

WEBVTT

NOTE duration: "00:51:26.762"

NOTE Confidence: 0.92428553

00:00:00.080 --> 00:00:01.599 Good evening, and welcome to

NOTE Confidence: 0.92428553

00:00:01.599 --> 00:00:02.420 the SmiloShares

NOTE Confidence: 0.93693656

00:00:02.879 --> 00:00:04.819 early stage breast cancer session

NOTE Confidence: 0.93693656

00:00:04.960 --> 00:00:06.879 entitled what patients and families

NOTE Confidence: 0.93693656

00:00:06.879 --> 00:00:07.620 should know.

NOTE Confidence: 0.9851854

00:00:08.000 --> 00:00:09.599 My name is doctor Rachel

NOTE Confidence: 0.9851854

00:00:09.599 --> 00:00:11.039 Greenup. I'm the chief of

NOTE Confidence: 0.9851854

00:00:11.039 --> 00:00:11.780 breast surgery

NOTE Confidence: 0.94876504

00:00:12.735 --> 00:00:14.495 at the SMILO in the

NOTE Confidence: 0.94876504

00:00:14.495 --> 00:00:15.695 department of surgery at the

NOTE Confidence: 0.94876504

00:00:15.695 --> 00:00:17.135 Yale School of Medicine. And

NOTE Confidence: 0.94876504

00:00:17.135 --> 00:00:18.335 tonight, we have three of

NOTE Confidence: 0.94876504

00:00:18.335 --> 00:00:20.275 our esteemed colleagues, doctor Elizabeth

NOTE Confidence: 0.94876504

00:00:20.335 --> 00:00:20.835 Berger,

NOTE Confidence: 0.88579863

00:00:21.135 --> 00:00:22.895 doctor Siba Haykel, and doctor  
NOTE Confidence: 0.88579863

00:00:22.895 --> 00:00:23.875 Maria Rosenblatt.  
NOTE Confidence: 0.95820516

00:00:24.460 --> 00:00:25.500 And we're gonna start with  
NOTE Confidence: 0.95820516

00:00:25.500 --> 00:00:27.340 doctor Berger who's an assistant  
NOTE Confidence: 0.95820516

00:00:27.340 --> 00:00:28.619 professor of surgery in the  
NOTE Confidence: 0.95820516

00:00:28.619 --> 00:00:30.160 division of surgical oncology  
NOTE Confidence: 0.943267

00:00:30.619 --> 00:00:32.219 who will talking be talking  
NOTE Confidence: 0.943267

00:00:32.219 --> 00:00:33.820 to us about surgical updates  
NOTE Confidence: 0.943267

00:00:33.820 --> 00:00:34.879 and breast cancer.  
NOTE Confidence: 0.9981099

00:00:35.340 --> 00:00:36.720 Doctor Berger, welcome.  
NOTE Confidence: 0.9671126

00:00:39.664 --> 00:00:40.465 Thank you so much for  
NOTE Confidence: 0.9671126

00:00:40.465 --> 00:00:42.144 that kind introduction, doctor Greenup.  
NOTE Confidence: 0.9671126

00:00:42.144 --> 00:00:43.524 Let me share my screen.  
NOTE Confidence: 0.97621304

00:00:49.425 --> 00:00:50.680 I get a thumbs up  
NOTE Confidence: 0.97621304

00:00:50.680 --> 00:00:52.199 so everyone can see it?  
NOTE Confidence: 0.97621304

00:00:52.199 --> 00:00:52.699 Great.

NOTE Confidence: 0.986796  
00:00:53.079 --> 00:00:54.600 So tonight, I I'm gonna  
NOTE Confidence: 0.986796  
00:00:54.600 --> 00:00:55.719 spend about ten to fifteen  
NOTE Confidence: 0.986796  
00:00:55.719 --> 00:00:57.000 minutes talking about some of  
NOTE Confidence: 0.986796  
00:00:57.000 --> 00:00:58.320 the kind of updates of  
NOTE Confidence: 0.986796  
00:00:58.440 --> 00:00:59.640 as far as surgical care  
NOTE Confidence: 0.986796  
00:00:59.640 --> 00:01:01.180 in early stage breast cancer.  
NOTE Confidence: 0.9822235  
00:01:01.800 --> 00:01:03.000 And I appreciate the time,  
NOTE Confidence: 0.9822235  
00:01:03.000 --> 00:01:04.360 and, hopefully, we'll have time  
NOTE Confidence: 0.9822235  
00:01:04.360 --> 00:01:05.020 for questions,  
NOTE Confidence: 0.9883989  
00:01:05.319 --> 00:01:06.165 at the end if there  
NOTE Confidence: 0.9883989  
00:01:06.165 --> 00:01:06.905 are some.  
NOTE Confidence: 0.9711529  
00:01:07.444 --> 00:01:08.565 So the way we stage  
NOTE Confidence: 0.9711529  
00:01:08.565 --> 00:01:09.605 breast cancers in just kind  
NOTE Confidence: 0.9711529  
00:01:09.605 --> 00:01:10.725 of context as far as  
NOTE Confidence: 0.9711529  
00:01:10.725 --> 00:01:12.085 early stage goes is is  
NOTE Confidence: 0.9711529

00:01:12.085 --> 00:01:13.444 multiple different ways. We think  
NOTE Confidence: 0.9711529

00:01:13.444 --> 00:01:14.645 about how big the tumor  
NOTE Confidence: 0.9711529

00:01:14.645 --> 00:01:16.085 size is, how how many  
NOTE Confidence: 0.9711529

00:01:16.085 --> 00:01:16.965 lymph nodes may or may  
NOTE Confidence: 0.9711529

00:01:16.965 --> 00:01:18.565 not be involved, and we  
NOTE Confidence: 0.9711529

00:01:18.565 --> 00:01:19.810 essentially come up with a  
NOTE Confidence: 0.9711529

00:01:19.810 --> 00:01:21.090 stage of breast cancer. And  
NOTE Confidence: 0.9711529

00:01:21.090 --> 00:01:22.450 doctor Rosenblatt will probably get  
NOTE Confidence: 0.9711529

00:01:22.450 --> 00:01:23.650 into this in more detail,  
NOTE Confidence: 0.9711529

00:01:23.650 --> 00:01:25.490 but the biology of tumors  
NOTE Confidence: 0.9711529

00:01:25.490 --> 00:01:26.450 now is so much more  
NOTE Confidence: 0.9711529

00:01:26.450 --> 00:01:27.970 important than stage. But we  
NOTE Confidence: 0.9711529

00:01:27.970 --> 00:01:29.490 still stage breast cancers based  
NOTE Confidence: 0.9711529

00:01:29.490 --> 00:01:30.450 upon the staging,  
NOTE Confidence: 0.9391713

00:01:31.250 --> 00:01:31.750 schema.  
NOTE Confidence: 0.9621449

00:01:32.050 --> 00:01:33.090 And what we'll be talking

NOTE Confidence: 0.9621449  
00:01:33.090 --> 00:01:34.530 about tonight is really this  
NOTE Confidence: 0.9621449  
00:01:34.530 --> 00:01:35.944 category of kind of stage  
NOTE Confidence: 0.9621449  
00:01:35.944 --> 00:01:37.065 zero, if you will, to  
NOTE Confidence: 0.9621449  
00:01:37.065 --> 00:01:38.265 stage two breast cancer is  
NOTE Confidence: 0.9621449  
00:01:38.265 --> 00:01:39.645 considered early stage.  
NOTE Confidence: 0.9619147  
00:01:40.265 --> 00:01:42.025 Stage zero breast cancer, kind  
NOTE Confidence: 0.9619147  
00:01:42.025 --> 00:01:43.625 of an enigma and doesn't  
NOTE Confidence: 0.9619147  
00:01:43.625 --> 00:01:44.905 make that much sense, but  
NOTE Confidence: 0.9619147  
00:01:44.905 --> 00:01:46.025 we really refer to what's  
NOTE Confidence: 0.9619147  
00:01:46.025 --> 00:01:47.784 called ductal carcinoma in situ  
NOTE Confidence: 0.9619147  
00:01:47.784 --> 00:01:49.405 as stage zero breast cancer.  
NOTE Confidence: 0.9812113  
00:01:49.780 --> 00:01:50.660 Or for a lot of  
NOTE Confidence: 0.9812113  
00:01:50.660 --> 00:01:51.540 my patients, when I say  
NOTE Confidence: 0.9812113  
00:01:51.540 --> 00:01:52.920 a precancerous process,  
NOTE Confidence: 0.9929357  
00:01:53.300 --> 00:01:55.060 it's in situ disease, meaning,  
NOTE Confidence: 0.9929357

00:01:55.060 --> 00:01:56.420 you know, the abnormal cells  
NOTE Confidence: 0.9929357

00:01:56.420 --> 00:01:58.100 are contained within the ducts.  
NOTE Confidence: 0.9929357

00:01:58.100 --> 00:01:59.700 There's no invasion that we've  
NOTE Confidence: 0.9929357

00:01:59.700 --> 00:02:00.200 identified.  
NOTE Confidence: 0.9960147

00:02:01.140 --> 00:02:01.880 And so,  
NOTE Confidence: 0.9946135

00:02:02.745 --> 00:02:03.545 you know, we really think  
NOTE Confidence: 0.9946135

00:02:03.545 --> 00:02:04.604 that this is a precancerous  
NOTE Confidence: 0.9946135

00:02:04.825 --> 00:02:05.945 lesion or stage  
NOTE Confidence: 0.87153566

00:02:09.705 --> 00:02:10.825 We still think that we  
NOTE Confidence: 0.87153566

00:02:10.825 --> 00:02:12.044 should take all of DCIS  
NOTE Confidence: 0.9828281

00:02:12.345 --> 00:02:13.705 out. We should remove it  
NOTE Confidence: 0.9828281

00:02:13.705 --> 00:02:14.205 surgically  
NOTE Confidence: 0.99934465

00:02:14.810 --> 00:02:16.110 because we thought all DCIS  
NOTE Confidence: 0.99934465

00:02:16.409 --> 00:02:17.930 became an invasive cancer at  
NOTE Confidence: 0.99934465

00:02:17.930 --> 00:02:18.669 some point.  
NOTE Confidence: 0.980751

00:02:19.530 --> 00:02:20.650 Now what we know with

NOTE Confidence: 0.980751  
00:02:20.650 --> 00:02:23.069 ongoing clinical trials is maybe  
NOTE Confidence: 0.980751  
00:02:23.129 --> 00:02:23.790 some DCIS  
NOTE Confidence: 0.98218375  
00:02:24.169 --> 00:02:25.790 never becomes invasive cancers,  
NOTE Confidence: 0.989786  
00:02:26.169 --> 00:02:27.549 and we can actually safely  
NOTE Confidence: 0.9869543  
00:02:27.945 --> 00:02:30.585 observe or survey DCIS without  
NOTE Confidence: 0.9869543  
00:02:30.585 --> 00:02:32.365 actually having to remove it.  
NOTE Confidence: 0.9869543  
00:02:32.505 --> 00:02:33.565 So stay tuned.  
NOTE Confidence: 0.9194055  
00:02:33.945 --> 00:02:35.305 Hopefully, in maybe two thousand  
NOTE Confidence: 0.9194055  
00:02:35.305 --> 00:02:36.665 and thirty, we'll hear more  
NOTE Confidence: 0.9194055  
00:02:36.665 --> 00:02:37.165 about,  
NOTE Confidence: 0.9616165  
00:02:37.865 --> 00:02:40.025 stage zero or precancerous lesions  
NOTE Confidence: 0.9616165  
00:02:40.025 --> 00:02:40.845 such as DCIS  
NOTE Confidence: 0.9819017  
00:02:41.145 --> 00:02:42.185 being able to,  
NOTE Confidence: 0.9947321  
00:02:42.585 --> 00:02:43.680 stay in the breast, not  
NOTE Confidence: 0.9947321  
00:02:43.760 --> 00:02:45.200 have to be removed because  
NOTE Confidence: 0.9947321

00:02:45.200 --> 00:02:46.900 of these ongoing clinical trials.  
NOTE Confidence: 0.9589387

00:02:47.519 --> 00:02:48.480 So much of breast cancer  
NOTE Confidence: 0.9589387

00:02:48.480 --> 00:02:49.840 care as I think everyone's  
NOTE Confidence: 0.9589387

00:02:49.840 --> 00:02:50.959 call knows is really based  
NOTE Confidence: 0.9589387

00:02:50.959 --> 00:02:52.639 upon really good clinical trial  
NOTE Confidence: 0.9589387

00:02:52.639 --> 00:02:54.319 data, which is really exciting  
NOTE Confidence: 0.9589387

00:02:54.319 --> 00:02:55.519 for all of us as  
NOTE Confidence: 0.9589387

00:02:55.519 --> 00:02:57.060 providers and for patients.  
NOTE Confidence: 0.98352224

00:02:57.725 --> 00:02:58.925 So if we're gonna talk  
NOTE Confidence: 0.98352224

00:02:58.925 --> 00:03:00.285 about surgery for breast cancer,  
NOTE Confidence: 0.98352224

00:03:00.285 --> 00:03:01.745 because surgery for breast cancer  
NOTE Confidence: 0.98352224

00:03:01.805 --> 00:03:03.105 is is still important,  
NOTE Confidence: 0.99653476

00:03:03.805 --> 00:03:04.845 we think about kind of  
NOTE Confidence: 0.99653476

00:03:04.845 --> 00:03:06.205 where we've we've been and  
NOTE Confidence: 0.99653476

00:03:06.205 --> 00:03:07.665 where we're going. So  
NOTE Confidence: 0.92865694

00:03:07.965 --> 00:03:09.725 doctor Halsted used to perform



NOTE Confidence: 0.92865694

00:03:09.725 --> 00:03:11.105 what's called the radical mastectomy

NOTE Confidence: 0.92865694

00:03:11.245 --> 00:03:12.660 where we'd remove the chest,

NOTE Confidence: 0.9411993

00:03:13.460 --> 00:03:15.400 the the breast, the, pectoralis

NOTE Confidence: 0.9411993

00:03:15.620 --> 00:03:17.000 major and minor muscles.

NOTE Confidence: 0.982617

00:03:17.460 --> 00:03:18.500 And now we know for

NOTE Confidence: 0.982617

00:03:18.500 --> 00:03:20.100 breast cancer care that we

NOTE Confidence: 0.982617

00:03:20.100 --> 00:03:22.200 can really preserve the breast.

NOTE Confidence: 0.982617

00:03:22.340 --> 00:03:23.380 We can often do what's

NOTE Confidence: 0.982617

00:03:23.380 --> 00:03:24.740 called lumpectomies where we do

NOTE Confidence: 0.982617

00:03:24.740 --> 00:03:26.500 breast conservation and not remove

NOTE Confidence: 0.982617

00:03:26.500 --> 00:03:27.320 the whole breast,

NOTE Confidence: 0.96695477

00:03:27.735 --> 00:03:29.655 and give patients similar, you

NOTE Confidence: 0.96695477

00:03:29.655 --> 00:03:31.495 know, the same outcomes from

NOTE Confidence: 0.96695477

00:03:31.495 --> 00:03:32.555 their cancer care.

NOTE Confidence: 0.9531318

00:03:37.015 --> 00:03:38.775 So and I recognize, but

NOTE Confidence: 0.9531318

00:03:38.775 --> 00:03:40.300 the the point the point  
NOTE Confidence: 0.9531318

00:03:40.300 --> 00:03:41.840 of the slide is that,  
NOTE Confidence: 0.97144836

00:03:42.300 --> 00:03:43.660 in the nineteen seventies, we  
NOTE Confidence: 0.97144836

00:03:43.660 --> 00:03:44.940 started to ask these big  
NOTE Confidence: 0.97144836

00:03:44.940 --> 00:03:46.700 questions for surgical care for  
NOTE Confidence: 0.97144836

00:03:46.700 --> 00:03:48.640 breast cancer. And we realized  
NOTE Confidence: 0.97144836

00:03:48.780 --> 00:03:50.400 that in the nineteen seventies,  
NOTE Confidence: 0.97144836

00:03:50.460 --> 00:03:51.660 we didn't have to remove  
NOTE Confidence: 0.97144836

00:03:51.660 --> 00:03:52.480 the whole breast,  
NOTE Confidence: 0.98528963

00:03:52.940 --> 00:03:53.900 and we could do breast  
NOTE Confidence: 0.98528963

00:03:53.900 --> 00:03:55.280 conservation with radiation.  
NOTE Confidence: 0.9891061

00:03:55.895 --> 00:03:57.334 We then, if we pivoted  
NOTE Confidence: 0.9891061

00:03:57.334 --> 00:03:59.114 towards the nineteen nineties, realized  
NOTE Confidence: 0.9891061

00:03:59.175 --> 00:04:00.055 that we didn't have to  
NOTE Confidence: 0.9891061

00:04:00.055 --> 00:04:01.575 do so much axillary surgery  
NOTE Confidence: 0.9891061

00:04:01.575 --> 00:04:03.275 for early stage breast cancers.

NOTE Confidence: 0.98951304  
00:04:03.655 --> 00:04:05.275 The z eleven trial was  
NOTE Confidence: 0.9979468  
00:04:05.575 --> 00:04:06.075 instrumental  
NOTE Confidence: 0.99527603  
00:04:06.375 --> 00:04:07.830 in allowing our patients to  
NOTE Confidence: 0.99527603  
00:04:07.830 --> 00:04:09.370 have less axillary surgery  
NOTE Confidence: 0.9923528  
00:04:09.830 --> 00:04:10.629 even if they had a  
NOTE Confidence: 0.9923528  
00:04:10.629 --> 00:04:11.830 few lymph nodes with cancer  
NOTE Confidence: 0.9923528  
00:04:11.830 --> 00:04:13.510 in it. And now fast  
NOTE Confidence: 0.9923528  
00:04:13.510 --> 00:04:14.950 forward to the, you know,  
NOTE Confidence: 0.96897554  
00:04:15.510 --> 00:04:17.589 kind of present time where  
NOTE Confidence: 0.96897554  
00:04:17.589 --> 00:04:18.470 we can do,  
NOTE Confidence: 0.9784898  
00:04:18.949 --> 00:04:20.229 maybe even less surgery for  
NOTE Confidence: 0.9784898  
00:04:20.229 --> 00:04:21.945 DCIS, and we just observe  
NOTE Confidence: 0.9784898  
00:04:22.105 --> 00:04:22.605 DCIS.  
NOTE Confidence: 0.9918997  
00:04:22.985 --> 00:04:23.785 So these are some of  
NOTE Confidence: 0.9918997  
00:04:23.785 --> 00:04:25.565 the really, important,  
NOTE Confidence: 0.98988855

00:04:26.904 --> 00:04:28.425 practice changing trials for breast  
NOTE Confidence: 0.98988855

00:04:28.425 --> 00:04:29.865 cancer care, especially in the  
NOTE Confidence: 0.98988855

00:04:29.865 --> 00:04:31.165 early stage setting.  
NOTE Confidence: 0.95545644

00:04:32.585 --> 00:04:33.945 We even may go as  
NOTE Confidence: 0.95545644

00:04:33.945 --> 00:04:35.320 far as to say and,  
NOTE Confidence: 0.95545644

00:04:35.320 --> 00:04:36.279 again, a little bit more  
NOTE Confidence: 0.95545644

00:04:36.279 --> 00:04:38.120 in advanced, breast cancer settings,  
NOTE Confidence: 0.95545644

00:04:38.120 --> 00:04:39.000 but we even may as  
NOTE Confidence: 0.95545644

00:04:39.000 --> 00:04:39.960 go as to far as  
NOTE Confidence: 0.95545644

00:04:39.960 --> 00:04:41.400 to say, if a woman  
NOTE Confidence: 0.95545644

00:04:41.400 --> 00:04:43.560 gets chemotherapy before surgery and  
NOTE Confidence: 0.95545644

00:04:43.560 --> 00:04:44.920 there's no cancer left in  
NOTE Confidence: 0.95545644

00:04:44.920 --> 00:04:46.120 the breast, we may be  
NOTE Confidence: 0.95545644

00:04:46.120 --> 00:04:47.764 even able to avoid surgery  
NOTE Confidence: 0.95545644

00:04:47.764 --> 00:04:48.264 altogether.  
NOTE Confidence: 0.9773449

00:04:48.645 --> 00:04:49.525 This is, I think, too

NOTE Confidence: 0.9773449  
00:04:49.525 --> 00:04:51.205 early for prime time, not  
NOTE Confidence: 0.9773449  
00:04:51.205 --> 00:04:52.664 not ready yet,  
NOTE Confidence: 0.99491787  
00:04:53.205 --> 00:04:54.724 but something potentially down the  
NOTE Confidence: 0.99491787  
00:04:54.724 --> 00:04:55.224 pipe.  
NOTE Confidence: 0.9959548  
00:04:57.525 --> 00:04:58.485 So if we are gonna  
NOTE Confidence: 0.9959548  
00:04:58.485 --> 00:04:59.604 do surgery for early stage  
NOTE Confidence: 0.9959548  
00:04:59.604 --> 00:05:00.344 breast cancers,  
NOTE Confidence: 0.92983484  
00:05:00.805 --> 00:05:01.620 what are some of the  
NOTE Confidence: 0.92983484  
00:05:01.699 --> 00:05:02.820 updates? And I'll go through  
NOTE Confidence: 0.92983484  
00:05:02.820 --> 00:05:04.180 these in a kind of  
NOTE Confidence: 0.92983484  
00:05:04.180 --> 00:05:04.680 brief,  
NOTE Confidence: 0.99990773  
00:05:05.139 --> 00:05:05.639 review  
NOTE Confidence: 0.9841137  
00:05:06.100 --> 00:05:07.460 as far as thinking about,  
NOTE Confidence: 0.95527935  
00:05:07.779 --> 00:05:09.380 we do have noncancerous lesions  
NOTE Confidence: 0.95527935  
00:05:09.380 --> 00:05:10.180 that we often take out  
NOTE Confidence: 0.95527935

00:05:10.180 --> 00:05:10.839 for breast,  
NOTE Confidence: 0.9829428

00:05:11.220 --> 00:05:12.260 as breast surgeons. We do  
NOTE Confidence: 0.9829428

00:05:12.260 --> 00:05:13.060 a lot of now more  
NOTE Confidence: 0.9829428

00:05:13.060 --> 00:05:14.654 oncoplastic work, which I'll touch  
NOTE Confidence: 0.9829428

00:05:14.654 --> 00:05:15.515 on, briefly.  
NOTE Confidence: 0.99732196

00:05:16.135 --> 00:05:17.335 We have some nipple sparing  
NOTE Confidence: 0.99732196

00:05:17.335 --> 00:05:19.015 mastectomy updates as far as,  
NOTE Confidence: 0.99732196

00:05:19.335 --> 00:05:20.875 nipple as far as sensation  
NOTE Confidence: 0.99732196

00:05:20.935 --> 00:05:21.435 preservation  
NOTE Confidence: 0.9222728

00:05:22.055 --> 00:05:23.895 and, potentially, you know, different  
NOTE Confidence: 0.9222728

00:05:23.895 --> 00:05:25.355 options for reduction of lymphedema.  
NOTE Confidence: 0.9953458

00:05:26.295 --> 00:05:27.575 So a lot of women  
NOTE Confidence: 0.9953458

00:05:27.575 --> 00:05:28.320 will get diagnosed  
NOTE Confidence: 0.99207294

00:05:30.240 --> 00:05:30.411 with these things called high  
NOTE Confidence: 0.99207294

00:05:30.411 --> 00:05:31.440 risk lesions. They're not actually  
NOTE Confidence: 0.99207294

00:05:31.440 --> 00:05:33.300 breast cancers, but sometimes,

NOTE Confidence: 0.98394424

00:05:34.240 --> 00:05:35.360 if they're in the breast

NOTE Confidence: 0.98394424

00:05:35.360 --> 00:05:36.320 and we remove it, we

NOTE Confidence: 0.98394424

00:05:36.320 --> 00:05:37.620 may find some underlying,

NOTE Confidence: 0.92718065

00:05:38.080 --> 00:05:40.420 essentially, precancer or DCIS diagnoses.

NOTE Confidence: 0.9785596

00:05:40.800 --> 00:05:41.835 So if a woman gets

NOTE Confidence: 0.9785596

00:05:41.835 --> 00:05:43.194 biopsy and has what's called

NOTE Confidence: 0.9785596

00:05:43.194 --> 00:05:44.654 atypical ductal hyperplasia,

NOTE Confidence: 0.9916919

00:05:45.435 --> 00:05:46.395 it is something that you

NOTE Confidence: 0.9916919

00:05:46.395 --> 00:05:48.235 wanna, consider seeing a breast

NOTE Confidence: 0.9916919

00:05:48.235 --> 00:05:49.595 surgeon for because it may

NOTE Confidence: 0.9916919

00:05:49.595 --> 00:05:50.634 be something we would talk

NOTE Confidence: 0.9916919

00:05:50.634 --> 00:05:52.235 to you you about removal

NOTE Confidence: 0.9916919

00:05:52.235 --> 00:05:52.735 of.

NOTE Confidence: 0.9581053

00:05:53.115 --> 00:05:54.315 Someone may get diagnosed with

NOTE Confidence: 0.9581053

00:05:54.315 --> 00:05:56.154 what's called LCIS or lobular

NOTE Confidence: 0.9581053

00:05:56.154 --> 00:05:57.750 carcinoma in situ, and it's  
NOTE Confidence: 0.9581053

00:05:57.910 --> 00:05:59.670 alarming for patients and often  
NOTE Confidence: 0.9581053

00:05:59.670 --> 00:06:00.790 get a a phone call  
NOTE Confidence: 0.9581053

00:06:00.790 --> 00:06:02.230 from their primary doctor saying,  
NOTE Confidence: 0.9581053

00:06:02.230 --> 00:06:03.450 you know, you have an  
NOTE Confidence: 0.9581053

00:06:03.589 --> 00:06:04.089 carcinoma.  
NOTE Confidence: 0.99854237

00:06:05.430 --> 00:06:06.390 But what we know about  
NOTE Confidence: 0.99854237

00:06:06.390 --> 00:06:06.890 LCIS,  
NOTE Confidence: 0.9948925

00:06:07.350 --> 00:06:08.390 that we actually don't need  
NOTE Confidence: 0.9948925

00:06:08.390 --> 00:06:09.029 to take it out. It  
NOTE Confidence: 0.9948925

00:06:09.029 --> 00:06:10.490 doesn't become a breast cancer,  
NOTE Confidence: 0.9948925

00:06:10.710 --> 00:06:11.670 and it's something that we  
NOTE Confidence: 0.9948925

00:06:11.670 --> 00:06:12.330 can watch,  
NOTE Confidence: 0.6613238

00:06:13.029 --> 00:06:13.529 recognizing  
NOTE Confidence: 0.99262136

00:06:14.205 --> 00:06:15.325 that it's a marker of  
NOTE Confidence: 0.99262136

00:06:15.325 --> 00:06:16.685 risk. And then, you know,



NOTE Confidence: 0.99262136  
00:06:16.685 --> 00:06:17.885 further things in the breast  
NOTE Confidence: 0.99262136  
00:06:17.885 --> 00:06:18.865 that can be diagnosed  
NOTE Confidence: 0.43780634  
00:06:19.725 --> 00:06:20.305 are the  
NOTE Confidence: 0.95963687  
00:06:21.005 --> 00:06:22.225 scars and papillomas.  
NOTE Confidence: 0.5208689  
00:06:23.085 --> 00:06:23.585 All  
NOTE Confidence: 0.51353633  
00:06:24.765 --> 00:06:25.425 some times,  
NOTE Confidence: 0.8998084  
00:06:25.805 --> 00:06:26.865 again, considering  
NOTE Confidence: 0.92776775  
00:06:29.339 --> 00:06:30.320 high risk lesions.  
NOTE Confidence: 0.9527139  
00:06:31.580 --> 00:06:33.040 Some we recommend,  
NOTE Confidence: 0.97240937  
00:06:33.580 --> 00:06:34.860 excision for, and some we  
NOTE Confidence: 0.97240937  
00:06:34.860 --> 00:06:36.480 don't recommend excision for.  
NOTE Confidence: 0.9757999  
00:06:37.820 --> 00:06:38.940 A lot of women ask,  
NOTE Confidence: 0.9757999  
00:06:38.940 --> 00:06:39.740 well, how are you gonna  
NOTE Confidence: 0.9757999  
00:06:39.740 --> 00:06:40.540 find who you're gonna be  
NOTE Confidence: 0.9757999  
00:06:40.540 --> 00:06:41.500 able to identify to get  
NOTE Confidence: 0.9757999

00:06:41.500 --> 00:06:42.745 the the tumor out? And,  
NOTE Confidence: 0.9757999

00:06:42.745 --> 00:06:44.345 unfortunately, that little biopsy clip  
NOTE Confidence: 0.9757999

00:06:44.345 --> 00:06:45.625 get that gets left is  
NOTE Confidence: 0.9757999

00:06:45.625 --> 00:06:46.585 not big enough for us  
NOTE Confidence: 0.9757999

00:06:46.585 --> 00:06:48.105 as breast cancer surgeons to  
NOTE Confidence: 0.9757999

00:06:48.105 --> 00:06:49.705 find on our own. So  
NOTE Confidence: 0.9757999

00:06:49.705 --> 00:06:50.745 we need some help to  
NOTE Confidence: 0.9757999

00:06:50.745 --> 00:06:51.625 be able to find that  
NOTE Confidence: 0.9757999

00:06:51.625 --> 00:06:53.225 lesion, and it's always disappointing  
NOTE Confidence: 0.9757999

00:06:53.225 --> 00:06:54.185 for the patient when we  
NOTE Confidence: 0.9757999

00:06:54.185 --> 00:06:55.380 say we have to put  
NOTE Confidence: 0.9757999

00:06:55.380 --> 00:06:56.500 in another thing into the  
NOTE Confidence: 0.9757999

00:06:56.500 --> 00:06:58.740 breast before surgery, but it's  
NOTE Confidence: 0.9757999

00:06:58.740 --> 00:07:00.100 very helpful for us, to  
NOTE Confidence: 0.9757999

00:07:00.100 --> 00:07:01.460 be able to find accurately  
NOTE Confidence: 0.9757999

00:07:01.460 --> 00:07:02.740 and pinpoint exactly where we

NOTE Confidence: 0.9757999  
00:07:02.740 --> 00:07:03.940 need to go. So we  
NOTE Confidence: 0.9757999  
00:07:03.940 --> 00:07:05.000 used to use wires.  
NOTE Confidence: 0.8673201  
00:07:05.779 --> 00:07:06.520 And now,  
NOTE Confidence: 0.9747921  
00:07:07.375 --> 00:07:09.055 because of all the sometimes  
NOTE Confidence: 0.9747921  
00:07:09.055 --> 00:07:10.255 chaos that can happen with  
NOTE Confidence: 0.9747921  
00:07:10.255 --> 00:07:12.255 wires, sometimes we'll use what's  
NOTE Confidence: 0.9747921  
00:07:12.255 --> 00:07:14.014 called a tag or even  
NOTE Confidence: 0.9747921  
00:07:14.014 --> 00:07:15.535 a smaller device that goes  
NOTE Confidence: 0.9747921  
00:07:15.535 --> 00:07:16.574 into the breast a few  
NOTE Confidence: 0.9747921  
00:07:16.574 --> 00:07:17.635 days before surgery,  
NOTE Confidence: 0.97753763  
00:07:18.335 --> 00:07:19.775 and then often doesn't delay  
NOTE Confidence: 0.97753763  
00:07:19.775 --> 00:07:20.275 surgeries.  
NOTE Confidence: 0.9804594  
00:07:21.135 --> 00:07:22.230 A patient can get it,  
NOTE Confidence: 0.9804594  
00:07:22.230 --> 00:07:23.190 you know, a few days  
NOTE Confidence: 0.9804594  
00:07:23.190 --> 00:07:24.810 before on their own time,  
NOTE Confidence: 0.9990409

00:07:25.270 --> 00:07:26.090 and it allows  
NOTE Confidence: 0.78651255

00:07:26.950 --> 00:07:27.450 often  
NOTE Confidence: 0.94416547

00:07:28.550 --> 00:07:30.230 to you know, a little  
NOTE Confidence: 0.94416547

00:07:30.230 --> 00:07:31.990 bit, at different locations of  
NOTE Confidence: 0.94416547

00:07:31.990 --> 00:07:33.270 the breast. Wires are still  
NOTE Confidence: 0.94416547

00:07:33.270 --> 00:07:34.730 used. They're great technology.  
NOTE Confidence: 0.95581454

00:07:35.335 --> 00:07:36.375 It's a very per, kind  
NOTE Confidence: 0.95581454

00:07:36.375 --> 00:07:38.055 of surgeon preference and personal  
NOTE Confidence: 0.95581454

00:07:38.055 --> 00:07:39.175 preference for the patient as  
NOTE Confidence: 0.95581454

00:07:39.175 --> 00:07:40.775 well, but they're just different  
NOTE Confidence: 0.95581454

00:07:40.775 --> 00:07:42.794 ways to, think about localization.  
NOTE Confidence: 0.99548095

00:07:45.014 --> 00:07:46.715 Some women will come into  
NOTE Confidence: 0.99548095

00:07:46.775 --> 00:07:47.514 our our  
NOTE Confidence: 0.9970582

00:07:47.840 --> 00:07:49.120 clinic with, you know, these  
NOTE Confidence: 0.9970582

00:07:49.120 --> 00:07:50.480 very large areas of, for  
NOTE Confidence: 0.9970582

00:07:50.480 --> 00:07:51.300 instance, calcifications

NOTE Confidence: 0.98730326  
00:07:51.840 --> 00:07:53.280 or even a large breast  
NOTE Confidence: 0.98730326  
00:07:53.280 --> 00:07:53.780 tumor,  
NOTE Confidence: 0.9906155  
00:07:54.640 --> 00:07:56.320 where, you know, we recommend  
NOTE Confidence: 0.9906155  
00:07:56.320 --> 00:07:57.300 surgery first.  
NOTE Confidence: 0.9793055  
00:07:57.680 --> 00:07:59.360 And sometimes, you know, there  
NOTE Confidence: 0.9793055  
00:07:59.360 --> 00:08:00.575 may be no other option  
NOTE Confidence: 0.9793055  
00:08:00.575 --> 00:08:01.235 but a mastectomy.  
NOTE Confidence: 0.95957667  
00:08:01.615 --> 00:08:02.815 But sometimes we have really  
NOTE Confidence: 0.95957667  
00:08:02.815 --> 00:08:03.555 nice options  
NOTE Confidence: 0.9650721  
00:08:03.855 --> 00:08:04.495 where we can do a  
NOTE Confidence: 0.9650721  
00:08:04.495 --> 00:08:05.855 very large resection and work  
NOTE Confidence: 0.9650721  
00:08:05.855 --> 00:08:06.975 very closely with our plastic  
NOTE Confidence: 0.9650721  
00:08:06.975 --> 00:08:08.915 surgeons, doctor Hakal and others,  
NOTE Confidence: 0.9650721  
00:08:09.055 --> 00:08:09.855 where we can do what's  
NOTE Confidence: 0.9650721  
00:08:09.855 --> 00:08:11.695 called an oncoplastic reduction. And  
NOTE Confidence: 0.9650721

00:08:11.695 --> 00:08:12.815 so it allows us as  
NOTE Confidence: 0.9650721

00:08:12.815 --> 00:08:14.430 breast cancer surgeons, even an  
NOTE Confidence: 0.9650721

00:08:14.430 --> 00:08:15.790 early stage breast cancer, to  
NOTE Confidence: 0.9650721

00:08:15.790 --> 00:08:16.750 take out a large piece  
NOTE Confidence: 0.9650721

00:08:16.750 --> 00:08:17.410 of tissue,  
NOTE Confidence: 0.9391014

00:08:18.110 --> 00:08:19.870 and really reduce or, you  
NOTE Confidence: 0.9391014

00:08:19.870 --> 00:08:20.990 know, do what's called a  
NOTE Confidence: 0.9391014

00:08:20.990 --> 00:08:22.770 mastopexy lift of the breast,  
NOTE Confidence: 0.9175561

00:08:23.150 --> 00:08:24.270 and leave a woman with  
NOTE Confidence: 0.9175561

00:08:24.270 --> 00:08:24.930 an amazing, reconstructive result,  
NOTE Confidence: 0.9970552

00:08:27.165 --> 00:08:28.125 but still take out a  
NOTE Confidence: 0.9970552

00:08:28.125 --> 00:08:29.405 fair amount of breast tissue  
NOTE Confidence: 0.9970552

00:08:29.405 --> 00:08:30.285 and and get out the  
NOTE Confidence: 0.9970552

00:08:30.285 --> 00:08:31.185 cancer safely.  
NOTE Confidence: 0.99711525

00:08:32.445 --> 00:08:33.904 When we are taking  
NOTE Confidence: 0.87617606

00:08:34.845 --> 00:08:36.684 out early stage cancers, we

NOTE Confidence: 0.87617606  
00:08:36.684 --> 00:08:37.804 all kinda make sure that  
NOTE Confidence: 0.87617606  
00:08:37.804 --> 00:08:39.840 we get clear margins around  
NOTE Confidence: 0.87617606  
00:08:39.840 --> 00:08:40.880 the cancer. And I think  
NOTE Confidence: 0.87617606  
00:08:40.880 --> 00:08:41.920 this is can be a  
NOTE Confidence: 0.87617606  
00:08:41.920 --> 00:08:42.900 very confusing,  
NOTE Confidence: 0.9992333  
00:08:43.360 --> 00:08:44.820 for patients to understand.  
NOTE Confidence: 0.99874073  
00:08:45.360 --> 00:08:46.480 So when we think about  
NOTE Confidence: 0.99874073  
00:08:46.480 --> 00:08:47.300 clear margins,  
NOTE Confidence: 0.9181956  
00:08:47.760 --> 00:08:49.120 what essentially what we wanna  
NOTE Confidence: 0.9181956  
00:08:49.120 --> 00:08:50.160 do is we wanna take  
NOTE Confidence: 0.9181956  
00:08:50.160 --> 00:08:51.380 out, the cancer,  
NOTE Confidence: 0.9924548  
00:08:51.855 --> 00:08:52.975 and then we always want  
NOTE Confidence: 0.9924548  
00:08:52.975 --> 00:08:54.514 some healthy breast tissue  
NOTE Confidence: 0.99447584  
00:08:54.975 --> 00:08:56.115 around that cancer.  
NOTE Confidence: 0.9868224  
00:08:56.735 --> 00:08:58.514 And so, you know, unfortunately,  
NOTE Confidence: 0.9868224

00:08:58.654 --> 00:08:59.615 when we have what's called  
NOTE Confidence: 0.9868224

00:08:59.615 --> 00:09:00.834 a positive margin,  
NOTE Confidence: 0.9686521

00:09:01.214 --> 00:09:02.495 what that means is is  
NOTE Confidence: 0.9686521

00:09:02.495 --> 00:09:03.695 the what we hope is  
NOTE Confidence: 0.9686521

00:09:03.695 --> 00:09:05.635 healthy breast tissue. Again, unfortunately,  
NOTE Confidence: 0.9686521

00:09:05.695 --> 00:09:06.834 this is all microscopic  
NOTE Confidence: 0.9945469

00:09:07.170 --> 00:09:07.670 disease.  
NOTE Confidence: 0.9037352

00:09:08.130 --> 00:09:09.410 What we what a healthy  
NOTE Confidence: 0.9037352

00:09:09.410 --> 00:09:10.929 breast tissue margin we we  
NOTE Confidence: 0.9037352

00:09:10.929 --> 00:09:11.429 removed  
NOTE Confidence: 0.9692475

00:09:11.970 --> 00:09:13.410 comes back underneath the microscope  
NOTE Confidence: 0.9692475

00:09:13.410 --> 00:09:14.450 with some cancer on the  
NOTE Confidence: 0.9692475

00:09:14.450 --> 00:09:15.970 edge of that margin. And  
NOTE Confidence: 0.9692475

00:09:15.970 --> 00:09:17.649 that does often require us  
NOTE Confidence: 0.9692475

00:09:17.649 --> 00:09:18.209 to go back to the  
NOTE Confidence: 0.9692475

00:09:18.209 --> 00:09:19.329 operating room with the patient



NOTE Confidence: 0.9692475  
00:09:19.329 --> 00:09:20.610 to take, again, a little  
NOTE Confidence: 0.9692475  
00:09:20.610 --> 00:09:21.510 bit more tissue.  
NOTE Confidence: 0.9371488  
00:09:21.889 --> 00:09:22.965 It doesn't mean that the  
NOTE Confidence: 0.9371488  
00:09:22.965 --> 00:09:24.485 cancer has spread all over  
NOTE Confidence: 0.9371488  
00:09:24.485 --> 00:09:25.605 the store. It doesn't mean  
NOTE Confidence: 0.9371488  
00:09:25.605 --> 00:09:26.105 that,  
NOTE Confidence: 0.98249036  
00:09:26.725 --> 00:09:28.645 you know, we missed something  
NOTE Confidence: 0.98249036  
00:09:28.645 --> 00:09:29.705 per se. Unfortunately,  
NOTE Confidence: 0.99163216  
00:09:30.165 --> 00:09:31.365 you know, we don't have,  
NOTE Confidence: 0.99163216  
00:09:31.605 --> 00:09:33.045 X-ray vision. If we did,  
NOTE Confidence: 0.99163216  
00:09:33.045 --> 00:09:34.265 that would be awesome.  
NOTE Confidence: 0.9902997  
00:09:34.645 --> 00:09:36.029 But since we don't, it's  
NOTE Confidence: 0.9902997  
00:09:36.029 --> 00:09:37.230 just a matter of where  
NOTE Confidence: 0.9902997  
00:09:37.230 --> 00:09:38.750 the pathologist, the doctors that  
NOTE Confidence: 0.9902997  
00:09:38.750 --> 00:09:39.709 look at things underneath the  
NOTE Confidence: 0.9902997

00:09:39.709 --> 00:09:41.470 microscope, really have to examine

NOTE Confidence: 0.9902997

00:09:41.470 --> 00:09:42.750 that tissue to make sure

NOTE Confidence: 0.9902997

00:09:42.750 --> 00:09:44.190 that the cancer cells are

NOTE Confidence: 0.9902997

00:09:44.190 --> 00:09:45.570 clean of the edge.

NOTE Confidence: 0.9843721

00:09:47.070 --> 00:09:48.429 We also want cancer cells

NOTE Confidence: 0.9843721

00:09:48.429 --> 00:09:49.309 clean of the edge when

NOTE Confidence: 0.9843721

00:09:49.309 --> 00:09:50.130 we do DCIS,

NOTE Confidence: 0.91640335

00:09:50.955 --> 00:09:52.175 surgeries as well,

NOTE Confidence: 0.9816119

00:09:52.635 --> 00:09:53.375 and we always,

NOTE Confidence: 0.9950725

00:09:53.755 --> 00:09:54.875 kinda shoot for this idea

NOTE Confidence: 0.9950725

00:09:54.875 --> 00:09:56.155 of two millimeters from the

NOTE Confidence: 0.9950725

00:09:56.155 --> 00:09:56.955 edge of the piece of

NOTE Confidence: 0.9950725

00:09:56.955 --> 00:09:57.995 tissue when we take out

NOTE Confidence: 0.9950725

00:09:57.995 --> 00:09:58.495 margins.

NOTE Confidence: 0.969089

00:10:00.875 --> 00:10:02.895 At Yale, the the study

NOTE Confidence: 0.969089

00:10:02.955 --> 00:10:04.895 done to look at margins

NOTE Confidence: 0.969089  
00:10:05.115 --> 00:10:06.395 when we do remove breast  
NOTE Confidence: 0.969089  
00:10:06.395 --> 00:10:07.670 tissue around,  
NOTE Confidence: 0.9351601  
00:10:08.050 --> 00:10:09.030 the the,  
NOTE Confidence: 0.99304754  
00:10:10.530 --> 00:10:11.670 cancer was done,  
NOTE Confidence: 0.98131716  
00:10:12.210 --> 00:10:13.730 by doctor Chagpar, who's no  
NOTE Confidence: 0.98131716  
00:10:13.730 --> 00:10:14.690 longer here at Yale, but  
NOTE Confidence: 0.98131716  
00:10:14.690 --> 00:10:15.890 she led this trial at  
NOTE Confidence: 0.98131716  
00:10:15.890 --> 00:10:17.250 Yale. And it was a  
NOTE Confidence: 0.98131716  
00:10:17.250 --> 00:10:19.304 really well done trial to  
NOTE Confidence: 0.9887572  
00:10:19.785 --> 00:10:21.464 show how we can take  
NOTE Confidence: 0.9887572  
00:10:21.464 --> 00:10:21.785 these,  
NOTE Confidence: 0.9886629  
00:10:22.345 --> 00:10:23.705 this healthy breast tissue around  
NOTE Confidence: 0.9886629  
00:10:23.705 --> 00:10:24.445 the cancer.  
NOTE Confidence: 0.9927851  
00:10:26.105 --> 00:10:26.825 As far as some of  
NOTE Confidence: 0.9927851  
00:10:26.825 --> 00:10:28.345 the mastectomy updates for early  
NOTE Confidence: 0.9927851

00:10:28.345 --> 00:10:30.425 stage breast cancers, so when  
NOTE Confidence: 0.9927851

00:10:30.425 --> 00:10:31.725 we think about mastectomies,  
NOTE Confidence: 0.9873783

00:10:32.665 --> 00:10:34.105 there's multiple different ways to  
NOTE Confidence: 0.9873783

00:10:34.105 --> 00:10:35.699 do mastectomies, multiple different types  
NOTE Confidence: 0.9873783

00:10:35.699 --> 00:10:36.279 of reconstruction.  
NOTE Confidence: 0.99221194

00:10:37.139 --> 00:10:38.179 And one of the ways  
NOTE Confidence: 0.99221194

00:10:38.179 --> 00:10:39.059 now is what we can  
NOTE Confidence: 0.99221194

00:10:39.059 --> 00:10:40.100 do is called a nipple  
NOTE Confidence: 0.99221194

00:10:40.100 --> 00:10:41.000 sparing mastectomy.  
NOTE Confidence: 0.9603476

00:10:42.100 --> 00:10:43.620 Yes, we know ducts do  
NOTE Confidence: 0.9603476

00:10:43.620 --> 00:10:44.980 go into the nipple, and  
NOTE Confidence: 0.9603476

00:10:44.980 --> 00:10:46.819 so sometimes there's fear that,  
NOTE Confidence: 0.9603476

00:10:46.819 --> 00:10:47.779 you know, that may increase  
NOTE Confidence: 0.9603476

00:10:47.779 --> 00:10:49.139 a woman's risk of developing  
NOTE Confidence: 0.9603476

00:10:49.139 --> 00:10:50.179 a breast cancer if they  
NOTE Confidence: 0.9603476

00:10:50.179 --> 00:10:51.925 have, for instance, the BRCA

NOTE Confidence: 0.9603476  
00:10:51.925 --> 00:10:53.145 gene and want a prophylactic  
NOTE Confidence: 0.9603476  
00:10:53.285 --> 00:10:53.785 mastectomy.  
NOTE Confidence: 0.96041197  
00:10:54.245 --> 00:10:55.205 Or it may you know,  
NOTE Confidence: 0.96041197  
00:10:55.205 --> 00:10:55.925 there there may be some  
NOTE Confidence: 0.96041197  
00:10:55.925 --> 00:10:57.465 fear about risk of recurrence,  
NOTE Confidence: 0.97935355  
00:10:58.085 --> 00:10:59.365 if a patient has cancer  
NOTE Confidence: 0.97935355  
00:10:59.365 --> 00:11:00.405 and has a nipple sparing  
NOTE Confidence: 0.97935355  
00:11:00.405 --> 00:11:00.905 mastectomy.  
NOTE Confidence: 0.9791118  
00:11:01.365 --> 00:11:02.405 And a lot of really  
NOTE Confidence: 0.9791118  
00:11:02.405 --> 00:11:03.365 well done trials, you'll see  
NOTE Confidence: 0.9791118  
00:11:03.365 --> 00:11:04.910 doctor Greenup on this study,  
NOTE Confidence: 0.9791118  
00:11:04.910 --> 00:11:05.809 I should say.  
NOTE Confidence: 0.96007395  
00:11:06.750 --> 00:11:07.870 There's been a lot of  
NOTE Confidence: 0.96007395  
00:11:07.870 --> 00:11:09.309 work done in whether or  
NOTE Confidence: 0.96007395  
00:11:09.309 --> 00:11:10.750 not nipple sparing mastectomies are  
NOTE Confidence: 0.96007395

00:11:10.750 --> 00:11:12.130 safe for our cancer patients  
NOTE Confidence: 0.96007395

00:11:12.270 --> 00:11:13.470 in the early stage setting  
NOTE Confidence: 0.96007395

00:11:13.470 --> 00:11:14.830 and in the prophylactic setting  
NOTE Confidence: 0.96007395

00:11:14.830 --> 00:11:16.610 for our BRCA carrier patients.  
NOTE Confidence: 0.96007395

00:11:16.830 --> 00:11:18.430 And what we found from  
NOTE Confidence: 0.96007395

00:11:18.430 --> 00:11:20.665 multiple trials now or studies,  
NOTE Confidence: 0.96007395

00:11:20.665 --> 00:11:21.725 I guess, I should articulate,  
NOTE Confidence: 0.96007395

00:11:21.865 --> 00:11:23.065 is that, it is a  
NOTE Confidence: 0.96007395

00:11:23.065 --> 00:11:25.545 very, very safe procedure for  
NOTE Confidence: 0.96007395

00:11:25.545 --> 00:11:27.304 women to have done. Not  
NOTE Confidence: 0.96007395

00:11:27.304 --> 00:11:28.905 everyone will qualify for a  
NOTE Confidence: 0.96007395

00:11:28.905 --> 00:11:30.845 nipple sparing for various reasons,  
NOTE Confidence: 0.983244

00:11:31.625 --> 00:11:32.125 but,  
NOTE Confidence: 0.99380964

00:11:32.700 --> 00:11:33.740 you know, in the setting  
NOTE Confidence: 0.99380964

00:11:33.740 --> 00:11:35.340 that it's it's, a reasonable  
NOTE Confidence: 0.99380964

00:11:35.340 --> 00:11:36.860 operation for a patient, it's

NOTE Confidence: 0.99380964  
00:11:36.860 --> 00:11:37.360 safe.  
NOTE Confidence: 0.970107  
00:11:39.100 --> 00:11:41.580 Contralateral prophylactic mastectomy. So this  
NOTE Confidence: 0.970107  
00:11:41.580 --> 00:11:42.960 is a whole another discussion  
NOTE Confidence: 0.970107  
00:11:43.020 --> 00:11:44.300 about when a woman has  
NOTE Confidence: 0.970107  
00:11:44.300 --> 00:11:45.660 an affected breast with breast  
NOTE Confidence: 0.970107  
00:11:45.660 --> 00:11:46.160 cancer.  
NOTE Confidence: 0.9891027  
00:11:47.454 --> 00:11:48.975 What about removing the other  
NOTE Confidence: 0.9891027  
00:11:48.975 --> 00:11:49.934 breast? You know, there's a  
NOTE Confidence: 0.9891027  
00:11:49.934 --> 00:11:51.135 lot of discussion about whether  
NOTE Confidence: 0.9891027  
00:11:51.135 --> 00:11:52.575 breast cancer spreads from one  
NOTE Confidence: 0.9891027  
00:11:52.575 --> 00:11:53.615 breast to the other, and  
NOTE Confidence: 0.9891027  
00:11:53.615 --> 00:11:55.075 that's actually not the case.  
NOTE Confidence: 0.9891027  
00:11:55.214 --> 00:11:56.334 We know that breast cancers  
NOTE Confidence: 0.9891027  
00:11:56.334 --> 00:11:57.615 don't spread from the right  
NOTE Confidence: 0.9891027  
00:11:57.615 --> 00:11:58.654 breast, for instance, to the  
NOTE Confidence: 0.9891027

00:11:58.654 --> 00:12:00.110 left breast, but we do  
NOTE Confidence: 0.9891027

00:12:00.110 --> 00:12:01.070 know that a woman's at  
NOTE Confidence: 0.9891027

00:12:01.070 --> 00:12:02.370 a higher risk of developing  
NOTE Confidence: 0.9891027

00:12:02.510 --> 00:12:03.870 a contralateral cancer if they  
NOTE Confidence: 0.9891027

00:12:03.870 --> 00:12:04.910 have a breast cancer in  
NOTE Confidence: 0.9891027

00:12:04.910 --> 00:12:05.890 one of their breast.  
NOTE Confidence: 0.9979593

00:12:06.830 --> 00:12:08.429 What we do know is  
NOTE Confidence: 0.9979593

00:12:08.429 --> 00:12:08.929 that  
NOTE Confidence: 0.99062157

00:12:09.309 --> 00:12:11.325 removing the contralateral breast does  
NOTE Confidence: 0.99062157

00:12:11.485 --> 00:12:12.765 decrease that woman's risk of  
NOTE Confidence: 0.99062157

00:12:12.765 --> 00:12:14.445 getting a breast cancer, but  
NOTE Confidence: 0.99062157

00:12:14.445 --> 00:12:15.885 doesn't improve their survival from  
NOTE Confidence: 0.99062157

00:12:15.885 --> 00:12:17.325 their actual cancer in their  
NOTE Confidence: 0.99062157

00:12:17.325 --> 00:12:18.304 in their breast.  
NOTE Confidence: 0.9812591

00:12:18.765 --> 00:12:20.205 It's something to consider. It's  
NOTE Confidence: 0.9812591

00:12:20.205 --> 00:12:21.565 definitely a conversation to have



NOTE Confidence: 0.9812591

00:12:21.565 --> 00:12:22.465 with your surgeon.

NOTE Confidence: 0.9751705

00:12:23.510 --> 00:12:24.710 And, you know, some women

NOTE Confidence: 0.9751705

00:12:24.710 --> 00:12:25.390 elect to do it for

NOTE Confidence: 0.9751705

00:12:25.390 --> 00:12:26.710 a very personal reason, and

NOTE Confidence: 0.9751705

00:12:26.710 --> 00:12:28.390 some women don't. It's just

NOTE Confidence: 0.9751705

00:12:28.390 --> 00:12:29.589 something to always kind of

NOTE Confidence: 0.9751705

00:12:29.589 --> 00:12:30.250 think about.

NOTE Confidence: 0.83846635

00:12:31.990 --> 00:12:33.750 As far as nipple sin

NOTE Confidence: 0.83846635

00:12:33.990 --> 00:12:34.490 neurotization

NOTE Confidence: 0.9304805

00:12:34.870 --> 00:12:35.690 now, so,

NOTE Confidence: 0.9993873

00:12:36.230 --> 00:12:37.290 there is some

NOTE Confidence: 0.974713

00:12:38.015 --> 00:12:39.775 data to suggest that we

NOTE Confidence: 0.974713

00:12:39.775 --> 00:12:41.715 may be able to reneurotize

NOTE Confidence: 0.9632978

00:12:42.095 --> 00:12:44.015 or essentially give sensation to

NOTE Confidence: 0.9632978

00:12:44.015 --> 00:12:45.695 the mastectomy skin when we

NOTE Confidence: 0.9632978

00:12:45.695 --> 00:12:47.535 remove the breast. Oftentimes, we  
NOTE Confidence: 0.9632978

00:12:47.535 --> 00:12:49.054 remove the breast, the skin  
NOTE Confidence: 0.9632978

00:12:49.054 --> 00:12:50.415 is innervated or gets its  
NOTE Confidence: 0.9632978

00:12:50.415 --> 00:12:52.100 sensation from the breast, And  
NOTE Confidence: 0.9632978

00:12:52.100 --> 00:12:53.540 so the skin loses sensation.  
NOTE Confidence: 0.9632978

00:12:53.540 --> 00:12:54.600 It becomes numb.  
NOTE Confidence: 0.9937104

00:12:55.220 --> 00:12:56.820 And now, you know, there  
NOTE Confidence: 0.9937104

00:12:56.820 --> 00:12:57.540 is some,  
NOTE Confidence: 0.9995757

00:12:57.940 --> 00:12:58.440 ability  
NOTE Confidence: 0.99167734

00:12:58.740 --> 00:13:01.060 to find these nerves along  
NOTE Confidence: 0.99167734

00:13:01.060 --> 00:13:02.740 the the outside part of  
NOTE Confidence: 0.99167734

00:13:02.740 --> 00:13:03.400 the breast,  
NOTE Confidence: 0.92280877

00:13:03.860 --> 00:13:04.304 connect,  
NOTE Confidence: 0.959941

00:13:04.785 --> 00:13:06.304 what's called an allograph. So  
NOTE Confidence: 0.959941

00:13:06.304 --> 00:13:07.684 it's a cadaver nerve,  
NOTE Confidence: 0.9925662

00:13:08.225 --> 00:13:09.825 and then so that also

NOTE Confidence: 0.9925662  
00:13:09.825 --> 00:13:11.665 into nerves underneath the nipple  
NOTE Confidence: 0.9925662  
00:13:11.665 --> 00:13:13.265 to try to preserve some  
NOTE Confidence: 0.9925662  
00:13:13.265 --> 00:13:13.765 sensation.  
NOTE Confidence: 0.9860177  
00:13:15.184 --> 00:13:15.684 There's  
NOTE Confidence: 0.97882706  
00:13:16.065 --> 00:13:17.745 some data to suggest that  
NOTE Confidence: 0.97882706  
00:13:17.745 --> 00:13:18.785 it works and then some  
NOTE Confidence: 0.97882706  
00:13:18.785 --> 00:13:20.220 data to suggest that it's  
NOTE Confidence: 0.97882706  
00:13:20.220 --> 00:13:21.679 it's not perfect,  
NOTE Confidence: 0.9395296  
00:13:22.059 --> 00:13:23.179 and that it doesn't always  
NOTE Confidence: 0.9395296  
00:13:23.179 --> 00:13:24.779 work. And so, you know,  
NOTE Confidence: 0.9395296  
00:13:24.779 --> 00:13:26.220 I think this is, you  
NOTE Confidence: 0.9395296  
00:13:26.220 --> 00:13:27.679 know, kinda two weeks continued.  
NOTE Confidence: 0.9635606  
00:13:29.259 --> 00:13:30.379 You know, I think often  
NOTE Confidence: 0.9635606  
00:13:30.379 --> 00:13:31.819 it's worth a try, and  
NOTE Confidence: 0.9635606  
00:13:31.819 --> 00:13:32.959 then, you know, sometimes,  
NOTE Confidence: 0.99777603

00:13:34.115 --> 00:13:35.074 you know, we'll just have  
NOTE Confidence: 0.99777603

00:13:35.074 --> 00:13:35.875 to see what the data  
NOTE Confidence: 0.99777603

00:13:35.875 --> 00:13:36.995 shows as far as long  
NOTE Confidence: 0.99777603

00:13:36.995 --> 00:13:37.815 term outcomes,  
NOTE Confidence: 0.96961415

00:13:38.355 --> 00:13:40.115 because it may not, hold  
NOTE Confidence: 0.96961415

00:13:40.115 --> 00:13:41.975 true to for every woman.  
NOTE Confidence: 0.99634993

00:13:44.355 --> 00:13:46.035 There's been a lot of  
NOTE Confidence: 0.99634993

00:13:46.035 --> 00:13:47.554 changes in the way we  
NOTE Confidence: 0.99634993

00:13:47.554 --> 00:13:49.030 think about removing lymph nodes  
NOTE Confidence: 0.99634993

00:13:49.030 --> 00:13:50.470 underneath the armpit for early  
NOTE Confidence: 0.99634993

00:13:50.470 --> 00:13:52.070 stage breast cancers, which is  
NOTE Confidence: 0.99634993

00:13:52.070 --> 00:13:53.530 really exciting for patients.  
NOTE Confidence: 0.96555567

00:13:53.910 --> 00:13:54.630 We used to have to  
NOTE Confidence: 0.96555567

00:13:54.630 --> 00:13:55.750 remove all the lymph nodes  
NOTE Confidence: 0.96555567

00:13:55.750 --> 00:13:57.030 underneath the armpit all the  
NOTE Confidence: 0.96555567

00:13:57.030 --> 00:13:58.309 time, and it caused a

NOTE Confidence: 0.96555567  
00:13:58.309 --> 00:13:59.750 lot of morbidity for our  
NOTE Confidence: 0.96555567  
00:13:59.750 --> 00:14:01.190 patients. And now what we  
NOTE Confidence: 0.96555567  
00:14:01.190 --> 00:14:02.390 know, we can really only  
NOTE Confidence: 0.96555567  
00:14:02.390 --> 00:14:03.350 have to remove a few  
NOTE Confidence: 0.96555567  
00:14:03.350 --> 00:14:04.725 lymph nodes off in called  
NOTE Confidence: 0.96555567  
00:14:04.725 --> 00:14:06.105 a sentinel lymph node biopsy  
NOTE Confidence: 0.9729881  
00:14:06.485 --> 00:14:07.605 and leave the the rest  
NOTE Confidence: 0.9729881  
00:14:07.605 --> 00:14:08.565 of the lymph nodes to  
NOTE Confidence: 0.9729881  
00:14:08.565 --> 00:14:09.845 avoid that really, you know,  
NOTE Confidence: 0.9729881  
00:14:10.165 --> 00:14:11.605 unfortunate risk of what's called  
NOTE Confidence: 0.9729881  
00:14:11.605 --> 00:14:13.125 lymphedema, the swelling of the  
NOTE Confidence: 0.9729881  
00:14:13.125 --> 00:14:13.625 arm.  
NOTE Confidence: 0.99031836  
00:14:14.165 --> 00:14:15.765 As I spoke, earlier on,  
NOTE Confidence: 0.99031836  
00:14:15.765 --> 00:14:17.045 the z eleven trial was  
NOTE Confidence: 0.99031836  
00:14:17.045 --> 00:14:18.404 the trial in the early  
NOTE Confidence: 0.99031836

00:14:18.404 --> 00:14:20.005 two thousands that showed us  
NOTE Confidence: 0.99031836

00:14:20.005 --> 00:14:21.360 that if a woman has  
NOTE Confidence: 0.99031836

00:14:21.420 --> 00:14:22.860 only one or two positive  
NOTE Confidence: 0.99031836

00:14:22.860 --> 00:14:23.980 lymph nodes at the time  
NOTE Confidence: 0.99031836

00:14:23.980 --> 00:14:25.660 of surgery, we don't have  
NOTE Confidence: 0.99031836

00:14:25.660 --> 00:14:27.100 to necessarily remove all the  
NOTE Confidence: 0.99031836

00:14:27.100 --> 00:14:27.920 lymph nodes.  
NOTE Confidence: 0.9960911

00:14:28.540 --> 00:14:30.000 Now we even know  
NOTE Confidence: 0.9579689

00:14:30.540 --> 00:14:31.899 that with women who have  
NOTE Confidence: 0.9579689

00:14:31.899 --> 00:14:34.160 early stage slow growing cancers,  
NOTE Confidence: 0.9958511

00:14:34.685 --> 00:14:36.204 the hormone receptor positive breast  
NOTE Confidence: 0.9958511

00:14:36.204 --> 00:14:36.704 cancers,  
NOTE Confidence: 0.990536

00:14:37.005 --> 00:14:38.285 we actually don't even have  
NOTE Confidence: 0.990536

00:14:38.285 --> 00:14:39.805 to remove lymph nodes at  
NOTE Confidence: 0.990536

00:14:39.805 --> 00:14:41.005 all. So we don't even  
NOTE Confidence: 0.990536

00:14:41.005 --> 00:14:42.045 have to do that sentinel

NOTE Confidence: 0.990536  
00:14:42.045 --> 00:14:42.865 lymph node biopsy.  
NOTE Confidence: 0.99545425  
00:14:43.644 --> 00:14:45.105 If a woman has small  
NOTE Confidence: 0.99545425  
00:14:45.404 --> 00:14:47.584 cancers, hormone receptor positive,  
NOTE Confidence: 0.98970103  
00:14:48.420 --> 00:14:50.260 two trials were done, kind  
NOTE Confidence: 0.98970103  
00:14:50.260 --> 00:14:51.460 of right near each other,  
NOTE Confidence: 0.98970103  
00:14:51.460 --> 00:14:52.500 one in Europe and one  
NOTE Confidence: 0.98970103  
00:14:52.500 --> 00:14:53.240 in the UK,  
NOTE Confidence: 0.9406283  
00:14:53.780 --> 00:14:54.820 that showed us that there  
NOTE Confidence: 0.9406283  
00:14:54.820 --> 00:14:56.260 was no difference in outcomes  
NOTE Confidence: 0.9406283  
00:14:56.260 --> 00:14:58.020 whether we actually remove lymph  
NOTE Confidence: 0.9406283  
00:14:58.020 --> 00:14:58.920 nodes at all.  
NOTE Confidence: 0.93789124  
00:14:59.780 --> 00:15:01.060 This was just a a  
NOTE Confidence: 0.93789124  
00:15:01.060 --> 00:15:02.100 little bit more detail on  
NOTE Confidence: 0.93789124  
00:15:02.100 --> 00:15:04.005 the sound trial that allowed  
NOTE Confidence: 0.93789124  
00:15:04.005 --> 00:15:05.205 us again to show if  
NOTE Confidence: 0.93789124

00:15:05.205 --> 00:15:06.405 a woman has a normal  
NOTE Confidence: 0.93789124

00:15:06.405 --> 00:15:08.645 axillary ultrasound before surgery, we  
NOTE Confidence: 0.93789124

00:15:08.645 --> 00:15:10.185 do breast conservation.  
NOTE Confidence: 0.9645931

00:15:10.725 --> 00:15:11.765 We don't have to remove  
NOTE Confidence: 0.9645931

00:15:11.765 --> 00:15:13.045 lymph nodes. And this was  
NOTE Confidence: 0.9645931

00:15:13.045 --> 00:15:14.725 the INSEMA trial in Europe,  
NOTE Confidence: 0.9645931

00:15:14.725 --> 00:15:16.560 again, showing essentially the same  
NOTE Confidence: 0.98649

00:15:17.120 --> 00:15:18.320 results. As you can see,  
NOTE Confidence: 0.98649

00:15:18.320 --> 00:15:19.700 the surgical complications  
NOTE Confidence: 0.99445516

00:15:20.480 --> 00:15:21.920 are real when we have  
NOTE Confidence: 0.99445516

00:15:21.920 --> 00:15:23.600 to remove lymph nodes, and  
NOTE Confidence: 0.99445516

00:15:23.600 --> 00:15:24.480 they did a really nice  
NOTE Confidence: 0.99445516

00:15:24.480 --> 00:15:25.760 job demonstrating that when we  
NOTE Confidence: 0.99445516

00:15:25.760 --> 00:15:27.760 omit removing lymph nodes, women  
NOTE Confidence: 0.99445516

00:15:27.760 --> 00:15:29.700 have a lot less, surgical  
NOTE Confidence: 0.99445516

00:15:29.760 --> 00:15:30.260 complications.



NOTE Confidence: 0.9640006  
00:15:32.024 --> 00:15:34.185 We give neoadjuvant chemotherapy, meaning  
NOTE Confidence: 0.9640006  
00:15:34.185 --> 00:15:36.505 chemotherapy before surgery and sometimes  
NOTE Confidence: 0.9640006  
00:15:36.505 --> 00:15:37.945 still early stage breast cancers  
NOTE Confidence: 0.9640006  
00:15:37.945 --> 00:15:39.305 if they're more aggressive, like  
NOTE Confidence: 0.9640006  
00:15:39.305 --> 00:15:40.665 the triple negative setting and  
NOTE Confidence: 0.9640006  
00:15:40.665 --> 00:15:41.964 the HER2 positive setting.  
NOTE Confidence: 0.9982458  
00:15:42.265 --> 00:15:43.305 And now what we know  
NOTE Confidence: 0.9982458  
00:15:43.305 --> 00:15:43.805 is  
NOTE Confidence: 0.96854514  
00:15:44.319 --> 00:15:46.160 that if we remove lymph  
NOTE Confidence: 0.96854514  
00:15:46.160 --> 00:15:47.620 nodes after chemotherapy  
NOTE Confidence: 0.9495417  
00:15:48.720 --> 00:15:50.160 and there's no cancer left  
NOTE Confidence: 0.9495417  
00:15:50.160 --> 00:15:51.600 in any of them, we  
NOTE Confidence: 0.9495417  
00:15:51.600 --> 00:15:52.480 don't have to take out  
NOTE Confidence: 0.9495417  
00:15:52.480 --> 00:15:53.860 all that lymph nodes underneath  
NOTE Confidence: 0.9495417  
00:15:53.920 --> 00:15:54.660 the armpit.  
NOTE Confidence: 0.97764814

00:15:55.279 --> 00:15:57.759 However, stay tuned because even  
NOTE Confidence: 0.97764814

00:15:57.759 --> 00:15:59.275 now, when we have a  
NOTE Confidence: 0.97764814

00:15:59.275 --> 00:16:00.315 few lymph nodes that still  
NOTE Confidence: 0.97764814

00:16:00.315 --> 00:16:01.355 have cancer in it after  
NOTE Confidence: 0.97764814

00:16:01.355 --> 00:16:01.855 chemotherapy,  
NOTE Confidence: 0.9902147

00:16:02.315 --> 00:16:03.435 we may not need to  
NOTE Confidence: 0.9902147

00:16:03.435 --> 00:16:04.235 take out all the rest  
NOTE Confidence: 0.9902147

00:16:04.235 --> 00:16:05.195 of them, and we may  
NOTE Confidence: 0.9902147

00:16:05.195 --> 00:16:06.795 be able to, offer the  
NOTE Confidence: 0.9902147

00:16:06.795 --> 00:16:08.955 patient radiation alone. So these  
NOTE Confidence: 0.9902147

00:16:08.955 --> 00:16:10.235 results are hopefully coming in  
NOTE Confidence: 0.9902147

00:16:10.235 --> 00:16:11.275 the next four to five  
NOTE Confidence: 0.9902147

00:16:11.275 --> 00:16:12.255 to ten years,  
NOTE Confidence: 0.8961461

00:16:12.635 --> 00:16:13.435 but I think this will  
NOTE Confidence: 0.8961461

00:16:13.435 --> 00:16:14.690 be practice changing patients  
NOTE Confidence: 0.8268656

00:16:15.110 --> 00:16:15.610 as

NOTE Confidence: 0.9503658  
00:16:16.030 --> 00:16:16.530 well.  
NOTE Confidence: 0.9320146  
00:16:18.510 --> 00:16:19.850 And doctor Hickall may get  
NOTE Confidence: 0.9320146  
00:16:19.870 --> 00:16:20.510 into this in a little  
NOTE Confidence: 0.9320146  
00:16:20.510 --> 00:16:21.790 bit more detail later, but  
NOTE Confidence: 0.9320146  
00:16:21.790 --> 00:16:22.590 we now know that if  
NOTE Confidence: 0.9320146  
00:16:22.590 --> 00:16:23.550 we do have to remove  
NOTE Confidence: 0.9320146  
00:16:23.550 --> 00:16:24.670 all the lymph nodes, even  
NOTE Confidence: 0.9320146  
00:16:24.670 --> 00:16:25.630 still for an early stage  
NOTE Confidence: 0.9320146  
00:16:25.630 --> 00:16:27.090 breast cancer, it can happen.  
NOTE Confidence: 0.9778394  
00:16:27.630 --> 00:16:28.964 We can do techniques now  
NOTE Confidence: 0.9778394  
00:16:28.964 --> 00:16:30.964 to hopefully avoid, the horrible  
NOTE Confidence: 0.9778394  
00:16:30.964 --> 00:16:32.345 complication of lymphedema,  
NOTE Confidence: 0.98103535  
00:16:33.285 --> 00:16:34.725 where we can connect a  
NOTE Confidence: 0.98103535  
00:16:34.725 --> 00:16:36.645 vein and a lymphatic, a  
NOTE Confidence: 0.98103535  
00:16:36.645 --> 00:16:38.025 little channel in the armpit.  
NOTE Confidence: 0.98103535

00:16:38.325 --> 00:16:40.404 And, again, I ideally, allow  
NOTE Confidence: 0.98103535

00:16:40.404 --> 00:16:41.765 our patients to suffer less  
NOTE Confidence: 0.98103535

00:16:41.765 --> 00:16:43.865 from potential complications of lymphedema.  
NOTE Confidence: 0.98232925

00:16:45.170 --> 00:16:46.790 There are ongoing clinical trials  
NOTE Confidence: 0.98232925

00:16:46.930 --> 00:16:48.210 in this country looking at  
NOTE Confidence: 0.98232925

00:16:48.210 --> 00:16:50.370 this very idea to hopefully  
NOTE Confidence: 0.98232925

00:16:50.370 --> 00:16:51.730 have to show that there  
NOTE Confidence: 0.98232925

00:16:51.730 --> 00:16:53.110 are good outcomes with it,  
NOTE Confidence: 0.98910266

00:16:53.730 --> 00:16:55.430 but stay tuned as well.  
NOTE Confidence: 0.99805856

00:16:55.730 --> 00:16:56.610 And I think that's all  
NOTE Confidence: 0.99805856

00:16:56.610 --> 00:16:57.885 I have. Thank you so  
NOTE Confidence: 0.99805856

00:16:57.885 --> 00:16:58.765 much for the time, and  
NOTE Confidence: 0.99805856

00:16:58.765 --> 00:16:59.805 I'd love to take questions  
NOTE Confidence: 0.99805856

00:16:59.805 --> 00:17:00.545 at the end.  
NOTE Confidence: 0.9926864

00:17:01.325 --> 00:17:02.685 Thank you so much, doctor  
NOTE Confidence: 0.9926864

00:17:02.685 --> 00:17:04.045 Berger. And we're gonna move

NOTE Confidence: 0.9926864  
00:17:04.045 --> 00:17:05.325 on to our two additional  
NOTE Confidence: 0.9926864  
00:17:05.325 --> 00:17:06.925 speakers. We'll take questions at  
NOTE Confidence: 0.9926864  
00:17:06.925 --> 00:17:07.805 the end, and I'll be  
NOTE Confidence: 0.9926864  
00:17:07.805 --> 00:17:09.244 responding in real time in  
NOTE Confidence: 0.9926864  
00:17:09.244 --> 00:17:09.905 the chat.  
NOTE Confidence: 0.9987061  
00:17:10.550 --> 00:17:11.510 This is really meant to  
NOTE Confidence: 0.9987061  
00:17:11.510 --> 00:17:12.570 highlight our multidisciplinary  
NOTE Confidence: 0.9995892  
00:17:13.190 --> 00:17:14.010 team approach.  
NOTE Confidence: 0.94369113  
00:17:14.470 --> 00:17:15.910 Next up is doctor Siva  
NOTE Confidence: 0.94369113  
00:17:15.910 --> 00:17:18.150 Haykal, associate professor of plastic  
NOTE Confidence: 0.94369113  
00:17:18.150 --> 00:17:19.670 surgery and section chief of  
NOTE Confidence: 0.94369113  
00:17:19.670 --> 00:17:20.170 oncoplastic  
NOTE Confidence: 0.99962103  
00:17:20.550 --> 00:17:21.050 reconstruction.  
NOTE Confidence: 0.9927793  
00:17:21.990 --> 00:17:23.510 Tonight, she'll be talking about  
NOTE Confidence: 0.9927793  
00:17:23.510 --> 00:17:24.330 breast reconstruction  
NOTE Confidence: 0.9615732

00:17:24.710 --> 00:17:26.445 and early stage breast cancer.  
NOTE Confidence: 0.9615732

00:17:26.445 --> 00:17:27.744 Thank you, doctor Haykel.  
NOTE Confidence: 0.9770223

00:17:28.284 --> 00:17:29.484 Thank you so much, doctor  
NOTE Confidence: 0.9770223

00:17:29.484 --> 00:17:31.085 Greenup, and thank you, doctor  
NOTE Confidence: 0.9770223

00:17:31.085 --> 00:17:33.025 Berger, for an amazing talk.  
NOTE Confidence: 0.9770223

00:17:33.164 --> 00:17:34.784 I'll be sharing my screen.  
NOTE Confidence: 0.9983218

00:17:42.299 --> 00:17:43.260 Please let me know if  
NOTE Confidence: 0.9983218

00:17:43.260 --> 00:17:44.160 you can see it.  
NOTE Confidence: 0.99637955

00:17:47.980 --> 00:17:49.280 Great. Thank you.  
NOTE Confidence: 0.9563401

00:17:49.820 --> 00:17:51.100 Okay. Great. So we're gonna  
NOTE Confidence: 0.9563401

00:17:51.100 --> 00:17:52.400 talk about breast reconstruction,  
NOTE Confidence: 0.9413633

00:17:53.075 --> 00:17:53.555 and,  
NOTE Confidence: 0.98497254

00:17:54.595 --> 00:17:55.795 I'm open to questions at  
NOTE Confidence: 0.98497254

00:17:55.795 --> 00:17:57.075 the end. Hopefully, I can  
NOTE Confidence: 0.98497254

00:17:57.075 --> 00:17:58.435 answer some of the questions  
NOTE Confidence: 0.98497254

00:17:58.435 --> 00:17:59.415 by going through,

NOTE Confidence: 0.9847363  
00:18:00.195 --> 00:18:01.315 some of the slides and  
NOTE Confidence: 0.9847363  
00:18:01.315 --> 00:18:02.994 some of the techniques where,  
NOTE Confidence: 0.78596175  
00:18:03.395 --> 00:18:03.875 breast,  
NOTE Confidence: 0.99859595  
00:18:04.435 --> 00:18:06.355 breast cancer surgeons are working  
NOTE Confidence: 0.99859595  
00:18:06.355 --> 00:18:08.135 in collaboration with reconstructive  
NOTE Confidence: 0.9975954  
00:18:08.560 --> 00:18:09.060 surgeons,  
NOTE Confidence: 0.9991277  
00:18:09.920 --> 00:18:11.040 in order to achieve a  
NOTE Confidence: 0.9991277  
00:18:11.040 --> 00:18:11.859 great outcome.  
NOTE Confidence: 0.9973522  
00:18:12.720 --> 00:18:14.160 So let's talk about breast  
NOTE Confidence: 0.9973522  
00:18:14.160 --> 00:18:15.920 reconstruction. So it can either  
NOTE Confidence: 0.9973522  
00:18:15.920 --> 00:18:17.520 be immediate, which is at  
NOTE Confidence: 0.9973522  
00:18:17.520 --> 00:18:18.580 the time of mastectomy,  
NOTE Confidence: 0.9893591  
00:18:19.200 --> 00:18:20.580 and we'll talk about lumpectomy  
NOTE Confidence: 0.9893591  
00:18:20.800 --> 00:18:21.840 as well, or it can  
NOTE Confidence: 0.9893591  
00:18:21.840 --> 00:18:23.359 be delayed, which is any  
NOTE Confidence: 0.9893591

00:18:23.359 --> 00:18:24.955 day after the mastectomy.  
NOTE Confidence: 0.96227825

00:18:26.215 --> 00:18:27.655 How do we determine the  
NOTE Confidence: 0.96227825

00:18:27.655 --> 00:18:28.555 best options,  
NOTE Confidence: 0.9966622

00:18:28.935 --> 00:18:30.375 and, how do we make  
NOTE Confidence: 0.9966622

00:18:30.375 --> 00:18:31.655 a decision? So it has  
NOTE Confidence: 0.9966622

00:18:31.655 --> 00:18:33.195 to do with patient preference,  
NOTE Confidence: 0.9179169

00:18:33.895 --> 00:18:35.835 the need for postoperative treatments  
NOTE Confidence: 0.9179169

00:18:35.895 --> 00:18:37.755 such as chemotherapy or radiation,  
NOTE Confidence: 0.99706405

00:18:38.790 --> 00:18:40.390 whether we have donor sites,  
NOTE Confidence: 0.99706405

00:18:40.390 --> 00:18:41.430 and I'll talk about what  
NOTE Confidence: 0.99706405

00:18:41.430 --> 00:18:42.170 that means,  
NOTE Confidence: 0.99080354

00:18:42.710 --> 00:18:44.890 other medical issues, and recovery  
NOTE Confidence: 0.99080354

00:18:44.950 --> 00:18:45.450 time.  
NOTE Confidence: 0.9925943

00:18:46.070 --> 00:18:47.270 So I'll first talk about  
NOTE Confidence: 0.9925943

00:18:47.270 --> 00:18:47.770 oncoplastic  
NOTE Confidence: 0.99940836

00:18:48.150 --> 00:18:48.650 reconstruction.



NOTE Confidence: 0.98442173

00:18:49.110 --> 00:18:50.790 So doctor Berger mentioned it

NOTE Confidence: 0.98442173

00:18:50.790 --> 00:18:52.250 a little bit, but oncoplastic

NOTE Confidence: 0.99948835

00:18:52.630 --> 00:18:53.130 reconstruction

NOTE Confidence: 0.97676647

00:18:54.304 --> 00:18:55.265 basically involves,

NOTE Confidence: 0.99932724

00:18:56.545 --> 00:18:58.545 rearranging breast tissue after a

NOTE Confidence: 0.99932724

00:18:58.545 --> 00:19:00.405 lumpectomy for breast cancer

NOTE Confidence: 0.9933311

00:19:01.025 --> 00:19:02.725 to achieve a better aesthetic

NOTE Confidence: 0.9933311

00:19:02.865 --> 00:19:04.385 result. So when a portion

NOTE Confidence: 0.9933311

00:19:04.385 --> 00:19:06.085 of the breast is removed,

NOTE Confidence: 0.9933311

00:19:06.225 --> 00:19:07.765 it can cause some dimples,

NOTE Confidence: 0.9933311

00:19:07.905 --> 00:19:09.605 some divots in the breast,

NOTE Confidence: 0.9983343

00:19:09.960 --> 00:19:11.080 and it can cause some

NOTE Confidence: 0.9983343

00:19:11.080 --> 00:19:13.020 asymmetry between the two breasts.

NOTE Confidence: 0.95175266

00:19:13.399 --> 00:19:14.600 So this is a great

NOTE Confidence: 0.95175266

00:19:14.600 --> 00:19:16.679 option for people who have

NOTE Confidence: 0.95175266

00:19:16.679 --> 00:19:18.119 large or very, what we  
NOTE Confidence: 0.95175266

00:19:18.119 --> 00:19:20.220 call, tootic or saggy breasts.  
NOTE Confidence: 0.99515575

00:19:20.679 --> 00:19:22.279 So a breast reduction is  
NOTE Confidence: 0.99515575

00:19:22.279 --> 00:19:24.279 typically done on the other  
NOTE Confidence: 0.99515575

00:19:24.279 --> 00:19:25.419 side as well,  
NOTE Confidence: 0.88672733

00:19:26.335 --> 00:19:27.935 and or and or a  
NOTE Confidence: 0.88672733

00:19:27.935 --> 00:19:28.755 breast lift.  
NOTE Confidence: 0.9991513

00:19:30.815 --> 00:19:32.255 Now let's talk about implant  
NOTE Confidence: 0.9991513

00:19:32.255 --> 00:19:33.075 based reconstruction.  
NOTE Confidence: 0.9823209

00:19:33.775 --> 00:19:35.135 So there are some techniques  
NOTE Confidence: 0.9823209

00:19:35.135 --> 00:19:37.295 that involve putting in an  
NOTE Confidence: 0.9823209

00:19:37.295 --> 00:19:38.975 implant right away. So that's  
NOTE Confidence: 0.9823209

00:19:38.975 --> 00:19:40.515 when we put an implant  
NOTE Confidence: 0.9823209

00:19:40.575 --> 00:19:41.830 at the time of a  
NOTE Confidence: 0.9823209

00:19:41.830 --> 00:19:42.330 mastectomy.  
NOTE Confidence: 0.99894214

00:19:43.350 --> 00:19:44.869 It eliminates the need for

NOTE Confidence: 0.99894214  
00:19:44.869 --> 00:19:46.250 what we call a tissue  
NOTE Confidence: 0.99894214  
00:19:46.309 --> 00:19:46.809 expander.  
NOTE Confidence: 0.99980587  
00:19:47.590 --> 00:19:48.809 It's a breast reconstruction  
NOTE Confidence: 0.96954304  
00:19:49.109 --> 00:19:50.549 that can be completed in  
NOTE Confidence: 0.96954304  
00:19:50.549 --> 00:19:51.369 one step,  
NOTE Confidence: 0.9936575  
00:19:51.990 --> 00:19:53.269 and people who are good  
NOTE Confidence: 0.9936575  
00:19:53.269 --> 00:19:55.109 candidates for this are really  
NOTE Confidence: 0.9936575  
00:19:55.109 --> 00:19:56.809 based on the breast size,  
NOTE Confidence: 0.9987588  
00:19:57.485 --> 00:19:58.785 the cancer size,  
NOTE Confidence: 0.99897325  
00:19:59.244 --> 00:20:00.625 and the type of mastectomy  
NOTE Confidence: 0.94375837  
00:20:01.085 --> 00:20:01.585 required.  
NOTE Confidence: 0.9636129  
00:20:02.045 --> 00:20:04.125 And frequently, it's done when,  
NOTE Confidence: 0.9877357  
00:20:04.685 --> 00:20:05.885 we try to keep the  
NOTE Confidence: 0.9877357  
00:20:05.885 --> 00:20:06.785 nipple areola.  
NOTE Confidence: 0.9989703  
00:20:07.485 --> 00:20:08.925 However, this is not the  
NOTE Confidence: 0.9989703

00:20:08.925 --> 00:20:09.905 gold standard.  
NOTE Confidence: 0.9600363

00:20:10.445 --> 00:20:11.565 It can lead to high  
NOTE Confidence: 0.9600363

00:20:11.565 --> 00:20:12.705 revision rates.  
NOTE Confidence: 0.9995084

00:20:14.260 --> 00:20:15.859 The gold standard for implant  
NOTE Confidence: 0.9995084

00:20:15.859 --> 00:20:16.680 based reconstruction  
NOTE Confidence: 0.9997487

00:20:17.060 --> 00:20:18.020 is what we call a  
NOTE Confidence: 0.9997487

00:20:18.020 --> 00:20:19.160 two stage procedure.  
NOTE Confidence: 0.99957377

00:20:20.020 --> 00:20:21.540 So in the first stage,  
NOTE Confidence: 0.99957377

00:20:21.540 --> 00:20:23.140 we put either a tissue  
NOTE Confidence: 0.99957377

00:20:23.140 --> 00:20:23.640 expander  
NOTE Confidence: 0.96454805

00:20:24.020 --> 00:20:25.859 above or underneath the muscle  
NOTE Confidence: 0.96454805

00:20:25.859 --> 00:20:27.700 and most commonly now above  
NOTE Confidence: 0.96454805

00:20:27.700 --> 00:20:28.359 the muscle.  
NOTE Confidence: 0.99878395

00:20:29.015 --> 00:20:30.135 This looks sort of like  
NOTE Confidence: 0.99878395

00:20:30.135 --> 00:20:31.755 a balloon. It has,  
NOTE Confidence: 0.9953199

00:20:32.294 --> 00:20:34.054 a magnetic port in it,

NOTE Confidence: 0.9953199  
00:20:34.054 --> 00:20:35.414 and it's covered by the  
NOTE Confidence: 0.9953199  
00:20:35.414 --> 00:20:35.914 skin.  
NOTE Confidence: 0.9996446  
00:20:36.695 --> 00:20:37.994 And this requires  
NOTE Confidence: 0.9771207  
00:20:38.534 --> 00:20:39.815 filling of that,  
NOTE Confidence: 0.9999839  
00:20:40.375 --> 00:20:40.875 balloon  
NOTE Confidence: 0.98339343  
00:20:41.654 --> 00:20:43.255 in clinic every one to  
NOTE Confidence: 0.98339343  
00:20:43.255 --> 00:20:44.580 two weeks, and we fill  
NOTE Confidence: 0.98339343  
00:20:44.580 --> 00:20:45.700 it to the size that  
NOTE Confidence: 0.98339343  
00:20:45.700 --> 00:20:47.140 we're happy with or you're  
NOTE Confidence: 0.98339343  
00:20:47.140 --> 00:20:47.960 happy with.  
NOTE Confidence: 0.9780277  
00:20:48.420 --> 00:20:49.940 And it involves the second  
NOTE Confidence: 0.9780277  
00:20:49.940 --> 00:20:51.700 stage. So that means going  
NOTE Confidence: 0.9780277  
00:20:51.700 --> 00:20:53.320 back to the operating room,  
NOTE Confidence: 0.9929709  
00:20:53.700 --> 00:20:55.700 removing the expander, and putting  
NOTE Confidence: 0.9929709  
00:20:55.700 --> 00:20:56.679 in an implant.  
NOTE Confidence: 0.9507651

00:20:57.325 --> 00:20:58.525 Because this is kinda what  
NOTE Confidence: 0.9507651

00:20:58.525 --> 00:21:00.205 it looks like. Sometimes it's  
NOTE Confidence: 0.9507651

00:21:00.205 --> 00:21:01.805 covered with a special type  
NOTE Confidence: 0.9507651

00:21:01.805 --> 00:21:02.545 of mesh.  
NOTE Confidence: 0.9948147

00:21:03.325 --> 00:21:03.825 And,  
NOTE Confidence: 0.98555017

00:21:04.365 --> 00:21:05.965 in clinic, we use a  
NOTE Confidence: 0.98555017

00:21:05.965 --> 00:21:07.744 mag we use a magnetic  
NOTE Confidence: 0.98555017

00:21:07.885 --> 00:21:09.744 finder. We find the magnetic  
NOTE Confidence: 0.98555017

00:21:09.805 --> 00:21:10.925 port, and we put a  
NOTE Confidence: 0.98555017

00:21:10.925 --> 00:21:12.225 needle through the skin  
NOTE Confidence: 0.9966089

00:21:12.760 --> 00:21:14.520 into the tissue expander, and  
NOTE Confidence: 0.9966089

00:21:14.520 --> 00:21:15.900 we fill up that space.  
NOTE Confidence: 0.986166

00:21:16.440 --> 00:21:18.380 So, typically, we start filling  
NOTE Confidence: 0.986166

00:21:18.520 --> 00:21:19.799 about two to three weeks  
NOTE Confidence: 0.986166

00:21:19.799 --> 00:21:20.700 after surgery.  
NOTE Confidence: 0.96315855

00:21:21.320 --> 00:21:23.240 The expansion process can take

NOTE Confidence: 0.96315855  
00:21:23.240 --> 00:21:23.900 up to  
NOTE Confidence: 0.92287165  
00:21:35.994 --> 00:21:37.295 treatment as required.  
NOTE Confidence: 0.9994043  
00:21:38.830 --> 00:21:40.269 What are the advantages of  
NOTE Confidence: 0.9994043  
00:21:40.269 --> 00:21:41.409 implant based reconstruction?  
NOTE Confidence: 0.99682754  
00:21:42.269 --> 00:21:43.730 It's a quicker procedure.  
NOTE Confidence: 0.99974597  
00:21:44.429 --> 00:21:46.450 It's a shorter recovery time.  
NOTE Confidence: 0.9994151  
00:21:46.750 --> 00:21:47.869 You get to choose the  
NOTE Confidence: 0.9994151  
00:21:47.869 --> 00:21:49.090 size of your reconstruction.  
NOTE Confidence: 0.99980897  
00:21:49.950 --> 00:21:51.789 We're only operating on one  
NOTE Confidence: 0.99980897  
00:21:51.789 --> 00:21:52.275 side.  
NOTE Confidence: 0.9945301  
00:21:52.595 --> 00:21:54.195 The disadvantage is it can  
NOTE Confidence: 0.9945301  
00:21:54.195 --> 00:21:55.734 be more than one surgery.  
NOTE Confidence: 0.9987264  
00:21:56.355 --> 00:21:57.955 We can sometimes see and  
NOTE Confidence: 0.9987264  
00:21:57.955 --> 00:21:59.175 palpate the implant.  
NOTE Confidence: 0.998712  
00:21:59.795 --> 00:22:01.075 If it's placed under the  
NOTE Confidence: 0.998712

00:22:01.075 --> 00:22:02.935 muscle, the muscle can cause  
NOTE Confidence: 0.998712

00:22:02.994 --> 00:22:03.494 animation.  
NOTE Confidence: 0.9892611

00:22:04.275 --> 00:22:05.635 There's always a risk of  
NOTE Confidence: 0.9892611

00:22:05.635 --> 00:22:06.135 infection.  
NOTE Confidence: 0.9936603

00:22:06.740 --> 00:22:07.780 There's a risk of what  
NOTE Confidence: 0.9936603

00:22:07.780 --> 00:22:09.859 we call capsular contracture, which  
NOTE Confidence: 0.9936603

00:22:09.859 --> 00:22:11.640 is the body forming  
NOTE Confidence: 0.98876065

00:22:12.100 --> 00:22:13.780 a capsule around the implant,  
NOTE Confidence: 0.98876065

00:22:13.780 --> 00:22:14.280 which  
NOTE Confidence: 0.90043706

00:22:15.220 --> 00:22:17.859 commonly happens. However, sometimes it  
NOTE Confidence: 0.90043706

00:22:17.859 --> 00:22:18.520 can become  
NOTE Confidence: 0.9990072

00:22:19.205 --> 00:22:20.345 hard and painful  
NOTE Confidence: 0.9919106

00:22:20.645 --> 00:22:22.185 and can distort the implant.  
NOTE Confidence: 0.99616694

00:22:22.725 --> 00:22:24.185 Implants can also rupture.  
NOTE Confidence: 0.9656575

00:22:25.045 --> 00:22:26.805 Any radiation can lead to  
NOTE Confidence: 0.9656575

00:22:26.805 --> 00:22:28.645 a higher failure rate, and



NOTE Confidence: 0.9656575  
00:22:28.645 --> 00:22:30.505 there's a few things associated  
NOTE Confidence: 0.978685  
00:22:30.885 --> 00:22:32.880 with implants that are less  
NOTE Confidence: 0.978685  
00:22:32.960 --> 00:22:34.640 common and actually very rare,  
NOTE Confidence: 0.978685  
00:22:34.640 --> 00:22:35.540 but we frequently  
NOTE Confidence: 0.94415444  
00:22:36.160 --> 00:22:37.119 talk about and you should  
NOTE Confidence: 0.94415444  
00:22:37.119 --> 00:22:39.300 discuss with your reconstructive surgeon,  
NOTE Confidence: 0.9862131  
00:22:39.680 --> 00:22:41.359 which are anaplastic large cell  
NOTE Confidence: 0.9862131  
00:22:41.359 --> 00:22:43.619 lymphoma and breast implant illness,  
NOTE Confidence: 0.97384053  
00:22:44.160 --> 00:22:45.840 which are related to safety,  
NOTE Confidence: 0.97384053  
00:22:45.840 --> 00:22:47.359 related to some types of  
NOTE Confidence: 0.97384053  
00:22:47.359 --> 00:22:47.859 implants,  
NOTE Confidence: 0.9990698  
00:22:48.274 --> 00:22:49.894 which are not always used,  
NOTE Confidence: 0.9993801  
00:22:50.514 --> 00:22:51.414 in all practices.  
NOTE Confidence: 0.9385782  
00:22:52.835 --> 00:22:55.095 Doctor Berger alluded to, sensation  
NOTE Confidence: 0.9385782  
00:22:55.315 --> 00:22:55.815 preservation.  
NOTE Confidence: 0.9641174

00:22:58.195 --> 00:22:59.255 So this is frequently  
NOTE Confidence: 0.9977473

00:22:59.715 --> 00:23:01.794 done when we can preserve  
NOTE Confidence: 0.9977473

00:23:01.794 --> 00:23:02.455 the nipple  
NOTE Confidence: 0.9860999

00:23:02.779 --> 00:23:04.159 and the areola,  
NOTE Confidence: 0.9862039

00:23:04.460 --> 00:23:05.740 which can which is done  
NOTE Confidence: 0.9862039

00:23:05.740 --> 00:23:08.059 in, some patients. Again, the  
NOTE Confidence: 0.9862039

00:23:08.059 --> 00:23:09.340 tumor has to be far  
NOTE Confidence: 0.9862039

00:23:09.340 --> 00:23:10.539 away enough from the nipple  
NOTE Confidence: 0.9862039

00:23:10.539 --> 00:23:11.740 areola so that we can  
NOTE Confidence: 0.9862039

00:23:11.740 --> 00:23:12.480 keep it.  
NOTE Confidence: 0.9205205

00:23:12.859 --> 00:23:13.980 And then the breast have  
NOTE Confidence: 0.9205205

00:23:13.980 --> 00:23:15.260 to has to already has  
NOTE Confidence: 0.9205205

00:23:15.260 --> 00:23:16.159 a nice shape,  
NOTE Confidence: 0.9918308

00:23:16.845 --> 00:23:17.725 to it so that we  
NOTE Confidence: 0.9918308

00:23:17.725 --> 00:23:19.425 can preserve the nipple areola.  
NOTE Confidence: 0.9894695

00:23:19.885 --> 00:23:21.244 So when that's done, we

NOTE Confidence: 0.9894695  
00:23:21.244 --> 00:23:22.925 can do we can preserve  
NOTE Confidence: 0.9894695  
00:23:22.925 --> 00:23:24.545 sensation in two ways.  
NOTE Confidence: 0.9480052  
00:23:25.005 --> 00:23:26.465 One of them by connecting  
NOTE Confidence: 0.99985874  
00:23:26.925 --> 00:23:27.665 a nerve  
NOTE Confidence: 0.9526768  
00:23:28.125 --> 00:23:29.645 that comes off the shelf  
NOTE Confidence: 0.9526768  
00:23:29.645 --> 00:23:31.105 that has been processed,  
NOTE Confidence: 0.99973345  
00:23:31.720 --> 00:23:32.760 or we can take a  
NOTE Confidence: 0.99973345  
00:23:32.760 --> 00:23:33.260 nerve  
NOTE Confidence: 0.99837  
00:23:33.720 --> 00:23:34.840 from the side of the  
NOTE Confidence: 0.99837  
00:23:34.840 --> 00:23:36.360 breast that's not involved in  
NOTE Confidence: 0.99837  
00:23:36.360 --> 00:23:37.100 the cancer  
NOTE Confidence: 0.9959179  
00:23:37.560 --> 00:23:39.480 and transfer it over to  
NOTE Confidence: 0.9959179  
00:23:39.480 --> 00:23:41.020 try to bring back sensation.  
NOTE Confidence: 0.96636796  
00:23:41.640 --> 00:23:43.400 Now the sensation is not  
NOTE Confidence: 0.96636796  
00:23:43.400 --> 00:23:44.620 like normal sensation.  
NOTE Confidence: 0.9944342

00:23:45.000 --> 00:23:46.060 It's not erogenous  
NOTE Confidence: 0.86052907

00:23:46.360 --> 00:23:46.860 sensation,  
NOTE Confidence: 0.99006104

00:23:47.585 --> 00:23:49.425 but, we think with some  
NOTE Confidence: 0.99006104

00:23:49.425 --> 00:23:50.945 studies that we can bring  
NOTE Confidence: 0.99006104

00:23:50.945 --> 00:23:51.765 back sensation,  
NOTE Confidence: 0.99957216

00:23:52.865 --> 00:23:54.305 better than not having this  
NOTE Confidence: 0.99957216

00:23:54.305 --> 00:23:55.205 done at all.  
NOTE Confidence: 0.9475041

00:23:56.465 --> 00:23:57.505 The other type of re  
NOTE Confidence: 0.9475041

00:23:57.505 --> 00:23:59.425 re breast reconstruction is called  
NOTE Confidence: 0.9475041

00:23:59.425 --> 00:24:01.045 autologous tissue reconstruction.  
NOTE Confidence: 0.9998217

00:24:02.309 --> 00:24:03.350 Can you guys still hear  
NOTE Confidence: 0.9998217

00:24:03.350 --> 00:24:03.850 me?  
NOTE Confidence: 0.99024934

00:24:04.630 --> 00:24:06.070 Okay. Great. Sorry. I think  
NOTE Confidence: 0.99024934

00:24:06.070 --> 00:24:07.130 you lost the signal.  
NOTE Confidence: 0.99510163

00:24:08.470 --> 00:24:10.309 And that means using your  
NOTE Confidence: 0.99510163

00:24:10.309 --> 00:24:12.070 own tissue. So that can

NOTE Confidence: 0.99510163  
00:24:12.070 --> 00:24:13.529 come from different areas.  
NOTE Confidence: 0.95676446  
00:24:14.164 --> 00:24:15.125 So there it can come  
NOTE Confidence: 0.95676446  
00:24:15.125 --> 00:24:16.885 from the abdomen, the belly.  
NOTE Confidence: 0.95676446  
00:24:16.885 --> 00:24:18.164 That's called a deep flap.  
NOTE Confidence: 0.95676446  
00:24:18.164 --> 00:24:19.205 It can come from the  
NOTE Confidence: 0.95676446  
00:24:19.205 --> 00:24:21.284 thighs. That can is called  
NOTE Confidence: 0.95676446  
00:24:21.284 --> 00:24:22.404 the tug flap or the  
NOTE Confidence: 0.95676446  
00:24:22.404 --> 00:24:24.164 pad flap. It can come  
NOTE Confidence: 0.95676446  
00:24:24.164 --> 00:24:25.765 from the buttocks, the eye  
NOTE Confidence: 0.95676446  
00:24:25.765 --> 00:24:26.885 gap, or the s cap,  
NOTE Confidence: 0.95676446  
00:24:26.885 --> 00:24:27.765 or it can come from  
NOTE Confidence: 0.95676446  
00:24:27.765 --> 00:24:28.470 the back.  
NOTE Confidence: 0.99732345  
00:24:29.030 --> 00:24:30.150 So that's using,  
NOTE Confidence: 0.99667126  
00:24:30.470 --> 00:24:32.070 the patient's own tissues to  
NOTE Confidence: 0.99667126  
00:24:32.070 --> 00:24:33.750 create a breast mound. It  
NOTE Confidence: 0.99667126

00:24:33.750 --> 00:24:35.289 avoids all the complications  
NOTE Confidence: 0.9894777

00:24:35.669 --> 00:24:36.730 related to implants,  
NOTE Confidence: 0.9982921

00:24:37.109 --> 00:24:38.309 and it's a pretty nice  
NOTE Confidence: 0.9982921

00:24:38.309 --> 00:24:39.830 donor site. So let's talk  
NOTE Confidence: 0.9982921

00:24:39.830 --> 00:24:40.809 about the options.  
NOTE Confidence: 0.987544

00:24:41.465 --> 00:24:42.905 The most common one is  
NOTE Confidence: 0.987544

00:24:42.905 --> 00:24:44.585 called the deep flap. That  
NOTE Confidence: 0.987544

00:24:44.585 --> 00:24:46.685 stands for deep inferior epigastric  
NOTE Confidence: 0.987544

00:24:46.984 --> 00:24:49.065 perforator flap. That just means  
NOTE Confidence: 0.987544

00:24:49.065 --> 00:24:50.665 the vessels that we actually  
NOTE Confidence: 0.987544

00:24:50.665 --> 00:24:51.165 use.  
NOTE Confidence: 0.9921132

00:24:51.705 --> 00:24:52.825 So this is a cross  
NOTE Confidence: 0.9921132

00:24:52.825 --> 00:24:54.185 section of the belly where  
NOTE Confidence: 0.9921132

00:24:54.185 --> 00:24:55.885 we have skin and fat  
NOTE Confidence: 0.9742818

00:24:56.240 --> 00:24:57.140 and the muscle.  
NOTE Confidence: 0.9976995

00:24:57.520 --> 00:24:59.119 There's little vessels that are

NOTE Confidence: 0.9976995  
00:24:59.119 --> 00:25:00.720 less than one millimeter in  
NOTE Confidence: 0.9976995  
00:25:00.720 --> 00:25:03.040 size that really penetrate through  
NOTE Confidence: 0.9976995  
00:25:03.040 --> 00:25:03.780 that muscle  
NOTE Confidence: 0.9914997  
00:25:04.160 --> 00:25:05.600 and give blood supply to  
NOTE Confidence: 0.9914997  
00:25:05.600 --> 00:25:06.820 the skin and the fat.  
NOTE Confidence: 0.9914997  
00:25:07.119 --> 00:25:08.240 So we get a CT  
NOTE Confidence: 0.9914997  
00:25:08.240 --> 00:25:09.680 scan of the belly first,  
NOTE Confidence: 0.9914997  
00:25:09.680 --> 00:25:10.980 and during the surgery,  
NOTE Confidence: 0.95912564  
00:25:11.625 --> 00:25:13.244 we find those little vessels.  
NOTE Confidence: 0.98707277  
00:25:13.705 --> 00:25:15.065 We follow them all the  
NOTE Confidence: 0.98707277  
00:25:15.065 --> 00:25:16.345 way down to the groin  
NOTE Confidence: 0.98707277  
00:25:16.345 --> 00:25:17.385 where they come from, where  
NOTE Confidence: 0.98707277  
00:25:17.385 --> 00:25:19.385 they become slightly larger, so  
NOTE Confidence: 0.98707277  
00:25:19.385 --> 00:25:20.845 about two to three millimeters.  
NOTE Confidence: 0.99148655  
00:25:21.465 --> 00:25:23.145 We disconnect them from that  
NOTE Confidence: 0.99148655

00:25:23.145 --> 00:25:23.645 area,  
NOTE Confidence: 0.9919041  
00:25:23.960 --> 00:25:25.400 and we reconnect them in  
NOTE Confidence: 0.9919041  
00:25:25.400 --> 00:25:27.240 vessels underneath a small piece  
NOTE Confidence: 0.9919041  
00:25:27.240 --> 00:25:27.980 of rib.  
NOTE Confidence: 0.99927413  
00:25:28.520 --> 00:25:29.900 This is called microsurgery.  
NOTE Confidence: 0.9965797  
00:25:30.520 --> 00:25:31.720 We use loops and a  
NOTE Confidence: 0.9965797  
00:25:31.720 --> 00:25:33.240 microscope to do this, and  
NOTE Confidence: 0.9965797  
00:25:33.240 --> 00:25:34.200 it can be a long  
NOTE Confidence: 0.9965797  
00:25:34.200 --> 00:25:34.700 procedure.  
NOTE Confidence: 0.97875106  
00:25:35.800 --> 00:25:36.765 You end up with a  
NOTE Confidence: 0.97875106  
00:25:36.845 --> 00:25:38.125 scar from hip to hip  
NOTE Confidence: 0.97875106  
00:25:38.125 --> 00:25:39.165 and a scar around the  
NOTE Confidence: 0.97875106  
00:25:39.165 --> 00:25:40.525 belly button like a tummy  
NOTE Confidence: 0.97875106  
00:25:40.525 --> 00:25:41.025 tuck.  
NOTE Confidence: 0.9799288  
00:25:42.125 --> 00:25:43.565 Half of the belly is  
NOTE Confidence: 0.9799288  
00:25:43.565 --> 00:25:45.405 used for one side, half



NOTE Confidence: 0.9799288  
00:25:45.405 --> 00:25:46.685 is used for the other  
NOTE Confidence: 0.9799288  
00:25:46.685 --> 00:25:47.885 side, and we create a  
NOTE Confidence: 0.9799288  
00:25:47.885 --> 00:25:49.025 breast out of it.  
NOTE Confidence: 0.99961  
00:25:49.650 --> 00:25:51.170 We can also bring in  
NOTE Confidence: 0.99961  
00:25:51.170 --> 00:25:52.930 a little nerve to try  
NOTE Confidence: 0.99961  
00:25:52.930 --> 00:25:54.230 to bring back sensation  
NOTE Confidence: 0.9925068  
00:25:55.010 --> 00:25:55.970 and try to,  
NOTE Confidence: 0.99912906  
00:25:56.530 --> 00:25:57.890 you know, to create the  
NOTE Confidence: 0.99912906  
00:25:57.890 --> 00:25:58.390 sensation  
NOTE Confidence: 0.9918404  
00:25:58.770 --> 00:25:59.970 similar to what I talked  
NOTE Confidence: 0.9918404  
00:25:59.970 --> 00:26:00.869 about earlier.  
NOTE Confidence: 0.9908813  
00:26:02.205 --> 00:26:03.085 I'm sorry. I have a  
NOTE Confidence: 0.9908813  
00:26:03.085 --> 00:26:04.385 little child in the background.  
NOTE Confidence: 0.98188126  
00:26:04.924 --> 00:26:06.285 And we also have,  
NOTE Confidence: 0.98245764  
00:26:07.085 --> 00:26:07.585 however,  
NOTE Confidence: 0.94065064

00:26:08.285 --> 00:26:10.365 it's, again, not like normal  
NOTE Confidence: 0.94065064

00:26:10.365 --> 00:26:10.865 sensation,  
NOTE Confidence: 0.97559136

00:26:11.645 --> 00:26:12.924 but we do know that  
NOTE Confidence: 0.97559136

00:26:12.924 --> 00:26:14.845 with time, even without using  
NOTE Confidence: 0.97559136

00:26:14.845 --> 00:26:16.440 a nerve graft, we can  
NOTE Confidence: 0.97559136

00:26:16.440 --> 00:26:18.520 bring back since the, the  
NOTE Confidence: 0.97559136

00:26:18.520 --> 00:26:20.119 nerves actually grow from the  
NOTE Confidence: 0.97559136

00:26:20.119 --> 00:26:20.619 side,  
NOTE Confidence: 0.99875927

00:26:21.480 --> 00:26:22.919 of the body to try  
NOTE Confidence: 0.99875927

00:26:22.919 --> 00:26:24.600 to bring back sensation into  
NOTE Confidence: 0.99875927

00:26:24.600 --> 00:26:25.260 the flap.  
NOTE Confidence: 0.98194045

00:26:26.119 --> 00:26:27.880 One side takes about six  
NOTE Confidence: 0.98194045

00:26:27.880 --> 00:26:28.380 hours.  
NOTE Confidence: 0.99884367

00:26:28.815 --> 00:26:30.335 Two sides takes about ten  
NOTE Confidence: 0.99884367

00:26:30.335 --> 00:26:30.835 hours.  
NOTE Confidence: 0.9711665

00:26:31.294 --> 00:26:33.215 This admit patients have to

NOTE Confidence: 0.9711665  
00:26:33.215 --> 00:26:34.734 admit be admitted for about  
NOTE Confidence: 0.9711665  
00:26:34.734 --> 00:26:36.335 two to three days. The  
NOTE Confidence: 0.9711665  
00:26:36.335 --> 00:26:37.695 first twenty four hours are  
NOTE Confidence: 0.9711665  
00:26:37.695 --> 00:26:39.455 the most important because we  
NOTE Confidence: 0.9711665  
00:26:39.455 --> 00:26:40.654 watch to make sure that  
NOTE Confidence: 0.9711665  
00:26:40.654 --> 00:26:42.274 everything is working okay.  
NOTE Confidence: 0.9889208  
00:26:43.010 --> 00:26:44.529 The advantages are that most  
NOTE Confidence: 0.9889208  
00:26:44.529 --> 00:26:46.049 of the reconstruction is done  
NOTE Confidence: 0.9889208  
00:26:46.049 --> 00:26:47.350 at the time of surgery.  
NOTE Confidence: 0.9960291  
00:26:47.809 --> 00:26:49.429 We're using your own tissues.  
NOTE Confidence: 0.989037  
00:26:49.730 --> 00:26:51.570 It's lifelong. It's the best  
NOTE Confidence: 0.989037  
00:26:51.570 --> 00:26:53.330 substitute for a natural looking  
NOTE Confidence: 0.989037  
00:26:53.330 --> 00:26:53.830 breast.  
NOTE Confidence: 0.9900326  
00:26:54.210 --> 00:26:55.809 The benefits is a tummy  
NOTE Confidence: 0.9900326  
00:26:55.809 --> 00:26:56.309 tuck.  
NOTE Confidence: 0.99233305

00:26:56.715 --> 00:26:58.575 However, it's a longer procedure.

NOTE Confidence: 0.9993814

00:26:59.195 --> 00:27:01.054 It's a longer recovery time.

NOTE Confidence: 0.99955416

00:27:01.355 --> 00:27:03.215 It's a separate donor site.

NOTE Confidence: 0.99850285

00:27:03.515 --> 00:27:05.615 It may require revision surgeries.

NOTE Confidence: 0.9957167

00:27:05.994 --> 00:27:07.755 There's a possibility of it

NOTE Confidence: 0.9957167

00:27:07.755 --> 00:27:09.195 not working, which is which

NOTE Confidence: 0.9957167

00:27:09.195 --> 00:27:10.734 doesn't happen very often.

NOTE Confidence: 0.9907973

00:27:11.119 --> 00:27:12.240 We can only use the

NOTE Confidence: 0.9907973

00:27:12.240 --> 00:27:14.000 belly once, and there's obviously

NOTE Confidence: 0.9907973

00:27:14.000 --> 00:27:15.680 more scars because we're operating

NOTE Confidence: 0.9907973

00:27:15.680 --> 00:27:16.740 in another area.

NOTE Confidence: 0.99902457

00:27:17.840 --> 00:27:19.119 Other areas that we can

NOTE Confidence: 0.99902457

00:27:19.119 --> 00:27:20.240 take it from is the

NOTE Confidence: 0.99902457

00:27:20.240 --> 00:27:20.740 buttocks,

NOTE Confidence: 0.99987197

00:27:21.359 --> 00:27:22.100 the thighs

NOTE Confidence: 0.9241674

00:27:22.720 --> 00:27:23.460 as well.

NOTE Confidence: 0.99957114

00:27:24.184 --> 00:27:25.725 Now let's talk about using

NOTE Confidence: 0.99957114

00:27:25.785 --> 00:27:27.565 implants with your own tissue.

NOTE Confidence: 0.9990282

00:27:27.945 --> 00:27:29.405 So that is a procedure

NOTE Confidence: 0.9990282

00:27:29.544 --> 00:27:30.684 where we can take,

NOTE Confidence: 0.9543528

00:27:31.385 --> 00:27:32.984 in cases, for example, of

NOTE Confidence: 0.9543528

00:27:32.984 --> 00:27:33.484 radiation,

NOTE Confidence: 0.93813723

00:27:34.025 --> 00:27:35.645 where we can take skin

NOTE Confidence: 0.93813723

00:27:35.705 --> 00:27:37.840 and fat and sometimes the

NOTE Confidence: 0.93813723

00:27:37.840 --> 00:27:38.340 muscle

NOTE Confidence: 0.9901427

00:27:38.720 --> 00:27:40.000 and swing it over to

NOTE Confidence: 0.9901427

00:27:40.000 --> 00:27:40.740 the breast

NOTE Confidence: 0.95772934

00:27:41.440 --> 00:27:43.040 along with a tissue expander

NOTE Confidence: 0.95772934

00:27:43.040 --> 00:27:44.340 of an or an implant,

NOTE Confidence: 0.99586284

00:27:45.200 --> 00:27:46.660 to recreate a breast.

NOTE Confidence: 0.9855735

00:27:47.760 --> 00:27:49.119 Now I also wanna talk

NOTE Confidence: 0.9855735

00:27:49.119 --> 00:27:50.580 about what we call aesthetic  
NOTE Confidence: 0.9855735

00:27:50.640 --> 00:27:51.460 flat closure.  
NOTE Confidence: 0.98418355

00:27:52.024 --> 00:27:53.865 So plastic surgeon can be  
NOTE Confidence: 0.98418355

00:27:53.865 --> 00:27:55.804 involved in after mastectomies  
NOTE Confidence: 0.94276917

00:27:56.265 --> 00:27:57.465 in patients who do not  
NOTE Confidence: 0.94276917

00:27:57.465 --> 00:27:58.284 want reconstruction,  
NOTE Confidence: 0.9997195

00:27:58.984 --> 00:28:00.524 but do not want redundant  
NOTE Confidence: 0.9997195

00:28:00.664 --> 00:28:02.345 skin in that area. So  
NOTE Confidence: 0.9997195

00:28:02.345 --> 00:28:03.885 we can do different techniques  
NOTE Confidence: 0.9990918

00:28:04.424 --> 00:28:05.465 to try to make sure  
NOTE Confidence: 0.9990918

00:28:05.465 --> 00:28:07.040 that we have scars,  
NOTE Confidence: 0.9987356

00:28:08.060 --> 00:28:09.119 that look aesthetic  
NOTE Confidence: 0.99044216

00:28:09.740 --> 00:28:11.020 and to make sure that  
NOTE Confidence: 0.99044216

00:28:11.020 --> 00:28:12.080 there are no irregularities  
NOTE Confidence: 0.9923164

00:28:12.619 --> 00:28:13.440 in the chest.  
NOTE Confidence: 0.9787558

00:28:14.619 --> 00:28:16.540 Now the advantages of implant

NOTE Confidence: 0.9787558

00:28:16.540 --> 00:28:18.380 and autologous based reconstruction, which

NOTE Confidence: 0.9787558

00:28:18.380 --> 00:28:20.005 I mentioned earlier, is that

NOTE Confidence: 0.9787558

00:28:20.005 --> 00:28:20.965 it can be used in

NOTE Confidence: 0.9787558

00:28:20.965 --> 00:28:22.345 patients who had radiation,

NOTE Confidence: 0.989913

00:28:23.365 --> 00:28:24.565 in patients who are too

NOTE Confidence: 0.989913

00:28:24.565 --> 00:28:25.765 thin or have had a

NOTE Confidence: 0.989913

00:28:25.765 --> 00:28:27.465 tummy tuck. The disadvantages

NOTE Confidence: 0.9965102

00:28:28.005 --> 00:28:29.445 is the disadvantages of an

NOTE Confidence: 0.9965102

00:28:29.445 --> 00:28:29.945 implant

NOTE Confidence: 0.99812764

00:28:30.325 --> 00:28:31.845 or using tissue from other

NOTE Confidence: 0.99812764

00:28:31.845 --> 00:28:32.825 part of the body.

NOTE Confidence: 0.9895898

00:28:33.550 --> 00:28:34.590 If we have to remove

NOTE Confidence: 0.9895898

00:28:34.590 --> 00:28:36.190 the nipple areola, then we

NOTE Confidence: 0.9895898

00:28:36.190 --> 00:28:38.050 can reconstruct the nipple areola,

NOTE Confidence: 0.9774162

00:28:38.670 --> 00:28:40.110 and that's usually done by

NOTE Confidence: 0.9774162

00:28:40.110 --> 00:28:41.710 either bunching up some tissue,

NOTE Confidence: 0.9774162

00:28:41.710 --> 00:28:43.310 kinda like origami, to make

NOTE Confidence: 0.9774162

00:28:43.310 --> 00:28:44.690 a nipple or an elevation

NOTE Confidence: 0.9774162

00:28:44.830 --> 00:28:45.495 out of it.

NOTE Confidence: 0.99834377

00:28:45.975 --> 00:28:47.415 And other techniques that we

NOTE Confidence: 0.99834377

00:28:47.415 --> 00:28:48.375 use are,

NOTE Confidence: 0.9943635

00:28:49.015 --> 00:28:49.515 tattooing.

NOTE Confidence: 0.98141164

00:28:50.375 --> 00:28:52.055 One of our APRNs will

NOTE Confidence: 0.98141164

00:28:52.055 --> 00:28:53.335 do that, and we have,

NOTE Confidence: 0.98141164

00:28:53.655 --> 00:28:55.195 they're involved in,

NOTE Confidence: 0.97686696

00:28:55.655 --> 00:28:57.735 clinical and operative care for

NOTE Confidence: 0.97686696

00:28:57.735 --> 00:28:59.515 breast, breast cancer patients.

NOTE Confidence: 0.96265584

00:29:00.200 --> 00:29:02.220 They're certified in tattoo art.

NOTE Confidence: 0.9524987

00:29:03.320 --> 00:29:05.160 Doctor Berger alluded to,

NOTE Confidence: 0.9894343

00:29:05.720 --> 00:29:07.400 a technique that we use

NOTE Confidence: 0.9894343

00:29:07.400 --> 00:29:08.220 for prevention.



NOTE Confidence: 0.9471159

00:29:08.920 --> 00:29:10.520 So one technique is called

NOTE Confidence: 0.9471159

00:29:10.520 --> 00:29:12.140 immediate lymphatic reconstruction,

NOTE Confidence: 0.9525675

00:29:13.245 --> 00:29:14.945 Most importantly, to prevent,

NOTE Confidence: 0.95349526

00:29:15.725 --> 00:29:16.865 to prevent lymphedema,

NOTE Confidence: 0.9977427

00:29:17.165 --> 00:29:18.205 it's the way that we

NOTE Confidence: 0.9977427

00:29:18.205 --> 00:29:20.365 actually remove the lymph nodes

NOTE Confidence: 0.9977427

00:29:20.365 --> 00:29:21.645 by making sure that we

NOTE Confidence: 0.9977427

00:29:21.645 --> 00:29:23.265 try to preserve the lymphatic

NOTE Confidence: 0.9977427

00:29:23.405 --> 00:29:25.025 vessels at the same time.

NOTE Confidence: 0.99890614

00:29:25.460 --> 00:29:26.580 But if all of the

NOTE Confidence: 0.99890614

00:29:26.580 --> 00:29:28.100 lymph nodes are removed and

NOTE Confidence: 0.99890614

00:29:28.100 --> 00:29:29.160 have to be removed,

NOTE Confidence: 0.9913561

00:29:29.700 --> 00:29:30.740 then what we can do

NOTE Confidence: 0.9913561

00:29:30.740 --> 00:29:32.100 is we can try to

NOTE Confidence: 0.9913561

00:29:32.100 --> 00:29:33.700 find those little lymph nodes

NOTE Confidence: 0.9913561

00:29:33.700 --> 00:29:35.240 again by using a microscope.  
NOTE Confidence: 0.97279805

00:29:35.780 --> 00:29:37.540 Those are very, very small  
NOTE Confidence: 0.97279805

00:29:37.540 --> 00:29:38.900 in size. They're less than  
NOTE Confidence: 0.97279805

00:29:38.900 --> 00:29:40.440 one millimeter in size.  
NOTE Confidence: 0.9857217

00:29:40.815 --> 00:29:42.434 And we find a vein  
NOTE Confidence: 0.9857217

00:29:42.495 --> 00:29:44.014 of equal size, and we  
NOTE Confidence: 0.9857217

00:29:44.014 --> 00:29:45.534 reroute them. We perform a  
NOTE Confidence: 0.9857217

00:29:45.534 --> 00:29:46.034 bypass.  
NOTE Confidence: 0.98850125

00:29:46.815 --> 00:29:47.934 The suture that we use  
NOTE Confidence: 0.98850125

00:29:47.934 --> 00:29:49.135 to bring those together is  
NOTE Confidence: 0.98850125

00:29:49.135 --> 00:29:50.654 actually finer than a hair,  
NOTE Confidence: 0.98850125

00:29:50.654 --> 00:29:51.855 so you can imagine that  
NOTE Confidence: 0.98850125

00:29:51.855 --> 00:29:53.075 that's very small.  
NOTE Confidence: 0.98483825

00:29:54.059 --> 00:29:55.820 And we our goal is  
NOTE Confidence: 0.98483825

00:29:55.820 --> 00:29:57.840 to hopefully prevent lymphedema.  
NOTE Confidence: 0.992184

00:29:58.779 --> 00:30:00.140 This adds about an hour

NOTE Confidence: 0.992184  
00:30:00.140 --> 00:30:00.860 to an hour and a  
NOTE Confidence: 0.992184  
00:30:00.860 --> 00:30:02.299 half to the case, and  
NOTE Confidence: 0.992184  
00:30:02.299 --> 00:30:03.740 we think by looking at  
NOTE Confidence: 0.992184  
00:30:03.740 --> 00:30:05.500 studies that it has the  
NOTE Confidence: 0.992184  
00:30:05.500 --> 00:30:07.340 ability to reduce the chances  
NOTE Confidence: 0.992184  
00:30:07.340 --> 00:30:09.225 of lymphedema by about fifty  
NOTE Confidence: 0.992184  
00:30:09.225 --> 00:30:09.725 percent.  
NOTE Confidence: 0.98192674  
00:30:10.105 --> 00:30:12.105 It doesn't necessarily mean that  
NOTE Confidence: 0.98192674  
00:30:12.105 --> 00:30:12.605 absolutely  
NOTE Confidence: 0.98477626  
00:30:12.905 --> 00:30:14.045 would not have lymphedema,  
NOTE Confidence: 0.9991519  
00:30:14.665 --> 00:30:15.485 but it definitely  
NOTE Confidence: 0.9893011  
00:30:15.945 --> 00:30:16.425 is,  
NOTE Confidence: 0.99796665  
00:30:17.065 --> 00:30:18.925 is worth, worth trying.  
NOTE Confidence: 0.9947438  
00:30:19.705 --> 00:30:20.985 Thank you very much for  
NOTE Confidence: 0.9947438  
00:30:20.985 --> 00:30:22.125 listening, and,  
NOTE Confidence: 0.99255276

00:30:22.425 --> 00:30:24.330 I welcome any questions that  
NOTE Confidence: 0.99255276

00:30:24.330 --> 00:30:25.450 may come at the end  
NOTE Confidence: 0.99255276

00:30:25.450 --> 00:30:26.430 of this talk.  
NOTE Confidence: 0.92940784

00:30:28.250 --> 00:30:29.850 Thank you very much, doctor  
NOTE Confidence: 0.92940784

00:30:29.850 --> 00:30:30.350 Haykel.  
NOTE Confidence: 0.98170424

00:30:30.650 --> 00:30:32.170 And, we'll move on to  
NOTE Confidence: 0.98170424

00:30:32.170 --> 00:30:33.550 doctor Maria Rosenblatt.  
NOTE Confidence: 0.9741934

00:30:34.010 --> 00:30:36.030 Doctor Rosenblatt is an assistant  
NOTE Confidence: 0.9741934

00:30:36.090 --> 00:30:37.450 professor of medicine in the  
NOTE Confidence: 0.9741934

00:30:37.450 --> 00:30:39.215 division of medical oncology,  
NOTE Confidence: 0.9611

00:30:39.515 --> 00:30:40.715 and she'll be talking with  
NOTE Confidence: 0.9611

00:30:40.715 --> 00:30:42.315 us this evening about updates  
NOTE Confidence: 0.9611

00:30:42.315 --> 00:30:43.535 in systemic therapy.  
NOTE Confidence: 0.9875906

00:30:44.395 --> 00:30:45.775 Welcome, doctor Rosenblitt.  
NOTE Confidence: 0.99934393

00:30:46.315 --> 00:30:47.455 Thank you so much.  
NOTE Confidence: 0.99653405

00:30:48.635 --> 00:30:49.755 Okay. So I'm gonna be

NOTE Confidence: 0.99653405

00:30:49.755 --> 00:30:51.835 talking about systemic therapy for

NOTE Confidence: 0.99653405

00:30:51.835 --> 00:30:52.655 breast cancer.

NOTE Confidence: 0.9971923

00:30:54.680 --> 00:30:56.280 And as we've heard so

NOTE Confidence: 0.9971923

00:30:56.280 --> 00:30:56.780 far,

NOTE Confidence: 0.9719805

00:30:57.320 --> 00:30:58.600 really, the treatment of breast

NOTE Confidence: 0.9719805

00:30:58.600 --> 00:30:59.820 cancer is a multidisciplinary

NOTE Confidence: 0.84435576

00:31:00.360 --> 00:31:00.860 approach,

NOTE Confidence: 0.99880207

00:31:01.160 --> 00:31:02.520 and this involves the breast

NOTE Confidence: 0.99880207

00:31:02.520 --> 00:31:05.000 surgeon, the radiation oncologist, and

NOTE Confidence: 0.99880207

00:31:05.000 --> 00:31:06.140 the medical oncologist.

NOTE Confidence: 0.99925166

00:31:06.920 --> 00:31:08.855 And each part of the

NOTE Confidence: 0.99925166

00:31:08.855 --> 00:31:10.534 team has a slightly different

NOTE Confidence: 0.99925166

00:31:10.534 --> 00:31:11.654 goal. So the goal of

NOTE Confidence: 0.99925166

00:31:11.654 --> 00:31:12.554 the breast surgeon

NOTE Confidence: 0.95851153

00:31:12.855 --> 00:31:14.215 is to remove the known

NOTE Confidence: 0.95851153

00:31:14.215 --> 00:31:14.715 cancer,  
NOTE Confidence: 0.9704663

00:31:15.095 --> 00:31:16.534 to obtain negative margins as  
NOTE Confidence: 0.9704663

00:31:16.534 --> 00:31:18.294 we heard about, to evaluate  
NOTE Confidence: 0.9704663

00:31:18.294 --> 00:31:19.355 the lymph nodes,  
NOTE Confidence: 0.9996464

00:31:19.735 --> 00:31:20.235 and  
NOTE Confidence: 0.9985485

00:31:20.740 --> 00:31:22.679 to remove involved lymph nodes.  
NOTE Confidence: 0.9989893

00:31:23.380 --> 00:31:24.679 The radiation oncologist  
NOTE Confidence: 0.9990533

00:31:24.980 --> 00:31:26.340 then tries to mop up  
NOTE Confidence: 0.9990533

00:31:26.340 --> 00:31:27.320 any microscopic  
NOTE Confidence: 0.9872899

00:31:27.620 --> 00:31:29.000 disease in the breast,  
NOTE Confidence: 0.9563343

00:31:29.380 --> 00:31:31.080 and the regional lymph nodes,  
NOTE Confidence: 0.9867027

00:31:31.380 --> 00:31:33.000 and this is usually done  
NOTE Confidence: 0.9867027

00:31:33.059 --> 00:31:34.580 after surgery, so after a  
NOTE Confidence: 0.9867027

00:31:34.580 --> 00:31:35.080 lumpectomy.  
NOTE Confidence: 0.9746005

00:31:35.755 --> 00:31:37.534 And sometimes in special circumstances,  
NOTE Confidence: 0.9915404

00:31:37.835 --> 00:31:39.355 it might be recommended after

NOTE Confidence: 0.9915404  
00:31:39.355 --> 00:31:39.934 a mastectomy.  
NOTE Confidence: 0.9968956  
00:31:40.475 --> 00:31:41.434 And the goal of that  
NOTE Confidence: 0.9968956  
00:31:41.434 --> 00:31:43.115 treatment is to reduce local  
NOTE Confidence: 0.9968956  
00:31:43.115 --> 00:31:44.554 recurrence, so the risk of  
NOTE Confidence: 0.9968956  
00:31:44.554 --> 00:31:46.315 the breast cancer coming back  
NOTE Confidence: 0.9968956  
00:31:46.315 --> 00:31:47.455 in the same breast.  
NOTE Confidence: 0.98952955  
00:31:48.090 --> 00:31:49.850 As the medical oncologist, my  
NOTE Confidence: 0.98952955  
00:31:49.850 --> 00:31:51.130 goal is to really mop  
NOTE Confidence: 0.98952955  
00:31:51.130 --> 00:31:53.130 up any microscopic disease that  
NOTE Confidence: 0.98952955  
00:31:53.130 --> 00:31:54.490 might be anywhere else in  
NOTE Confidence: 0.98952955  
00:31:54.490 --> 00:31:56.010 the body. And my goal  
NOTE Confidence: 0.98952955  
00:31:56.010 --> 00:31:57.530 is to decrease the risk  
NOTE Confidence: 0.98952955  
00:31:57.530 --> 00:31:58.650 of what we call distant  
NOTE Confidence: 0.98952955  
00:31:58.650 --> 00:32:00.170 recurrence, so the risk that  
NOTE Confidence: 0.98952955  
00:32:00.170 --> 00:32:00.830 this cancer  
NOTE Confidence: 0.9892878

00:32:01.210 --> 00:32:02.330 might come back in other  
NOTE Confidence: 0.9892878

00:32:02.330 --> 00:32:03.390 parts of the body.  
NOTE Confidence: 0.9989914

00:32:04.145 --> 00:32:05.585 And we call that, the  
NOTE Confidence: 0.9989914

00:32:05.585 --> 00:32:07.684 risk of developing metastatic recurrence.  
NOTE Confidence: 0.9953669

00:32:13.265 --> 00:32:14.385 Okay. So how do we  
NOTE Confidence: 0.9953669

00:32:14.385 --> 00:32:14.885 decide,  
NOTE Confidence: 0.9762191

00:32:15.345 --> 00:32:16.945 what kind of medical treatment  
NOTE Confidence: 0.9762191

00:32:16.945 --> 00:32:18.090 to offer? And this is  
NOTE Confidence: 0.9762191

00:32:18.090 --> 00:32:19.690 a really complex decision that  
NOTE Confidence: 0.9762191

00:32:19.690 --> 00:32:20.410 we put a lot of  
NOTE Confidence: 0.9762191

00:32:20.410 --> 00:32:22.010 thought into. And we heard  
NOTE Confidence: 0.9762191

00:32:22.010 --> 00:32:22.970 a little bit from Doctor.  
NOTE Confidence: 0.9762191

00:32:22.970 --> 00:32:24.809 Berger about stage. So we  
NOTE Confidence: 0.9762191

00:32:24.809 --> 00:32:26.490 think about what size is  
NOTE Confidence: 0.9762191

00:32:26.490 --> 00:32:28.330 the tumor, how many lymph  
NOTE Confidence: 0.9762191

00:32:28.330 --> 00:32:29.390 nodes are involved,



NOTE Confidence: 0.9883035  
00:32:30.170 --> 00:32:31.450 are we worried about any  
NOTE Confidence: 0.9883035  
00:32:31.450 --> 00:32:33.525 distant metastatic sites? And then  
NOTE Confidence: 0.9883035  
00:32:33.525 --> 00:32:34.965 we think about the patient  
NOTE Confidence: 0.9883035  
00:32:34.965 --> 00:32:35.845 in front of us. What  
NOTE Confidence: 0.9883035  
00:32:35.845 --> 00:32:36.965 is their age? What are  
NOTE Confidence: 0.9883035  
00:32:36.965 --> 00:32:38.505 their other medical problems?  
NOTE Confidence: 0.99886054  
00:32:38.885 --> 00:32:40.345 What is their life expectancy?  
NOTE Confidence: 0.9996252  
00:32:40.885 --> 00:32:41.925 What are their values?  
NOTE Confidence: 0.998517  
00:32:43.445 --> 00:32:44.885 And then we also think  
NOTE Confidence: 0.998517  
00:32:44.885 --> 00:32:45.385 about  
NOTE Confidence: 0.9749951  
00:32:45.910 --> 00:32:47.130 additional characteristics.  
NOTE Confidence: 0.97543633  
00:32:47.510 --> 00:32:49.030 So just as doctor Berger  
NOTE Confidence: 0.97543633  
00:32:49.030 --> 00:32:50.150 mentioned, it's not just about  
NOTE Confidence: 0.97543633  
00:32:50.150 --> 00:32:51.690 tumor size and lymph nodes,  
NOTE Confidence: 0.97543633  
00:32:51.750 --> 00:32:53.290 it's also about the molecular  
NOTE Confidence: 0.97543633

00:32:53.350 --> 00:32:54.870 makeup of that tumor. So  
NOTE Confidence: 0.97543633

00:32:54.870 --> 00:32:55.770 we know that,  
NOTE Confidence: 0.9740696

00:32:56.630 --> 00:32:58.230 whether it's a hormone positive  
NOTE Confidence: 0.9740696

00:32:58.230 --> 00:32:59.990 or HER2 positive or triple  
NOTE Confidence: 0.9740696

00:32:59.990 --> 00:33:01.130 negative breast cancer,  
NOTE Confidence: 0.95242566

00:33:01.905 --> 00:33:03.265 The type of breast cancer  
NOTE Confidence: 0.95242566

00:33:03.265 --> 00:33:04.805 has a very different prognosis.  
NOTE Confidence: 0.95545954

00:33:05.585 --> 00:33:07.125 We also think about grade,  
NOTE Confidence: 0.95545954

00:33:07.185 --> 00:33:08.865 meaning how aggressive does this  
NOTE Confidence: 0.95545954

00:33:08.865 --> 00:33:10.565 cancer look under the microscope,  
NOTE Confidence: 0.9982801

00:33:11.025 --> 00:33:12.545 and we sometimes do special  
NOTE Confidence: 0.9982801

00:33:12.545 --> 00:33:14.805 types of gene expression testing  
NOTE Confidence: 0.9982801

00:33:15.060 --> 00:33:15.940 to try to help us  
NOTE Confidence: 0.9982801

00:33:15.940 --> 00:33:16.980 figure out what is the  
NOTE Confidence: 0.9982801

00:33:16.980 --> 00:33:18.260 risk of this cancer coming  
NOTE Confidence: 0.9982801

00:33:18.260 --> 00:33:18.760 back.

NOTE Confidence: 0.9858965  
00:33:20.020 --> 00:33:21.060 So in terms of the  
NOTE Confidence: 0.9858965  
00:33:21.060 --> 00:33:22.900 timing of the therapy, we  
NOTE Confidence: 0.9858965  
00:33:22.900 --> 00:33:24.500 think about it, in two  
NOTE Confidence: 0.9858965  
00:33:24.500 --> 00:33:26.900 large buckets, meaning adjuvant or  
NOTE Confidence: 0.9858965  
00:33:26.900 --> 00:33:27.400 neoadjuvant  
NOTE Confidence: 0.99935013  
00:33:27.700 --> 00:33:28.185 approach.  
NOTE Confidence: 0.99754024  
00:33:28.745 --> 00:33:29.625 When we talk about an  
NOTE Confidence: 0.99754024  
00:33:29.625 --> 00:33:31.945 adjuvant approach, that's when we  
NOTE Confidence: 0.99754024  
00:33:31.945 --> 00:33:32.985 have a discussion with the  
NOTE Confidence: 0.99754024  
00:33:32.985 --> 00:33:33.485 surgeon,  
NOTE Confidence: 0.99875885  
00:33:34.265 --> 00:33:35.145 and we come up with  
NOTE Confidence: 0.99875885  
00:33:35.145 --> 00:33:36.825 a plan that we recommend  
NOTE Confidence: 0.99875885  
00:33:36.825 --> 00:33:37.965 surgery first.  
NOTE Confidence: 0.99972975  
00:33:38.425 --> 00:33:39.325 After surgery,  
NOTE Confidence: 0.9999088  
00:33:40.265 --> 00:33:41.405 we think about whether  
NOTE Confidence: 0.9888063

00:33:41.899 --> 00:33:43.419 the person would benefit from  
NOTE Confidence: 0.9888063

00:33:43.419 --> 00:33:44.640 the addition of chemotherapy,  
NOTE Confidence: 0.9800796

00:33:45.740 --> 00:33:46.860 if they have a HER2  
NOTE Confidence: 0.9800796

00:33:46.860 --> 00:33:48.539 positive breast cancer, whether they  
NOTE Confidence: 0.9800796

00:33:48.539 --> 00:33:50.320 need HER2 targeted therapy,  
NOTE Confidence: 0.994525

00:33:51.179 --> 00:33:52.940 and then if radiation is  
NOTE Confidence: 0.994525

00:33:52.940 --> 00:33:54.059 needed. And then if it's  
NOTE Confidence: 0.994525

00:33:54.059 --> 00:33:55.645 a hormone positive breast cancer,  
NOTE Confidence: 0.994525

00:33:55.645 --> 00:33:56.885 we would add on something  
NOTE Confidence: 0.994525

00:33:56.885 --> 00:33:58.804 called endocrine therapy at the  
NOTE Confidence: 0.994525

00:33:58.804 --> 00:33:59.304 end.  
NOTE Confidence: 0.9624588

00:34:00.245 --> 00:34:01.865 Sometimes we prefer a neoadjuvant  
NOTE Confidence: 0.9624588

00:34:02.085 --> 00:34:03.785 approach, and this is often  
NOTE Confidence: 0.9624588

00:34:03.925 --> 00:34:05.225 when chemotherapy  
NOTE Confidence: 0.9375857

00:34:05.525 --> 00:34:07.465 is recommended before surgery.  
NOTE Confidence: 0.9994564

00:34:07.765 --> 00:34:09.225 And this is often done

NOTE Confidence: 0.9994564  
00:34:09.364 --> 00:34:10.665 in larger tumors  
NOTE Confidence: 0.9763268  
00:34:11.000 --> 00:34:11.880 where there might be a  
NOTE Confidence: 0.9763268  
00:34:11.880 --> 00:34:13.000 lot of lymph nodes that  
NOTE Confidence: 0.9763268  
00:34:13.000 --> 00:34:14.599 we're hoping to shrink before  
NOTE Confidence: 0.9763268  
00:34:14.599 --> 00:34:15.099 surgery,  
NOTE Confidence: 0.9677774  
00:34:15.719 --> 00:34:16.599 or if it's a more  
NOTE Confidence: 0.9677774  
00:34:16.599 --> 00:34:18.680 aggressive cancer like a triple  
NOTE Confidence: 0.9677774  
00:34:18.680 --> 00:34:20.520 negative breast cancer or HER2  
NOTE Confidence: 0.9677774  
00:34:20.520 --> 00:34:21.739 positive breast cancer.  
NOTE Confidence: 0.8656814  
00:34:22.200 --> 00:34:22.940 And sometimes,  
NOTE Confidence: 0.9987538  
00:34:23.960 --> 00:34:24.859 we recommend  
NOTE Confidence: 0.9900504  
00:34:25.665 --> 00:34:27.745 systemic treatment first because how  
NOTE Confidence: 0.9900504  
00:34:27.745 --> 00:34:29.265 the tumor responds to the  
NOTE Confidence: 0.9900504  
00:34:29.265 --> 00:34:31.025 treatment can actually be very  
NOTE Confidence: 0.9900504  
00:34:31.025 --> 00:34:32.465 important information for us as  
NOTE Confidence: 0.9900504

00:34:32.465 --> 00:34:33.445 medical oncologists.  
NOTE Confidence: 0.99812686

00:34:34.545 --> 00:34:36.545 And when the patient gets  
NOTE Confidence: 0.99812686

00:34:36.545 --> 00:34:37.205 to surgery,  
NOTE Confidence: 0.9683489

00:34:38.160 --> 00:34:39.359 we are looking for something  
NOTE Confidence: 0.9683489

00:34:39.359 --> 00:34:40.739 called a complete pathologic  
NOTE Confidence: 0.99926984

00:34:41.040 --> 00:34:42.400 response. So if we did  
NOTE Confidence: 0.99926984

00:34:42.400 --> 00:34:44.020 systemic therapy first  
NOTE Confidence: 0.9053417

00:34:44.400 --> 00:34:45.859 and the whole tumor,  
NOTE Confidence: 0.98748666

00:34:46.560 --> 00:34:47.760 was killed off by the  
NOTE Confidence: 0.98748666

00:34:47.760 --> 00:34:48.960 therapy and it looks just  
NOTE Confidence: 0.98748666

00:34:48.960 --> 00:34:50.319 like scar tissue under the  
NOTE Confidence: 0.98748666

00:34:50.319 --> 00:34:50.819 microscope,  
NOTE Confidence: 0.9898591

00:34:51.245 --> 00:34:53.085 prognostically, that's very important and  
NOTE Confidence: 0.9898591

00:34:53.085 --> 00:34:54.445 predicts a very low risk  
NOTE Confidence: 0.9898591

00:34:54.445 --> 00:34:55.105 of recurrence.  
NOTE Confidence: 0.9171677

00:34:55.805 --> 00:34:56.465 The radiation,

NOTE Confidence: 0.99919945  
00:34:57.325 --> 00:34:58.685 question is up to the  
NOTE Confidence: 0.99919945  
00:34:58.685 --> 00:34:59.665 radiation oncologist  
NOTE Confidence: 0.96138275  
00:34:59.965 --> 00:35:01.425 and really depends on,  
NOTE Confidence: 0.9717256  
00:35:01.885 --> 00:35:03.185 what type of surgery,  
NOTE Confidence: 0.98160475  
00:35:03.805 --> 00:35:04.625 was recommended.  
NOTE Confidence: 0.9647465  
00:35:04.980 --> 00:35:06.020 And then once again, if  
NOTE Confidence: 0.9647465  
00:35:06.020 --> 00:35:07.540 it's hormone positive, we would  
NOTE Confidence: 0.9647465  
00:35:07.540 --> 00:35:07.940 end,  
NOTE Confidence: 0.99706334  
00:35:08.340 --> 00:35:09.719 we would add on endocrine  
NOTE Confidence: 0.99706334  
00:35:09.780 --> 00:35:11.000 therapy at the end.  
NOTE Confidence: 0.98803097  
00:35:12.100 --> 00:35:13.400 So this is an example  
NOTE Confidence: 0.98803097  
00:35:13.460 --> 00:35:14.739 of an oncotype, but this  
NOTE Confidence: 0.98803097  
00:35:14.739 --> 00:35:15.700 is a test that we  
NOTE Confidence: 0.98803097  
00:35:15.700 --> 00:35:17.780 commonly send for hormone positive  
NOTE Confidence: 0.98803097  
00:35:17.780 --> 00:35:18.440 breast cancers.  
NOTE Confidence: 0.9991622

00:35:19.065 --> 00:35:20.025 And what this does is  
NOTE Confidence: 0.9991622

00:35:20.025 --> 00:35:21.385 it takes a small piece  
NOTE Confidence: 0.9991622

00:35:21.385 --> 00:35:22.925 of tissue from the original  
NOTE Confidence: 0.9991622

00:35:23.065 --> 00:35:23.805 breast tumor  
NOTE Confidence: 0.99890584

00:35:24.105 --> 00:35:24.984 and sends it off to  
NOTE Confidence: 0.99890584

00:35:24.984 --> 00:35:26.265 a special lab to look  
NOTE Confidence: 0.99890584

00:35:26.265 --> 00:35:27.385 at a certain number of  
NOTE Confidence: 0.99890584

00:35:27.385 --> 00:35:29.005 genes in the tumor itself  
NOTE Confidence: 0.9852406

00:35:29.464 --> 00:35:30.825 that help to predict how  
NOTE Confidence: 0.9852406

00:35:30.825 --> 00:35:32.585 aggressive that cancer is and  
NOTE Confidence: 0.9852406

00:35:32.585 --> 00:35:33.464 what is the risk of  
NOTE Confidence: 0.9852406

00:35:33.464 --> 00:35:35.160 the cancer coming back. And  
NOTE Confidence: 0.9852406

00:35:35.160 --> 00:35:36.520 so what the report gives  
NOTE Confidence: 0.9852406

00:35:36.520 --> 00:35:37.660 you is a number.  
NOTE Confidence: 0.9573178

00:35:38.040 --> 00:35:40.059 And in general, anything above  
NOTE Confidence: 0.9573178

00:35:40.200 --> 00:35:41.880 twenty five suggests that there's



NOTE Confidence: 0.9573178

00:35:41.880 --> 00:35:43.180 a benefit to chemotherapy,

NOTE Confidence: 0.99392265

00:35:43.960 --> 00:35:45.000 and it also gives you

NOTE Confidence: 0.99392265

00:35:45.000 --> 00:35:47.339 this number called distant recurrence

NOTE Confidence: 0.99392265

00:35:47.400 --> 00:35:49.224 risk at nine years. And

NOTE Confidence: 0.99392265

00:35:49.224 --> 00:35:50.425 so what that number tells

NOTE Confidence: 0.99392265

00:35:50.425 --> 00:35:51.785 you is over the next

NOTE Confidence: 0.99392265

00:35:51.785 --> 00:35:52.525 nine years,

NOTE Confidence: 0.97796

00:35:53.305 --> 00:35:54.185 what is the risk of

NOTE Confidence: 0.97796

00:35:54.185 --> 00:35:56.025 this cancer coming back in

NOTE Confidence: 0.97796

00:35:56.025 --> 00:35:57.224 other parts of the body,

NOTE Confidence: 0.97796

00:35:57.224 --> 00:35:58.344 so coming back as a

NOTE Confidence: 0.97796

00:35:58.344 --> 00:35:59.885 metastatic breast cancer.

NOTE Confidence: 0.83997023

00:36:00.265 --> 00:36:00.765 And,

NOTE Confidence: 0.9996344

00:36:01.320 --> 00:36:03.180 if you take endocrine therapy,

NOTE Confidence: 0.9871704

00:36:03.880 --> 00:36:05.020 it gives you the the

NOTE Confidence: 0.9871704

00:36:05.080 --> 00:36:07.180 risk with the endocrine therapy.  
NOTE Confidence: 0.99835205

00:36:07.719 --> 00:36:09.160 In general, we know that  
NOTE Confidence: 0.99835205

00:36:09.160 --> 00:36:11.160 endocrine therapy reduces risk by  
NOTE Confidence: 0.99835205

00:36:11.160 --> 00:36:12.920 about fifty percent. So if  
NOTE Confidence: 0.99835205

00:36:12.920 --> 00:36:14.540 you don't take endocrine therapy,  
NOTE Confidence: 0.99400705

00:36:15.080 --> 00:36:16.460 you can double that number.  
NOTE Confidence: 0.99400705

00:36:16.655 --> 00:36:17.775 And then it also gives  
NOTE Confidence: 0.99400705

00:36:17.775 --> 00:36:19.135 you the number for absolute  
NOTE Confidence: 0.99400705

00:36:19.135 --> 00:36:19.635 chemotherapy  
NOTE Confidence: 0.99128

00:36:20.094 --> 00:36:20.594 benefit.  
NOTE Confidence: 0.9427074

00:36:21.214 --> 00:36:22.335 And so often if it's  
NOTE Confidence: 0.9427074

00:36:22.335 --> 00:36:23.234 a high oncotype,  
NOTE Confidence: 0.99776006

00:36:23.695 --> 00:36:25.454 that absolute benefit is usually  
NOTE Confidence: 0.99776006

00:36:25.454 --> 00:36:27.135 greater than fifteen percent, and  
NOTE Confidence: 0.99776006

00:36:27.135 --> 00:36:28.435 that's when we'll be recommending  
NOTE Confidence: 0.99776006

00:36:28.655 --> 00:36:29.155 chemotherapy.

NOTE Confidence: 0.96688396  
00:36:31.770 --> 00:36:32.890 Here at Yale, we have  
NOTE Confidence: 0.96688396  
00:36:32.890 --> 00:36:35.070 developed several different pathways,  
NOTE Confidence: 0.99151665  
00:36:35.850 --> 00:36:36.910 to help standardize,  
NOTE Confidence: 0.98543775  
00:36:37.530 --> 00:36:38.969 the decision for when to  
NOTE Confidence: 0.98543775  
00:36:38.969 --> 00:36:39.870 send Oncotype.  
NOTE Confidence: 0.9821491  
00:36:40.650 --> 00:36:42.730 And so wherever you go  
NOTE Confidence: 0.9821491  
00:36:42.730 --> 00:36:44.010 as a patient across the  
NOTE Confidence: 0.9821491  
00:36:44.010 --> 00:36:44.830 Yale network,  
NOTE Confidence: 0.9361281  
00:36:45.435 --> 00:36:46.875 the different physicians will be  
NOTE Confidence: 0.9361281  
00:36:46.875 --> 00:36:48.175 following the same algorithm.  
NOTE Confidence: 0.98891467  
00:36:48.555 --> 00:36:49.515 And this can be really  
NOTE Confidence: 0.98891467  
00:36:49.515 --> 00:36:51.114 helpful because for some tumors  
NOTE Confidence: 0.98891467  
00:36:51.114 --> 00:36:52.635 that are very small, that  
NOTE Confidence: 0.98891467  
00:36:52.635 --> 00:36:54.094 have very low risk features,  
NOTE Confidence: 0.98891467  
00:36:54.315 --> 00:36:55.594 we often don't even have  
NOTE Confidence: 0.98891467

00:36:55.594 --> 00:36:56.735 to send an oncotype.  
NOTE Confidence: 0.9816223

00:36:57.450 --> 00:36:58.570 And then for some tumors  
NOTE Confidence: 0.9816223

00:36:58.570 --> 00:36:59.930 that are very large and  
NOTE Confidence: 0.9816223

00:36:59.930 --> 00:37:01.130 are very high risk and  
NOTE Confidence: 0.9816223

00:37:01.130 --> 00:37:02.330 we know that that person  
NOTE Confidence: 0.9816223

00:37:02.330 --> 00:37:03.230 needs chemotherapy,  
NOTE Confidence: 0.98613715

00:37:03.690 --> 00:37:04.810 we often don't have to  
NOTE Confidence: 0.98613715

00:37:04.810 --> 00:37:06.650 send oncotype either. And then  
NOTE Confidence: 0.98613715

00:37:06.650 --> 00:37:07.849 sometimes there are these gray  
NOTE Confidence: 0.98613715

00:37:07.849 --> 00:37:09.130 areas, and that's when these  
NOTE Confidence: 0.98613715

00:37:09.130 --> 00:37:10.670 pathways can be really helpful.  
NOTE Confidence: 0.9555853

00:37:11.325 --> 00:37:12.445 And if you're a physician  
NOTE Confidence: 0.9555853

00:37:12.445 --> 00:37:13.665 and you're on the call,  
NOTE Confidence: 0.99935687

00:37:14.045 --> 00:37:14.705 and you're  
NOTE Confidence: 0.93316966

00:37:15.965 --> 00:37:17.165 looking for some guidance for  
NOTE Confidence: 0.93316966

00:37:17.165 --> 00:37:18.705 when to send an oncotype,

NOTE Confidence: 0.93316966  
00:37:19.005 --> 00:37:20.224 you can click the pathways  
NOTE Confidence: 0.93316966  
00:37:20.285 --> 00:37:21.185 tab in epic.  
NOTE Confidence: 0.9986371  
00:37:21.724 --> 00:37:22.685 And so this has been  
NOTE Confidence: 0.9986371  
00:37:22.685 --> 00:37:24.130 developed for both premenopausal  
NOTE Confidence: 0.9988313  
00:37:24.510 --> 00:37:25.250 and postmenopausal  
NOTE Confidence: 0.9970396  
00:37:25.710 --> 00:37:27.310 women with hormone positive breast  
NOTE Confidence: 0.9970396  
00:37:27.310 --> 00:37:27.810 cancer.  
NOTE Confidence: 0.99259067  
00:37:28.430 --> 00:37:29.650 And then in the adjuvant  
NOTE Confidence: 0.99259067  
00:37:29.710 --> 00:37:30.190 setting,  
NOTE Confidence: 0.93467087  
00:37:30.670 --> 00:37:31.170 where,  
NOTE Confidence: 0.9991873  
00:37:31.710 --> 00:37:33.730 somebody has already completed surgery,  
NOTE Confidence: 0.9447629  
00:37:34.910 --> 00:37:36.510 chemotherapy if they needed it,  
NOTE Confidence: 0.9447629  
00:37:36.830 --> 00:37:37.570 and radiation,  
NOTE Confidence: 0.9968816  
00:37:38.325 --> 00:37:39.445 We also think about ways  
NOTE Confidence: 0.9968816  
00:37:39.445 --> 00:37:40.565 that we can optimize what  
NOTE Confidence: 0.9968816

00:37:40.565 --> 00:37:42.325 we call endocrine therapy. So  
NOTE Confidence: 0.9968816

00:37:42.325 --> 00:37:44.025 we want to block estrogen  
NOTE Confidence: 0.9827904

00:37:44.484 --> 00:37:46.344 in hormone positive breast cancer.  
NOTE Confidence: 0.9827904

00:37:46.565 --> 00:37:48.165 And in addition to our  
NOTE Confidence: 0.9827904

00:37:48.165 --> 00:37:50.325 estrogen blocking pills, we now  
NOTE Confidence: 0.9827904

00:37:50.325 --> 00:37:51.969 have something called CDK four  
NOTE Confidence: 0.9827904

00:37:51.969 --> 00:37:53.570 six inhibitors, and these are  
NOTE Confidence: 0.9827904

00:37:53.570 --> 00:37:54.070 pills  
NOTE Confidence: 0.99821854

00:37:54.450 --> 00:37:56.050 that actually inhibit the cell  
NOTE Confidence: 0.99821854

00:37:56.050 --> 00:37:57.489 cycle. So if there's any  
NOTE Confidence: 0.99821854

00:37:57.489 --> 00:37:57.989 microscopic  
NOTE Confidence: 0.9835306

00:37:58.290 --> 00:38:00.230 cancer cells left over anywhere,  
NOTE Confidence: 0.9835306

00:38:00.370 --> 00:38:01.890 it actually inhibits their growth  
NOTE Confidence: 0.9835306

00:38:01.890 --> 00:38:03.010 and helps to kill them  
NOTE Confidence: 0.9835306

00:38:03.010 --> 00:38:04.450 off, and we often give  
NOTE Confidence: 0.9835306

00:38:04.450 --> 00:38:06.450 these in combination with estrogen

NOTE Confidence: 0.9835306  
00:38:06.450 --> 00:38:06.950 blockers.  
NOTE Confidence: 0.9691616  
00:38:07.545 --> 00:38:08.825 And so this is often,  
NOTE Confidence: 0.98463136  
00:38:10.025 --> 00:38:11.625 saved for patients who have  
NOTE Confidence: 0.98463136  
00:38:11.625 --> 00:38:13.165 a high risk of recurrence,  
NOTE Confidence: 0.9866896  
00:38:13.625 --> 00:38:15.224 and so we've developed pathways  
NOTE Confidence: 0.9866896  
00:38:15.224 --> 00:38:16.265 here at Yale to help  
NOTE Confidence: 0.9866896  
00:38:16.265 --> 00:38:17.545 with that decision making as  
NOTE Confidence: 0.9866896  
00:38:17.545 --> 00:38:18.045 well.  
NOTE Confidence: 0.9517979  
00:38:18.585 --> 00:38:20.799 And oftentimes, it depends on  
NOTE Confidence: 0.9517979  
00:38:20.799 --> 00:38:22.480 the tumor size. So larger  
NOTE Confidence: 0.9517979  
00:38:22.480 --> 00:38:22.980 tumors,  
NOTE Confidence: 0.9289997  
00:38:23.520 --> 00:38:24.500 higher oncotypes,  
NOTE Confidence: 0.9984925  
00:38:25.839 --> 00:38:27.520 more lymph node involvement at  
NOTE Confidence: 0.9984925  
00:38:27.520 --> 00:38:28.579 the time of diagnosis.  
NOTE Confidence: 0.98501015  
00:38:31.359 --> 00:38:32.319 The other thing that we  
NOTE Confidence: 0.98501015

00:38:32.319 --> 00:38:33.760 often think about as medical  
NOTE Confidence: 0.98501015

00:38:33.760 --> 00:38:35.775 oncologist is whether somebody is  
NOTE Confidence: 0.98501015

00:38:35.934 --> 00:38:37.474 eligible for clinical trials.  
NOTE Confidence: 0.99416107

00:38:37.855 --> 00:38:39.454 And clinical trials are really  
NOTE Confidence: 0.99416107

00:38:39.454 --> 00:38:40.895 important because it's a really  
NOTE Confidence: 0.99416107

00:38:40.895 --> 00:38:42.194 great way to  
NOTE Confidence: 0.90258634

00:38:42.654 --> 00:38:43.454 try to,  
NOTE Confidence: 0.99918705

00:38:43.855 --> 00:38:45.694 optimize therapy for someone that  
NOTE Confidence: 0.99918705

00:38:45.694 --> 00:38:46.434 we're seeing  
NOTE Confidence: 0.9497048

00:38:46.815 --> 00:38:48.969 and either get a drug  
NOTE Confidence: 0.9497048

00:38:48.969 --> 00:38:49.469 early,  
NOTE Confidence: 0.95859134

00:38:49.850 --> 00:38:51.310 before it's on the market,  
NOTE Confidence: 0.9645214

00:38:51.770 --> 00:38:53.850 or hopefully get, just a  
NOTE Confidence: 0.9645214

00:38:53.850 --> 00:38:55.310 better approach to treatment.  
NOTE Confidence: 0.97739804

00:38:55.850 --> 00:38:56.810 So one of the big  
NOTE Confidence: 0.97739804

00:38:56.810 --> 00:38:58.489 questions currently in the field



NOTE Confidence: 0.97739804  
00:38:58.489 --> 00:39:00.090 is, can we think about  
NOTE Confidence: 0.97739804  
00:39:00.090 --> 00:39:00.989 ways to  
NOTE Confidence: 0.96209353  
00:39:02.175 --> 00:39:02.675 chemotherapy  
NOTE Confidence: 0.96876436  
00:39:03.135 --> 00:39:04.575 in young women with hormone  
NOTE Confidence: 0.96876436  
00:39:04.575 --> 00:39:05.795 positive breast cancer?  
NOTE Confidence: 0.9864595  
00:39:06.175 --> 00:39:07.215 And the reason why this  
NOTE Confidence: 0.9864595  
00:39:07.215 --> 00:39:08.594 comes up is because,  
NOTE Confidence: 0.99942565  
00:39:09.455 --> 00:39:10.575 after doing this for many  
NOTE Confidence: 0.99942565  
00:39:10.575 --> 00:39:12.415 decades in breast cancer, we're  
NOTE Confidence: 0.99942565  
00:39:12.415 --> 00:39:13.614 not sure if it's really  
NOTE Confidence: 0.99942565  
00:39:13.614 --> 00:39:14.355 the chemotherapy  
NOTE Confidence: 0.9996847  
00:39:14.655 --> 00:39:15.555 drugs themselves  
NOTE Confidence: 0.9995876  
00:39:16.030 --> 00:39:17.630 that are showing benefit in  
NOTE Confidence: 0.9995876  
00:39:17.630 --> 00:39:18.770 this patient population  
NOTE Confidence: 0.9541986  
00:39:19.310 --> 00:39:20.850 or whether it's the chemotherapy  
NOTE Confidence: 0.9541986

00:39:21.070 --> 00:39:22.510 putting these women into early  
NOTE Confidence: 0.9541986

00:39:22.510 --> 00:39:23.010 menopause  
NOTE Confidence: 0.92497635

00:39:23.390 --> 00:39:24.510 and whether it's actually the  
NOTE Confidence: 0.92497635

00:39:24.510 --> 00:39:25.730 menopausal status,  
NOTE Confidence: 0.9946599

00:39:26.350 --> 00:39:27.810 that is causing the benefit  
NOTE Confidence: 0.9946599

00:39:27.870 --> 00:39:28.690 that we see.  
NOTE Confidence: 0.96813273

00:39:29.015 --> 00:39:30.715 So there's currently a clinical  
NOTE Confidence: 0.96813273

00:39:30.855 --> 00:39:32.135 trial being run by the  
NOTE Confidence: 0.96813273

00:39:32.135 --> 00:39:33.515 NRG called BR009,  
NOTE Confidence: 0.9962188

00:39:34.855 --> 00:39:36.295 and this is looking for  
NOTE Confidence: 0.9962188

00:39:36.295 --> 00:39:37.915 young women who have  
NOTE Confidence: 0.97545534

00:39:38.215 --> 00:39:40.215 oncotype below twenty five, which  
NOTE Confidence: 0.97545534

00:39:40.215 --> 00:39:41.755 we generally think of as  
NOTE Confidence: 0.97545534

00:39:41.950 --> 00:39:42.770 low risk,  
NOTE Confidence: 0.9638348

00:39:43.230 --> 00:39:44.190 but they may have a  
NOTE Confidence: 0.9638348

00:39:44.190 --> 00:39:46.530 positive lymph node and randomizing

NOTE Confidence: 0.9638348  
00:39:46.750 --> 00:39:47.969 them to chemotherapy,  
NOTE Confidence: 0.9993728  
00:39:49.070 --> 00:39:50.190 which is the standard of  
NOTE Confidence: 0.9993728  
00:39:50.190 --> 00:39:50.690 care  
NOTE Confidence: 0.6953426  
00:39:50.989 --> 00:39:51.489 versus  
NOTE Confidence: 0.96647596  
00:39:52.110 --> 00:39:54.110 not doing chemotherapy, but really  
NOTE Confidence: 0.96647596  
00:39:54.110 --> 00:39:54.610 optimizing  
NOTE Confidence: 0.99795806  
00:39:55.244 --> 00:39:57.005 their estrogen blocking and putting  
NOTE Confidence: 0.99795806  
00:39:57.005 --> 00:39:58.384 them into early menopause.  
NOTE Confidence: 0.9937541  
00:39:59.244 --> 00:40:00.125 And so this is an  
NOTE Confidence: 0.9937541  
00:40:00.125 --> 00:40:01.805 important trial and something to  
NOTE Confidence: 0.9937541  
00:40:01.805 --> 00:40:02.364 think about,  
NOTE Confidence: 0.9792485  
00:40:02.924 --> 00:40:04.204 especially if if you are  
NOTE Confidence: 0.9792485  
00:40:04.204 --> 00:40:05.644 a young woman being diagnosed  
NOTE Confidence: 0.9792485  
00:40:05.644 --> 00:40:06.844 or you know somebody who's  
NOTE Confidence: 0.9792485  
00:40:06.844 --> 00:40:07.505 being diagnosed,  
NOTE Confidence: 0.9799245

00:40:08.125 --> 00:40:10.020 because we're really starting to  
NOTE Confidence: 0.9799245

00:40:10.020 --> 00:40:11.700 think that maybe it's not  
NOTE Confidence: 0.9799245

00:40:11.700 --> 00:40:12.760 so much the chemotherapy,  
NOTE Confidence: 0.9776851

00:40:13.060 --> 00:40:14.840 but the actual menopause status,  
NOTE Confidence: 0.99053603

00:40:15.380 --> 00:40:16.840 that may be benefiting  
NOTE Confidence: 0.8367033

00:40:17.700 --> 00:40:18.760 these young women.  
NOTE Confidence: 0.9965609

00:40:19.940 --> 00:40:21.219 And then we also know  
NOTE Confidence: 0.9965609

00:40:21.219 --> 00:40:23.060 that there's probably a subgroup  
NOTE Confidence: 0.9965609

00:40:23.060 --> 00:40:24.920 of hormone positive breast cancers  
NOTE Confidence: 0.9965609

00:40:25.114 --> 00:40:26.474 that are really high risk,  
NOTE Confidence: 0.97895163

00:40:26.875 --> 00:40:28.255 high risk for coming back.  
NOTE Confidence: 0.98654836

00:40:28.555 --> 00:40:29.594 And so how can we  
NOTE Confidence: 0.98654836

00:40:29.594 --> 00:40:31.594 escalate and optimize treatment for  
NOTE Confidence: 0.98654836

00:40:31.594 --> 00:40:32.414 those patients?  
NOTE Confidence: 0.9648068

00:40:33.194 --> 00:40:34.315 And so there's a trial  
NOTE Confidence: 0.9648068

00:40:34.315 --> 00:40:35.755 being run by Swag here

NOTE Confidence: 0.9648068

00:40:35.755 --> 00:40:37.515 at Yale called, two two

NOTE Confidence: 0.9648068

00:40:37.515 --> 00:40:38.910 zero six that is looking

NOTE Confidence: 0.9648068

00:40:38.910 --> 00:40:40.589 at something called mamaprint, which

NOTE Confidence: 0.9648068

00:40:40.589 --> 00:40:42.290 is very similar to Oncotype,

NOTE Confidence: 0.95505446

00:40:42.750 --> 00:40:44.030 but is a different assay

NOTE Confidence: 0.95505446

00:40:44.030 --> 00:40:45.150 looking at a different set

NOTE Confidence: 0.95505446

00:40:45.150 --> 00:40:45.730 of genes.

NOTE Confidence: 0.9593294

00:40:46.430 --> 00:40:47.950 And for patients who score

NOTE Confidence: 0.9593294

00:40:47.950 --> 00:40:48.989 in the in that really

NOTE Confidence: 0.9593294

00:40:48.989 --> 00:40:51.069 high risk category called high

NOTE Confidence: 0.9593294

00:40:51.069 --> 00:40:52.930 risk two or MP two,

NOTE Confidence: 0.99412835

00:40:53.424 --> 00:40:55.364 they're being randomized to adding

NOTE Confidence: 0.9995793

00:40:55.744 --> 00:40:56.244 immunotherapy

NOTE Confidence: 0.99942726

00:40:56.944 --> 00:40:57.684 to chemotherapy.

NOTE Confidence: 0.99955463

00:40:58.385 --> 00:40:59.045 In general,

NOTE Confidence: 0.9973761

00:40:59.344 --> 00:41:00.864 we don't think of hormone  
NOTE Confidence: 0.9973761

00:41:00.864 --> 00:41:02.164 positive breast cancer,  
NOTE Confidence: 0.99320257

00:41:02.785 --> 00:41:03.984 as a cancer that's very  
NOTE Confidence: 0.99320257

00:41:03.984 --> 00:41:05.285 responsive to immunotherapy,  
NOTE Confidence: 0.98198307

00:41:05.910 --> 00:41:06.950 But we think that there  
NOTE Confidence: 0.98198307

00:41:06.950 --> 00:41:08.390 might be a subgroup of  
NOTE Confidence: 0.98198307

00:41:08.390 --> 00:41:10.549 these very aggressive, fast growing  
NOTE Confidence: 0.98198307

00:41:10.549 --> 00:41:12.230 hormone positive breast cancers that  
NOTE Confidence: 0.98198307

00:41:12.230 --> 00:41:13.910 may benefit, and that's what  
NOTE Confidence: 0.98198307

00:41:13.910 --> 00:41:15.289 that trial is looking at.  
NOTE Confidence: 0.9884208

00:41:16.549 --> 00:41:18.069 We also wanna think about  
NOTE Confidence: 0.9884208

00:41:18.069 --> 00:41:19.609 how can we tailor chemotherapy  
NOTE Confidence: 0.98771393

00:41:20.315 --> 00:41:22.335 for triple negative breast cancer.  
NOTE Confidence: 0.9772564

00:41:23.275 --> 00:41:24.315 And so there is a  
NOTE Confidence: 0.9772564

00:41:24.315 --> 00:41:26.174 trial also out of SWOG  
NOTE Confidence: 0.9546282

00:41:26.474 --> 00:41:27.755 that is looking at,

NOTE Confidence: 0.9994369  
00:41:28.394 --> 00:41:30.714 patients with early stage triple  
NOTE Confidence: 0.9994369  
00:41:30.714 --> 00:41:31.934 negative breast cancer  
NOTE Confidence: 0.9848466  
00:41:32.234 --> 00:41:32.894 and randomizing  
NOTE Confidence: 0.99804854  
00:41:33.434 --> 00:41:33.934 to  
NOTE Confidence: 0.96950865  
00:41:34.700 --> 00:41:35.579 standard of care,  
NOTE Confidence: 0.95201206  
00:41:36.059 --> 00:41:36.559 chemotherapy,  
NOTE Confidence: 0.97041786  
00:41:37.660 --> 00:41:39.599 versus standard of care chemotherapy,  
NOTE Confidence: 0.97041786  
00:41:39.739 --> 00:41:41.119 but without the AC.  
NOTE Confidence: 0.9557864  
00:41:41.900 --> 00:41:43.359 And the AC drugs,  
NOTE Confidence: 0.98744124  
00:41:44.460 --> 00:41:45.579 often referred to as the  
NOTE Confidence: 0.98744124  
00:41:45.579 --> 00:41:46.960 red devil on the Internet,  
NOTE Confidence: 0.9996028  
00:41:47.715 --> 00:41:48.755 are the ones that have  
NOTE Confidence: 0.9996028  
00:41:48.755 --> 00:41:49.655 the most toxicity  
NOTE Confidence: 0.9024949  
00:41:50.275 --> 00:41:51.495 in terms of the chemotherapies  
NOTE Confidence: 0.99949354  
00:41:51.795 --> 00:41:52.614 that we use  
NOTE Confidence: 0.9344435

00:41:52.915 --> 00:41:54.515 and also have a small  
NOTE Confidence: 0.9344435

00:41:54.515 --> 00:41:56.775 but significant risk of potentially  
NOTE Confidence: 0.9344435

00:41:56.915 --> 00:41:58.455 heart failure in the future.  
NOTE Confidence: 0.9755228

00:41:58.755 --> 00:41:59.715 So we would like to  
NOTE Confidence: 0.9755228

00:41:59.715 --> 00:42:00.835 avoid them as much as  
NOTE Confidence: 0.9755228

00:42:00.835 --> 00:42:02.390 we can, And so we're  
NOTE Confidence: 0.9755228

00:42:02.390 --> 00:42:04.570 hopeful that because triple negative  
NOTE Confidence: 0.9967632

00:42:04.950 --> 00:42:06.330 tends to be more responsive  
NOTE Confidence: 0.9967632

00:42:06.390 --> 00:42:07.050 to immunotherapy,  
NOTE Confidence: 0.99844193

00:42:08.070 --> 00:42:09.270 we're hoping that this trial  
NOTE Confidence: 0.99844193

00:42:09.270 --> 00:42:10.150 will show that we can  
NOTE Confidence: 0.99844193

00:42:10.150 --> 00:42:11.130 avoid anthracyclines  
NOTE Confidence: 0.98915434

00:42:11.510 --> 00:42:13.290 or AC in the future.  
NOTE Confidence: 0.98292226

00:42:15.595 --> 00:42:16.955 And so the other thing  
NOTE Confidence: 0.98292226

00:42:16.955 --> 00:42:18.395 that I think about, for  
NOTE Confidence: 0.98292226

00:42:18.395 --> 00:42:20.075 hormone positive breast cancers in



NOTE Confidence: 0.98292226  
00:42:20.075 --> 00:42:21.595 particular is how can we  
NOTE Confidence: 0.98292226  
00:42:21.595 --> 00:42:22.655 tailor our treatments  
NOTE Confidence: 0.98021954  
00:42:22.955 --> 00:42:24.075 to decrease the risk of  
NOTE Confidence: 0.98021954  
00:42:24.075 --> 00:42:26.095 late recurrence. So in general,  
NOTE Confidence: 0.98021954  
00:42:26.155 --> 00:42:27.150 most breast  
NOTE Confidence: 0.98275846  
00:42:27.450 --> 00:42:28.989 cancers, if they come back,  
NOTE Confidence: 0.98275846  
00:42:29.050 --> 00:42:30.330 they often come back in  
NOTE Confidence: 0.98275846  
00:42:30.330 --> 00:42:31.630 the first five years,  
NOTE Confidence: 0.9720743  
00:42:31.930 --> 00:42:33.869 but hormone positive breast cancers  
NOTE Confidence: 0.9720743  
00:42:34.010 --> 00:42:35.450 can come back late. So  
NOTE Confidence: 0.9720743  
00:42:35.450 --> 00:42:36.730 even as far as ten  
NOTE Confidence: 0.9720743  
00:42:36.730 --> 00:42:37.790 years out sometimes.  
NOTE Confidence: 0.9993567  
00:42:38.730 --> 00:42:39.850 And we don't really have  
NOTE Confidence: 0.9993567  
00:42:39.850 --> 00:42:41.130 a good way to detect  
NOTE Confidence: 0.9993567  
00:42:41.130 --> 00:42:41.630 them  
NOTE Confidence: 0.9866178

00:42:41.955 --> 00:42:43.955 besides continuing to screen with  
NOTE Confidence: 0.9866178

00:42:43.955 --> 00:42:45.575 our breast imaging with mammograms  
NOTE Confidence: 0.9866178

00:42:45.715 --> 00:42:46.455 and ultrasounds.  
NOTE Confidence: 0.97142607

00:42:47.155 --> 00:42:48.594 So this is, a trial  
NOTE Confidence: 0.97142607

00:42:48.594 --> 00:42:50.195 called KEATS, that is now  
NOTE Confidence: 0.97142607

00:42:50.195 --> 00:42:51.715 open at Yale and will  
NOTE Confidence: 0.97142607

00:42:51.715 --> 00:42:53.555 be open across several different  
NOTE Confidence: 0.97142607

00:42:53.555 --> 00:42:54.775 sites through the TBCRC.  
NOTE Confidence: 0.9727002

00:42:55.850 --> 00:42:57.050 And this is looking at  
NOTE Confidence: 0.9727002

00:42:57.050 --> 00:42:58.969 using a novel test called  
NOTE Confidence: 0.9727002

00:42:58.969 --> 00:43:00.510 circulating tumor DNA,  
NOTE Confidence: 0.9994085

00:43:01.770 --> 00:43:03.210 to see whether we can  
NOTE Confidence: 0.9994085

00:43:03.210 --> 00:43:03.710 detect  
NOTE Confidence: 0.993054

00:43:04.090 --> 00:43:05.610 cancer coming back at just  
NOTE Confidence: 0.993054

00:43:05.610 --> 00:43:06.270 the microscopic  
NOTE Confidence: 0.99513036

00:43:06.650 --> 00:43:07.150 level.

NOTE Confidence: 0.9808791  
00:43:07.450 --> 00:43:08.650 And so for patients who  
NOTE Confidence: 0.9808791  
00:43:08.650 --> 00:43:09.850 are more than five years  
NOTE Confidence: 0.9808791  
00:43:09.850 --> 00:43:11.714 out from diagnosis with hormone  
NOTE Confidence: 0.9808791  
00:43:11.714 --> 00:43:13.474 positive breast cancer, who have  
NOTE Confidence: 0.9808791  
00:43:13.474 --> 00:43:14.994 completed all of their prior  
NOTE Confidence: 0.9808791  
00:43:14.994 --> 00:43:15.494 treatments,  
NOTE Confidence: 0.95884985  
00:43:16.755 --> 00:43:17.875 on this trial, they can  
NOTE Confidence: 0.95884985  
00:43:17.875 --> 00:43:19.635 get the ctDNA test, which  
NOTE Confidence: 0.95884985  
00:43:19.635 --> 00:43:21.315 is a blood test every  
NOTE Confidence: 0.95884985  
00:43:21.315 --> 00:43:21.974 three months.  
NOTE Confidence: 0.9990612  
00:43:22.515 --> 00:43:23.910 And if they end up  
NOTE Confidence: 0.9990612  
00:43:24.069 --> 00:43:25.910 coming back positive on this  
NOTE Confidence: 0.9990612  
00:43:25.910 --> 00:43:26.410 test  
NOTE Confidence: 0.9807279  
00:43:26.710 --> 00:43:28.069 and they don't have cancer  
NOTE Confidence: 0.9807279  
00:43:28.069 --> 00:43:29.369 yet on their scans,  
NOTE Confidence: 0.9795992

00:43:29.670 --> 00:43:31.030 we're gonna be treating them  
NOTE Confidence: 0.9795992

00:43:31.030 --> 00:43:31.690 with elocestrant,  
NOTE Confidence: 0.9455382

00:43:32.150 --> 00:43:33.130 which is a pill.  
NOTE Confidence: 0.9993648

00:43:33.430 --> 00:43:34.730 And it's one of these  
NOTE Confidence: 0.9993648

00:43:34.869 --> 00:43:35.369 newer  
NOTE Confidence: 0.96508104

00:43:35.750 --> 00:43:37.369 estrogen receptor degraders.  
NOTE Confidence: 0.95832044

00:43:37.829 --> 00:43:39.270 So not just a blocker,  
NOTE Confidence: 0.95832044

00:43:39.270 --> 00:43:40.864 but actually degrading the estrogen  
NOTE Confidence: 0.95832044

00:43:41.005 --> 00:43:41.505 receptor.  
NOTE Confidence: 0.9907997

00:43:42.364 --> 00:43:43.985 And we're hopeful that by,  
NOTE Confidence: 0.9981723

00:43:44.685 --> 00:43:45.185 intervening  
NOTE Confidence: 0.9997801

00:43:45.485 --> 00:43:46.385 at the microscopic  
NOTE Confidence: 0.99192744

00:43:46.765 --> 00:43:48.685 state, we can prevent these  
NOTE Confidence: 0.99192744

00:43:48.685 --> 00:43:50.285 cells from growing back into  
NOTE Confidence: 0.99192744

00:43:50.285 --> 00:43:51.565 a tumor and growing back  
NOTE Confidence: 0.99192744

00:43:51.565 --> 00:43:53.344 into a breast cancer recurrence.

NOTE Confidence: 0.9810672  
00:43:55.170 --> 00:43:56.290 So thank you very much,  
NOTE Confidence: 0.9810672  
00:43:56.290 --> 00:43:57.730 and I hope that if  
NOTE Confidence: 0.9810672  
00:43:57.730 --> 00:43:59.170 you're a patient or a  
NOTE Confidence: 0.9810672  
00:43:59.170 --> 00:44:00.950 family member or a treating  
NOTE Confidence: 0.9810672  
00:44:01.089 --> 00:44:02.450 physician that you think about  
NOTE Confidence: 0.9810672  
00:44:02.450 --> 00:44:04.210 clinical trials or at least  
NOTE Confidence: 0.9810672  
00:44:04.210 --> 00:44:05.890 discuss clinical trials with your  
NOTE Confidence: 0.9810672  
00:44:05.890 --> 00:44:07.349 oncologist. Thank you.  
NOTE Confidence: 0.97475815  
00:44:08.165 --> 00:44:09.844 Thank you very much, doctor  
NOTE Confidence: 0.97475815  
00:44:09.844 --> 00:44:10.344 Rosenblatt.  
NOTE Confidence: 0.9413103  
00:44:11.844 --> 00:44:13.705 So we've answered many questions  
NOTE Confidence: 0.9413103  
00:44:13.765 --> 00:44:14.724 in the chat. This has  
NOTE Confidence: 0.9413103  
00:44:14.724 --> 00:44:16.344 been a fast and furious  
NOTE Confidence: 0.9413103  
00:44:16.484 --> 00:44:18.325 overview on updates in early  
NOTE Confidence: 0.9413103  
00:44:18.325 --> 00:44:20.085 stage breast cancer. We learned,  
NOTE Confidence: 0.9413103

00:44:20.405 --> 00:44:22.930 surgical therapy from doctor Berger,  
NOTE Confidence: 0.9413103

00:44:22.930 --> 00:44:24.930 options for reconstruction from doctor  
NOTE Confidence: 0.9413103

00:44:24.930 --> 00:44:26.610 Hakal as well as updates  
NOTE Confidence: 0.9413103

00:44:26.610 --> 00:44:27.830 and systemic therapy  
NOTE Confidence: 0.9179023

00:44:28.370 --> 00:44:29.510 from doctor Rosenblit.  
NOTE Confidence: 0.99155146

00:44:31.090 --> 00:44:32.130 I think the last thing  
NOTE Confidence: 0.99155146

00:44:32.130 --> 00:44:33.250 we'd love to share with  
NOTE Confidence: 0.99155146

00:44:33.250 --> 00:44:34.690 our attendees is that we  
NOTE Confidence: 0.99155146

00:44:34.690 --> 00:44:35.969 do make decisions as a  
NOTE Confidence: 0.99155146

00:44:35.969 --> 00:44:38.215 multi disciplinary cancer team. So  
NOTE Confidence: 0.99155146

00:44:38.215 --> 00:44:39.114 patients that  
NOTE Confidence: 0.97176826

00:44:39.495 --> 00:44:41.175 come to any site across  
NOTE Confidence: 0.97176826

00:44:41.175 --> 00:44:42.715 the Yale Smilow network  
NOTE Confidence: 0.9804726

00:44:43.094 --> 00:44:44.614 will meet with a medical  
NOTE Confidence: 0.9804726

00:44:44.614 --> 00:44:45.114 oncologist,  
NOTE Confidence: 0.9772515

00:44:45.655 --> 00:44:47.975 surgeon, radiation oncologist, and plastic

NOTE Confidence: 0.9772515  
00:44:47.975 --> 00:44:48.475 surgeon,  
NOTE Confidence: 0.9092379  
00:44:49.010 --> 00:44:50.130 and we work as a  
NOTE Confidence: 0.9092379  
00:44:50.130 --> 00:44:52.130 cohesive united team in patients  
NOTE Confidence: 0.9092379  
00:44:52.130 --> 00:44:52.630 care.  
NOTE Confidence: 0.972694  
00:44:53.410 --> 00:44:55.010 I think there's one last  
NOTE Confidence: 0.972694  
00:44:55.010 --> 00:44:56.369 question in the chat, doctor  
NOTE Confidence: 0.972694  
00:44:56.369 --> 00:44:57.989 Rosenblatt, about a lobular  
NOTE Confidence: 0.9778885  
00:44:58.609 --> 00:45:00.150 carcinoma with an oncotype  
NOTE Confidence: 0.99761695  
00:45:00.530 --> 00:45:01.670 of thirty four  
NOTE Confidence: 0.9923586  
00:45:02.255 --> 00:45:02.735 and,  
NOTE Confidence: 0.99948853  
00:45:03.215 --> 00:45:04.995 some concern about how estrogen  
NOTE Confidence: 0.9694295  
00:45:05.375 --> 00:45:06.195 gene expression,  
NOTE Confidence: 0.9927826  
00:45:07.935 --> 00:45:09.475 being borderline positive  
NOTE Confidence: 0.9146848  
00:45:10.015 --> 00:45:10.915 and how that  
NOTE Confidence: 0.9983505  
00:45:11.775 --> 00:45:12.275 information  
NOTE Confidence: 0.99697185

00:45:12.975 --> 00:45:15.475 influences your recommendations for systemic

NOTE Confidence: 0.99697185

00:45:15.614 --> 00:45:16.114 therapy.

NOTE Confidence: 0.99670905

00:45:21.670 --> 00:45:23.690 That's a great question. So

NOTE Confidence: 0.99670905

00:45:23.829 --> 00:45:24.329 Oncotype

NOTE Confidence: 0.9996166

00:45:24.630 --> 00:45:26.650 was really designed to

NOTE Confidence: 0.93731946

00:45:27.029 --> 00:45:28.950 answer the question of, is

NOTE Confidence: 0.93731946

00:45:28.950 --> 00:45:30.410 there benefit to chemotherapy

NOTE Confidence: 0.9659013

00:45:30.869 --> 00:45:31.529 or not?

NOTE Confidence: 0.960485

00:45:32.035 --> 00:45:33.815 And it really wasn't designed

NOTE Confidence: 0.960485

00:45:34.035 --> 00:45:34.535 to

NOTE Confidence: 0.84106827

00:45:35.875 --> 00:45:37.175 kind of investigate

NOTE Confidence: 0.99966884

00:45:37.555 --> 00:45:38.455 how hormone

NOTE Confidence: 0.9598734

00:45:38.755 --> 00:45:40.515 positive a breast cancer is.

NOTE Confidence: 0.9598734

00:45:40.515 --> 00:45:42.035 So we still do rely

NOTE Confidence: 0.9598734

00:45:42.035 --> 00:45:42.535 on

NOTE Confidence: 0.9695376

00:45:42.915 --> 00:45:44.594 looking at the tumor under



NOTE Confidence: 0.9695376  
00:45:44.594 --> 00:45:46.329 the microscope, and that would  
NOTE Confidence: 0.9695376  
00:45:46.329 --> 00:45:47.869 be a discussion with your  
NOTE Confidence: 0.90702164  
00:45:48.969 --> 00:45:50.190 team, including the pathologist  
NOTE Confidence: 0.94620055  
00:45:50.569 --> 00:45:52.190 in terms of how,  
NOTE Confidence: 0.9978469  
00:45:52.650 --> 00:45:54.650 how much estrogen positivity you're  
NOTE Confidence: 0.9978469  
00:45:54.650 --> 00:45:55.869 seeing in that case.  
NOTE Confidence: 0.99462223  
00:45:56.730 --> 00:45:57.550 In general,  
NOTE Confidence: 0.9989968  
00:45:58.445 --> 00:45:59.825 even for borderline  
NOTE Confidence: 0.9999143  
00:46:00.205 --> 00:46:00.705 positive  
NOTE Confidence: 0.96939635  
00:46:01.245 --> 00:46:01.745 cases,  
NOTE Confidence: 0.9809399  
00:46:02.445 --> 00:46:03.485 it looks like in this  
NOTE Confidence: 0.9809399  
00:46:03.485 --> 00:46:04.625 case, it was  
NOTE Confidence: 0.97052073  
00:46:04.925 --> 00:46:06.364 ninety percent is what I'm  
NOTE Confidence: 0.97052073  
00:46:06.364 --> 00:46:06.864 understanding  
NOTE Confidence: 0.99098337  
00:46:07.325 --> 00:46:07.825 from  
NOTE Confidence: 0.9875386

00:46:08.364 --> 00:46:09.025 the report.  
NOTE Confidence: 0.9790204

00:46:09.885 --> 00:46:10.844 We would go ahead and  
NOTE Confidence: 0.9790204

00:46:10.844 --> 00:46:12.225 treat that as an estrogen,  
NOTE Confidence: 0.9404736

00:46:13.820 --> 00:46:15.440 hormone positive breast cancer.  
NOTE Confidence: 0.99502337

00:46:15.980 --> 00:46:17.739 There are borderline cases where  
NOTE Confidence: 0.99502337

00:46:17.739 --> 00:46:19.500 the estrogen positivity is very  
NOTE Confidence: 0.99502337

00:46:19.500 --> 00:46:20.940 low, and that becomes just  
NOTE Confidence: 0.99502337

00:46:20.940 --> 00:46:22.780 a very complex discussion with  
NOTE Confidence: 0.99502337

00:46:22.780 --> 00:46:23.920 your medical oncologist.  
NOTE Confidence: 0.9907307

00:46:24.460 --> 00:46:25.500 And in that case, they  
NOTE Confidence: 0.9907307

00:46:25.500 --> 00:46:25.965 might  
NOTE Confidence: 0.9997082

00:46:26.765 --> 00:46:27.905 tailor the chemotherapy  
NOTE Confidence: 0.99952114

00:46:28.205 --> 00:46:29.485 and offer you a slightly  
NOTE Confidence: 0.99952114

00:46:29.485 --> 00:46:30.385 different chemotherapy  
NOTE Confidence: 0.9793243

00:46:30.925 --> 00:46:31.905 if it's borderline.  
NOTE Confidence: 0.9998594

00:46:33.405 --> 00:46:35.085 Thank you very much. There's

NOTE Confidence: 0.9998594  
00:46:35.085 --> 00:46:36.705 another question about  
NOTE Confidence: 0.99959344  
00:46:37.885 --> 00:46:39.405 what we recommend for young  
NOTE Confidence: 0.99959344  
00:46:39.405 --> 00:46:40.705 women who are  
NOTE Confidence: 0.9948567  
00:46:42.070 --> 00:46:43.849 thinking about future pregnancy  
NOTE Confidence: 0.9644534  
00:46:44.310 --> 00:46:46.170 and have an estrogen positive  
NOTE Confidence: 0.9644534  
00:46:46.230 --> 00:46:47.130 tumor. Unfortunately,  
NOTE Confidence: 0.96488523  
00:46:48.230 --> 00:46:49.910 the positive trial, which was  
NOTE Confidence: 0.96488523  
00:46:49.910 --> 00:46:51.270 run out of Dana Farber  
NOTE Confidence: 0.96488523  
00:46:51.270 --> 00:46:52.969 but included multiple institutions  
NOTE Confidence: 0.9651647  
00:46:53.270 --> 00:46:54.630 across the country and the  
NOTE Confidence: 0.9651647  
00:46:54.630 --> 00:46:55.130 world,  
NOTE Confidence: 0.96799827  
00:46:55.535 --> 00:46:57.135 did look at young women.  
NOTE Confidence: 0.96799827  
00:46:57.135 --> 00:46:58.575 They were forty two or  
NOTE Confidence: 0.96799827  
00:46:58.575 --> 00:46:59.635 younger who  
NOTE Confidence: 0.98807865  
00:47:00.015 --> 00:47:01.935 were treated for hormone receptor  
NOTE Confidence: 0.98807865

00:47:01.935 --> 00:47:03.875 positive breast cancer and received  
NOTE Confidence: 0.98807865

00:47:03.935 --> 00:47:05.715 between eighteen and thirty months  
NOTE Confidence: 0.8542176

00:47:06.335 --> 00:47:08.255 of anti estrogen therapy or  
NOTE Confidence: 0.8542176

00:47:08.255 --> 00:47:08.755 hormone,  
NOTE Confidence: 0.9963076

00:47:09.980 --> 00:47:11.739 endocrine therapy to target their  
NOTE Confidence: 0.9963076

00:47:11.739 --> 00:47:13.260 breast cancer. They went on  
NOTE Confidence: 0.9963076

00:47:13.260 --> 00:47:14.460 to take a break for  
NOTE Confidence: 0.9963076

00:47:14.460 --> 00:47:15.680 pregnancy and  
NOTE Confidence: 0.9834119

00:47:16.059 --> 00:47:18.160 potential breastfeeding, and their pregnancy  
NOTE Confidence: 0.99962616

00:47:18.460 --> 00:47:20.000 success was very good  
NOTE Confidence: 0.95827687

00:47:20.540 --> 00:47:21.980 as well as the risk  
NOTE Confidence: 0.95827687

00:47:21.980 --> 00:47:22.880 of a recurrence  
NOTE Confidence: 0.99882156

00:47:23.180 --> 00:47:24.655 was similar to the women  
NOTE Confidence: 0.99882156

00:47:24.655 --> 00:47:25.855 who did not go ahead  
NOTE Confidence: 0.99882156

00:47:25.855 --> 00:47:27.454 with pregnancy. So the data  
NOTE Confidence: 0.99882156

00:47:27.454 --> 00:47:28.674 we currently have

NOTE Confidence: 0.9996669  
00:47:29.135 --> 00:47:30.994 is showing great promise  
NOTE Confidence: 0.98910344  
00:47:31.535 --> 00:47:33.375 that it's safe for select  
NOTE Confidence: 0.98910344  
00:47:33.375 --> 00:47:35.694 women with hormone receptor positive  
NOTE Confidence: 0.98910344  
00:47:35.694 --> 00:47:37.560 breast cancers to take a  
NOTE Confidence: 0.98910344  
00:47:37.560 --> 00:47:39.420 break for pregnancy and,  
NOTE Confidence: 0.95895493  
00:47:40.360 --> 00:47:40.860 future,  
NOTE Confidence: 0.871452  
00:47:41.480 --> 00:47:41.980 breastfeeding.  
NOTE Confidence: 0.9921204  
00:47:42.440 --> 00:47:43.960 And this is certainly something  
NOTE Confidence: 0.9921204  
00:47:43.960 --> 00:47:45.820 you should discuss with your  
NOTE Confidence: 0.9902169  
00:47:46.200 --> 00:47:48.040 oncology team. It's important that  
NOTE Confidence: 0.9902169  
00:47:48.040 --> 00:47:49.080 you're at a right stage  
NOTE Confidence: 0.9902169  
00:47:49.080 --> 00:47:50.520 of your cancer treatment and  
NOTE Confidence: 0.9902169  
00:47:50.520 --> 00:47:52.435 that we can monitor you  
NOTE Confidence: 0.9902169  
00:47:52.435 --> 00:47:53.954 as well as possible during  
NOTE Confidence: 0.9902169  
00:47:53.954 --> 00:47:55.015 and after pregnancy.  
NOTE Confidence: 0.99332213

00:47:57.315 --> 00:47:59.494 There's another question about,

NOTE Confidence: 0.99778885

00:47:59.954 --> 00:48:01.795 a recent article on spike

NOTE Confidence: 0.99778885

00:48:01.795 --> 00:48:02.295 proteins

NOTE Confidence: 0.9645371

00:48:02.915 --> 00:48:04.614 and the aggressive new cancers.

NOTE Confidence: 0.9645371

00:48:04.675 --> 00:48:06.790 Doctor Rosenblatt, I'd I'd defer

NOTE Confidence: 0.9645371

00:48:06.790 --> 00:48:07.910 to you if you're able

NOTE Confidence: 0.9645371

00:48:07.910 --> 00:48:09.210 to answer this question.

NOTE Confidence: 0.9967861

00:48:11.270 --> 00:48:12.469 I don't see this question

NOTE Confidence: 0.9967861

00:48:12.469 --> 00:48:13.930 about the spike proteins.

NOTE Confidence: 0.977864

00:48:15.109 --> 00:48:16.630 It says, any comment on

NOTE Confidence: 0.977864

00:48:16.630 --> 00:48:18.150 the recent article on spike

NOTE Confidence: 0.977864

00:48:18.150 --> 00:48:20.170 protein and aggressive new cancers?

NOTE Confidence: 0.9993556

00:48:22.495 --> 00:48:23.855 I'm not exactly sure what

NOTE Confidence: 0.9993556

00:48:23.855 --> 00:48:25.875 this article is referring to.

NOTE Confidence: 0.9828689

00:48:26.495 --> 00:48:27.375 There is a lot of

NOTE Confidence: 0.9828689

00:48:27.375 --> 00:48:28.975 research out there trying to

NOTE Confidence: 0.9828689  
00:48:28.975 --> 00:48:29.795 figure out,  
NOTE Confidence: 0.98968184  
00:48:30.335 --> 00:48:32.515 better ways of predicting aggressiveness  
NOTE Confidence: 0.98968184  
00:48:32.655 --> 00:48:34.415 and recurrence, so that's probably  
NOTE Confidence: 0.98968184  
00:48:34.415 --> 00:48:35.795 what that's referring to.  
NOTE Confidence: 0.9930942  
00:48:36.650 --> 00:48:38.250 It's nothing that has reached,  
NOTE Confidence: 0.9930942  
00:48:38.250 --> 00:48:39.610 you know, standard of care  
NOTE Confidence: 0.9930942  
00:48:39.610 --> 00:48:41.630 yet. It hasn't entered mainstream  
NOTE Confidence: 0.9930942  
00:48:41.850 --> 00:48:42.350 practice.  
NOTE Confidence: 0.9963893  
00:48:43.050 --> 00:48:44.170 But, yeah, I I look  
NOTE Confidence: 0.9963893  
00:48:44.170 --> 00:48:45.210 forward to reading more about  
NOTE Confidence: 0.9963893  
00:48:45.210 --> 00:48:45.710 it.  
NOTE Confidence: 0.9993653  
00:48:46.250 --> 00:48:46.750 Okay.  
NOTE Confidence: 0.9996875  
00:48:47.290 --> 00:48:48.810 And then there's another question  
NOTE Confidence: 0.9996875  
00:48:48.810 --> 00:48:50.270 about tracking recurrences  
NOTE Confidence: 0.9684714  
00:48:50.570 --> 00:48:52.430 and HER2 positive versus  
NOTE Confidence: 0.9968696

00:48:52.785 --> 00:48:53.605 hormone receptor  
NOTE Confidence: 0.9720924

00:48:54.224 --> 00:48:56.005 positive HER2 negative cancers.  
NOTE Confidence: 0.9715191

00:48:56.704 --> 00:48:58.224 I'll dive in very quickly  
NOTE Confidence: 0.9715191

00:48:58.224 --> 00:48:59.585 as a surgeon. I think  
NOTE Confidence: 0.9715191

00:48:59.585 --> 00:49:01.585 locally, we're examining your skin.  
NOTE Confidence: 0.9715191

00:49:01.585 --> 00:49:03.204 We're looking at any changes.  
NOTE Confidence: 0.9982894

00:49:04.305 --> 00:49:05.585 There can be there was  
NOTE Confidence: 0.9982894

00:49:05.585 --> 00:49:07.530 another comment and question in  
NOTE Confidence: 0.9982894

00:49:07.530 --> 00:49:08.730 the chat. There can be  
NOTE Confidence: 0.9982894

00:49:08.730 --> 00:49:10.250 ongoing changes in the breast  
NOTE Confidence: 0.9982894

00:49:10.250 --> 00:49:10.750 tissue  
NOTE Confidence: 0.98328185

00:49:11.130 --> 00:49:13.550 after surgery, reconstruction, and radiation  
NOTE Confidence: 0.98328185

00:49:13.690 --> 00:49:15.210 for even a couple years,  
NOTE Confidence: 0.98328185

00:49:15.210 --> 00:49:16.969 but most cancer patients should  
NOTE Confidence: 0.98328185

00:49:16.969 --> 00:49:18.489 be under surveillance with their  
NOTE Confidence: 0.98328185

00:49:18.489 --> 00:49:19.630 oncology team.



NOTE Confidence: 0.9502033  
00:49:20.325 --> 00:49:22.405 We decide to survey people  
NOTE Confidence: 0.9502033  
00:49:22.405 --> 00:49:24.005 for a distant recurrence in  
NOTE Confidence: 0.9502033  
00:49:24.005 --> 00:49:25.625 the setting of of symptoms  
NOTE Confidence: 0.9502033  
00:49:25.685 --> 00:49:27.205 or abnormal labs, and doctor  
NOTE Confidence: 0.9502033  
00:49:27.205 --> 00:49:29.045 Rosenblitz really an expert in  
NOTE Confidence: 0.9502033  
00:49:29.045 --> 00:49:29.545 ctDNA.  
NOTE Confidence: 0.9309252  
00:49:29.925 --> 00:49:32.244 So I'll, turn that over  
NOTE Confidence: 0.9309252  
00:49:32.244 --> 00:49:32.905 to her.  
NOTE Confidence: 0.9893918  
00:49:33.900 --> 00:49:36.000 Yeah. So the main surveillance  
NOTE Confidence: 0.9893918  
00:49:36.140 --> 00:49:37.980 mechanism, like we mentioned, is  
NOTE Confidence: 0.9893918  
00:49:37.980 --> 00:49:39.980 physical exam and then breast  
NOTE Confidence: 0.9893918  
00:49:39.980 --> 00:49:40.480 imaging.  
NOTE Confidence: 0.9981876  
00:49:41.579 --> 00:49:42.940 In breast cancer, we have  
NOTE Confidence: 0.9981876  
00:49:42.940 --> 00:49:44.160 not seen any benefit  
NOTE Confidence: 0.9861653  
00:49:44.460 --> 00:49:45.819 from PET scans or CAT  
NOTE Confidence: 0.9861653

00:49:45.819 --> 00:49:47.099 scans, and so we don't  
NOTE Confidence: 0.9861653

00:49:47.099 --> 00:49:48.079 do them because  
NOTE Confidence: 0.9905095

00:49:49.224 --> 00:49:50.344 the risk of the radiation  
NOTE Confidence: 0.9905095

00:49:50.344 --> 00:49:51.965 from the scans actually outweighs  
NOTE Confidence: 0.9905095

00:49:52.025 --> 00:49:53.625 any any benefit in terms  
NOTE Confidence: 0.9905095

00:49:53.625 --> 00:49:54.925 of finding a recurrence.  
NOTE Confidence: 0.9753808

00:49:55.864 --> 00:49:57.065 And we don't have good  
NOTE Confidence: 0.9753808

00:49:57.065 --> 00:49:58.744 blood tests either. There are  
NOTE Confidence: 0.9753808

00:49:58.744 --> 00:49:59.864 blood tests out there called  
NOTE Confidence: 0.9753808

00:49:59.864 --> 00:50:01.305 tumor markers and we use  
NOTE Confidence: 0.9753808

00:50:01.305 --> 00:50:03.145 them for metastatic breast cancer  
NOTE Confidence: 0.9753808

00:50:03.145 --> 00:50:04.420 all the time, But for  
NOTE Confidence: 0.9753808

00:50:04.420 --> 00:50:06.340 early stage breast cancer, they've  
NOTE Confidence: 0.9753808

00:50:06.340 --> 00:50:07.700 been shown to have what's  
NOTE Confidence: 0.9753808

00:50:07.700 --> 00:50:09.380 called low sensitivity and low  
NOTE Confidence: 0.9753808

00:50:09.380 --> 00:50:10.820 specificity. So they can be

NOTE Confidence: 0.9753808  
00:50:10.820 --> 00:50:12.100 negative and there can still  
NOTE Confidence: 0.9753808  
00:50:12.100 --> 00:50:13.380 be a cancer and they  
NOTE Confidence: 0.9753808  
00:50:13.380 --> 00:50:14.420 can be positive and there  
NOTE Confidence: 0.9753808  
00:50:14.420 --> 00:50:15.700 could be no cancer. So  
NOTE Confidence: 0.9753808  
00:50:15.700 --> 00:50:16.820 they're not very helpful to  
NOTE Confidence: 0.9753808  
00:50:16.820 --> 00:50:18.055 us. And that's why we're  
NOTE Confidence: 0.9753808  
00:50:18.055 --> 00:50:19.415 trying to develop this new  
NOTE Confidence: 0.9753808  
00:50:19.415 --> 00:50:21.255 blood test called circulating tumor  
NOTE Confidence: 0.9753808  
00:50:21.255 --> 00:50:21.755 DNA.  
NOTE Confidence: 0.9926834  
00:50:22.135 --> 00:50:23.335 Right now, we're looking at  
NOTE Confidence: 0.9926834  
00:50:23.335 --> 00:50:24.535 it just in the research  
NOTE Confidence: 0.9926834  
00:50:24.535 --> 00:50:26.395 setting because we don't know  
NOTE Confidence: 0.9926834  
00:50:26.614 --> 00:50:28.295 yet how helpful this test  
NOTE Confidence: 0.9926834  
00:50:28.295 --> 00:50:30.060 is, and we don't have  
NOTE Confidence: 0.9926834  
00:50:30.219 --> 00:50:31.340 a treatment option. We need  
NOTE Confidence: 0.9926834

00:50:31.340 --> 00:50:32.780 to investigate what treatment we  
NOTE Confidence: 0.9926834

00:50:32.780 --> 00:50:33.820 can give if that test  
NOTE Confidence: 0.9926834

00:50:33.820 --> 00:50:34.560 is positive.  
NOTE Confidence: 0.98905396

00:50:34.940 --> 00:50:36.219 So there are trials going  
NOTE Confidence: 0.98905396

00:50:36.219 --> 00:50:37.260 on for that for both  
NOTE Confidence: 0.98905396

00:50:37.260 --> 00:50:39.360 hormone positive and HER2 positive  
NOTE Confidence: 0.98905396

00:50:39.420 --> 00:50:40.940 and triple negative breast cancer.  
NOTE Confidence: 0.98905396

00:50:40.940 --> 00:50:42.320 So if you're really interested,  
NOTE Confidence: 0.9988585

00:50:43.045 --> 00:50:44.085 please look out for those  
NOTE Confidence: 0.9988585

00:50:44.085 --> 00:50:44.565 trials.  
NOTE Confidence: 0.9939486

00:50:44.965 --> 00:50:46.825 They're in very early stages,  
NOTE Confidence: 0.9997353

00:50:47.125 --> 00:50:48.405 but we'll probably see more  
NOTE Confidence: 0.9997353

00:50:48.405 --> 00:50:50.165 of those clinical trials in  
NOTE Confidence: 0.9997353

00:50:50.165 --> 00:50:51.465 the next couple of years.  
NOTE Confidence: 0.9939114

00:50:53.844 --> 00:50:55.125 Alright. Well, thank you to  
NOTE Confidence: 0.9939114

00:50:55.125 --> 00:50:56.265 my esteemed colleagues,

NOTE Confidence: 0.9651952

00:50:56.965 --> 00:50:58.440 for joining us tonight and

NOTE Confidence: 0.9651952

00:50:58.440 --> 00:50:59.719 sharing your knowledge, and thank

NOTE Confidence: 0.9651952

00:50:59.719 --> 00:51:01.020 you to all the attendees

NOTE Confidence: 0.9651952

00:51:01.080 --> 00:51:02.440 for joining us for this

NOTE Confidence: 0.9651952

00:51:02.440 --> 00:51:03.739 Milo shares. We,

NOTE Confidence: 0.9608205

00:51:04.440 --> 00:51:05.960 encourage you to attend our

NOTE Confidence: 0.9608205

00:51:05.960 --> 00:51:07.480 future sessions in the month

NOTE Confidence: 0.9608205

00:51:07.480 --> 00:51:08.839 of October, which as many

NOTE Confidence: 0.9608205

00:51:08.839 --> 00:51:09.800 of you know is breast

NOTE Confidence: 0.9608205

00:51:09.800 --> 00:51:12.119 cancer awareness month. And please

NOTE Confidence: 0.9608205

00:51:12.119 --> 00:51:12.599 reach out,

NOTE Confidence: 0.995776

00:51:13.594 --> 00:51:14.954 to any member of our

NOTE Confidence: 0.995776

00:51:14.954 --> 00:51:16.954 program if you or family

NOTE Confidence: 0.995776

00:51:16.954 --> 00:51:18.154 or friends need to be

NOTE Confidence: 0.995776

00:51:18.154 --> 00:51:18.654 seen.

NOTE Confidence: 0.99352664

00:51:19.355 --> 00:51:20.555 We wish you all well,

NOTE Confidence: 0.99352664

00:51:20.555 --> 00:51:21.055 and

NOTE Confidence: 0.99633205

00:51:21.434 --> 00:51:22.974 thank you again for joining.