarrow 01:00:34.960$ but definitely for other cohorts.

NOTE Confidence: 0.599299804

01:00:34.960 --> 01:00:37.125 Folks with higher were busy

NOTE Confidence: 0.599299804

01:00:37.125 --> 01:00:39.290 looking cancer cells or high

NOTE Confidence: 0.599299804

 $01:00:39.368 \dashrightarrow 01:00:41.918$ grade cancer cells that are DCIS.

NOTE Confidence: 0.599299804

 $01:00:41.920 \longrightarrow 01:00:44.240$ We we generally stick with standard of care,

NOTE Confidence: 0.599299804

01:00:44.240 --> 01:00:46.960 which is excision or radiation,

NOTE Confidence: 0.599299804

 $01:00:46.960 \longrightarrow 01:00:50.124$ and and it's some sort of systemic

NOTE Confidence: 0.599299804

01:00:50.124 --> 01:00:52.210 hormonal anti hormone therapy.

NOTE Confidence: 0.787442442222222

 $01:00:54.230 \longrightarrow 01:00:57.902$ Create an. Where at the top

NOTE Confidence: 0.78744244222222

01:00:57.902 --> 01:01:01.396 of the hour I wanted to come,

NOTE Confidence: 0.78744244222222

01:01:01.396 --> 01:01:03.466 there's just one more question.

01:01:03.470 --> 01:01:05.030 I'm just gonna answer and then

NOTE Confidence: 0.787442442222222

01:01:05.030 --> 01:01:06.699 I'll close that so so it's

NOTE Confidence: 0.78744244222222

 $01:01:06.699 \longrightarrow 01:01:08.139$ related to the park inhibitor.

NOTE Confidence: 0.787442442222222

 $01:01:08.140 \longrightarrow 01:01:09.172$ All impares a.

NOTE Confidence: 0.787442442222222

 $01:01:09.172 \longrightarrow 01:01:12.078$ Is it recommended for all BRCA one or

NOTE Confidence: 0.78744244222222

01:01:12.078 --> 01:01:14.610 two carriers regardless of cancer type?

NOTE Confidence: 0.78744244222222

 $01:01:14.610 \longrightarrow 01:01:17.137$ So studies are being done for prevention

NOTE Confidence: 0.78744244222222

 $01{:}01{:}17.137 \dashrightarrow 01{:}01{:}19.598$ or risk reduction if there's no cancer,

NOTE Confidence: 0.78744244222222

01:01:19.600 --> 01:01:22.407 but in terms of current FDA approval

NOTE Confidence: 0.78744244222222

01:01:22.407 --> 01:01:24.490 it's indicated for metastatic,

NOTE Confidence: 0.787442442222222

 $01:01:24.490 \longrightarrow 01:01:27.000$ BRCA one and two tumors.

NOTE Confidence: 0.78744244222222

 $01:01:27.000 \longrightarrow 01:01:29.718$ And then the Advent indication for

NOTE Confidence: 0.787442442222222

 $01{:}01{:}29.718 \dashrightarrow 01{:}01{:}32.530$ high risk here positive as well

NOTE Confidence: 0.78744244222222

 $01:01:32.530 \longrightarrow 01:01:34.820$ as triple negative breast cancer.

NOTE Confidence: 0.78744244222222

01:01:34.820 --> 01:01:36.720 Their results have been reported.

01:01:36.720 --> 01:01:38.834 We don't have official FDA approval yet,

NOTE Confidence: 0.78744244222222

 $01:01:38.840 \longrightarrow 01:01:41.976$ but were able to get the agents,

NOTE Confidence: 0.78744244222222

01:01:41.980 --> 01:01:45.940 so I would say in the metastatic setting,

NOTE Confidence: 0.78744244222222

 $01:01:45.940 \longrightarrow 01:01:48.005$ regardless of the cancer type

NOTE Confidence: 0.78744244222222

 $01:01:48.005 \longrightarrow 01:01:49.657$ in the adjuvant setting,

NOTE Confidence: 0.787442442222222

01:01:49.660 --> 01:01:51.380 it would be triple negative and higher risk,

NOTE Confidence: 0.78744244222222

01:01:51.380 --> 01:01:54.430 ER, positive disease for now.

NOTE Confidence: 0.787442442222222

01:01:54.430 --> 01:01:54.720 Well,

NOTE Confidence: 0.78744244222222

 $01:01:54.720 \longrightarrow 01:01:56.460$ thank you to the audience members

NOTE Confidence: 0.787442442222222

 $01:01:56.460 \longrightarrow 01:01:58.090$ for joining on your evening.

NOTE Confidence: 0.787442442222222

 $01{:}01{:}58.090 \dashrightarrow 01{:}02{:}01.098$ A special thank you to my panelists for

NOTE Confidence: 0.78744244222222

 $01:02:01.098 \longrightarrow 01:02:04.410$ a great discussion and wonderful talks.

NOTE Confidence: 0.78744244222222

 $01:02:04.410 \longrightarrow 01:02:06.418$ There will be a number of other smiles,

NOTE Confidence: 0.787442442222222

 $01:02:06.420 \longrightarrow 01:02:08.568$ shares events with different

NOTE Confidence: 0.78744244222222

01:02:08.568 --> 01:02:10.716 topics throughout the month,

NOTE Confidence: 0.78744244222222

 $01:02:10.720 \longrightarrow 01:02:13.648$ so feel free to check out our sites

 $01{:}02{:}13.650 \dashrightarrow 01{:}02{:}17.465$ for those events and thank you again.

NOTE Confidence: 0.787442442222222

 $01:02:17.470 \longrightarrow 01:02:18.178$ Have a good night.