

WEBVTT

NOTE duration:"01:05:10.3110000"

NOTE language:en-us

NOTE Confidence: 0.7527053

00:00:00.000 --> 00:00:02.325 Soon my name is Mara,

NOTE Confidence: 0.7527053

00:00:02.325 --> 00:00:04.650 Gulshan here at Yale University,

NOTE Confidence: 0.7527053

00:00:04.650 --> 00:00:06.033 Yale Cancer Center,

NOTE Confidence: 0.7527053

00:00:06.033 --> 00:00:07.416 Smilow Cancer Hospital.

NOTE Confidence: 0.7527053

00:00:07.420 --> 00:00:10.345 Welcome you to the third

NOTE Confidence: 0.7527053

00:00:10.345 --> 00:00:12.685 breast CME lecture series.

NOTE Confidence: 0.7527053

00:00:12.690 --> 00:00:15.567 This today we're really fortunate to have

NOTE Confidence: 0.7527053

00:00:15.567 --> 00:00:17.730 three phenomenal speakers and panelists.

NOTE Confidence: 0.7527053

00:00:17.730 --> 00:00:19.830 We're going to start with

NOTE Confidence: 0.7527053

00:00:19.830 --> 00:00:21.090 Doctor Regina Hooley,

NOTE Confidence: 0.7527053

00:00:21.090 --> 00:00:23.544 who's professor of Radiology vice chair

NOTE Confidence: 0.7527053

00:00:23.544 --> 00:00:26.525 in the Department of Radiology in the

NOTE Confidence: 0.7527053

00:00:26.525 --> 00:00:29.486 interim as division Chief for breast imaging,

NOTE Confidence: 0.7527053

00:00:29.490 --> 00:00:32.850 and then we go to Doctor Kristen Knowlton,

NOTE Confidence: 0.7527053

00:00:32.850 --> 00:00:34.950 our medical director for Radiation

NOTE Confidence: 0.7527053

00:00:34.950 --> 00:00:37.050 Oncology at Yale at Hamden,

NOTE Confidence: 0.7527053

00:00:37.050 --> 00:00:39.990 and then last but certainly not least,

NOTE Confidence: 0.7527053

00:00:39.990 --> 00:00:41.340 Doctor Tomer Abraham,

NOTE Confidence: 0.7527053

00:00:41.340 --> 00:00:44.040 who is our director of breasts.

NOTE Confidence: 0.7527053

00:00:44.040 --> 00:00:45.114 Microsurgical reconstruction and

NOTE Confidence: 0.7527053

00:00:45.114 --> 00:00:46.904 breast reconstruction here at Yale.

NOTE Confidence: 0.7527053

00:00:46.910 --> 00:00:49.058 The format is that will have

NOTE Confidence: 0.7527053

00:00:49.058 --> 00:00:50.132 three consecutive speakers.

NOTE Confidence: 0.7527053

00:00:50.140 --> 00:00:52.674 I really encourage you to put as

NOTE Confidence: 0.7527053

00:00:52.674 --> 00:00:55.142 many questions as you want into the

NOTE Confidence: 0.7527053

00:00:55.142 --> 00:00:57.680 chat box or the question to answer.

NOTE Confidence: 0.7527053

00:00:57.680 --> 00:01:00.193 Box will try to answer them as

NOTE Confidence: 0.7527053

00:01:00.193 --> 00:01:02.348 much as possible in real time.

NOTE Confidence: 0.7527053

00:01:02.350 --> 00:01:04.498 Some will leave two to the

NOTE Confidence: 0.7527053

00:01:04.498 --> 00:01:05.572 end for discussion,
NOTE Confidence: 0.7527053

00:01:05.580 --> 00:01:08.387 and with that I really appreciate everyone
NOTE Confidence: 0.7527053

00:01:08.387 --> 00:01:11.316 taking the time to to log in and listen.
NOTE Confidence: 0.7527053

00:01:11.320 --> 00:01:13.852 This is going to be recorded
NOTE Confidence: 0.7527053

00:01:13.852 --> 00:01:16.150 so you can go back.
NOTE Confidence: 0.7527053

00:01:16.150 --> 00:01:18.467 If you want or share this with
NOTE Confidence: 0.7527053

00:01:18.467 --> 00:01:20.242 friends and colleagues around the
NOTE Confidence: 0.7527053

00:01:20.242 --> 00:01:22.027 country and around the world,
NOTE Confidence: 0.7527053

00:01:22.030 --> 00:01:23.760 so with no further ado,
NOTE Confidence: 0.7527053

00:01:23.760 --> 00:01:26.528 we'll turn it over to doctor Doctor Hooley.
NOTE Confidence: 0.738898

00:01:29.290 --> 00:01:32.320 OK, thanks so much doctor Golshan.
NOTE Confidence: 0.738898

00:01:32.320 --> 00:01:34.708 It's really great to be here,
NOTE Confidence: 0.738898

00:01:34.710 --> 00:01:38.310 so I'm going to start by sharing my
NOTE Confidence: 0.738898

00:01:38.310 --> 00:01:41.368 slides and let me just get this.
NOTE Confidence: 0.738898

00:01:41.370 --> 00:01:44.211 Uhm? Why OK? So?
NOTE Confidence: 0.738898

00:01:44.211 --> 00:01:46.758 I'm going to talk a little bit about

NOTE Confidence: 0.738898
00:01:46.758 --> 00:01:49.322 breast cancer screening and, you know,
NOTE Confidence: 0.738898
00:01:49.322 --> 00:01:52.130 one size no longer fits all these days.
NOTE Confidence: 0.738898
00:01:52.130 --> 00:01:53.880 There's we're moving towards a
NOTE Confidence: 0.738898
00:01:53.880 --> 00:01:54.930 more personalized screening,
NOTE Confidence: 0.738898
00:01:54.930 --> 00:01:57.372 so I'm going to review screening
NOTE Confidence: 0.738898
00:01:57.372 --> 00:02:00.313 it and show you where it's going
NOTE Confidence: 0.738898
00:02:00.313 --> 00:02:03.162 over the next 20 minutes or so.
NOTE Confidence: 0.738898
00:02:03.170 --> 00:02:05.683 My disclosures I am on the Medical
NOTE Confidence: 0.738898
00:02:05.683 --> 00:02:07.851 Advisory Board for dense breast dot
NOTE Confidence: 0.738898
00:02:07.851 --> 00:02:10.224 dash info and that's where I took
NOTE Confidence: 0.738898
00:02:10.295 --> 00:02:12.668 some of my tables and figures from.
NOTE Confidence: 0.738898
00:02:12.670 --> 00:02:14.882 That's a website that has a lot
NOTE Confidence: 0.738898
00:02:14.882 --> 00:02:16.550 of information on screening.
NOTE Confidence: 0.738898
00:02:16.550 --> 00:02:19.040 It's accurate and it's for
NOTE Confidence: 0.738898
00:02:19.040 --> 00:02:21.530 patients as well as providers.
NOTE Confidence: 0.738898

00:02:21.530 --> 00:02:24.008 So I'll start by reviewing the
NOTE Confidence: 0.738898
00:02:24.008 --> 00:02:25.660 background breast cancer course.
NOTE Confidence: 0.738898
00:02:25.660 --> 00:02:28.956 Worldwide is the most common cancer in women.
NOTE Confidence: 0.738898
00:02:28.960 --> 00:02:31.025 It accounts for about 1/4
NOTE Confidence: 0.738898
00:02:31.025 --> 00:02:32.677 of all female cancers.
NOTE Confidence: 0.738898
00:02:32.680 --> 00:02:35.158 Is the leading cause of cancer
NOTE Confidence: 0.738898
00:02:35.158 --> 00:02:36.397 related mortality worldwide?
NOTE Confidence: 0.738898
00:02:36.400 --> 00:02:38.465 About 15% of all female
NOTE Confidence: 0.738898
00:02:38.465 --> 00:02:40.530 cancer deaths in the US.
NOTE Confidence: 0.738898
00:02:40.530 --> 00:02:42.595 Lung cancer is number one
NOTE Confidence: 0.738898
00:02:42.595 --> 00:02:44.247 for cancer related mortality,
NOTE Confidence: 0.738898
00:02:44.250 --> 00:02:45.132 and interestingly,
NOTE Confidence: 0.738898
00:02:45.132 --> 00:02:48.219 the rates of breast cancer is rising
NOTE Confidence: 0.738898
00:02:48.219 --> 00:02:50.632 worldwide at about 6.4% per year.
NOTE Confidence: 0.738898
00:02:50.632 --> 00:02:52.676 Nobody really knows why,
NOTE Confidence: 0.738898
00:02:52.680 --> 00:02:55.548 but that adds up.

NOTE Confidence: 0.738898
00:02:55.550 --> 00:02:57.475 The World Health Organization reports
NOTE Confidence: 0.738898
00:02:57.475 --> 00:03:00.420 that in 2018 there were 2,000,000 cases
NOTE Confidence: 0.738898
00:03:00.420 --> 00:03:02.810 of breast cancer diagnosed worldwide,
NOTE Confidence: 0.738898
00:03:02.810 --> 00:03:05.799 and by 2040 that'll rise to 3,000,000,
NOTE Confidence: 0.738898
00:03:05.800 --> 00:03:08.000 so it is significant.
NOTE Confidence: 0.738898
00:03:08.000 --> 00:03:09.100 In general,
NOTE Confidence: 0.738898
00:03:09.100 --> 00:03:11.092 the incidence of breast cancer is
NOTE Confidence: 0.738898
00:03:11.092 --> 00:03:13.030 more frequent in developed countries,
NOTE Confidence: 0.738898
00:03:13.030 --> 00:03:16.252 as noted on the blue map on the left,
NOTE Confidence: 0.738898
00:03:16.260 --> 00:03:18.402 and this is likely due to
NOTE Confidence: 0.738898
00:03:18.402 --> 00:03:19.116 screening mammography.
NOTE Confidence: 0.738898
00:03:19.120 --> 00:03:19.478 However,
NOTE Confidence: 0.738898
00:03:19.478 --> 00:03:21.268 women diagnosed in developing countries,
NOTE Confidence: 0.738898
00:03:21.270 --> 00:03:23.250 as noted on the map on
NOTE Confidence: 0.738898
00:03:23.250 --> 00:03:25.560 the red map on the right,
NOTE Confidence: 0.738898

00:03:25.560 --> 00:03:27.708 are more likely to be diagnosed
NOTE Confidence: 0.738898

00:03:27.708 --> 00:03:30.266 at an advanced age and are more
NOTE Confidence: 0.738898

00:03:30.266 --> 00:03:32.366 likely to die from the disease.
NOTE Confidence: 0.738898

00:03:32.370 --> 00:03:34.350 And maybe this is because there
NOTE Confidence: 0.738898

00:03:34.350 --> 00:03:36.660 is pretends not to be formalized.
NOTE Confidence: 0.738898

00:03:36.660 --> 00:03:38.876 Breast cancer screening in
NOTE Confidence: 0.738898

00:03:38.876 --> 00:03:40.538 these developing countries.
NOTE Confidence: 0.738898

00:03:40.540 --> 00:03:42.370 When it comes to breast cancer
NOTE Confidence: 0.738898

00:03:42.370 --> 00:03:43.285 screening and mammography,
NOTE Confidence: 0.738898

00:03:43.290 --> 00:03:46.068 we've certainly come a long way.
NOTE Confidence: 0.738898

00:03:46.070 --> 00:03:48.480 Breast cancers.
NOTE Confidence: 0.738898

00:03:48.480 --> 00:03:50.695 Screening and mammography was first
NOTE Confidence: 0.738898

00:03:50.695 --> 00:03:52.700 introduced, probably in the 1960s,
NOTE Confidence: 0.738898

00:03:52.700 --> 00:03:55.655 and this is a paper from 1967
NOTE Confidence: 0.738898

00:03:55.655 --> 00:03:57.779 showing the new technology.
NOTE Confidence: 0.738898

00:03:57.780 --> 00:04:00.874 At the time there was film screen,

NOTE Confidence: 0.738898
00:04:00.880 --> 00:04:03.538 mammography, and zero mammography as well.
NOTE Confidence: 0.738898
00:04:03.540 --> 00:04:05.312 Pretty basic stuff that,
NOTE Confidence: 0.738898
00:04:05.312 --> 00:04:07.527 compared to our standards today.
NOTE Confidence: 0.738898
00:04:07.530 --> 00:04:10.030 But even those studies were
NOTE Confidence: 0.738898
00:04:10.030 --> 00:04:12.530 able to show some cancers.
NOTE Confidence: 0.738898
00:04:12.530 --> 00:04:13.754 Of these days,
NOTE Confidence: 0.738898
00:04:13.754 --> 00:04:14.570 of course,
NOTE Confidence: 0.738898
00:04:14.570 --> 00:04:17.762 Thomas synthesis or the 3D mammogram
NOTE Confidence: 0.738898
00:04:17.762 --> 00:04:19.890 digital breast tomosynthesis is
NOTE Confidence: 0.738898
00:04:19.972 --> 00:04:22.122 becoming the standard of care
NOTE Confidence: 0.738898
00:04:22.122 --> 00:04:24.738 where we can see explicit detail
NOTE Confidence: 0.738898
00:04:24.738 --> 00:04:27.405 of the breast tissue as well as.
NOTE Confidence: 0.738898
00:04:27.410 --> 00:04:29.744 Small or or subtle cancers that
NOTE Confidence: 0.738898
00:04:29.744 --> 00:04:32.891 are not well seen on the 2D
NOTE Confidence: 0.738898
00:04:32.891 --> 00:04:34.400 traditional mammogram alone.
NOTE Confidence: 0.738898

00:04:34.400 --> 00:04:37.168 Our group at Yale was lucky to be
NOTE Confidence: 0.738898

00:04:37.168 --> 00:04:40.543 one of the first centers in the
NOTE Confidence: 0.738898

00:04:40.543 --> 00:04:43.138 United States to get tomosynthesis.
NOTE Confidence: 0.738898

00:04:43.140 --> 00:04:45.692 I think it was back in 2011 and
NOTE Confidence: 0.738898

00:04:45.692 --> 00:04:48.743 a few years after that we became
NOTE Confidence: 0.738898

00:04:48.743 --> 00:04:51.669 fully all of our mammograms were
NOTE Confidence: 0.738898

00:04:51.669 --> 00:04:54.717 tomosynthesis and we were leaders in
NOTE Confidence: 0.738898

00:04:54.717 --> 00:04:57.699 publishing led by Doctor Leon Philpotts.
NOTE Confidence: 0.738898

00:04:57.699 --> 00:05:00.114 And so showing that tomosynthesis
NOTE Confidence: 0.738898

00:05:00.114 --> 00:05:01.080 is beneficial
NOTE Confidence: 0.82772106875

00:05:01.149 --> 00:05:03.633 for screening and diagnosis of breast
NOTE Confidence: 0.82772106875

00:05:03.633 --> 00:05:06.667 cancer among all women and among all ages.
NOTE Confidence: 0.7707585

00:05:10.450 --> 00:05:11.515 Some screening mammography
NOTE Confidence: 0.7707585

00:05:11.515 --> 00:05:13.645 has been shown to save lives,
NOTE Confidence: 0.7707585

00:05:13.650 --> 00:05:15.070 multiple randomized control trials,
NOTE Confidence: 0.7707585

00:05:15.070 --> 00:05:15.780 and observation.

NOTE Confidence: 0.7707585

00:05:15.780 --> 00:05:18.615 ULL studies have shown that breast cancer

NOTE Confidence: 0.7707585

00:05:18.615 --> 00:05:21.097 mortality is increased by about 20 to 40%.

NOTE Confidence: 0.7707585

00:05:21.100 --> 00:05:23.674 Is the only test that has been shown a

NOTE Confidence: 0.7707585

00:05:23.674 --> 00:05:26.430 clear mortality reduction of breast cancer,

NOTE Confidence: 0.7707585

00:05:26.430 --> 00:05:28.992 and this is mostly due to downshifting

NOTE Confidence: 0.7707585

00:05:28.992 --> 00:05:31.748 up stage two and hired a stage one.

NOTE Confidence: 0.7707585

00:05:31.750 --> 00:05:33.530 There are fewer node negative.

NOTE Confidence: 0.7707585

00:05:33.530 --> 00:05:35.660 There are fewer negative invasive cancers,

NOTE Confidence: 0.7707585

00:05:35.660 --> 00:05:37.976 less tumor process, better tumor biology.

NOTE Confidence: 0.7707585

00:05:37.980 --> 00:05:39.880 And among screening detected cancers

NOTE Confidence: 0.7707585

00:05:39.880 --> 00:05:42.864 75% or stage zero DCIS or stage one

NOTE Confidence: 0.7707585

00:05:42.864 --> 00:05:45.194 and among clinically detected cancer is

NOTE Confidence: 0.7707585

00:05:45.194 --> 00:05:49.350 more than 50% are stage two or higher.

NOTE Confidence: 0.7707585

00:05:49.350 --> 00:05:50.910 And here are some examples

NOTE Confidence: 0.7707585

00:05:50.910 --> 00:05:52.470 of some mammograms in women.

NOTE Confidence: 0.7707585

00:05:52.470 --> 00:05:54.966 On the left hand side of the screen.
NOTE Confidence: 0.7707585

00:05:54.970 --> 00:05:57.328 This is a 67 year old woman who had
NOTE Confidence: 0.7707585

00:05:57.328 --> 00:05:59.327 never had a screening mammogram.
NOTE Confidence: 0.7707585

00:05:59.330 --> 00:06:01.514 She is a palpable 4 centimeter mass.
NOTE Confidence: 0.7707585

00:06:01.520 --> 00:06:04.008 It's pirates 5. We know it's a cancer.
NOTE Confidence: 0.7707585

00:06:04.010 --> 00:06:05.570 This was a triple negative,
NOTE Confidence: 0.7707585

00:06:05.570 --> 00:06:07.719 high grade cancer and we would think
NOTE Confidence: 0.7707585

00:06:07.719 --> 00:06:09.632 that she would have, you know,
NOTE Confidence: 0.7707585

00:06:09.632 --> 00:06:10.876 regular speeding. Agra fee.
NOTE Confidence: 0.7707585

00:06:10.880 --> 00:06:13.296 We would have caught this at an earlier
NOTE Confidence: 0.7707585

00:06:13.296 --> 00:06:14.929 earlier stage and smaller size.
NOTE Confidence: 0.7707585

00:06:14.930 --> 00:06:16.046 On the other hand,
NOTE Confidence: 0.7707585

00:06:16.046 --> 00:06:18.168 in this patient there's a tiny new
NOTE Confidence: 0.7707585

00:06:18.168 --> 00:06:19.716 group of calcifications there.
NOTE Confidence: 0.7707585

00:06:19.720 --> 00:06:20.764 Linear their branching.
NOTE Confidence: 0.7707585

00:06:20.764 --> 00:06:22.156 She's 15-6 years old.

NOTE Confidence: 0.7707585

00:06:22.160 --> 00:06:24.610 She has a screening mammogram every year,

NOTE Confidence: 0.7707585

00:06:24.610 --> 00:06:25.874 so they're caught earlier,

NOTE Confidence: 0.7707585

00:06:25.874 --> 00:06:28.705 and this was a very tiny 1.5 millimeter

NOTE Confidence: 0.7707585

00:06:28.705 --> 00:06:30.890 grade, two cancer, High Ki 67.

NOTE Confidence: 0.7707585

00:06:30.890 --> 00:06:33.680 So presumably this is a life

NOTE Confidence: 0.7707585

00:06:33.680 --> 00:06:36.160 saving mammogram in this woman.

NOTE Confidence: 0.7707585

00:06:36.160 --> 00:06:38.128 So despite the success of mammography,

NOTE Confidence: 0.7707585

00:06:38.130 --> 00:06:39.069 it is imperfect,

NOTE Confidence: 0.7707585

00:06:39.069 --> 00:06:40.321 is particularly limited in

NOTE Confidence: 0.7707585

00:06:40.321 --> 00:06:41.740 women with dense breasts.

NOTE Confidence: 0.7707585

00:06:41.740 --> 00:06:43.530 The overall false negative rate

NOTE Confidence: 0.7707585

00:06:43.530 --> 00:06:45.320 of mammography among all breast

NOTE Confidence: 0.7707585

00:06:45.385 --> 00:06:47.308 densities is about 10 to 15% in

NOTE Confidence: 0.7707585

00:06:47.308 --> 00:06:49.276 the overall sensitivity is 70 to

NOTE Confidence: 0.7707585

00:06:49.276 --> 00:06:51.404 90% dense breasts make it hard for

NOTE Confidence: 0.7707585

00:06:51.404 --> 00:06:53.369 us because of the masking effect
NOTE Confidence: 0.7707585

00:06:53.369 --> 00:06:55.840 where cancers tend to be white spot.
NOTE Confidence: 0.7707585

00:06:55.840 --> 00:06:57.814 So there can be difficult to see
NOTE Confidence: 0.7707585

00:06:57.814 --> 00:06:59.491 with the white fiber glandular
NOTE Confidence: 0.7707585

00:06:59.491 --> 00:07:01.795 tissue versus women with non dense
NOTE Confidence: 0.7707585

00:07:01.795 --> 00:07:03.907 breasts where there's more fat and
NOTE Confidence: 0.7707585

00:07:03.907 --> 00:07:05.507 less white gland or tissue.
NOTE Confidence: 0.7707585

00:07:05.510 --> 00:07:08.756 And cancers are easier to identify.
NOTE Confidence: 0.7707585

00:07:08.760 --> 00:07:10.510 So screening mammography is very
NOTE Confidence: 0.7707585

00:07:10.510 --> 00:07:11.315 controversial, controversial.
NOTE Confidence: 0.7707585

00:07:11.315 --> 00:07:14.500 I think we all know that our
NOTE Confidence: 0.7707585

00:07:14.500 --> 00:07:17.018 patients know that it's hard to
NOTE Confidence: 0.7707585

00:07:17.018 --> 00:07:18.923 miss the articles in the.
NOTE Confidence: 0.7707585

00:07:18.930 --> 00:07:21.378 And in the press.
NOTE Confidence: 0.7707585

00:07:21.380 --> 00:07:24.098 Over the past decade or so,
NOTE Confidence: 0.7707585

00:07:24.100 --> 00:07:26.830 and screening has become more complicated,

NOTE Confidence: 0.7707585

00:07:26.830 --> 00:07:29.924 and this step partially because of the

NOTE Confidence: 0.7707585

00:07:29.924 --> 00:07:32.729 United States Protective Services Task Force,

NOTE Confidence: 0.7707585

00:07:32.730 --> 00:07:34.538 who first issued recommendations

NOTE Confidence: 0.7707585

00:07:34.538 --> 00:07:36.798 on screening mammography in 2009

NOTE Confidence: 0.7707585

00:07:36.798 --> 00:07:39.088 and then reinstated them again,

NOTE Confidence: 0.7707585

00:07:39.090 --> 00:07:40.341 didn't change them.

NOTE Confidence: 0.7707585

00:07:40.341 --> 00:07:40.758 Basically,

NOTE Confidence: 0.7707585

00:07:40.758 --> 00:07:43.260 in 2015 and basically gave screening

NOTE Confidence: 0.7707585

00:07:43.331 --> 00:07:46.798 mammography, AB, and even a C rating.

NOTE Confidence: 0.7707585

00:07:46.800 --> 00:07:49.180 They basically said that having

NOTE Confidence: 0.7707585

00:07:49.180 --> 00:07:51.560 a annual screening mammogram and

NOTE Confidence: 0.7707585

00:07:51.643 --> 00:07:52.759 women in there.

NOTE Confidence: 0.7707585

00:07:52.760 --> 00:07:55.120 40S was a C grade,

NOTE Confidence: 0.7707585

00:07:55.120 --> 00:07:59.878 meaning that this service might be.

NOTE Confidence: 0.7707585

00:07:59.880 --> 00:08:01.928 Offered in selected patients.

NOTE Confidence: 0.7707585

00:08:01.928 --> 00:08:03.976 Depending on some circumstances
NOTE Confidence: 0.7707585

00:08:03.976 --> 00:08:06.330 and then gave screening mammography
NOTE Confidence: 0.7707585

00:08:06.330 --> 00:08:09.676 every two years from age 50 to 74
NOTE Confidence: 0.7707585

00:08:09.676 --> 00:08:12.835 AB grade and you know when we're in medicine,
NOTE Confidence: 0.7707585

00:08:12.840 --> 00:08:15.864 we generally like A's that we should
NOTE Confidence: 0.7707585

00:08:15.864 --> 00:08:17.160 be offering this.
NOTE Confidence: 0.7707585

00:08:17.160 --> 00:08:20.506 But you know Decencies and also the
NOTE Confidence: 0.7707585

00:08:20.506 --> 00:08:21.940 changing recommendations didn't
NOTE Confidence: 0.7707585

00:08:22.015 --> 00:08:24.619 really sit right over all the task
NOTE Confidence: 0.7707585

00:08:24.619 --> 00:08:25.363 force again.
NOTE Confidence: 0.83849704

00:08:25.370 --> 00:08:26.666 Recommended against screening
NOTE Confidence: 0.83849704

00:08:26.666 --> 00:08:29.258 mammogram of women in their 40s.
NOTE Confidence: 0.83849704

00:08:29.260 --> 00:08:31.615 They also recommended against teaching
NOTE Confidence: 0.83849704

00:08:31.615 --> 00:08:34.560 self breast examination they were against.
NOTE Confidence: 0.83849704

00:08:34.560 --> 00:08:36.189 Clinical breast examination.
NOTE Confidence: 0.83849704

00:08:36.189 --> 00:08:39.447 There were against screening women over

NOTE Confidence: 0.83849704

00:08:39.447 --> 00:08:42.650 the age of 75 and they were really

NOTE Confidence: 0.83849704

00:08:42.650 --> 00:08:44.925 only for screening women every other

NOTE Confidence: 0.83849704

00:08:44.925 --> 00:08:47.890 year in the starting age 50 to 74.

NOTE Confidence: 0.83849704

00:08:47.890 --> 00:08:49.610 This is very controversial.

NOTE Confidence: 0.83849704

00:08:49.610 --> 00:08:51.760 Patient advocacy groups primary care,

NOTE Confidence: 0.83849704

00:08:51.760 --> 00:08:53.050 oncology, radiology. Perhaps?

NOTE Confidence: 0.83849704

00:08:53.050 --> 00:08:56.060 It was really just about saving money,

NOTE Confidence: 0.83849704

00:08:56.060 --> 00:08:59.070 because it's certainly the less we screen,

NOTE Confidence: 0.83849704

00:08:59.070 --> 00:09:01.650 the more money we're going to

NOTE Confidence: 0.83849704

00:09:01.650 --> 00:09:03.370 save on healthcare dollars.

NOTE Confidence: 0.83849704

00:09:03.370 --> 00:09:04.606 And in all fairness.

NOTE Confidence: 0.83849704

00:09:04.606 --> 00:09:06.460 These recommendations are very similar to

NOTE Confidence: 0.83849704

00:09:06.511 --> 00:09:08.376 other countries that have nationalized

NOTE Confidence: 0.83849704

00:09:08.376 --> 00:09:10.241 health services and health programs,

NOTE Confidence: 0.83849704

00:09:10.250 --> 00:09:11.845 but we don't have that

NOTE Confidence: 0.83849704

00:09:11.845 --> 00:09:13.440 here in the United States.

NOTE Confidence: 0.83849704

00:09:13.440 --> 00:09:15.358 So saying that this is what we

NOTE Confidence: 0.83849704

00:09:15.358 --> 00:09:17.601 should do in in a country that

NOTE Confidence: 0.83849704

00:09:17.601 --> 00:09:19.629 doesn't have a full National Health

NOTE Confidence: 0.83849704

00:09:19.697 --> 00:09:21.737 Service doesn't seem to be fair,

NOTE Confidence: 0.83849704

00:09:21.740 --> 00:09:23.905 and not mentioning that at

NOTE Confidence: 0.83849704

00:09:23.905 --> 00:09:25.637 all doesn't seem fair.

NOTE Confidence: 0.83849704

00:09:25.640 --> 00:09:28.614 I do want to focus on the fact that we really

NOTE Confidence: 0.83849704

00:09:28.614 --> 00:09:31.288 should be screening women in their 40s,

NOTE Confidence: 0.83849704

00:09:31.290 --> 00:09:33.313 and if there's one thing that you

NOTE Confidence: 0.83849704

00:09:33.313 --> 00:09:35.583 should take away for anyone who doesn't

NOTE Confidence: 0.83849704

00:09:35.583 --> 00:09:37.890 believe in screening women in their 40s,

NOTE Confidence: 0.83849704

00:09:37.890 --> 00:09:39.774 we need to screen women in

NOTE Confidence: 0.83849704

00:09:39.774 --> 00:09:41.030 their 40s every year.

NOTE Confidence: 0.83849704

00:09:41.030 --> 00:09:42.908 So, so please take, you know,

NOTE Confidence: 0.83849704

00:09:42.910 --> 00:09:44.480 lock this in from this,

NOTE Confidence: 0.83849704

00:09:44.480 --> 00:09:46.364 talk women in their 40s have

NOTE Confidence: 0.83849704

00:09:46.364 --> 00:09:47.620 higher interval cancer rates.

NOTE Confidence: 0.83849704

00:09:47.620 --> 00:09:48.792 They have denser breasts.

NOTE Confidence: 0.83849704

00:09:48.792 --> 00:09:50.944 We know that interval cancers that are

NOTE Confidence: 0.83849704

00:09:50.944 --> 00:09:52.960 diagnosed between having a normal mammogram.

NOTE Confidence: 0.83849704

00:09:52.960 --> 00:09:54.432 These are usually symptomatic.

NOTE Confidence: 0.83849704

00:09:54.432 --> 00:09:56.640 Cancers tend to be more aggressive.

NOTE Confidence: 0.83849704

00:09:56.640 --> 00:09:59.440 Cancers in women have a shorter sojourn time,

NOTE Confidence: 0.83849704

00:09:59.440 --> 00:10:01.890 and they tend to be faster growing.

NOTE Confidence: 0.83849704

00:10:01.890 --> 00:10:04.710 We also know that.

NOTE Confidence: 0.83849704

00:10:04.710 --> 00:10:06.760 There's higher survival for earlier

NOTE Confidence: 0.83849704

00:10:06.760 --> 00:10:08.400 stage tumors, and, importantly,

NOTE Confidence: 0.83849704

00:10:08.400 --> 00:10:09.630 there's ethnic differences.

NOTE Confidence: 0.83849704

00:10:09.630 --> 00:10:12.801 Black and Hispanic women have a peak

NOTE Confidence: 0.83849704

00:10:12.801 --> 00:10:16.190 incidence of breast cancer in ages 46 to 47,

NOTE Confidence: 0.83849704

00:10:16.190 --> 00:10:18.240 so telling having a sweeping
NOTE Confidence: 0.83849704

00:10:18.240 --> 00:10:19.470 statement that says,
NOTE Confidence: 0.83849704

00:10:19.470 --> 00:10:21.888 you know we should only start
NOTE Confidence: 0.83849704

00:10:21.888 --> 00:10:25.127 screening at age 50 is really doing
NOTE Confidence: 0.83849704

00:10:25.127 --> 00:10:27.697 these patients a major disservice.
NOTE Confidence: 0.83849704

00:10:27.700 --> 00:10:29.920 Uhm?
NOTE Confidence: 0.83849704

00:10:29.920 --> 00:10:32.332 Here this graph shows that you
NOTE Confidence: 0.83849704

00:10:32.332 --> 00:10:34.639 know breast cancer in the 40s,
NOTE Confidence: 0.83849704

00:10:34.640 --> 00:10:36.600 accounts for about 20% of
NOTE Confidence: 0.83849704

00:10:36.600 --> 00:10:38.168 all invasive breast cancer,
NOTE Confidence: 0.83849704

00:10:38.170 --> 00:10:40.528 so it is a considerable fraction
NOTE Confidence: 0.83849704

00:10:40.528 --> 00:10:42.100 of the disease burden.
NOTE Confidence: 0.83849704

00:10:42.100 --> 00:10:44.830 So it is very important.
NOTE Confidence: 0.83849704

00:10:44.830 --> 00:10:46.958 So the screening guidelines,
NOTE Confidence: 0.83849704

00:10:46.958 --> 00:10:49.086 as they stand now.
NOTE Confidence: 0.83849704

00:10:49.090 --> 00:10:50.389 Among various organizations,

NOTE Confidence: 0.83849704

00:10:50.389 --> 00:10:53.420 looks kind of confusing in this table,

NOTE Confidence: 0.83849704

00:10:53.420 --> 00:10:56.258 but it's pretty.

NOTE Confidence: 0.83849704

00:10:56.260 --> 00:10:58.200 Think it's really pretty straightforward.

NOTE Confidence: 0.83849704

00:10:58.200 --> 00:10:59.361 Basically, most organizations

NOTE Confidence: 0.83849704

00:10:59.361 --> 00:11:02.070 say you should start at age 40,

NOTE Confidence: 0.83849704

00:11:02.070 --> 00:11:04.434 and with the exception of the

NOTE Confidence: 0.83849704

00:11:04.434 --> 00:11:06.320 task force were offer it.

NOTE Confidence: 0.83849704

00:11:06.320 --> 00:11:07.146 So again,

NOTE Confidence: 0.83849704

00:11:07.146 --> 00:11:09.211 this this reflects the patient

NOTE Confidence: 0.83849704

00:11:09.211 --> 00:11:11.252 shared decision making with ACOG

NOTE Confidence: 0.83849704

00:11:11.252 --> 00:11:13.087 and the American Cancer Society

NOTE Confidence: 0.83849704

00:11:13.087 --> 00:11:15.358 has the option also discharge date

NOTE Confidence: 0.83849704

00:11:15.358 --> 00:11:17.560 page 40 and says really start

NOTE Confidence: 0.83849704

00:11:17.560 --> 00:11:19.458 annual screening at age 45,

NOTE Confidence: 0.83849704

00:11:19.458 --> 00:11:22.241 so the American Cancer Society sort of

NOTE Confidence: 0.83849704

00:11:22.241 --> 00:11:24.737 bridge the gap between societies like

NOTE Confidence: 0.83849704

00:11:24.737 --> 00:11:26.950 the American College of Radiology.

NOTE Confidence: 0.83849704

00:11:26.950 --> 00:11:28.640 And the United States Protective

NOTE Confidence: 0.83849704

00:11:28.640 --> 00:11:29.654 Services Task force.

NOTE Confidence: 0.83849704

00:11:29.660 --> 00:11:31.694 Life expectancy is a little bit

NOTE Confidence: 0.83849704

00:11:31.694 --> 00:11:33.050 all over the place.

NOTE Confidence: 0.83849704

00:11:33.050 --> 00:11:34.745 I'm not so sure something

NOTE Confidence: 0.83849704

00:11:34.745 --> 00:11:36.440 magical happens at age 75.

NOTE Confidence: 0.83849704

00:11:36.440 --> 00:11:38.636 I think it's better to limit

NOTE Confidence: 0.83849704

00:11:38.636 --> 00:11:40.100 screening when life expectancy

NOTE Confidence: 0.83849704

00:11:40.164 --> 00:11:41.529 is less than 10 years,

NOTE Confidence: 0.86362046

00:11:41.530 --> 00:11:43.120 because we know these patients

NOTE Confidence: 0.86362046

00:11:43.120 --> 00:11:45.133 are not going to really benefit

NOTE Confidence: 0.86362046

00:11:45.133 --> 00:11:46.948 as much from early detection.

NOTE Confidence: 0.86362046

00:11:46.950 --> 00:11:48.876 So we have healthy patients who

NOTE Confidence: 0.86362046

00:11:48.876 --> 00:11:51.286 might be 76 years old and they

NOTE Confidence: 0.86362046

00:11:51.286 --> 00:11:53.046 should still have a mammogram,

NOTE Confidence: 0.86362046

00:11:53.050 --> 00:11:54.850 perhaps, maybe not annually.

NOTE Confidence: 0.86362046

00:11:54.850 --> 00:11:57.100 Perhaps we can even consider

NOTE Confidence: 0.86362046

00:11:57.100 --> 00:11:58.837 every one to two years.

NOTE Confidence: 0.86362046

00:11:58.840 --> 00:12:00.723 And then we have patients who might

NOTE Confidence: 0.86362046

00:12:00.723 --> 00:12:03.128 be 70 or 69 years old or whatever,

NOTE Confidence: 0.86362046

00:12:03.130 --> 00:12:04.434 or not that healthy.

NOTE Confidence: 0.86362046

00:12:04.434 --> 00:12:06.064 And maybe don't need to

NOTE Confidence: 0.86362046

00:12:06.064 --> 00:12:07.787 have a mammogram as well.

NOTE Confidence: 0.86362046

00:12:07.790 --> 00:12:10.654 And again, as far as the interval goes,

NOTE Confidence: 0.86362046

00:12:10.660 --> 00:12:12.416 most people say annually,

NOTE Confidence: 0.86362046

00:12:12.416 --> 00:12:15.549 maybe every one to two years the

NOTE Confidence: 0.86362046

00:12:15.549 --> 00:12:18.033 the task force being the extreme

NOTE Confidence: 0.86362046

00:12:18.033 --> 00:12:20.259 of every every other year.

NOTE Confidence: 0.86362046

00:12:20.260 --> 00:12:22.600 So in addition to the variable

NOTE Confidence: 0.86362046

00:12:22.600 --> 00:12:23.770 mammographic screening recommendations,

NOTE Confidence: 0.86362046

00:12:23.770 --> 00:12:25.590 supplemental screening is also an

NOTE Confidence: 0.86362046

00:12:25.590 --> 00:12:28.060 option for many of our patients.

NOTE Confidence: 0.86362046

00:12:28.060 --> 00:12:30.010 This includes ultrasounds and MRI.

NOTE Confidence: 0.86362046

00:12:30.010 --> 00:12:31.558 There's also newer technologies

NOTE Confidence: 0.86362046

00:12:31.558 --> 00:12:33.493 such as molecular breast imaging

NOTE Confidence: 0.86362046

00:12:33.493 --> 00:12:35.873 and contrast enhanced memo that are

NOTE Confidence: 0.86362046

00:12:35.873 --> 00:12:37.808 really investigational at this time,

NOTE Confidence: 0.86362046

00:12:37.810 --> 00:12:40.722 but they are on the verge of being

NOTE Confidence: 0.86362046

00:12:40.722 --> 00:12:43.267 offered outside of the screening trials.

NOTE Confidence: 0.86362046

00:12:43.270 --> 00:12:45.110 There are limited screening

NOTE Confidence: 0.86362046

00:12:45.110 --> 00:12:47.410 trials that are going on.

NOTE Confidence: 0.86362046

00:12:47.410 --> 00:12:50.210 So these tools are right around the corner.

NOTE Confidence: 0.86362046

00:12:50.210 --> 00:12:52.310 I believe for more widespread use,

NOTE Confidence: 0.86362046

00:12:52.310 --> 00:12:53.498 widespread clinical use,

NOTE Confidence: 0.86362046

00:12:53.498 --> 00:12:55.874 but I'm only going to review

NOTE Confidence: 0.86362046

00:12:55.874 --> 00:12:57.932 screening ultrasound and MRI today

NOTE Confidence: 0.86362046

00:12:57.932 --> 00:12:59.922 because of the time constraints.

NOTE Confidence: 0.86362046

00:12:59.930 --> 00:13:01.616 So breast ultrasound screening is linked

NOTE Confidence: 0.86362046

00:13:01.616 --> 00:13:03.610 to death dense breast notification laws.

NOTE Confidence: 0.86362046

00:13:03.610 --> 00:13:05.794 We do a lot of breast ultrasound

NOTE Confidence: 0.86362046

00:13:05.794 --> 00:13:07.049 screening in Connecticut because

NOTE Confidence: 0.86362046

00:13:07.049 --> 00:13:08.883 we were the first state to have

NOTE Confidence: 0.86362046

00:13:08.883 --> 00:13:10.155 a breast density notification

NOTE Confidence: 0.86362046

00:13:10.155 --> 00:13:12.207 law which was passed in 2009.

NOTE Confidence: 0.86362046

00:13:12.210 --> 00:13:13.690 Coincidentally the same month

NOTE Confidence: 0.86362046

00:13:13.690 --> 00:13:15.540 that the United States Protective

NOTE Confidence: 0.86362046

00:13:15.540 --> 00:13:17.351 Services Task Force told us that

NOTE Confidence: 0.86362046

00:13:17.351 --> 00:13:19.058 we should stop screening women in

NOTE Confidence: 0.86362046

00:13:19.058 --> 00:13:20.892 their 40s and then we have the

NOTE Confidence: 0.86362046

00:13:20.892 --> 00:13:22.575 Connecticut State saying that we

NOTE Confidence: 0.86362046

00:13:22.575 --> 00:13:24.500 should be offering patients with
NOTE Confidence: 0.86362046

00:13:24.500 --> 00:13:26.690 dense breast screening ultrasound.
NOTE Confidence: 0.86362046

00:13:26.690 --> 00:13:27.902 The restless notification.
NOTE Confidence: 0.86362046

00:13:27.902 --> 00:13:29.518 Just as an aside,
NOTE Confidence: 0.86362046

00:13:29.520 --> 00:13:30.892 has become quite popular,
NOTE Confidence: 0.86362046

00:13:30.892 --> 00:13:33.962 I think over 30 states in the United
NOTE Confidence: 0.86362046

00:13:33.962 --> 00:13:36.788 States have breast density notification laws.
NOTE Confidence: 0.86362046

00:13:36.790 --> 00:13:39.289 There are countries in Europe and South
NOTE Confidence: 0.86362046

00:13:39.289 --> 00:13:41.640 America that are considering breast.
NOTE Confidence: 0.80421704

00:13:44.200 --> 00:13:48.460 Density notification guidelines as well.
NOTE Confidence: 0.80421704

00:13:48.460 --> 00:13:50.630 And women with dense breasts do benefit
NOTE Confidence: 0.80421704

00:13:50.630 --> 00:13:52.849 from having a screening ultrasound.
NOTE Confidence: 0.80421704

00:13:52.850 --> 00:13:55.258 Overall, the cancer detection rate is about
NOTE Confidence: 0.80421704

00:13:55.258 --> 00:13:57.977 two to four per thousand women screen.
NOTE Confidence: 0.80421704

00:13:57.980 --> 00:14:00.129 This is in addition to the approximate
NOTE Confidence: 0.80421704

00:14:00.129 --> 00:14:02.018 5 cancers per thousand women

NOTE Confidence: 0.80421704

00:14:02.018 --> 00:14:03.830 screen detected on mammography.

NOTE Confidence: 0.80421704

00:14:03.830 --> 00:14:06.616 We know that most cancers detected on

NOTE Confidence: 0.80421704

00:14:06.616 --> 00:14:08.856 screening ultrasound are small and node

NOTE Confidence: 0.80421704

00:14:08.856 --> 00:14:11.145 negative and tend to be early stage,

NOTE Confidence: 0.80421704

00:14:11.150 --> 00:14:13.796 so it's rational to think that

NOTE Confidence: 0.80421704

00:14:13.796 --> 00:14:15.560 finding these mammographic Leopold

NOTE Confidence: 0.80421704

00:14:15.637 --> 00:14:18.206 cancers at an early stage in smaller

NOTE Confidence: 0.80421704

00:14:18.206 --> 00:14:20.600 size will improve overall mortality.

NOTE Confidence: 0.80421704

00:14:20.600 --> 00:14:22.068 Ultrasound screening is really

NOTE Confidence: 0.80421704

00:14:22.068 --> 00:14:23.903 well accepted by our patients.

NOTE Confidence: 0.80421704

00:14:23.910 --> 00:14:25.002 It's relatively inexpensive.

NOTE Confidence: 0.80421704

00:14:25.002 --> 00:14:28.329 It costs about the same price as a mammogram.

NOTE Confidence: 0.80421704

00:14:28.330 --> 00:14:29.798 There's no Ivy contrast.

NOTE Confidence: 0.80421704

00:14:29.798 --> 00:14:30.899 There's no compression.

NOTE Confidence: 0.80421704

00:14:30.900 --> 00:14:34.666 It's widely available, so it can work.

NOTE Confidence: 0.80421704

00:14:34.670 --> 00:14:38.738 Which is why we offer it to our patients.

NOTE Confidence: 0.80421704

00:14:38.740 --> 00:14:40.780 It also performs very well in

NOTE Confidence: 0.80421704

00:14:40.780 --> 00:14:42.623 women with dense breast tissue

NOTE Confidence: 0.80421704

00:14:42.623 --> 00:14:44.708 before the mammogram is limited,

NOTE Confidence: 0.80421704

00:14:44.710 --> 00:14:46.570 and that's because of the

NOTE Confidence: 0.80421704

00:14:46.570 --> 00:14:47.686 contrast on ultrasound.

NOTE Confidence: 0.80421704

00:14:47.690 --> 00:14:49.355 These small cancers on ultrasound

NOTE Confidence: 0.80421704

00:14:49.355 --> 00:14:51.800 tend to be dark or hypoechoic,

NOTE Confidence: 0.80421704

00:14:51.800 --> 00:14:54.327 and dense breast tissue tends to look

NOTE Confidence: 0.80421704

00:14:54.327 --> 00:14:56.639 echogenic or white on the ultrasound,

NOTE Confidence: 0.80421704

00:14:56.640 --> 00:14:59.320 so we can see these little cancers that

NOTE Confidence: 0.80421704

00:14:59.320 --> 00:15:01.797 are draped in the glandular tissue fairly

NOTE Confidence: 0.80421704

00:15:01.797 --> 00:15:04.480 well and they will be mammographic.

NOTE Confidence: 0.80421704

00:15:04.480 --> 00:15:07.714 Leah called because they're just hiding

NOTE Confidence: 0.80421704

00:15:07.714 --> 00:15:10.589 behind this glandular tissue as well.

NOTE Confidence: 0.80421704

00:15:10.590 --> 00:15:12.320 Breast density is also important,

NOTE Confidence: 0.80421704

00:15:12.320 --> 00:15:14.864 so I just want to review this briefly

NOTE Confidence: 0.80421704

00:15:14.864 --> 00:15:17.144 because most of our more personalized

NOTE Confidence: 0.80421704

00:15:17.144 --> 00:15:19.508 community in the direction that we're

NOTE Confidence: 0.80421704

00:15:19.580 --> 00:15:22.076 going to go to is going to include

NOTE Confidence: 0.80421704

00:15:22.076 --> 00:15:24.355 breast density as a factor in what

NOTE Confidence: 0.80421704

00:15:24.355 --> 00:15:26.435 kind of screening patients should get

NOTE Confidence: 0.80421704

00:15:26.435 --> 00:15:28.577 breast dense breasts is very common.

NOTE Confidence: 0.80421704

00:15:28.580 --> 00:15:31.000 It's seen in about 50% of all

NOTE Confidence: 0.80421704

00:15:31.000 --> 00:15:32.725 women in the United States.

NOTE Confidence: 0.80421704

00:15:32.730 --> 00:15:34.410 We know there's an increased

NOTE Confidence: 0.80421704

00:15:34.410 --> 00:15:36.540 risk of breast cancer in women.

NOTE Confidence: 0.80421704

00:15:36.540 --> 00:15:38.616 It's a 2/6 times increased risk,

NOTE Confidence: 0.80421704

00:15:38.620 --> 00:15:41.030 and it can be confusing.

NOTE Confidence: 0.80421704

00:15:41.030 --> 00:15:42.968 When you see what they did,

NOTE Confidence: 0.80421704

00:15:42.970 --> 00:15:45.091 you know two times increased risk and

NOTE Confidence: 0.80421704

00:15:45.091 --> 00:15:47.078 then we'll see another article that
NOTE Confidence: 0.80421704

00:15:47.078 --> 00:15:49.444 says four to six times increase risk,
NOTE Confidence: 0.80421704

00:15:49.450 --> 00:15:51.184 and that's because it really depends
NOTE Confidence: 0.80421704

00:15:51.184 --> 00:15:52.819 on what breast density category
NOTE Confidence: 0.80421704

00:15:52.819 --> 00:15:53.669 you're comparing.
NOTE Confidence: 0.80421704

00:15:53.670 --> 00:15:56.204 So if you compare women with extremely
NOTE Confidence: 0.80421704

00:15:56.204 --> 00:15:58.879 dense breasts with women with fatty tissue.
NOTE Confidence: 0.80421704

00:15:58.880 --> 00:16:01.190 Then the increased risk of developing
NOTE Confidence: 0.80421704

00:16:01.190 --> 00:16:03.445 breast cancer for women with extremely
NOTE Confidence: 0.80421704

00:16:03.445 --> 00:16:06.021 dense breasts is 4 to 6 times higher
NOTE Confidence: 0.80421704

00:16:06.090 --> 00:16:08.238 than the women with fatty breasts.
NOTE Confidence: 0.80421704

00:16:08.240 --> 00:16:08.588 However,
NOTE Confidence: 0.80421704

00:16:08.588 --> 00:16:10.676 that's the minority of our patients
NOTE Confidence: 0.80421704

00:16:10.676 --> 00:16:12.200 in the United States.
NOTE Confidence: 0.80421704

00:16:12.200 --> 00:16:14.853 Only about 10% of women have extremely
NOTE Confidence: 0.80421704

00:16:14.853 --> 00:16:16.944 dense breast tissue and only about

NOTE Confidence: 0.80421704

00:16:16.944 --> 00:16:19.040 10% of women have fatty tissue.

NOTE Confidence: 0.80421704

00:16:19.040 --> 00:16:21.416 So 80% of our patients have

NOTE Confidence: 0.80421704

00:16:21.416 --> 00:16:23.000 heterogeneously dense breasts or

NOTE Confidence: 0.80421704

00:16:23.074 --> 00:16:25.189 scattered fibroglandular tissue.

NOTE Confidence: 0.80421704

00:16:25.190 --> 00:16:27.416 And so if you compare women with

NOTE Confidence: 0.80421704

00:16:27.416 --> 00:16:29.213 heterogeneously dense breasts with fatty

NOTE Confidence: 0.80421704

00:16:29.213 --> 00:16:30.785 with with scattered fibroglandular,

NOTE Confidence: 0.80421704

00:16:30.790 --> 00:16:32.890 then you have only about two

NOTE Confidence: 0.80421704

00:16:32.890 --> 00:16:33.940 times increase risk.

NOTE Confidence: 0.80421704

00:16:33.940 --> 00:16:36.390 So that's why that risk is variable,

NOTE Confidence: 0.80421704

00:16:36.390 --> 00:16:37.440 so it does.

NOTE Confidence: 0.80421704

00:16:37.440 --> 00:16:38.840 It is considered however,

NOTE Confidence: 0.80421704

00:16:38.840 --> 00:16:41.290 a intermediate risk factor for breast cancer.

NOTE Confidence: 0.80421704

00:16:41.290 --> 00:16:42.590 It limits the mammogram.

NOTE Confidence: 0.80421704

00:16:42.590 --> 00:16:44.215 There are higher interval cancer

NOTE Confidence: 0.80421704

00:16:44.215 --> 00:16:46.091 rates and worse prognosis for
NOTE Confidence: 0.80421704

00:16:46.091 --> 00:16:47.587 these clinically detected cancers.
NOTE Confidence: 0.80421704

00:16:47.590 --> 00:16:49.280 So that's why breast density
NOTE Confidence: 0.80421704

00:16:49.280 --> 00:16:51.399 is important and it can only
NOTE Confidence: 0.80421704

00:16:51.399 --> 00:16:53.189 be diagnosed on a mammogram.
NOTE Confidence: 0.81505984

00:16:53.190 --> 00:16:55.680 It can be diagnosed based on.
NOTE Confidence: 0.81505984

00:16:55.680 --> 00:16:58.216 A breast exam and if the patient's breast
NOTE Confidence: 0.81505984

00:16:58.216 --> 00:17:01.129 exam is sort of lumpy and difficult to do.
NOTE Confidence: 0.81505984

00:17:01.130 --> 00:17:03.062 Another option for women with dense
NOTE Confidence: 0.81505984

00:17:03.062 --> 00:17:05.000 breasts is fast MRI screening.
NOTE Confidence: 0.81505984

00:17:05.000 --> 00:17:07.464 It has been proposed for average risk.
NOTE Confidence: 0.81505984

00:17:07.470 --> 00:17:08.934 Women with dense breasts.
NOTE Confidence: 0.81505984

00:17:08.934 --> 00:17:11.130 It is been being done clinically
NOTE Confidence: 0.81505984

00:17:11.202 --> 00:17:13.098 in other parts of the country.
NOTE Confidence: 0.81505984

00:17:13.100 --> 00:17:15.206 There's very little of it done
NOTE Confidence: 0.81505984

00:17:15.206 --> 00:17:16.963 in Connecticut, but for example,

NOTE Confidence: 0.81505984

00:17:16.963 --> 00:17:18.718 University of Pennsylvania does a

NOTE Confidence: 0.81505984

00:17:18.718 --> 00:17:20.492 lot of fast, summarized meeting

NOTE Confidence: 0.81505984

00:17:20.492 --> 00:17:22.247 for women with dense breasts.

NOTE Confidence: 0.81505984

00:17:22.250 --> 00:17:23.995 The first study was published

NOTE Confidence: 0.81505984

00:17:23.995 --> 00:17:26.120 back in 2014 by Christiana Cool.

NOTE Confidence: 0.81505984

00:17:26.120 --> 00:17:28.334 She's a highly regarded a radiologist

NOTE Confidence: 0.81505984

00:17:28.334 --> 00:17:31.159 in Germany an she showed that with a.

NOTE Confidence: 0.81505984

00:17:31.160 --> 00:17:33.484 Very fast acquisition time of three minutes,

NOTE Confidence: 0.81505984

00:17:33.490 --> 00:17:35.849 as opposed to about the the acquisition

NOTE Confidence: 0.81505984

00:17:35.849 --> 00:17:38.489 time or scanning time of a traditional MRI,

NOTE Confidence: 0.81505984

00:17:38.490 --> 00:17:42.340 which is about 10 or 15 minutes.

NOTE Confidence: 0.81505984

00:17:42.340 --> 00:17:44.797 We could detect cancers at a very

NOTE Confidence: 0.81505984

00:17:44.797 --> 00:17:47.160 high rate of 18 per thousand,

NOTE Confidence: 0.81505984

00:17:47.160 --> 00:17:49.015 and this has been replicated

NOTE Confidence: 0.81505984

00:17:49.015 --> 00:17:50.870 by other studies as well.

NOTE Confidence: 0.81505984

00:17:50.870 --> 00:17:53.156 So overall, the cancer detection rate
NOTE Confidence: 0.81505984

00:17:53.156 --> 00:17:56.069 of MRI's about 15 to 18 per thousand,
NOTE Confidence: 0.81505984

00:17:56.070 --> 00:17:58.290 which is higher than screening ultrasound.
NOTE Confidence: 0.81505984

00:17:58.290 --> 00:18:00.005 That supplemental yield is only
NOTE Confidence: 0.81505984

00:18:00.005 --> 00:18:02.370 about two to four per thousand.
NOTE Confidence: 0.81505984

00:18:02.370 --> 00:18:04.596 But MRI is more expensive and
NOTE Confidence: 0.81505984

00:18:04.596 --> 00:18:05.709 requires Ivy contrast.
NOTE Confidence: 0.81505984

00:18:05.710 --> 00:18:07.964 There's not a lot of MRI scanners
NOTE Confidence: 0.81505984

00:18:07.964 --> 00:18:10.539 out there as opposed to ultrasound,
NOTE Confidence: 0.81505984

00:18:10.540 --> 00:18:12.116 so it's not as.
NOTE Confidence: 0.81505984

00:18:12.116 --> 00:18:13.298 Easy to perform.
NOTE Confidence: 0.81505984

00:18:13.300 --> 00:18:15.708 Patients may not like it as well.
NOTE Confidence: 0.81505984

00:18:15.710 --> 00:18:16.400 Takes longer,
NOTE Confidence: 0.81505984

00:18:16.400 --> 00:18:17.780 but it does work.
NOTE Confidence: 0.81505984

00:18:17.780 --> 00:18:19.922 The two year validation showed there
NOTE Confidence: 0.81505984

00:18:19.922 --> 00:18:22.378 were no interval cancers so it was

NOTE Confidence: 0.81505984

00:18:22.378 --> 00:18:23.988 really catching all those cancers.

NOTE Confidence: 0.81505984

00:18:23.990 --> 00:18:25.685 The sense the negative predicted

NOTE Confidence: 0.81505984

00:18:25.685 --> 00:18:27.867 value was high and the specificity

NOTE Confidence: 0.81505984

00:18:27.867 --> 00:18:29.567 and positive positive predictive

NOTE Confidence: 0.81505984

00:18:29.567 --> 00:18:32.249 value are also very good as well.

NOTE Confidence: 0.81505984

00:18:32.250 --> 00:18:34.226 So here is a 61 year old patient

NOTE Confidence: 0.81505984

00:18:34.226 --> 00:18:36.172 with a pathogenic BRACA mutation

NOTE Confidence: 0.81505984

00:18:36.172 --> 00:18:38.482 and Paris producting something over

NOTE Confidence: 0.81505984

00:18:38.482 --> 00:18:40.810 ectomy with a negative mammogram,

NOTE Confidence: 0.81505984

00:18:40.810 --> 00:18:43.402 and she had a MRI six months later

NOTE Confidence: 0.81505984

00:18:43.402 --> 00:18:46.007 and they saw this little cancer and

NOTE Confidence: 0.81505984

00:18:46.007 --> 00:18:49.178 detected this so it can work in women

NOTE Confidence: 0.81505984

00:18:49.178 --> 00:18:51.590 with dense breasts and this woman.

NOTE Confidence: 0.81505984

00:18:51.590 --> 00:18:54.278 She also had high risk and which is

NOTE Confidence: 0.81505984

00:18:54.278 --> 00:18:57.486 where we do most of our breast MRI in

NOTE Confidence: 0.81505984

00:18:57.486 --> 00:19:00.148 our practices for high risk screening,
NOTE Confidence: 0.81505984

00:19:00.150 --> 00:19:02.388 and that's traditional.
NOTE Confidence: 0.81505984

00:19:02.390 --> 00:19:05.414 I was screening MRI for high risk patients.
NOTE Confidence: 0.81505984

00:19:05.420 --> 00:19:07.652 Here's the list there Braca positive
NOTE Confidence: 0.81505984

00:19:07.652 --> 00:19:10.339 patients they they have some of these
NOTE Confidence: 0.81505984

00:19:10.339 --> 00:19:12.234 syndromes may have chest radiation,
NOTE Confidence: 0.81505984

00:19:12.240 --> 00:19:13.760 usually eight years earlier,
NOTE Confidence: 0.81505984

00:19:13.760 --> 00:19:14.900 part age 30,
NOTE Confidence: 0.81505984

00:19:14.900 --> 00:19:16.790 an overall lifetime risk of
NOTE Confidence: 0.81505984

00:19:16.790 --> 00:19:19.046 greater than 20% high risk women.
NOTE Confidence: 0.81505984

00:19:19.046 --> 00:19:21.650 We recommend that they have an annual
NOTE Confidence: 0.81505984

00:19:21.720 --> 00:19:23.826 mammogram and MRI beginning around age
NOTE Confidence: 0.81505984

00:19:23.826 --> 00:19:27.298 25 to 30 and again this is the BRACA
NOTE Confidence: 0.81505984

00:19:27.298 --> 00:19:29.293 positive patients and another high
NOTE Confidence: 0.81505984

00:19:29.300 --> 00:19:31.670 risk patients and this is recommended
NOTE Confidence: 0.81505984

00:19:31.670 --> 00:19:34.155 by the American College of Radiology

NOTE Confidence: 0.81505984

00:19:34.155 --> 00:19:36.240 and the American Cancer Society.

NOTE Confidence: 0.81505984

00:19:36.240 --> 00:19:38.046 We also know that it's reasonable

NOTE Confidence: 0.81505984

00:19:38.046 --> 00:19:39.979 to delay the onset of mammographic

NOTE Confidence: 0.81505984

00:19:39.979 --> 00:19:41.977 screening until the age of 30.

NOTE Confidence: 0.81505984

00:19:41.980 --> 00:19:43.580 In some of these patients,

NOTE Confidence: 0.81505984

00:19:43.580 --> 00:19:45.806 and that's because of the radiation risk.

NOTE Confidence: 0.81505984

00:19:45.810 --> 00:19:47.718 These patients are known to have

NOTE Confidence: 0.81505984

00:19:47.718 --> 00:19:48.672 increased radiation sensitivity,

NOTE Confidence: 0.81505984

00:19:48.680 --> 00:19:50.270 particularly the BRACA one carriers

NOTE Confidence: 0.81505984

00:19:50.270 --> 00:19:52.190 and the P53 carriers, as well.

NOTE Confidence: 0.8335403

00:19:54.570 --> 00:19:56.390 So breast cancer risk

NOTE Confidence: 0.8335403

00:19:56.390 --> 00:19:58.665 evaluation is a growing program.

NOTE Confidence: 0.8335403

00:19:58.670 --> 00:20:02.030 Most more and more breast centers today are

NOTE Confidence: 0.8335403

00:20:02.030 --> 00:20:04.580 offering breast cancer risk assessment.

NOTE Confidence: 0.8335403

00:20:04.580 --> 00:20:07.359 This is in lieu in in coordination

NOTE Confidence: 0.8335403

00:20:07.359 --> 00:20:10.040 with interest in population health.
NOTE Confidence: 0.8335403

00:20:10.040 --> 00:20:12.315 We're doing more screening not
NOTE Confidence: 0.8335403

00:20:12.315 --> 00:20:15.210 only for breast cancer, but colon,
NOTE Confidence: 0.8335403

00:20:15.210 --> 00:20:18.420 cancer, and other cancers as well.
NOTE Confidence: 0.8335403

00:20:18.420 --> 00:20:21.108 So with breast cancer risk evaluation,
NOTE Confidence: 0.8335403

00:20:21.110 --> 00:20:23.505 there are multiple risk assessment
NOTE Confidence: 0.8335403

00:20:23.505 --> 00:20:26.410 tools that are very available online
NOTE Confidence: 0.8335403

00:20:26.410 --> 00:20:29.014 and the estimated risk can really
NOTE Confidence: 0.8335403

00:20:29.014 --> 00:20:31.889 vary depending on which model you use.
NOTE Confidence: 0.8335403

00:20:31.890 --> 00:20:34.851 Most centers are going for the tire
NOTE Confidence: 0.8335403

00:20:34.851 --> 00:20:37.135 acoustic model that's most widely
NOTE Confidence: 0.8335403

00:20:37.135 --> 00:20:39.475 used and that also incorporates
NOTE Confidence: 0.8335403

00:20:39.475 --> 00:20:41.769 breast density into that model.
NOTE Confidence: 0.8335403

00:20:41.770 --> 00:20:44.906 When we think about breast cancer risk,
NOTE Confidence: 0.8335403

00:20:44.910 --> 00:20:48.566 we have to know that risk changes overtime.
NOTE Confidence: 0.8335403

00:20:48.570 --> 00:20:50.790 Unknown risk and change every year.

NOTE Confidence: 0.8335403

00:20:50.790 --> 00:20:51.474 For example,

NOTE Confidence: 0.8335403

00:20:51.474 --> 00:20:54.679 you can have a patient who is just an

NOTE Confidence: 0.8335403

00:20:54.679 --> 00:20:57.430 average risk and then her sister was

NOTE Confidence: 0.8335403

00:20:57.430 --> 00:21:00.037 diagnosed with breast cancer at age 39,

NOTE Confidence: 0.8335403

00:21:00.040 --> 00:21:02.256 and that's going to bump up her her

NOTE Confidence: 0.8335403

00:21:02.256 --> 00:21:04.468 risk for breast cancer the following

NOTE Confidence: 0.8335403

00:21:04.468 --> 00:21:06.850 year and overtime the lifetime risk

NOTE Confidence: 0.8335403

00:21:06.918 --> 00:21:08.878 increases decreases, excuse me,

NOTE Confidence: 0.8335403

00:21:08.878 --> 00:21:11.670 but the five and 10 year breast cancer

NOTE Confidence: 0.8335403

00:21:11.746 --> 00:21:14.098 risk is also proportional to age,

NOTE Confidence: 0.8335403

00:21:14.100 --> 00:21:16.065 so it's complicated and that's

NOTE Confidence: 0.8335403

00:21:16.065 --> 00:21:18.580 something that I think most breast.

NOTE Confidence: 0.8335403

00:21:18.580 --> 00:21:18.949 Centers,

NOTE Confidence: 0.8335403

00:21:18.949 --> 00:21:21.163 including our own will be doing

NOTE Confidence: 0.8335403

00:21:21.163 --> 00:21:23.269 within the next 5 to 10 years,

NOTE Confidence: 0.8335403

00:21:23.270 --> 00:21:25.524 so we're really moving beyond just starting
NOTE Confidence: 0.8335403

00:21:25.524 --> 00:21:28.629 at age 40 and having a mammogram every year,
NOTE Confidence: 0.8335403

00:21:28.630 --> 00:21:30.310 which is nice and simple,
NOTE Confidence: 0.8335403

00:21:30.310 --> 00:21:32.320 and it's nice for you know,
NOTE Confidence: 0.8335403

00:21:32.320 --> 00:21:33.990 buzzwords and things like that,
NOTE Confidence: 0.8335403

00:21:33.990 --> 00:21:36.000 and advertising to something like this,
NOTE Confidence: 0.8335403

00:21:36.000 --> 00:21:37.340 which looks really complicated,
NOTE Confidence: 0.8335403

00:21:37.340 --> 00:21:39.350 but it's really not that complicated,
NOTE Confidence: 0.8335403

00:21:39.350 --> 00:21:41.695 so let me just review with you.
NOTE Confidence: 0.8335403

00:21:41.700 --> 00:21:43.036 Review this with you.
NOTE Confidence: 0.8335403

00:21:43.036 --> 00:21:44.706 So the first question is,
NOTE Confidence: 0.8335403

00:21:44.710 --> 00:21:46.846 does the patient have at least
NOTE Confidence: 0.8335403

00:21:46.846 --> 00:21:49.220 a 10 year life expectancy?
NOTE Confidence: 0.8335403

00:21:49.220 --> 00:21:49.722 If not,
NOTE Confidence: 0.8335403

00:21:49.722 --> 00:21:51.730 then she would only have breast imaging is
NOTE Confidence: 0.8335403

00:21:51.787 --> 00:21:53.797 there's a clinically suspicious finding.

NOTE Confidence: 0.8335403

00:21:53.800 --> 00:21:56.112 The majority of our patients will have a

NOTE Confidence: 0.8335403

00:21:56.112 --> 00:21:58.678 10 year life expectancy and then we ask,

NOTE Confidence: 0.8335403

00:21:58.680 --> 00:22:00.808 is she under the age of 25?

NOTE Confidence: 0.8335403

00:22:00.810 --> 00:22:01.352 A 75?

NOTE Confidence: 0.8335403

00:22:01.352 --> 00:22:01.894 If not,

NOTE Confidence: 0.8335403

00:22:01.894 --> 00:22:03.879 she's over age 75 with healthy then

NOTE Confidence: 0.8335403

00:22:03.879 --> 00:22:05.649 maybe she would have an annual

NOTE Confidence: 0.8335403

00:22:05.649 --> 00:22:07.220 or BI annual mammogram.

NOTE Confidence: 0.8335403

00:22:07.220 --> 00:22:09.502 Most of our patients are going to

NOTE Confidence: 0.8335403

00:22:09.502 --> 00:22:12.004 be under the age of 75 and then

NOTE Confidence: 0.8335403

00:22:12.004 --> 00:22:14.382 we're going to look at the wrist and

NOTE Confidence: 0.8335403

00:22:14.382 --> 00:22:16.708 if she is at high risk for breast

NOTE Confidence: 0.8335403

00:22:16.708 --> 00:22:18.398 cancer then we would recommend

NOTE Confidence: 0.8335403

00:22:18.398 --> 00:22:19.412 annual contrast enhanced.

NOTE Confidence: 0.8335403

00:22:19.420 --> 00:22:22.236 MRI beginning at age 25 or 30 and

NOTE Confidence: 0.8335403

00:22:22.236 --> 00:22:23.648 mammography beginning at age 30,
NOTE Confidence: 0.8335403

00:22:23.650 --> 00:22:26.194 she can't have an MRI because it's she
NOTE Confidence: 0.8335403

00:22:26.194 --> 00:22:28.517 can tolerate it or for whatever reason.
NOTE Confidence: 0.8335403

00:22:28.520 --> 00:22:30.809 Then she would have an annual screening
NOTE Confidence: 0.8335403

00:22:30.809 --> 00:22:32.748 ultrasound in addition to her mammogram.
NOTE Confidence: 0.8335403

00:22:32.750 --> 00:22:35.198 The majority of our patients that
NOTE Confidence: 0.8335403

00:22:35.198 --> 00:22:37.972 we are not going to be increased
NOTE Confidence: 0.8335403

00:22:37.972 --> 00:22:41.170 risk and so then we want to be sure.
NOTE Confidence: 0.8335403

00:22:41.170 --> 00:22:43.368 That they are under the age of
NOTE Confidence: 0.8335403

00:22:43.368 --> 00:22:44.829 over the age of 40.
NOTE Confidence: 0.8335403

00:22:44.830 --> 00:22:47.270 If they're not over the age of four.
NOTE Confidence: 0.8335403

00:22:47.270 --> 00:22:49.710 If they're not over the age of 40,
NOTE Confidence: 0.8335403

00:22:49.710 --> 00:22:52.104 and we would just tell them to
NOTE Confidence: 0.8335403

00:22:52.104 --> 00:22:53.980 start really screening at 40 at 40,
NOTE Confidence: 0.8335403

00:22:53.980 --> 00:22:55.510 we do the baseline mammogram.
NOTE Confidence: 0.8335403

00:22:55.510 --> 00:22:56.120 Of course,

NOTE Confidence: 0.8335403

00:22:56.120 --> 00:22:57.950 we always want to synthesis if

NOTE Confidence: 0.8335403

00:22:57.950 --> 00:22:58.560 it's available,

NOTE Confidence: 0.8403123

00:22:58.560 --> 00:23:00.688 and if she has dense breast tissue,

NOTE Confidence: 0.8403123

00:23:00.690 --> 00:23:02.742 then we would also offer them

NOTE Confidence: 0.8403123

00:23:02.742 --> 00:23:04.525 screening ultrasound or at some

NOTE Confidence: 0.8403123

00:23:04.525 --> 00:23:06.255 places screening MRI as well.

NOTE Confidence: 0.8403123

00:23:06.260 --> 00:23:07.964 So that's the algorithm

NOTE Confidence: 0.8403123

00:23:07.964 --> 00:23:09.668 where it stands today.

NOTE Confidence: 0.8403123

00:23:09.670 --> 00:23:12.310 What about the future?

NOTE Confidence: 0.8403123

00:23:12.310 --> 00:23:14.814 There are going to be more screening options.

NOTE Confidence: 0.8403123

00:23:14.820 --> 00:23:16.518 We're going to have advancing knowledge

NOTE Confidence: 0.8403123

00:23:16.518 --> 00:23:19.020 of genetics so it will be better risk

NOTE Confidence: 0.8403123

00:23:19.020 --> 00:23:20.332 assessment and more personalized

NOTE Confidence: 0.8403123

00:23:20.332 --> 00:23:22.040 medicine will have new technology.

NOTE Confidence: 0.8403123

00:23:22.040 --> 00:23:23.930 As I mentioned, molecular breast imaging,

NOTE Confidence: 0.8403123

00:23:23.930 --> 00:23:24.830 contrast enhanced mammography,
NOTE Confidence: 0.8403123

00:23:24.830 --> 00:23:27.380 and of course AI will be more patient,
NOTE Confidence: 0.8403123

00:23:27.380 --> 00:23:28.268 shared decision making.
NOTE Confidence: 0.8403123

00:23:28.268 --> 00:23:30.340 We're going to be talking more patience
NOTE Confidence: 0.8403123

00:23:30.394 --> 00:23:32.089 and helping them filter information,
NOTE Confidence: 0.8403123

00:23:32.090 --> 00:23:33.350 medical information and guide
NOTE Confidence: 0.8403123

00:23:33.350 --> 00:23:33.980 their decisions.
NOTE Confidence: 0.8403123

00:23:33.980 --> 00:23:35.640 And of course, health.
NOTE Confidence: 0.8403123

00:23:35.640 --> 00:23:38.856 Health care economics is going to play a
NOTE Confidence: 0.8403123

00:23:38.856 --> 00:23:41.910 part in how we screen our patients as well.
NOTE Confidence: 0.8403123

00:23:41.910 --> 00:23:43.710 And what makes the most sense?
NOTE Confidence: 0.8122481

00:23:45.900 --> 00:23:47.450 Briefly, I'm just going to
NOTE Confidence: 0.8122481

00:23:47.450 --> 00:23:48.380 touch on overdiagnosis.
NOTE Confidence: 0.8122481

00:23:48.380 --> 00:23:50.480 I know that there's some people probably
NOTE Confidence: 0.8122481

00:23:50.480 --> 00:23:52.064 listening and thinking we shouldn't
NOTE Confidence: 0.8122481

00:23:52.064 --> 00:23:53.960 screen so much because of overdiagnosis.

NOTE Confidence: 0.8122481

00:23:53.960 --> 00:23:56.130 We could talk entire day about overdiagnosis,

NOTE Confidence: 0.8122481

00:23:56.130 --> 00:23:58.300 but I've condensed it into two slides,

NOTE Confidence: 0.8122481

00:23:58.300 --> 00:24:00.589 and here's an example of a case

NOTE Confidence: 0.8122481

00:24:00.589 --> 00:24:02.638 of over diagnosis of 59 year old.

NOTE Confidence: 0.8122481

00:24:02.640 --> 00:24:04.796 She had a mass present or left

NOTE Confidence: 0.8122481

00:24:04.796 --> 00:24:06.669 outer breast stable for five years.

NOTE Confidence: 0.8122481

00:24:06.670 --> 00:24:09.150 It looks just like a little lymph node.

NOTE Confidence: 0.8122481

00:24:09.150 --> 00:24:10.700 We do tomosynthesis the first

NOTE Confidence: 0.8122481

00:24:10.700 --> 00:24:12.250 time she has atomic exam,

NOTE Confidence: 0.8122481

00:24:12.250 --> 00:24:13.542 and there's little speculations.

NOTE Confidence: 0.8122481

00:24:13.542 --> 00:24:16.669 And this turns out to be a great two tubular.

NOTE Confidence: 0.8122481

00:24:16.670 --> 00:24:19.505 My cancer probably would have done anything.

NOTE Confidence: 0.8122481

00:24:19.510 --> 00:24:22.446 It's a low grade cancer and so perhaps

NOTE Confidence: 0.8122481

00:24:22.446 --> 00:24:25.579 this is a true case of overdiagnosis.

NOTE Confidence: 0.8122481

00:24:25.580 --> 00:24:28.142 We know that some screening detected cancers

NOTE Confidence: 0.8122481

00:24:28.142 --> 00:24:30.440 may never become clinically evident.
NOTE Confidence: 0.8122481

00:24:30.440 --> 00:24:32.582 They Sgro very slowly with patients
NOTE Confidence: 0.8122481

00:24:32.582 --> 00:24:35.053 that die of something else before
NOTE Confidence: 0.8122481

00:24:35.053 --> 00:24:36.520 cancer becomes symptomatic.
NOTE Confidence: 0.8122481

00:24:36.520 --> 00:24:38.782 This example would be low grade
NOTE Confidence: 0.8122481

00:24:38.782 --> 00:24:40.970 DCIS in an elderly patient.
NOTE Confidence: 0.8122481

00:24:40.970 --> 00:24:43.986 We might over treat these patients and give
NOTE Confidence: 0.8122481

00:24:43.986 --> 00:24:47.118 him and subject them to potential hard.
NOTE Confidence: 0.8122481

00:24:47.120 --> 00:24:48.856 But the key is we don't know yet
NOTE Confidence: 0.8122481

00:24:48.856 --> 00:24:50.670 which low grade cancers will become
NOTE Confidence: 0.8122481

00:24:50.670 --> 00:24:52.656 lethal and when they'll become lethal,
NOTE Confidence: 0.8122481

00:24:52.660 --> 00:24:54.895 and so hopefully more research
NOTE Confidence: 0.8122481

00:24:54.895 --> 00:24:56.683 will be able to.
NOTE Confidence: 0.8122481

00:24:56.690 --> 00:24:58.842 To identify these cancers so that we'll know
NOTE Confidence: 0.8122481

00:24:58.842 --> 00:25:00.847 more where we need to really treat them.
NOTE Confidence: 0.8122481

00:25:00.850 --> 00:25:04.706 Where we can stand back a little bit.

NOTE Confidence: 0.8122481

00:25:04.710 --> 00:25:07.044 AI tools and population health and

NOTE Confidence: 0.8122481

00:25:07.044 --> 00:25:09.330 new technology are going to allow

NOTE Confidence: 0.8122481

00:25:09.330 --> 00:25:10.650 us to screen smarter.

NOTE Confidence: 0.8122481

00:25:10.650 --> 00:25:12.648 We're going to know who needs

NOTE Confidence: 0.8122481

00:25:12.648 --> 00:25:15.099 more and who needs less screening,

NOTE Confidence: 0.8122481

00:25:15.100 --> 00:25:18.133 but it's going to take a lot of outcome

NOTE Confidence: 0.8122481

00:25:18.133 --> 00:25:20.659 analysis and sufficient data right now.

NOTE Confidence: 0.8122481

00:25:20.660 --> 00:25:23.257 Our data collection is not that great.

NOTE Confidence: 0.8122481

00:25:23.260 --> 00:25:25.486 Most of the cancer registries that.

NOTE Confidence: 0.8449189

00:25:27.740 --> 00:25:29.032 Collect information on cancer.

NOTE Confidence: 0.8449189

00:25:29.032 --> 00:25:31.045 Breast cancer. Do not look at the

NOTE Confidence: 0.8449189

00:25:31.045 --> 00:25:33.236 method of detection so we don't know

NOTE Confidence: 0.8449189

00:25:33.236 --> 00:25:35.516 how these cancers are being diagnosed,

NOTE Confidence: 0.8449189

00:25:35.520 --> 00:25:36.816 whether they are palpable

NOTE Confidence: 0.8449189

00:25:36.816 --> 00:25:38.760 or whether they had to mow,

NOTE Confidence: 0.8449189

00:25:38.760 --> 00:25:40.734 or that whether they were diagnosis
NOTE Confidence: 0.8449189

00:25:40.734 --> 00:25:42.320 on screening ultrasound or MRI.
NOTE Confidence: 0.8449189

00:25:42.320 --> 00:25:44.861 So the American College of Radiology is
NOTE Confidence: 0.8449189

00:25:44.861 --> 00:25:46.914 working to include method of detection
NOTE Confidence: 0.8449189

00:25:46.914 --> 00:25:49.768 in the BI RADS and then when we do that,
NOTE Confidence: 0.8449189

00:25:49.770 --> 00:25:51.414 hopefully the cancer registries
NOTE Confidence: 0.8449189

00:25:51.414 --> 00:25:53.469 and the national databases will
NOTE Confidence: 0.8449189

00:25:53.469 --> 00:25:55.943 accept this so that we can collect
NOTE Confidence: 0.8449189

00:25:55.943 --> 00:25:57.660 information on new technology and
NOTE Confidence: 0.8449189

00:25:57.660 --> 00:25:59.865 figure out what works and what doesn't.
NOTE Confidence: 0.8449189

00:25:59.870 --> 00:26:00.833 So in summary,
NOTE Confidence: 0.8449189

00:26:00.833 --> 00:26:02.117 annual screening mammogram beginning
NOTE Confidence: 0.8449189

00:26:02.117 --> 00:26:04.269 at age 40 saves the most lives
NOTE Confidence: 0.8449189

00:26:04.269 --> 00:26:05.689 women with dense breasts have
NOTE Confidence: 0.8449189

00:26:05.689 --> 00:26:07.552 the option to choose supplemental
NOTE Confidence: 0.8449189

00:26:07.552 --> 00:26:09.076 screening ultrasound or MRI,

NOTE Confidence: 0.8449189

00:26:09.080 --> 00:26:11.019 high risk women benefit from annual MRI

NOTE Confidence: 0.8449189

00:26:11.019 --> 00:26:13.029 in addition to screening mammography.

NOTE Confidence: 0.8449189

00:26:13.030 --> 00:26:14.670 Often this will start before

NOTE Confidence: 0.8449189

00:26:14.670 --> 00:26:17.310 the age of 40 and just one key.

NOTE Confidence: 0.8449189

00:26:17.310 --> 00:26:19.606 If a patient is having a supplement,

NOTE Confidence: 0.8449189

00:26:19.610 --> 00:26:21.906 an MRI in addition to our mammogram,

NOTE Confidence: 0.8449189

00:26:21.910 --> 00:26:23.550 she really doesn't need a

NOTE Confidence: 0.8449189

00:26:23.550 --> 00:26:24.862 screening ultrasound as well.

NOTE Confidence: 0.8449189

00:26:24.870 --> 00:26:26.520 We know in the future,

NOTE Confidence: 0.8449189

00:26:26.520 --> 00:26:27.852 vascular based imaging

NOTE Confidence: 0.8449189

00:26:27.852 --> 00:26:29.628 will become more common.

NOTE Confidence: 0.8449189

00:26:29.630 --> 00:26:31.230 It's interesting vascular based

NOTE Confidence: 0.8449189

00:26:31.230 --> 00:26:33.230 imaging may not necessarily require

NOTE Confidence: 0.8449189

00:26:33.230 --> 00:26:35.332 Ivy contrast routine breast cancer

NOTE Confidence: 0.8449189

00:26:35.332 --> 00:26:37.387 risk assessment will probably be

NOTE Confidence: 0.8449189

00:26:37.387 --> 00:26:39.773 available to all women and artificial
NOTE Confidence: 0.8449189

00:26:39.773 --> 00:26:41.305 intelligence will definitely enhance
NOTE Confidence: 0.8449189

00:26:41.305 --> 00:26:43.298 the delivery of breast cancer
NOTE Confidence: 0.8449189

00:26:43.298 --> 00:26:44.906 screening at multiple levels.
NOTE Confidence: 0.8449189

00:26:44.910 --> 00:26:46.586 From effective efficient scheduling
NOTE Confidence: 0.8449189

00:26:46.586 --> 00:26:49.507 to managing and analyzing new data to
NOTE Confidence: 0.8449189

00:26:49.507 --> 00:26:51.242 helping the radiologist read better
NOTE Confidence: 0.8449189

00:26:51.242 --> 00:26:53.350 and faster and more accurately,
NOTE Confidence: 0.8449189

00:26:53.350 --> 00:26:55.882 and also again help us determine
NOTE Confidence: 0.8449189

00:26:55.882 --> 00:26:59.312 who needs what when so that we can
NOTE Confidence: 0.8449189

00:26:59.312 --> 00:27:01.796 really serve our patients very well.
NOTE Confidence: 0.8449189

00:27:01.800 --> 00:27:03.888 So I want to thank you for your
NOTE Confidence: 0.8449189

00:27:03.888 --> 00:27:06.180 time and attention and will be
NOTE Confidence: 0.8449189

00:27:06.180 --> 00:27:07.880 available for questions later.
NOTE Confidence: 0.8449189

00:27:07.880 --> 00:27:09.570 Thanks, thank you Doctor Holy,
NOTE Confidence: 0.8449189

00:27:09.570 --> 00:27:09.910 that

NOTE Confidence: 0.8576684

00:27:09.910 --> 00:27:11.600 was fantastic. I mean honestly,

NOTE Confidence: 0.8576684

00:27:11.600 --> 00:27:13.812 the the amount of work that the

NOTE Confidence: 0.8576684

00:27:13.812 --> 00:27:15.166 our breast imaging colleagues

NOTE Confidence: 0.8576684

00:27:15.166 --> 00:27:17.511 and yuan in our group and others

NOTE Confidence: 0.8576684

00:27:17.511 --> 00:27:19.709 have done is is truly remarkable.

NOTE Confidence: 0.8576684

00:27:19.710 --> 00:27:22.552 And there's just so much new excitement

NOTE Confidence: 0.8576684

00:27:22.552 --> 00:27:25.614 in the pipeline and kind of figuring out

NOTE Confidence: 0.8576684

00:27:25.614 --> 00:27:28.789 what the next steps are going to be great.

NOTE Confidence: 0.8576684

00:27:28.790 --> 00:27:32.080 Next, move on to Doctor Knowlton to

NOTE Confidence: 0.8576684

00:27:32.080 --> 00:27:35.925 discuss some of the recent changes and

NOTE Confidence: 0.8576684

00:27:35.925 --> 00:27:38.845 advances in radiation therapy and.

NOTE Confidence: 0.8576684

00:27:38.850 --> 00:27:40.250 The floor is all yours.

NOTE Confidence: 0.7904694

00:27:46.440 --> 00:27:48.310 Hope you're on mute still.

NOTE Confidence: 0.8589882

00:28:18.350 --> 00:28:20.403 So while we're waiting

NOTE Confidence: 0.8589882

00:28:20.403 --> 00:28:23.769 for the slides to pop up.

NOTE Confidence: 0.8589882

00:28:23.770 --> 00:28:25.385 Regina, what are your thoughts
NOTE Confidence: 0.8589882

00:28:25.385 --> 00:28:27.451 on how to screen an elderly
NOTE Confidence: 0.8589882

00:28:27.451 --> 00:28:29.386 woman after an index cancer?
NOTE Confidence: 0.8589882

00:28:29.390 --> 00:28:32.117 For example, an 85 year old with a newly
NOTE Confidence: 0.8589882

00:28:32.117 --> 00:28:34.297 diagnosed breast cancer after treatment,
NOTE Confidence: 0.8589882

00:28:34.300 --> 00:28:36.757 does she need follow up image in?
NOTE Confidence: 0.8589882

00:28:36.760 --> 00:28:38.860 This is from Doctor Berger. Really
NOTE Confidence: 0.85043895

00:28:38.860 --> 00:28:39.560 great question.
NOTE Confidence: 0.85043895

00:28:39.560 --> 00:28:42.010 Yeah so generally women you know around
NOTE Confidence: 0.85043895

00:28:42.010 --> 00:28:44.477 85 or 86 their their life expectancy.
NOTE Confidence: 0.85043895

00:28:44.480 --> 00:28:46.496 Even healthy women is probably around
NOTE Confidence: 0.85043895

00:28:46.496 --> 00:28:49.340 six or seven years where the benefit of
NOTE Confidence: 0.85043895

00:28:49.340 --> 00:28:51.500 early detection probably is not useful.
NOTE Confidence: 0.85043895

00:28:51.500 --> 00:28:54.436 That said, I think it really depends on.
NOTE Confidence: 0.85043895

00:28:54.440 --> 00:28:56.396 On how healthy the patient is,
NOTE Confidence: 0.85043895

00:28:56.400 --> 00:28:58.668 maybe she still likes having a mammogram

NOTE Confidence: 0.85043895

00:28:58.668 --> 00:29:00.958 love these older ladies of her healthy.

NOTE Confidence: 0.85043895

00:29:00.960 --> 00:29:03.424 They still want to come in and get

NOTE Confidence: 0.85043895

00:29:03.424 --> 00:29:05.519 their mammogram maybe every other year.

NOTE Confidence: 0.85043895

00:29:05.520 --> 00:29:07.150 I just wouldn't push it,

NOTE Confidence: 0.85043895

00:29:07.150 --> 00:29:09.439 but there is still some shared decision

NOTE Confidence: 0.83871317

00:29:09.440 --> 00:29:11.070 making there got it excellent.

NOTE Confidence: 0.84972835

00:29:13.680 --> 00:29:16.585 Hopefully you see my slides properly now.

NOTE Confidence: 0.84972835

00:29:16.590 --> 00:29:18.802 Looks great. OK, great, thank you.

NOTE Confidence: 0.84972835

00:29:18.802 --> 00:29:22.084 So my title is as you can see is

NOTE Confidence: 0.84972835

00:29:22.084 --> 00:29:23.952 deescalation of radiation therapy

NOTE Confidence: 0.84972835

00:29:23.952 --> 00:29:26.960 for breast cancer for breast cancer.

NOTE Confidence: 0.84972835

00:29:26.960 --> 00:29:28.620 At less is more.

NOTE Confidence: 0.8602074

00:29:31.770 --> 00:29:34.713 OK so I have no conflict of interest to

NOTE Confidence: 0.8602074

00:29:34.713 --> 00:29:37.667 report related to this presentation an any.

NOTE Confidence: 0.8602074

00:29:37.670 --> 00:29:40.478 I do not unfortunately have as many awesome

NOTE Confidence: 0.8602074

00:29:40.478 --> 00:29:42.840 pictures as our two other presenters.
NOTE Confidence: 0.8602074

00:29:42.840 --> 00:29:45.390 However, any pictures that were used
NOTE Confidence: 0.8602074

00:29:45.390 --> 00:29:48.351 here were taken from sites that allow
NOTE Confidence: 0.8602074

00:29:48.351 --> 00:29:51.116 use of their photos in this setting.
NOTE Confidence: 0.8602074

00:29:51.120 --> 00:29:54.016 So when I after the title was submitted,
NOTE Confidence: 0.8602074

00:29:54.020 --> 00:29:56.924 you know D escalation in the setting of,
NOTE Confidence: 0.8602074

00:29:56.930 --> 00:29:58.745 you know, radiation therapy in
NOTE Confidence: 0.8602074

00:29:58.745 --> 00:30:00.560 the setting of breast cancer.
NOTE Confidence: 0.8602074

00:30:00.560 --> 00:30:02.648 I actually looked up the word
NOTE Confidence: 0.8602074

00:30:02.648 --> 00:30:05.397 deescalation and I think maybe my title
NOTE Confidence: 0.8602074

00:30:05.397 --> 00:30:07.552 is not grammatically correct because
NOTE Confidence: 0.8602074

00:30:07.552 --> 00:30:09.374 Merriam Webster Dictionary does not
NOTE Confidence: 0.8602074

00:30:09.374 --> 00:30:11.812 say that this is a noun in anyway
NOTE Confidence: 0.8602074

00:30:11.812 --> 00:30:14.346 and I tried hard copy and online.
NOTE Confidence: 0.8602074

00:30:14.350 --> 00:30:17.954 It is a will say that it is a verb that
NOTE Confidence: 0.8602074

00:30:17.954 --> 00:30:21.554 can mean to limit to decrease in extent.

NOTE Confidence: 0.8602074

00:30:21.560 --> 00:30:23.905 Are to decrease in volume or scope.

NOTE Confidence: 0.8602074

00:30:23.910 --> 00:30:26.334 I was able to find a definition for

NOTE Confidence: 0.8602074

00:30:26.334 --> 00:30:28.598 the noun in the free dictionary,

NOTE Confidence: 0.8602074

00:30:28.600 --> 00:30:30.610 which is a reduction in intensity.

NOTE Confidence: 0.8602074

00:30:30.610 --> 00:30:33.138 So if we have any people that are

NOTE Confidence: 0.8602074

00:30:33.138 --> 00:30:35.473 very much on top of their grammar

NOTE Confidence: 0.8602074

00:30:35.473 --> 00:30:37.979 and my title may not be correct,

NOTE Confidence: 0.8602074

00:30:37.980 --> 00:30:41.022 I will say however that the title is more

NOTE Confidence: 0.8602074

00:30:41.022 --> 00:30:43.980 in the spirit of the Marian Webster.

NOTE Confidence: 0.8602074

00:30:43.980 --> 00:30:47.756 Definition where we are in the modern era,

NOTE Confidence: 0.8602074

00:30:47.760 --> 00:30:50.598 aiming to limit the radiation limit,

NOTE Confidence: 0.8602074

00:30:50.600 --> 00:30:53.234 the number of fractions limit the

NOTE Confidence: 0.8602074

00:30:53.234 --> 00:30:56.093 dose that they treatment volumes and

NOTE Confidence: 0.8602074

00:30:56.093 --> 00:30:58.638 also omit radiation when necessary.

NOTE Confidence: 0.8602074

00:30:58.640 --> 00:31:01.080 Really the free dictionary definition

NOTE Confidence: 0.8602074

00:31:01.080 --> 00:31:03.520 doesn't make sense because we're
NOTE Confidence: 0.8602074

00:31:03.598 --> 00:31:05.823 not really reducing the intensity
NOTE Confidence: 0.8602074

00:31:05.823 --> 00:31:07.158 of the radiation.
NOTE Confidence: 0.8602074

00:31:07.160 --> 00:31:10.616 What we do when we are changing the
NOTE Confidence: 0.8602074

00:31:10.616 --> 00:31:12.970 fractionation to a shorter fractionation
NOTE Confidence: 0.8602074

00:31:12.970 --> 00:31:17.150 is we are using newer schemes of radiation.
NOTE Confidence: 0.8602074

00:31:17.150 --> 00:31:18.770 To deliver the same biological
NOTE Confidence: 0.8602074

00:31:18.770 --> 00:31:21.628 effective dose so I do not feel that
NOTE Confidence: 0.8602074

00:31:21.628 --> 00:31:23.583 the free dictionary definition really
NOTE Confidence: 0.8602074

00:31:23.583 --> 00:31:25.839 beats what's happening in radiation.
NOTE Confidence: 0.8602074

00:31:25.840 --> 00:31:29.050 But the Marian Webster one does.
NOTE Confidence: 0.8602074

00:31:29.050 --> 00:31:32.610 So here we see, this is how we are D.
NOTE Confidence: 0.8602074

00:31:32.610 --> 00:31:34.494 Escalating as I had mentioned with
NOTE Confidence: 0.8602074

00:31:34.494 --> 00:31:36.479 the decrease in number of fractions
NOTE Confidence: 0.8602074

00:31:36.479 --> 00:31:38.495 decrease in volume of tissue treated
NOTE Confidence: 0.8602074

00:31:38.495 --> 00:31:40.547 an omission of radiation therapy

NOTE Confidence: 0.8602074

00:31:40.547 --> 00:31:41.870 for appropriate candidates.

NOTE Confidence: 0.8602074

00:31:41.870 --> 00:31:43.907 And this really does fit the less

NOTE Confidence: 0.8602074

00:31:43.907 --> 00:31:46.528 is more if we have less radiation

NOTE Confidence: 0.8602074

00:31:46.528 --> 00:31:48.623 we will have increased compliance.

NOTE Confidence: 0.8602074

00:31:48.630 --> 00:31:50.838 People will have if the fractionation

NOTE Confidence: 0.8602074

00:31:50.838 --> 00:31:52.900 scheme is more convenient for them,

NOTE Confidence: 0.8602074

00:31:52.900 --> 00:31:54.680 whether they have traveled issues

NOTE Confidence: 0.8602074

00:31:54.680 --> 00:31:55.748 or working issues.

NOTE Confidence: 0.8602074

00:31:55.750 --> 00:31:58.042 We're going to have more patients

NOTE Confidence: 0.8602074

00:31:58.042 --> 00:32:01.150 that will be able to get it with less.

NOTE Confidence: 0.8602074

00:32:01.150 --> 00:32:03.285 Stress there will be increased

NOTE Confidence: 0.8602074

00:32:03.285 --> 00:32:05.420 acceptance of the treatment course

NOTE Confidence: 0.8602074

00:32:05.495 --> 00:32:07.625 increased time for patients to work

NOTE Confidence: 0.8602074

00:32:07.625 --> 00:32:10.280 or to pursue their hobbies or take

NOTE Confidence: 0.8602074

00:32:10.280 --> 00:32:12.608 care of their families and increase

NOTE Confidence: 0.8602074

00:32:12.608 --> 00:32:13.790 quality of life.
NOTE Confidence: 0.85277045

00:32:15.860 --> 00:32:17.021 So moderate fractionation
NOTE Confidence: 0.85277045

00:32:17.021 --> 00:32:18.956 is now really old news.
NOTE Confidence: 0.85277045

00:32:18.960 --> 00:32:21.676 At this point, we've all seen it.
NOTE Confidence: 0.85277045

00:32:21.680 --> 00:32:24.008 This is what it is now.
NOTE Confidence: 0.85277045

00:32:24.010 --> 00:32:25.950 Truly in the United States,
NOTE Confidence: 0.85277045

00:32:25.950 --> 00:32:28.098 the new standard of radiation therapy
NOTE Confidence: 0.85277045

00:32:28.098 --> 00:32:30.426 for the intact breast standard or
NOTE Confidence: 0.85277045

00:32:30.426 --> 00:32:32.928 conventional radiation to the whole breast.
NOTE Confidence: 0.85277045

00:32:32.930 --> 00:32:34.870 It was for several decades,
NOTE Confidence: 0.85277045

00:32:34.870 --> 00:32:36.810 50 Gray and 25 fractions,
NOTE Confidence: 0.85277045

00:32:36.810 --> 00:32:38.362 meaning that the patient
NOTE Confidence: 0.85277045

00:32:38.362 --> 00:32:40.690 needed to come for five weeks.
NOTE Confidence: 0.85277045

00:32:40.690 --> 00:32:43.735 And then there would be an optional
NOTE Confidence: 0.85277045

00:32:43.735 --> 00:32:46.203 tumor bed boost of an additional
NOTE Confidence: 0.85277045

00:32:46.203 --> 00:32:48.970 10 to 16 Gray and five to 8.

NOTE Confidence: 0.85277045

00:32:48.970 --> 00:32:50.695 Actions which many women have

NOTE Confidence: 0.85277045

00:32:50.695 --> 00:32:52.075 received over the years,

NOTE Confidence: 0.85277045

00:32:52.080 --> 00:32:54.551 so that's six to six and a

NOTE Confidence: 0.85277045

00:32:54.551 --> 00:32:57.110 half weeks of daily treatment.

NOTE Confidence: 0.85277045

00:32:57.110 --> 00:32:58.730 Moderate fractionation for whole

NOTE Confidence: 0.85277045

00:32:58.730 --> 00:32:59.945 breast irradiation therapy,

NOTE Confidence: 0.85277045

00:32:59.950 --> 00:33:02.662 which I'd like to stress in at this

NOTE Confidence: 0.85277045

00:33:02.662 --> 00:33:05.639 time is without including the nodes.

NOTE Confidence: 0.85277045

00:33:05.640 --> 00:33:08.377 This is the new standard where we

NOTE Confidence: 0.85277045

00:33:08.377 --> 00:33:10.857 where the whole breast is being

NOTE Confidence: 0.85277045

00:33:10.857 --> 00:33:13.706 treated in 40 grey and 15 fractions

NOTE Confidence: 0.85277045

00:33:13.792 --> 00:33:16.186 or 42.5 Gray and 16 fractions.

NOTE Confidence: 0.85277045

00:33:16.190 --> 00:33:18.174 That's really institutional preference.

NOTE Confidence: 0.85277045

00:33:18.174 --> 00:33:21.150 Our institution at Yale we use

NOTE Confidence: 0.85277045

00:33:21.222 --> 00:33:23.504 the 40 grey in the 15 fractions

NOTE Confidence: 0.85277045

00:33:23.504 --> 00:33:25.119 from the start B trial,
NOTE Confidence: 0.85277045

00:33:25.120 --> 00:33:27.260 and for these patients there's
NOTE Confidence: 0.85277045

00:33:27.260 --> 00:33:29.863 an optional tumor bed boost 10
NOTE Confidence: 0.85277045

00:33:29.863 --> 00:33:31.399 Gray and for fractions.
NOTE Confidence: 0.85277045

00:33:31.400 --> 00:33:33.986 So we're taking the standard or
NOTE Confidence: 0.85277045

00:33:33.986 --> 00:33:35.710 conventional fractionation of five
NOTE Confidence: 0.85277045

00:33:35.782 --> 00:33:37.806 to six to six and a half weeks,
NOTE Confidence: 0.85277045

00:33:37.810 --> 00:33:39.778 and now it's become three to
NOTE Confidence: 0.85277045

00:33:39.778 --> 00:33:41.720 four weeks for the patient.
NOTE Confidence: 0.82770544

00:33:43.790 --> 00:33:45.830 And of course there's some
NOTE Confidence: 0.82770544

00:33:45.830 --> 00:33:48.670 data to back all of this up.
NOTE Confidence: 0.82770544

00:33:48.670 --> 00:33:50.914 These are the three largest trials
NOTE Confidence: 0.82770544

00:33:50.914 --> 00:33:53.181 that have the longest follow-up that
NOTE Confidence: 0.82770544

00:33:53.181 --> 00:33:55.617 are used to backup or support the
NOTE Confidence: 0.82770544

00:33:55.617 --> 00:33:58.039 use of moderate hypofractionation.
NOTE Confidence: 0.82770544

00:33:58.040 --> 00:34:02.116 All three trials to start a the start B, and.

NOTE Confidence: 0.82770544

00:34:02.116 --> 00:34:05.028 There's no great name for this one.

NOTE Confidence: 0.82770544

00:34:05.030 --> 00:34:06.700 The Canadian Ontario Wayland trial.

NOTE Confidence: 0.82770544

00:34:06.700 --> 00:34:08.710 Depending on who you're talking about.

NOTE Confidence: 0.82770544

00:34:08.710 --> 00:34:10.042 I learned from this.

NOTE Confidence: 0.82770544

00:34:10.042 --> 00:34:12.755 I need to have make sure that any

NOTE Confidence: 0.82770544

00:34:12.755 --> 00:34:15.750 trials I have have a have a catchy name,

NOTE Confidence: 0.82770544

00:34:15.750 --> 00:34:18.062 but the start a trial and start be

NOTE Confidence: 0.82770544

00:34:18.062 --> 00:34:20.551 were done in England and the obviously

NOTE Confidence: 0.82770544

00:34:20.551 --> 00:34:23.120 the Canadian trial was done in Canada.

NOTE Confidence: 0.82770544

00:34:23.120 --> 00:34:24.740 They all compared their moderately

NOTE Confidence: 0.82770544

00:34:24.740 --> 00:34:26.036 hypofractionated regimens in whole

NOTE Confidence: 0.82770544

00:34:26.036 --> 00:34:28.112 breast radiation therapy to the standard

NOTE Confidence: 0.82770544

00:34:28.112 --> 00:34:29.476 conventional fractionation of welding.

NOTE Confidence: 0.82770544

00:34:29.480 --> 00:34:32.208 I guess we're going to call that conventional

NOTE Confidence: 0.82770544

00:34:32.208 --> 00:34:34.509 'cause modern hypo frack is now standard,

NOTE Confidence: 0.82770544

00:34:34.510 --> 00:34:37.382 but 50 Gray in 25 fractions was the
NOTE Confidence: 0.82770544

00:34:37.382 --> 00:34:40.096 standard arm and all Childs found
NOTE Confidence: 0.82770544

00:34:40.096 --> 00:34:42.491 no significant difference in local
NOTE Confidence: 0.82770544

00:34:42.491 --> 00:34:44.622 regional recurrence and overall
NOTE Confidence: 0.82770544

00:34:44.622 --> 00:34:46.718 survival for the patients.
NOTE Confidence: 0.82770544

00:34:46.720 --> 00:34:50.149 At 10 years they did all use a slightly
NOTE Confidence: 0.82770544

00:34:50.149 --> 00:34:52.950 different fractionation scheme to start.
NOTE Confidence: 0.82770544

00:34:52.950 --> 00:34:53.836 A trial,
NOTE Confidence: 0.82770544

00:34:53.836 --> 00:34:56.937 had had patients receiving 41.6 Gray or
NOTE Confidence: 0.82770544

00:34:56.937 --> 00:35:00.520 39 Gray and 13 fractions over 5 weeks,
NOTE Confidence: 0.82770544

00:35:00.520 --> 00:35:03.628 which is approximately 3 fractions per week.
NOTE Confidence: 0.82770544

00:35:03.630 --> 00:35:06.100 It's a little bit of.
NOTE Confidence: 0.82770544

00:35:06.100 --> 00:35:08.010 More challenging regimen to schedule,
NOTE Confidence: 0.82770544

00:35:08.010 --> 00:35:09.920 so most institutions are not
NOTE Confidence: 0.82770544

00:35:09.920 --> 00:35:11.448 really using this regiment,
NOTE Confidence: 0.82770544

00:35:11.450 --> 00:35:14.117 but it is interesting that they did.

NOTE Confidence: 0.82770544

00:35:14.120 --> 00:35:16.025 Note that a significant significant

NOTE Confidence: 0.82770544

00:35:16.025 --> 00:35:18.426 decrease in the number of patients

NOTE Confidence: 0.82770544

00:35:18.426 --> 00:35:20.551 with breast induration adima intellect

NOTE Confidence: 0.82770544

00:35:20.551 --> 00:35:23.280 until inject ages in the 39 Gray

NOTE Confidence: 0.82770544

00:35:23.280 --> 00:35:25.200 arm compared to the standard frac.

NOTE Confidence: 0.82770544

00:35:25.200 --> 00:35:28.091 The 41.6 Gray arm did not really

NOTE Confidence: 0.82770544

00:35:28.091 --> 00:35:31.415 do any better as far as then the 50

NOTE Confidence: 0.82770544

00:35:31.415 --> 00:35:34.214 Gray arm as far as acute effects

NOTE Confidence: 0.82770544

00:35:34.214 --> 00:35:36.968 an late term effects as that.

NOTE Confidence: 0.82770544

00:35:36.970 --> 00:35:39.754 Start B, which is what Yale is using.

NOTE Confidence: 0.82770544

00:35:39.760 --> 00:35:42.210 That's the 50 Gray and 15 fractions.

NOTE Confidence: 0.82770544

00:35:42.210 --> 00:35:44.646 So once a day Monday through Friday,

NOTE Confidence: 0.82770544

00:35:44.650 --> 00:35:45.694 that's three weeks.

NOTE Confidence: 0.82770544

00:35:45.694 --> 00:35:47.434 So once again their outcomes,

NOTE Confidence: 0.82770544

00:35:47.440 --> 00:35:48.976 local region of occurrence,

NOTE Confidence: 0.82770544

00:35:48.976 --> 00:35:50.896 overall survival at 10 years
NOTE Confidence: 0.82770544

00:35:50.896 --> 00:35:53.020 was the same with the 50 Gray,
NOTE Confidence: 0.82770544

00:35:53.020 --> 00:35:54.770 and there was a significant
NOTE Confidence: 0.82770544

00:35:54.770 --> 00:35:56.170 decrease in breast shrinkage,
NOTE Confidence: 0.82770544

00:35:56.170 --> 00:35:57.806 breast edema and telangiectasia.
NOTE Confidence: 0.82770544

00:35:57.806 --> 00:36:01.119 But age is in the 40 great arm.
NOTE Confidence: 0.82770544

00:36:01.120 --> 00:36:02.970 The Canadian trial was interesting.
NOTE Confidence: 0.82770544

00:36:02.970 --> 00:36:04.442 That is slightly different.
NOTE Confidence: 0.82770544

00:36:04.442 --> 00:36:05.914 42.5 in 16 fractions,
NOTE Confidence: 0.82770544

00:36:05.920 --> 00:36:10.169 so that's three weeks and a day.
NOTE Confidence: 0.82770544

00:36:10.170 --> 00:36:11.602 Subgroup analysis it's worthy
NOTE Confidence: 0.82770544

00:36:11.602 --> 00:36:13.750 of note that they did notice
NOTE Confidence: 0.82770544

00:36:13.816 --> 00:36:16.040 increased local regional recurrence.
NOTE Confidence: 0.82770544

00:36:16.040 --> 00:36:17.716 In high grade tumors,
NOTE Confidence: 0.82770544

00:36:17.716 --> 00:36:20.713 with the Hypo frac with 15.6% of
NOTE Confidence: 0.82770544

00:36:20.713 --> 00:36:23.611 patients who received with with high

NOTE Confidence: 0.82770544

00:36:23.611 --> 00:36:26.774 grade tumors that had hypo fact

NOTE Confidence: 0.82770544

00:36:26.774 --> 00:36:29.484 experience in local regional recurrence

NOTE Confidence: 0.82770544

00:36:29.484 --> 00:36:32.269 versus 4.7 in the 50 Gray arm.

NOTE Confidence: 0.82770544

00:36:32.270 --> 00:36:32.620 However,

NOTE Confidence: 0.82770544

00:36:32.620 --> 00:36:35.420 I will say that start B did look

NOTE Confidence: 0.82770544

00:36:35.420 --> 00:36:38.742 at that and did not find any any

NOTE Confidence: 0.82770544

00:36:38.742 --> 00:36:40.802 difference in outcomes for the

NOTE Confidence: 0.82770544

00:36:40.802 --> 00:36:41.900 Grade 3 tumors,

NOTE Confidence: 0.82770544

00:36:41.900 --> 00:36:44.612 so we tend to still treat those patients

NOTE Confidence: 0.82770544

00:36:44.612 --> 00:36:45.807 with moderate hypofractionation

NOTE Confidence: 0.82770544

00:36:45.807 --> 00:36:48.057 an in the Canadian trial,

NOTE Confidence: 0.82770544

00:36:48.060 --> 00:36:50.550 there was no significant difference

NOTE Confidence: 0.82770544

00:36:50.550 --> 00:36:53.730 in acute toxicity or cosmetic outcome.

NOTE Confidence: 0.82770544

00:36:53.730 --> 00:36:55.767 So maybe we can tighten things up

NOTE Confidence: 0.82770544

00:36:55.767 --> 00:36:58.411 a little bit more now and the newer

NOTE Confidence: 0.82770544

00:36:58.411 --> 00:37:00.631 regimens that are being brought out
NOTE Confidence: 0.82770544

00:37:00.631 --> 00:37:03.289 there are now called Ultra Hypofractionation.
NOTE Confidence: 0.8578268

00:37:03.290 --> 00:37:05.714 And these once again are in for the
NOTE Confidence: 0.8578268

00:37:05.714 --> 00:37:08.240 setting of whole breast radiation only.
NOTE Confidence: 0.8578268

00:37:08.240 --> 00:37:10.982 We are not yet talking about
NOTE Confidence: 0.8578268

00:37:10.982 --> 00:37:12.810 anything with the nodes.
NOTE Confidence: 0.8578268

00:37:12.810 --> 00:37:14.690 And we have two regimens,
NOTE Confidence: 0.8578268

00:37:14.690 --> 00:37:16.565 the fast regimen and the
NOTE Confidence: 0.8578268

00:37:16.565 --> 00:37:17.690 Fast forward regimen.
NOTE Confidence: 0.8578268

00:37:17.690 --> 00:37:20.196 Yale has adopted the FAST regimen which
NOTE Confidence: 0.8578268

00:37:20.196 --> 00:37:22.560 we've been using with great success.
NOTE Confidence: 0.8578268

00:37:22.560 --> 00:37:24.810 We've been very happy with it.
NOTE Confidence: 0.8578268

00:37:24.810 --> 00:37:28.560 We started using it in the fall of last year,
NOTE Confidence: 0.8578268

00:37:28.560 --> 00:37:31.030 so in the fast trial.
NOTE Confidence: 0.8578268

00:37:31.030 --> 00:37:34.180 Patients were randomized to one fraction
NOTE Confidence: 0.8578268

00:37:34.180 --> 00:37:37.626 of radiation per week to a total of

NOTE Confidence: 0.8578268

00:37:37.626 --> 00:37:40.530 28.5 Gray or to a total of 30 Gray,

NOTE Confidence: 0.8578268

00:37:40.530 --> 00:37:43.394 so that's 5.7 or 6 Gray once a

NOTE Confidence: 0.8578268

00:37:43.394 --> 00:37:45.591 week versus the more traditional

NOTE Confidence: 0.8578268

00:37:45.591 --> 00:37:48.375 50 Gray in the 25 fractions.

NOTE Confidence: 0.8578268

00:37:48.380 --> 00:37:50.440 This fast trial is randomized.

NOTE Confidence: 0.8578268

00:37:50.440 --> 00:37:51.676 It's well done,

NOTE Confidence: 0.8578268

00:37:51.676 --> 00:37:54.560 and it has 10 years of follow

NOTE Confidence: 0.8578268

00:37:54.660 --> 00:37:56.220 up at this point,

NOTE Confidence: 0.8578268

00:37:56.220 --> 00:37:58.968 and there was no significant difference

NOTE Confidence: 0.8578268

00:37:58.968 --> 00:38:02.541 in normal tissue affects in the 28.5 by

NOTE Confidence: 0.8578268

00:38:02.541 --> 00:38:05.031 ARM compared to the standard fractionation.

NOTE Confidence: 0.8578268

00:38:05.040 --> 00:38:07.168 And that's why I put that in.

NOTE Confidence: 0.8578268

00:38:07.170 --> 00:38:09.996 Read up there because that is really the arm

NOTE Confidence: 0.8578268

00:38:09.996 --> 00:38:12.932 that we are treating on in the 28.5 Gray arm,

NOTE Confidence: 0.8578268

00:38:12.940 --> 00:38:14.879 because the 30 Gray arm did have

NOTE Confidence: 0.8578268

00:38:14.879 --> 00:38:16.589 increase in normal tissue effects,
NOTE Confidence: 0.8578268

00:38:16.590 --> 00:38:18.760 so we're not using that.
NOTE Confidence: 0.8578268

00:38:18.760 --> 00:38:21.100 For all three dosing fractionation schemes,
NOTE Confidence: 0.8578268

00:38:21.100 --> 00:38:21.490 however,
NOTE Confidence: 0.8578268

00:38:21.490 --> 00:38:22.660 local regional recurrence,
NOTE Confidence: 0.8578268

00:38:22.660 --> 00:38:23.440 distant recurrence,
NOTE Confidence: 0.8578268

00:38:23.440 --> 00:38:25.390 and overall survival were equivalent,
NOTE Confidence: 0.8578268

00:38:25.390 --> 00:38:27.730 and this regimen has made it
NOTE Confidence: 0.8578268

00:38:27.730 --> 00:38:29.290 into the national guidelines.
NOTE Confidence: 0.8578268

00:38:29.290 --> 00:38:31.258 Now the NCC N guidelines saying
NOTE Confidence: 0.8578268

00:38:31.258 --> 00:38:33.462 that it may be considered for
NOTE Confidence: 0.8578268

00:38:33.462 --> 00:38:35.904 patients greater than 50 years of
NOTE Confidence: 0.8578268

00:38:35.904 --> 00:38:38.648 age with early stage breast cancer,
NOTE Confidence: 0.8578268

00:38:38.650 --> 00:38:41.146 which they have defined as as
NOTE Confidence: 0.8578268

00:38:41.146 --> 00:38:44.317 insight to T1T 2AN OI kind of put
NOTE Confidence: 0.8578268

00:38:44.317 --> 00:38:47.229 in that who do not require a boost,

NOTE Confidence: 0.8578268

00:38:47.230 --> 00:38:50.446 they had a few sentences about how boosted.

NOTE Confidence: 0.8578268

00:38:50.450 --> 00:38:52.090 Difficult in this setting and

NOTE Confidence: 0.8578268

00:38:52.090 --> 00:38:53.074 hasn't been established,

NOTE Confidence: 0.8578268

00:38:53.080 --> 00:38:54.725 but that's really how we

NOTE Confidence: 0.8578268

00:38:54.725 --> 00:38:56.370 are approaching it at Yale.

NOTE Confidence: 0.8578268

00:38:56.370 --> 00:38:58.930 If we have a patient with early stage

NOTE Confidence: 0.8578268

00:38:58.930 --> 00:39:01.306 cancer who does not require a boost,

NOTE Confidence: 0.8578268

00:39:01.310 --> 00:39:03.634 and we're not quite ready for patients

NOTE Confidence: 0.8578268

00:39:03.634 --> 00:39:06.224 as young as 50 with just such a

NOTE Confidence: 0.8578268

00:39:06.224 --> 00:39:08.220 short term follow-up of 10 years,

NOTE Confidence: 0.8578268

00:39:08.220 --> 00:39:10.710 so we are tending to lean

NOTE Confidence: 0.8578268

00:39:10.710 --> 00:39:12.880 towards patients 65 and over.

NOTE Confidence: 0.8578268

00:39:12.880 --> 00:39:15.638 Although if someone did have a a

NOTE Confidence: 0.8578268

00:39:15.638 --> 00:39:17.749 needed transportation need or something

NOTE Confidence: 0.8578268

00:39:17.749 --> 00:39:19.894 that still fit this requirement,

NOTE Confidence: 0.8578268

00:39:19.900 --> 00:39:22.378 we would be open for that.
NOTE Confidence: 0.8578268

00:39:22.380 --> 00:39:24.440 The Fast forward has not.
NOTE Confidence: 0.8578268

00:39:24.440 --> 00:39:27.478 It is not yet widely adopted because
NOTE Confidence: 0.8578268

00:39:27.478 --> 00:39:30.996 the data is only going out for five
NOTE Confidence: 0.8578268

00:39:30.996 --> 00:39:33.934 years at this point and that is
NOTE Confidence: 0.8578268

00:39:33.934 --> 00:39:36.822 looking at 26 or 27 Gray in five
NOTE Confidence: 0.8578268

00:39:36.830 --> 00:39:38.900 fractions just Monday through Friday.
NOTE Confidence: 0.8578268

00:39:38.900 --> 00:39:41.258 You're done in a week versus
NOTE Confidence: 0.8578268

00:39:41.258 --> 00:39:43.920 the what's now the more modern.
NOTE Confidence: 0.8578268

00:39:43.920 --> 00:39:44.302 Standard,
NOTE Confidence: 0.8578268

00:39:44.302 --> 00:39:46.594 then the modern standard hypo fractionation,
NOTE Confidence: 0.8578268

00:39:46.600 --> 00:39:48.898 40 Gray, and in 15 fractions.
NOTE Confidence: 0.8578268

00:39:48.900 --> 00:39:51.198 The five year data is promising.
NOTE Confidence: 0.8578268

00:39:51.200 --> 00:39:52.728 It's showing non inferiority
NOTE Confidence: 0.8578268

00:39:52.728 --> 00:39:53.874 and local control.
NOTE Confidence: 0.8578268

00:39:53.880 --> 00:39:55.815 There are increased normal tissue

NOTE Confidence: 0.8578268

00:39:55.815 --> 00:39:58.090 affects with the 27 Gray arm.

NOTE Confidence: 0.8578268

00:39:58.090 --> 00:40:00.520 So overtime I think we're going

NOTE Confidence: 0.8578268

00:40:00.520 --> 00:40:03.268 to be very interesting to see what

NOTE Confidence: 0.8578268

00:40:03.268 --> 00:40:05.368 happens with that 26 Gray arm.

NOTE Confidence: 0.8578268

00:40:05.370 --> 00:40:07.668 And if we get more data,

NOTE Confidence: 0.8578268

00:40:07.670 --> 00:40:10.344 more longer term data under our belt,

NOTE Confidence: 0.8578268

00:40:10.350 --> 00:40:12.335 that may be something that

NOTE Confidence: 0.8578268

00:40:12.335 --> 00:40:13.923 we will be adopting.

NOTE Confidence: 0.8578268

00:40:13.930 --> 00:40:15.136 In the future,

NOTE Confidence: 0.8578268

00:40:15.136 --> 00:40:17.548 that would certainly be very convenient.

NOTE Confidence: 0.8369247

00:40:20.380 --> 00:40:23.425 So, so far we've only talked about

NOTE Confidence: 0.8369247

00:40:23.425 --> 00:40:25.595 using the HYPOFRACTIONATION in settings

NOTE Confidence: 0.8369247

00:40:25.595 --> 00:40:28.374 where just the breast is being treated.

NOTE Confidence: 0.8369247

00:40:28.380 --> 00:40:30.906 What about in the setting of

NOTE Confidence: 0.8369247

00:40:30.906 --> 00:40:32.590 regional nodal or radiation,

NOTE Confidence: 0.8369247

00:40:32.590 --> 00:40:34.690 or post mastectomy radiation therapy?

NOTE Confidence: 0.8369247

00:40:34.690 --> 00:40:37.742 There is a growing body of maturing

NOTE Confidence: 0.8369247

00:40:37.742 --> 00:40:40.201 data and accruing data in this

NOTE Confidence: 0.8369247

00:40:40.201 --> 00:40:43.234 setting that we may see in the future

NOTE Confidence: 0.8369247

00:40:43.234 --> 00:40:46.054 that we are more widely adopting.

NOTE Confidence: 0.8369247

00:40:46.060 --> 00:40:47.744 The hypo fractionation for

NOTE Confidence: 0.8369247

00:40:47.744 --> 00:40:49.428 these patients as well.

NOTE Confidence: 0.8369247

00:40:49.430 --> 00:40:51.525 One trial that's ongoing right

NOTE Confidence: 0.8369247

00:40:51.525 --> 00:40:54.210 now is the RT charm trial.

NOTE Confidence: 0.8369247

00:40:54.210 --> 00:40:56.860 And it's looking at moderately

NOTE Confidence: 0.8369247

00:40:56.860 --> 00:40:58.450 hypofractionated post mastectomy

NOTE Confidence: 0.8369247

00:40:58.450 --> 00:41:01.016 radiation therapy for patients who've

NOTE Confidence: 0.8369247

00:41:01.016 --> 00:41:02.928 had breast reconstruction comparing

NOTE Confidence: 0.8369247

00:41:02.928 --> 00:41:06.474 with the standard 50 Gray and patients

NOTE Confidence: 0.8369247

00:41:06.474 --> 00:41:08.518 can have autologous reconstruction

NOTE Confidence: 0.8369247

00:41:08.518 --> 00:41:10.217 implant reconstruction immediate

NOTE Confidence: 0.8369247

00:41:10.217 --> 00:41:14.956 or delayed to be on this trial.

NOTE Confidence: 0.8369247

00:41:14.960 --> 00:41:18.152 The fabric trial that is open at

NOTE Confidence: 0.8369247

00:41:18.152 --> 00:41:21.858 Yale Dr Mina Moran is RPI for that.

NOTE Confidence: 0.8369247

00:41:21.860 --> 00:41:23.990 That's the study of radiation

NOTE Confidence: 0.8369247

00:41:23.990 --> 00:41:25.694 fractionation on patient outcomes

NOTE Confidence: 0.8369247

00:41:25.694 --> 00:41:27.199 after breast reconstruction

NOTE Confidence: 0.8369247

00:41:27.199 --> 00:41:29.219 for invasive breast cancer,

NOTE Confidence: 0.8369247

00:41:29.220 --> 00:41:31.520 and this is randomized as

NOTE Confidence: 0.8369247

00:41:31.520 --> 00:41:32.900 well to hypofractionation.

NOTE Confidence: 0.8369247

00:41:32.900 --> 00:41:33.306 Plus,

NOTE Confidence: 0.8369247

00:41:33.306 --> 00:41:35.742 the more standard 50 Gray and

NOTE Confidence: 0.8369247

00:41:35.742 --> 00:41:38.090 patience for this would have

NOTE Confidence: 0.8369247

00:41:38.090 --> 00:41:40.715 permanent implant or tissue expander.

NOTE Confidence: 0.8369247

00:41:40.720 --> 00:41:43.480 This is not for autologous patients.

NOTE Confidence: 0.8369247

00:41:43.480 --> 00:41:45.830 There is some published data.

NOTE Confidence: 0.8369247

00:41:45.830 --> 00:41:47.402 That one can find,
NOTE Confidence: 0.8369247

00:41:47.402 --> 00:41:48.188 for example,
NOTE Confidence: 0.8369247

00:41:48.190 --> 00:41:51.350 this trial out of China by Doctor Wang.
NOTE Confidence: 0.8369247

00:41:51.350 --> 00:41:53.774 It's a randomized trial of standard
NOTE Confidence: 0.8369247

00:41:53.774 --> 00:41:54.986 fractionation versus moderately
NOTE Confidence: 0.8369247

00:41:54.986 --> 00:41:56.542 hypofractionated patients in post
NOTE Confidence: 0.8369247

00:41:56.542 --> 00:41:57.646 mastectomy radiation therapy.
NOTE Confidence: 0.8369247

00:41:57.650 --> 00:42:00.408 I read every word in the article.
NOTE Confidence: 0.8369247

00:42:00.410 --> 00:42:02.954 I can find nothing that really
NOTE Confidence: 0.8369247

00:42:02.954 --> 00:42:05.083 discuss is if reconstruction was
NOTE Confidence: 0.8369247

00:42:05.083 --> 00:42:06.878 used and the median follow-up
NOTE Confidence: 0.8369247

00:42:06.878 --> 00:42:09.468 is not that long at 58.5 months,
NOTE Confidence: 0.8369247

00:42:09.470 --> 00:42:11.046 but there is an.
NOTE Confidence: 0.8369247

00:42:11.046 --> 00:42:13.410 These were a little bit high.
NOTE Confidence: 0.8369247

00:42:13.410 --> 00:42:16.674 These were some high risk patients as well.
NOTE Confidence: 0.8369247

00:42:16.680 --> 00:42:18.465 Four or more involved nodes

NOTE Confidence: 0.8369247

00:42:18.465 --> 00:42:19.536 for everybody T3T4,

NOTE Confidence: 0.8369247

00:42:19.540 --> 00:42:21.997 but there was no difference in local

NOTE Confidence: 0.8369247

00:42:21.997 --> 00:42:23.826 regional recurrence between the 50

NOTE Confidence: 0.8369247

00:42:23.826 --> 00:42:25.626 Gray in the moderate hypofractionation,

NOTE Confidence: 0.8369247

00:42:25.630 --> 00:42:27.420 but there was an increase

NOTE Confidence: 0.8369247

00:42:27.420 --> 00:42:29.210 in grade 3 acute toxicity,

NOTE Confidence: 0.8369247

00:42:29.210 --> 00:42:31.000 in the Hypo frac arm,

NOTE Confidence: 0.8369247

00:42:31.000 --> 00:42:33.488 so none of this has really LED for

NOTE Confidence: 0.8369247

00:42:33.488 --> 00:42:36.010 wide adoption of the of hypo frack in

NOTE Confidence: 0.8369247

00:42:36.010 --> 00:42:38.259 the setting of treating regional nodes

NOTE Confidence: 0.8369247

00:42:38.259 --> 00:42:40.669 or post mastectomy radiation therapy.

NOTE Confidence: 0.8369247

00:42:40.670 --> 00:42:42.578 At this point I have done

NOTE Confidence: 0.8369247

00:42:42.578 --> 00:42:44.600 it in very select patients.

NOTE Confidence: 0.8369247

00:42:44.600 --> 00:42:47.204 I think that the rest of our.

NOTE Confidence: 0.8369247

00:42:47.210 --> 00:42:49.802 Group has but it has not yet been

NOTE Confidence: 0.8369247

00:42:49.802 --> 00:42:52.251 adopted by the NCC N due to the
NOTE Confidence: 0.8369247

00:42:52.251 --> 00:42:54.289 paucity of data at this point.
NOTE Confidence: 0.8369247

00:42:54.290 --> 00:42:54.984 Although overtime,
NOTE Confidence: 0.8369247

00:42:54.984 --> 00:42:57.413 I'm sure that charm and fabric will
NOTE Confidence: 0.8369247

00:42:57.413 --> 00:42:59.449 provide us with a lot of information.
NOTE Confidence: 0.8805183

00:43:01.670 --> 00:43:04.724 OK. So, another way,
NOTE Confidence: 0.8805183

00:43:04.724 --> 00:43:06.914 besides shortening the treatment course
NOTE Confidence: 0.8805183

00:43:06.914 --> 00:43:10.113 in the number of visits is by decreasing
NOTE Confidence: 0.8805183

00:43:10.113 --> 00:43:13.149 the volume of tissue that we are treating.
NOTE Confidence: 0.8805183

00:43:13.150 --> 00:43:15.768 One way that's been around for awhile.
NOTE Confidence: 0.8805183

00:43:15.770 --> 00:43:18.008 Actually, you post all probably know,
NOTE Confidence: 0.8805183

00:43:18.010 --> 00:43:19.510 is accelerated partial breast
NOTE Confidence: 0.8805183

00:43:19.510 --> 00:43:20.260 irradiation therapy,
NOTE Confidence: 0.8805183

00:43:20.260 --> 00:43:22.420 and until recently there was a
NOTE Confidence: 0.8805183

00:43:22.420 --> 00:43:24.370 lack of longer term phase.
NOTE Confidence: 0.8805183

00:43:24.370 --> 00:43:26.884 Should say phase three up there

NOTE Confidence: 0.8805183

00:43:26.884 --> 00:43:29.582 scuse me of longer term phase

NOTE Confidence: 0.8805183

00:43:29.582 --> 00:43:31.917 three data supporting a PBI.

NOTE Confidence: 0.8805183

00:43:31.920 --> 00:43:34.917 We do have these two studies that I put

NOTE Confidence: 0.8805183

00:43:34.917 --> 00:43:37.898 up here that now are have randomized

NOTE Confidence: 0.8805183

00:43:37.898 --> 00:43:41.120 data giving us their ten year outcomes.

NOTE Confidence: 0.8805183

00:43:41.120 --> 00:43:42.143 The NSA BP.

NOTE Confidence: 0.8805183

00:43:42.143 --> 00:43:44.189 39 that looked at whole breast

NOTE Confidence: 0.8805183

00:43:44.189 --> 00:43:46.586 irradiation with standard frack versus

NOTE Confidence: 0.8805183

00:43:46.586 --> 00:43:48.578 accelerated partial breast irradiation

NOTE Confidence: 0.8805183

00:43:48.578 --> 00:43:51.034 therapy using either breakey therapy or

NOTE Confidence: 0.8805183

00:43:51.034 --> 00:43:53.920 external beam twice a day for 10 fractions.

NOTE Confidence: 0.8805183

00:43:53.920 --> 00:43:57.120 So patients would be done in a week.

NOTE Confidence: 0.8805183

00:43:57.120 --> 00:43:58.664 It's very interesting results,

NOTE Confidence: 0.8805183

00:43:58.664 --> 00:44:00.594 so they were really looking

NOTE Confidence: 0.8805183

00:44:00.594 --> 00:44:01.999 at in ipsilateral.

NOTE Confidence: 0.8805183

00:44:02.000 --> 00:44:03.275 Breast tumor recurrence.
NOTE Confidence: 0.8805183

00:44:03.275 --> 00:44:06.545 At 10 years it was found to be
NOTE Confidence: 0.8805183

00:44:06.545 --> 00:44:08.334 4% and the accelerated partial
NOTE Confidence: 0.8805183

00:44:08.334 --> 00:44:10.710 breast irradiation and 3% in the
NOTE Confidence: 0.8805183

00:44:10.710 --> 00:44:12.685 whole rest of radiation arm.
NOTE Confidence: 0.8805183

00:44:12.690 --> 00:44:15.066 But based on their statistical analysis,
NOTE Confidence: 0.8805183

00:44:15.070 --> 00:44:17.836 even though there's just that 1% difference,
NOTE Confidence: 0.8805183

00:44:17.836 --> 00:44:21.004 it did not meet the criteria for equivalence,
NOTE Confidence: 0.8805183

00:44:21.010 --> 00:44:23.722 so API was not bound to be equivalent
NOTE Confidence: 0.8805183

00:44:23.722 --> 00:44:26.550 to whole breast or radiation therapy.
NOTE Confidence: 0.8805183

00:44:26.550 --> 00:44:27.810 That being said,
NOTE Confidence: 0.8805183

00:44:27.810 --> 00:44:29.910 in the discussion the authors
NOTE Confidence: 0.8805183

00:44:29.910 --> 00:44:32.166 discuss how with that 1% difference
NOTE Confidence: 0.8805183

00:44:32.166 --> 00:44:34.030 in lower risk patients.
NOTE Confidence: 0.8805183

00:44:34.030 --> 00:44:36.851 This still does perhaps leave the door
NOTE Confidence: 0.8805183

00:44:36.851 --> 00:44:40.615 open for a PBI for for low risk patients.

NOTE Confidence: 0.8805183

00:44:40.620 --> 00:44:41.535 The Florence trial.

NOTE Confidence: 0.8805183

00:44:41.535 --> 00:44:43.670 He has gained a lot of attention

NOTE Confidence: 0.8805183

00:44:43.734 --> 00:44:45.954 and that has treated accelerated

NOTE Confidence: 0.8805183

00:44:45.954 --> 00:44:47.730 partial breast irradiation therapy.

NOTE Confidence: 0.8805183

00:44:47.730 --> 00:44:49.974 So when we're trading with accelerated

NOTE Confidence: 0.8805183

00:44:49.974 --> 00:44:51.470 partial breast radiation therapy,

NOTE Confidence: 0.8805183

00:44:51.470 --> 00:44:54.438 you probably all know that we are really

NOTE Confidence: 0.8805183

00:44:54.438 --> 00:44:55.982 concentrating the radiation therapy

NOTE Confidence: 0.8805183

00:44:55.982 --> 00:44:58.565 on the tumor bed and an expansion,

NOTE Confidence: 0.8805183

00:44:58.570 --> 00:45:00.440 and therefore we are leaving

NOTE Confidence: 0.8805183

00:45:00.440 --> 00:45:01.936 more of the well.

NOTE Confidence: 0.8805183

00:45:01.940 --> 00:45:03.870 We're leaving the uninvolved breast

NOTE Confidence: 0.8805183

00:45:03.870 --> 00:45:06.573 or a good portion of the uninvolved

NOTE Confidence: 0.8805183

00:45:06.573 --> 00:45:09.037 rest out of the high dose area.

NOTE Confidence: 0.8805183

00:45:09.040 --> 00:45:10.940 And by tightening our fields

NOTE Confidence: 0.8805183

00:45:10.940 --> 00:45:12.460 like this one can.
NOTE Confidence: 0.8805183

00:45:12.460 --> 00:45:15.260 Also.
NOTE Confidence: 0.8805183

00:45:15.260 --> 00:45:18.548 Less dose to the healthy tissues as well,
NOTE Confidence: 0.8805183

00:45:18.550 --> 00:45:21.208 so the Florence trial used accelerated
NOTE Confidence: 0.8805183

00:45:21.208 --> 00:45:22.980 partial breast radiation therapy
NOTE Confidence: 0.8805183

00:45:23.047 --> 00:45:24.955 30 Gray and five fractions using
NOTE Confidence: 0.8805183

00:45:24.955 --> 00:45:27.273 and I MRT approach versus whole
NOTE Confidence: 0.8805183

00:45:27.273 --> 00:45:29.229 breast and standard fractionation.
NOTE Confidence: 0.8805183

00:45:29.230 --> 00:45:32.518 So at 10 years with their randomized trial,
NOTE Confidence: 0.8805183

00:45:32.520 --> 00:45:34.986 there was no significant difference in
NOTE Confidence: 0.8805183

00:45:34.986 --> 00:45:36.630 ipsilateral breast tumor recurrence.
NOTE Confidence: 0.8805183

00:45:36.630 --> 00:45:39.507 It was 2.5% in the whole breast
NOTE Confidence: 0.8805183

00:45:39.507 --> 00:45:41.563 versus 3.7% in the accelerated
NOTE Confidence: 0.8805183

00:45:41.563 --> 00:45:43.207 partial breast irradiation therapy.
NOTE Confidence: 0.8805183

00:45:43.210 --> 00:45:45.670 But based on their statistical analysis,
NOTE Confidence: 0.8805183

00:45:45.670 --> 00:45:46.996 this was not.

NOTE Confidence: 0.8805183

00:45:46.996 --> 00:45:47.880 Statistically different,

NOTE Confidence: 0.8805183

00:45:47.880 --> 00:45:49.880 there was also significantly less

NOTE Confidence: 0.8805183

00:45:49.880 --> 00:45:52.959 acute in late term toxicity with the

NOTE Confidence: 0.8805183

00:45:52.959 --> 00:45:55.489 accelerated partial breast radiation therapy,

NOTE Confidence: 0.8805183

00:45:55.490 --> 00:45:57.944 so they partial breast irradiation therapy

NOTE Confidence: 0.8805183

00:45:57.944 --> 00:46:01.319 has made it into the national guidelines.

NOTE Confidence: 0.8805183

00:46:01.320 --> 00:46:04.449 It's been there for a little while,

NOTE Confidence: 0.8805183

00:46:04.450 --> 00:46:07.138 but on the most recent iteration,

NOTE Confidence: 0.8805183

00:46:07.140 --> 00:46:09.375 the Florence Regiment is listed

NOTE Confidence: 0.8805183

00:46:09.375 --> 00:46:11.163 as the preferred regimen,

NOTE Confidence: 0.8805183

00:46:11.170 --> 00:46:14.020 and it is recommended that the

NOTE Confidence: 0.8805183

00:46:14.020 --> 00:46:16.397 Astro guidelines where I've put

NOTE Confidence: 0.8805183

00:46:16.397 --> 00:46:17.969 a reference on here.

NOTE Confidence: 0.8805183

00:46:17.970 --> 00:46:21.018 As many of you may know,

NOTE Confidence: 0.8805183

00:46:21.020 --> 00:46:23.390 Astro has published guidelines regarding

NOTE Confidence: 0.8805183

00:46:23.390 --> 00:46:25.760 who is suitable for accelerated
NOTE Confidence: 0.8805183

00:46:25.826 --> 00:46:28.130 partial breast irradiation therapy,
NOTE Confidence: 0.8805183

00:46:28.130 --> 00:46:30.670 and there are three groups,
NOTE Confidence: 0.845531

00:46:30.670 --> 00:46:33.354 suitable cautionary and basically
NOTE Confidence: 0.845531

00:46:33.354 --> 00:46:36.038 do not treat unsuitable.
NOTE Confidence: 0.845531

00:46:36.040 --> 00:46:38.735 So here at Yale, we are working.
NOTE Confidence: 0.845531

00:46:38.740 --> 00:46:40.670 We do treat accelerated partial
NOTE Confidence: 0.845531

00:46:40.670 --> 00:46:41.828 breast irradiation therapy.
NOTE Confidence: 0.845531

00:46:41.830 --> 00:46:44.525 Although not very often for suitable cases,
NOTE Confidence: 0.845531

00:46:44.530 --> 00:46:46.938 just because the hypo frack is so
NOTE Confidence: 0.845531

00:46:46.938 --> 00:46:49.729 works out so well and you're really
NOTE Confidence: 0.845531

00:46:49.729 --> 00:46:52.243 not saving the patient much time.
NOTE Confidence: 0.845531

00:46:52.250 --> 00:46:54.284 However, we are in the process
NOTE Confidence: 0.845531

00:46:54.284 --> 00:46:56.509 of gearing up to start offering
NOTE Confidence: 0.845531

00:46:56.509 --> 00:46:58.494 treatment in the manner that
NOTE Confidence: 0.845531

00:46:58.494 --> 00:47:01.129 was used in the Florence trial,

NOTE Confidence: 0.845531
00:47:01.130 --> 00:47:03.476 the 6th grade Perfection Times 5
NOTE Confidence: 0.845531
00:47:03.476 --> 00:47:06.249 fractions and that was every other day.
NOTE Confidence: 0.845531
00:47:06.250 --> 00:47:07.042 Using I MRT.
NOTE Confidence: 0.845531
00:47:07.042 --> 00:47:08.890 So we are working with our physics
NOTE Confidence: 0.845531
00:47:08.947 --> 00:47:10.903 department and doing all the safety
NOTE Confidence: 0.845531
00:47:10.903 --> 00:47:12.961 checks and getting our policies and
NOTE Confidence: 0.845531
00:47:12.961 --> 00:47:15.404 procedures in place to start adopting that.
NOTE Confidence: 0.845531
00:47:15.410 --> 00:47:18.570 But we are not on line for that just yet.
NOTE Confidence: 0.81489193
00:47:21.220 --> 00:47:23.950 So what about decreasing our the
NOTE Confidence: 0.81489193
00:47:23.950 --> 00:47:27.475 amount of tissue that's treated in the
NOTE Confidence: 0.81489193
00:47:27.475 --> 00:47:30.170 setting of regional nodal irradiation?
NOTE Confidence: 0.81489193
00:47:30.170 --> 00:47:32.627 Well, there is some ongoing trials that
NOTE Confidence: 0.81489193
00:47:32.627 --> 00:47:35.329 we read before this is widely adopted
NOTE Confidence: 0.81489193
00:47:35.329 --> 00:47:37.705 to start eliminating our nodal fields.
NOTE Confidence: 0.81489193
00:47:37.710 --> 00:47:40.014 In certain cases we need some
NOTE Confidence: 0.81489193

00:47:40.014 --> 00:47:41.860 more guidance on that in,
NOTE Confidence: 0.81489193

00:47:41.860 --> 00:47:43.740 especially in the post mastectomy
NOTE Confidence: 0.81489193

00:47:43.740 --> 00:47:45.622 setting you know who who,
NOTE Confidence: 0.81489193

00:47:45.622 --> 00:47:47.512 when the patients have involved,
NOTE Confidence: 0.81489193

00:47:47.512 --> 00:47:50.284 knows, who can we really skip treating
NOTE Confidence: 0.81489193

00:47:50.284 --> 00:47:52.904 the regional nodes and still ensure
NOTE Confidence: 0.81489193

00:47:52.904 --> 00:47:55.279 that we have excellent outcomes?
NOTE Confidence: 0.81489193

00:47:55.280 --> 00:47:58.136 This trial, the NSA BP 51 it was
NOTE Confidence: 0.81489193

00:47:58.136 --> 00:48:01.455 open at Yale for a while and it
NOTE Confidence: 0.81489193

00:48:01.455 --> 00:48:04.119 was very challenging to accrue to,
NOTE Confidence: 0.81489193

00:48:04.120 --> 00:48:06.948 and it was nationally quite difficult to
NOTE Confidence: 0.81489193

00:48:06.948 --> 00:48:10.555 accrue too so really long trial may not name.
NOTE Confidence: 0.81489193

00:48:10.560 --> 00:48:14.580 Maybe that was part of it that it's a bait.
NOTE Confidence: 0.81489193

00:48:14.580 --> 00:48:16.986 You can read the name there,
NOTE Confidence: 0.81489193

00:48:16.990 --> 00:48:19.412 but basically what it does is it
NOTE Confidence: 0.81489193

00:48:19.412 --> 00:48:21.523 took patients who had pathologically

NOTE Confidence: 0.81489193

00:48:21.523 --> 00:48:23.020 proven by biopsy,

NOTE Confidence: 0.81489193

00:48:23.020 --> 00:48:25.310 axillary nodal involvement who received.

NOTE Confidence: 0.81489193

00:48:25.310 --> 00:48:26.276 Neoadjuvant chemotherapy.

NOTE Confidence: 0.81489193

00:48:26.276 --> 00:48:28.691 Then they would undergo either

NOTE Confidence: 0.81489193

00:48:28.691 --> 00:48:30.140 lumpectomy or mastectomy.

NOTE Confidence: 0.81489193

00:48:30.140 --> 00:48:32.550 And they could have Sentinel

NOTE Confidence: 0.81489193

00:48:32.550 --> 00:48:33.996 lymph node biopsy,

NOTE Confidence: 0.81489193

00:48:34.000 --> 00:48:36.290 Sentinel lymph node biopsy converted

NOTE Confidence: 0.81489193

00:48:36.290 --> 00:48:39.320 to XI section or XI section.

NOTE Confidence: 0.81489193

00:48:39.320 --> 00:48:42.616 But if they were converted to YPN 0

NOTE Confidence: 0.81489193

00:48:42.616 --> 00:48:45.598 then these patients were eligible.

NOTE Confidence: 0.81489193

00:48:45.600 --> 00:48:46.065 Remember,

NOTE Confidence: 0.81489193

00:48:46.065 --> 00:48:48.855 they had to have T1T3 pathologically

NOTE Confidence: 0.81489193

00:48:48.855 --> 00:48:50.910 proven N1 disease upfront,

NOTE Confidence: 0.81489193

00:48:50.910 --> 00:48:51.942 neoadjuvant, chemo,

NOTE Confidence: 0.81489193

00:48:51.942 --> 00:48:55.554 and then rendered YPNO in the axilla.
NOTE Confidence: 0.81489193

00:48:55.560 --> 00:48:58.098 So arm one was omission of
NOTE Confidence: 0.81489193

00:48:58.098 --> 00:48:59.790 regional nodal irradiation therapy,
NOTE Confidence: 0.81489193

00:48:59.790 --> 00:49:02.244 with so lumpectomy patients would only
NOTE Confidence: 0.81489193

00:49:02.244 --> 00:49:04.870 have the breast treated high tangents.
NOTE Confidence: 0.81489193

00:49:04.870 --> 00:49:05.714 Not allowed.
NOTE Confidence: 0.81489193

00:49:05.714 --> 00:49:07.824 Mastectomy would have no radiation.
NOTE Confidence: 0.81489193

00:49:07.830 --> 00:49:08.739 An arm two,
NOTE Confidence: 0.81489193

00:49:08.739 --> 00:49:11.434 which was I call it the yes regional
NOTE Confidence: 0.81489193

00:49:11.434 --> 00:49:13.884 nodal radiation therapy would treat
NOTE Confidence: 0.81489193

00:49:13.884 --> 00:49:17.304 in though that arm the whole breast
NOTE Confidence: 0.81489193

00:49:17.304 --> 00:49:20.058 and the chest wall would receive
NOTE Confidence: 0.81489193

00:49:20.058 --> 00:49:21.774 radiation plus regional nodal
NOTE Confidence: 0.81489193

00:49:21.774 --> 00:49:23.864 irradiation which was defined on
NOTE Confidence: 0.81489193

00:49:23.864 --> 00:49:26.519 the trial as internal mammary nodes.
NOTE Confidence: 0.81489193

00:49:26.520 --> 00:49:29.568 Une dissected axilla.

NOTE Confidence: 0.81489193

00:49:29.570 --> 00:49:30.434 And the superclass.

NOTE Confidence: 0.81489193

00:49:30.434 --> 00:49:32.162 So you're either getting a very

NOTE Confidence: 0.81489193

00:49:32.162 --> 00:49:34.308 limited radiation or basically the full boat.

NOTE Confidence: 0.81489193

00:49:34.310 --> 00:49:35.930 And I think that some people

NOTE Confidence: 0.81489193

00:49:35.930 --> 00:49:38.337 when I mean I know when I talk

NOTE Confidence: 0.81489193

00:49:38.337 --> 00:49:40.227 to patients about the trial one,

NOTE Confidence: 0.81489193

00:49:40.230 --> 00:49:41.414 either want they either

NOTE Confidence: 0.81489193

00:49:41.414 --> 00:49:43.190 wanted one arm or the other,

NOTE Confidence: 0.81489193

00:49:43.190 --> 00:49:45.110 and many people were reluctant to let go

NOTE Confidence: 0.81489193

00:49:45.110 --> 00:49:47.327 of the regional nodal radiation therapy.

NOTE Confidence: 0.81489193

00:49:47.330 --> 00:49:49.682 So I personally was not able to accrue

NOTE Confidence: 0.81489193

00:49:49.682 --> 00:49:52.359 anyone to the trial when I spoke with them.

NOTE Confidence: 0.81489193

00:49:52.360 --> 00:49:54.138 And I think that that was a

NOTE Confidence: 0.81489193

00:49:54.138 --> 00:49:55.620 problem kind of nationwide,

NOTE Confidence: 0.81489193

00:49:55.620 --> 00:49:57.390 but it's now closed to accrual.

NOTE Confidence: 0.81489193

00:49:57.390 --> 00:49:58.870 They've obviously reached their goal,

NOTE Confidence: 0.81489193

00:49:58.870 --> 00:50:00.118 which is great.

NOTE Confidence: 0.81489193

00:50:00.118 --> 00:50:03.030 And I am not aware of any

NOTE Confidence: 0.81489193

00:50:03.137 --> 00:50:06.487 preliminary results at this time.

NOTE Confidence: 0.81489193

00:50:06.490 --> 00:50:08.518 Another trial this is open at

NOTE Confidence: 0.81489193

00:50:08.518 --> 00:50:11.310 Yale and we are actively accruing.

NOTE Confidence: 0.81489193

00:50:11.310 --> 00:50:14.012 So please we would love to have

NOTE Confidence: 0.81489193

00:50:14.012 --> 00:50:16.139 your patience on this trial.

NOTE Confidence: 0.81489193

00:50:16.140 --> 00:50:18.947 The MA 39 also called Taylor RT.

NOTE Confidence: 0.81489193

00:50:18.950 --> 00:50:20.066 This is different.

NOTE Confidence: 0.81489193

00:50:20.066 --> 00:50:22.298 This is not really looking at

NOTE Confidence: 0.81489193

00:50:22.298 --> 00:50:23.780 response to chemotherapy.

NOTE Confidence: 0.81489193

00:50:23.780 --> 00:50:26.288 It is looking at omitting regional

NOTE Confidence: 0.81489193

00:50:26.288 --> 00:50:28.370 nodal radiation therapy for patients

NOTE Confidence: 0.81489193

00:50:28.370 --> 00:50:30.771 who have a more favorable cancer as

NOTE Confidence: 0.81489193

00:50:30.771 --> 00:50:33.420 far as biomarker risk is concerned.

NOTE Confidence: 0.81489193

00:50:33.420 --> 00:50:35.940 So the and the inclusion criteria.

NOTE Confidence: 0.81489193

00:50:35.940 --> 00:50:37.428 Changed extremely recently within

NOTE Confidence: 0.81489193

00:50:37.428 --> 00:50:38.916 the last eight weeks.

NOTE Confidence: 0.81489193

00:50:38.920 --> 00:50:41.158 Initially when we open the trial,

NOTE Confidence: 0.81489193

00:50:41.160 --> 00:50:43.398 only T1 or T2 patients were

NOTE Confidence: 0.81489193

00:50:43.398 --> 00:50:44.890 allowed on the trial,

NOTE Confidence: 0.85038424

00:50:44.890 --> 00:50:47.874 but now patients with T3 disease are allowed.

NOTE Confidence: 0.85038424

00:50:47.880 --> 00:50:50.680 Also, a very recent change and what the

NOTE Confidence: 0.85038424

00:50:50.680 --> 00:50:53.100 definition of low volume nodal disease.

NOTE Confidence: 0.85038424

00:50:53.100 --> 00:50:56.076 What is this? Is the updated version here,

NOTE Confidence: 0.85038424

00:50:56.080 --> 00:50:58.090 so if the patient had lumpectomy

NOTE Confidence: 0.85038424

00:50:58.090 --> 00:51:00.190 or mastectomy an axillary dissection,

NOTE Confidence: 0.85038424

00:51:00.190 --> 00:51:02.416 they can have one to three positive

NOTE Confidence: 0.85038424

00:51:02.416 --> 00:51:04.385 nodes if they have lumpectomy

NOTE Confidence: 0.85038424

00:51:04.385 --> 00:51:06.285 or mastectomy plus Sentinel.

NOTE Confidence: 0.85038424

00:51:06.290 --> 00:51:07.366 Lymph node biopsy only.
NOTE Confidence: 0.85038424

00:51:07.366 --> 00:51:10.108 They can now have one to two positive nodes.
NOTE Confidence: 0.85038424

00:51:10.110 --> 00:51:11.262 That's a change.
NOTE Confidence: 0.85038424

00:51:11.262 --> 00:51:14.464 And a huge change is that the archetype
NOTE Confidence: 0.85038424

00:51:14.464 --> 00:51:17.446 score when this trial opened had to
NOTE Confidence: 0.85038424

00:51:17.446 --> 00:51:20.639 be 17 or less to enroll patients.
NOTE Confidence: 0.85038424

00:51:20.640 --> 00:51:22.974 Now patients with an archetype score
NOTE Confidence: 0.85038424

00:51:22.974 --> 00:51:25.938 of 25 or less our are eligible.
NOTE Confidence: 0.85038424

00:51:25.940 --> 00:51:27.980 They cannot have had neoadjuvant
NOTE Confidence: 0.85038424

00:51:27.980 --> 00:51:28.388 chemotherapy.
NOTE Confidence: 0.85038424

00:51:28.390 --> 00:51:30.682 They've also made it amendment allowing
NOTE Confidence: 0.85038424

00:51:30.682 --> 00:51:33.279 for they are allowing for neoadjuvant.
NOTE Confidence: 0.85038424

00:51:33.280 --> 00:51:35.728 I should have said Neo there,
NOTE Confidence: 0.85038424

00:51:35.730 --> 00:51:36.966 excuse me.
NOTE Confidence: 0.85038424

00:51:36.966 --> 00:51:40.674 Neoadjuvant endocrine therapy is now allowed.
NOTE Confidence: 0.85038424

00:51:40.680 --> 00:51:41.874 Agement chimos allowed.

NOTE Confidence: 0.85038424

00:51:41.874 --> 00:51:43.864 Agement endocrine therapy is allowed.

NOTE Confidence: 0.85038424

00:51:43.870 --> 00:51:45.064 Patients are randomized,

NOTE Confidence: 0.85038424

00:51:45.064 --> 00:51:47.054 similar to the other one.

NOTE Confidence: 0.85038424

00:51:47.060 --> 00:51:49.060 The no regional nodal radiation

NOTE Confidence: 0.85038424

00:51:49.060 --> 00:51:50.660 arm that no RNI,

NOTE Confidence: 0.85038424

00:51:50.660 --> 00:51:53.860 so those patients would have to have whole

NOTE Confidence: 0.85038424

00:51:53.860 --> 00:51:56.238 breast irradiation if they had lumpectomy,

NOTE Confidence: 0.85038424

00:51:56.240 --> 00:51:57.434 but no radiation.

NOTE Confidence: 0.85038424

00:51:57.434 --> 00:51:59.424 If mastectomy and then yes,

NOTE Confidence: 0.85038424

00:51:59.430 --> 00:52:00.108 are in,

NOTE Confidence: 0.85038424

00:52:00.108 --> 00:52:02.142 I would be whole breast irradiation

NOTE Confidence: 0.85038424

00:52:02.142 --> 00:52:04.264 or chest wall irradiation depending

NOTE Confidence: 0.85038424

00:52:04.264 --> 00:52:07.006 on their surgery and regional nodal.

NOTE Confidence: 0.85038424

00:52:07.010 --> 00:52:09.010 And like the other trial,

NOTE Confidence: 0.85038424

00:52:09.010 --> 00:52:11.470 regional nodal means internal mammary nodes.

NOTE Confidence: 0.85038424

00:52:11.470 --> 00:52:14.848 Une dissected axela in the superclass.
NOTE Confidence: 0.85038424

00:52:14.850 --> 00:52:17.340 And the primary endpoint is breast
NOTE Confidence: 0.85038424

00:52:17.340 --> 00:52:19.000 cancer recurrence free interval,
NOTE Confidence: 0.85038424

00:52:19.000 --> 00:52:21.905 but of course they're over looking at.
NOTE Confidence: 0.85038424

00:52:21.910 --> 00:52:23.570 You know, local recurrence,
NOTE Confidence: 0.85038424

00:52:23.570 --> 00:52:25.228 distant recurrence, side effects,
NOTE Confidence: 0.85038424

00:52:25.228 --> 00:52:27.298 and lymphoedema risk as well.
NOTE Confidence: 0.8390835

00:52:30.050 --> 00:52:33.794 So the last way to limit or deescalate the
NOTE Confidence: 0.8390835

00:52:33.794 --> 00:52:36.607 radiation therapy is to just not do it.
NOTE Confidence: 0.8390835

00:52:36.610 --> 00:52:38.926 That's the kind of most straightforward.
NOTE Confidence: 0.8390835

00:52:38.930 --> 00:52:42.278 I think that a lot of us now are
NOTE Confidence: 0.8390835

00:52:42.278 --> 00:52:45.099 familiar with the CL GB 9343 trial.
NOTE Confidence: 0.8390835

00:52:45.100 --> 00:52:46.644 I can, you know,
NOTE Confidence: 0.8390835

00:52:46.644 --> 00:52:48.960 memorize this one in my sleep.
NOTE Confidence: 0.8390835

00:52:48.960 --> 00:52:50.775 Those patients were 70 years
NOTE Confidence: 0.8390835

00:52:50.775 --> 00:52:53.210 of age or older T1 tumors.

NOTE Confidence: 0.8390835

00:52:53.210 --> 00:52:55.015 They could be clinically or

NOTE Confidence: 0.8390835

00:52:55.015 --> 00:52:56.459 pathologically node negative had

NOTE Confidence: 0.8390835

00:52:56.459 --> 00:52:58.978 to be hormone receptor positive and

NOTE Confidence: 0.8390835

00:52:58.978 --> 00:53:00.658 lumpectomy with negative margins.

NOTE Confidence: 0.8390835

00:53:00.660 --> 00:53:03.369 I put the negative margins in red

NOTE Confidence: 0.8390835

00:53:03.369 --> 00:53:05.450 because for this trial negative

NOTE Confidence: 0.8390835

00:53:05.450 --> 00:53:08.794 margins was defined as no tumor on Inc.

NOTE Confidence: 0.8390835

00:53:08.800 --> 00:53:10.785 The patients were randomized to

NOTE Confidence: 0.8390835

00:53:10.785 --> 00:53:13.325 tamoxifen alone or whole breasts or

NOTE Confidence: 0.8390835

00:53:13.325 --> 00:53:15.745 radiation therapy using a moderate

NOTE Confidence: 0.8390835

00:53:15.745 --> 00:53:17.681 hypofractionation course plus tamoxifen.

NOTE Confidence: 0.8390835

00:53:17.690 --> 00:53:21.090 At 10 years you could see the overall

NOTE Confidence: 0.8390835

00:53:21.090 --> 00:53:24.286 survival was the same 67% in Tamar T

NOTE Confidence: 0.8390835

00:53:24.286 --> 00:53:27.630 and 66% in the Tam arm with a lot of

NOTE Confidence: 0.8390835

00:53:27.630 --> 00:53:30.252 those deaths being non breast cancer

NOTE Confidence: 0.8390835

00:53:30.252 --> 00:53:33.114 deaths and freedom from local regional
NOTE Confidence: 0.8390835

00:53:33.194 --> 00:53:36.640 recurrence was 98% in the Tamar TR man,
NOTE Confidence: 0.8390835

00:53:36.640 --> 00:53:39.112 90% in the Tamar that actually
NOTE Confidence: 0.8390835

00:53:39.112 --> 00:53:40.348 was statistically significant,
NOTE Confidence: 0.8390835

00:53:40.350 --> 00:53:42.285 there was a statistically significant
NOTE Confidence: 0.8390835

00:53:42.285 --> 00:53:45.225 reduction in the risk of local regional
NOTE Confidence: 0.8390835

00:53:45.225 --> 00:53:48.033 occurrence with the radiation being provided.
NOTE Confidence: 0.8390835

00:53:48.040 --> 00:53:49.850 So you might say, well,
NOTE Confidence: 0.8390835

00:53:49.850 --> 00:53:52.022 this trial should support us doing
NOTE Confidence: 0.8390835

00:53:52.022 --> 00:53:52.746 the radiation,
NOTE Confidence: 0.8390835

00:53:52.750 --> 00:53:54.795 but because the overall survival
NOTE Confidence: 0.8390835

00:53:54.795 --> 00:53:56.840 was not different and although
NOTE Confidence: 0.8390835

00:53:56.914 --> 00:53:58.540 I don't have it up there,
NOTE Confidence: 0.8390835

00:53:58.540 --> 00:54:00.712 the very low rate of distant
NOTE Confidence: 0.8390835

00:54:00.712 --> 00:54:02.160 recurrence was no different.
NOTE Confidence: 0.8390835

00:54:02.160 --> 00:54:03.604 The breast cancer specific

NOTE Confidence: 0.8390835

00:54:03.604 --> 00:54:05.048 mortality was not different,

NOTE Confidence: 0.8390835

00:54:05.050 --> 00:54:07.210 so the radiation was not doing

NOTE Confidence: 0.8390835

00:54:07.210 --> 00:54:09.040 anything to prevent those more.

NOTE Confidence: 0.8390835

00:54:09.040 --> 00:54:11.206 One could argue more meaningful outcomes.

NOTE Confidence: 0.8390835

00:54:11.210 --> 00:54:12.164 So this could.

NOTE Confidence: 0.8390835

00:54:12.164 --> 00:54:14.390 This is used for two in support

NOTE Confidence: 0.8390835

00:54:14.466 --> 00:54:16.646 of omitting radiation therapy for

NOTE Confidence: 0.8390835

00:54:16.646 --> 00:54:18.826 women that meet the criteria.

NOTE Confidence: 0.8390835

00:54:18.830 --> 00:54:21.377 If I see patients and I have a 71

NOTE Confidence: 0.8390835

00:54:21.377 --> 00:54:23.824 year old patient who is very who I

NOTE Confidence: 0.8390835

00:54:23.824 --> 00:54:26.046 feel has a life expectancy exceeding

NOTE Confidence: 0.8390835

00:54:26.046 --> 00:54:29.307 10 years or then we talk about hey,

NOTE Confidence: 0.8390835

00:54:29.307 --> 00:54:31.666 maybe we should do the radiation so.

NOTE Confidence: 0.8390835

00:54:31.670 --> 00:54:33.980 But it is good fodder for discussion

NOTE Confidence: 0.8390835

00:54:33.980 --> 00:54:36.832 and an it can help to find those

NOTE Confidence: 0.8390835

00:54:36.832 --> 00:54:39.745 patients for whom a mission of radiation

NOTE Confidence: 0.8390835

00:54:39.745 --> 00:54:42.355 therapy would be certainly acceptable.

NOTE Confidence: 0.8390835

00:54:42.360 --> 00:54:42.678 Also,

NOTE Confidence: 0.8390835

00:54:42.678 --> 00:54:44.268 patients are not going to

NOTE Confidence: 0.8390835

00:54:44.268 --> 00:54:45.540 take the endocrine therapy.

NOTE Confidence: 0.8390835

00:54:45.540 --> 00:54:48.150 They really should get the radiation.

NOTE Confidence: 0.8390835

00:54:48.150 --> 00:54:49.554 Prime two is similar.

NOTE Confidence: 0.8390835

00:54:49.554 --> 00:54:52.107 It's a little bit behind as far

NOTE Confidence: 0.8390835

00:54:52.107 --> 00:54:54.339 as how long it's been accruing

NOTE Confidence: 0.8390835

00:54:54.339 --> 00:54:56.179 and following out the data.

NOTE Confidence: 0.8390835

00:54:56.180 --> 00:54:58.735 The women can be 65 or older,

NOTE Confidence: 0.8390835

00:54:58.740 --> 00:55:00.930 T2 tumors up to three CM.

NOTE Confidence: 0.8390835

00:55:00.930 --> 00:55:02.502 They must have pathologically

NOTE Confidence: 0.8390835

00:55:02.502 --> 00:55:04.467 negative nodes with Sentinel node

NOTE Confidence: 0.8390835

00:55:04.467 --> 00:55:06.682 biopsy or XI section hormone receptor

NOTE Confidence: 0.8390835

00:55:06.682 --> 00:55:08.829 positive and their definition of a

NOTE Confidence: 0.8390835

00:55:08.829 --> 00:55:10.419 negative margin is 1 millimeter.

NOTE Confidence: 0.8390835

00:55:10.420 --> 00:55:12.616 They live had some limits that

NOTE Confidence: 0.8390835

00:55:12.616 --> 00:55:14.799 the CL GB trial did not.

NOTE Confidence: 0.8390835

00:55:14.800 --> 00:55:18.076 The tumor could be grade 3 or have elvii,

NOTE Confidence: 0.8390835

00:55:18.080 --> 00:55:19.990 but you could not have.

NOTE Confidence: 0.8390835

00:55:19.990 --> 00:55:22.096 Both an once again must have

NOTE Confidence: 0.8390835

00:55:22.096 --> 00:55:24.280 adequate their Bay and we see

NOTE Confidence: 0.8390835

00:55:24.280 --> 00:55:26.398 similar results at the five years.

NOTE Confidence: 0.8390835

00:55:26.400 --> 00:55:28.444 It almost mirrored the CLG be at

NOTE Confidence: 0.8390835

00:55:28.444 --> 00:55:30.241 the five years where ipsilateral

NOTE Confidence: 0.8390835

00:55:30.241 --> 00:55:32.376 breast tumor recurrence was around

NOTE Confidence: 0.8390835

00:55:32.376 --> 00:55:34.940 1% in the radiation arm and 4%

NOTE Confidence: 0.8390835

00:55:34.940 --> 00:55:37.243 in the no radiation arm with no

NOTE Confidence: 0.8390835

00:55:37.243 --> 00:55:38.860 difference in overall survival.

NOTE Confidence: 0.8390835

00:55:38.860 --> 00:55:40.440 There was a recent update

NOTE Confidence: 0.8390835

00:55:40.440 --> 00:55:42.020 at the San Antonio Breast
NOTE Confidence: 0.82080436

00:55:42.087 --> 00:55:44.294 Conference, however, that paper has
NOTE Confidence: 0.82080436

00:55:44.294 --> 00:55:46.199 not followed showing similar results
NOTE Confidence: 0.82080436

00:55:46.199 --> 00:55:49.142 as CLG be at 10 years with ipsilateral
NOTE Confidence: 0.82080436

00:55:49.142 --> 00:55:50.879 breast tumor recurrence around 10.
NOTE Confidence: 0.82080436

00:55:50.880 --> 00:55:54.520 In the know in the, I miss those up in
NOTE Confidence: 0.82080436

00:55:54.520 --> 00:55:58.490 the no RT arm and then .9% in the RT arm.
NOTE Confidence: 0.82080436

00:55:58.490 --> 00:56:00.970 So I think that Prime 2 once
NOTE Confidence: 0.82080436

00:56:00.970 --> 00:56:02.746 that paper comes out,
NOTE Confidence: 0.82080436

00:56:02.750 --> 00:56:05.518 you know we may start offering for younger
NOTE Confidence: 0.82080436

00:56:05.518 --> 00:56:08.317 women or women with some larger tumors.
NOTE Confidence: 0.82080436

00:56:08.320 --> 00:56:11.328 Omission of radiation therapy.
NOTE Confidence: 0.82080436

00:56:11.330 --> 00:56:14.048 Now this is my last slide before I get
NOTE Confidence: 0.82080436

00:56:14.048 --> 00:56:16.666 into the thank yous in the summaries,
NOTE Confidence: 0.82080436

00:56:16.670 --> 00:56:18.340 and these are trials that
NOTE Confidence: 0.82080436

00:56:18.340 --> 00:56:20.010 I'm not that familiar with.

NOTE Confidence: 0.82080436

00:56:20.010 --> 00:56:21.680 To be frank with you,

NOTE Confidence: 0.82080436

00:56:21.680 --> 00:56:24.018 there seemed to be more surgical trials,

NOTE Confidence: 0.82080436

00:56:24.020 --> 00:56:26.024 but I thought they were worth

NOTE Confidence: 0.82080436

00:56:26.024 --> 00:56:27.026 just springing up.

NOTE Confidence: 0.82080436

00:56:27.030 --> 00:56:29.694 We have the comet trial open at Yale.

NOTE Confidence: 0.82080436

00:56:29.700 --> 00:56:31.370 The Pi is doctor Golshan,

NOTE Confidence: 0.82080436

00:56:31.370 --> 00:56:33.368 and that if I'm understanding correctly,

NOTE Confidence: 0.82080436

00:56:33.370 --> 00:56:33.998 looks at.

NOTE Confidence: 0.82080436

00:56:33.998 --> 00:56:35.882 You know what's considered a lower

NOTE Confidence: 0.82080436

00:56:35.882 --> 00:56:38.521 risk DCIS grade one and grade two and

NOTE Confidence: 0.82080436

00:56:38.521 --> 00:56:40.245 looking at endocrine therapy alone

NOTE Confidence: 0.82080436

00:56:40.245 --> 00:56:42.387 with surveillance in lieu of surgery,

NOTE Confidence: 0.82080436

00:56:42.390 --> 00:56:43.080 an obviously,

NOTE Confidence: 0.82080436

00:56:43.080 --> 00:56:44.805 if we don't do surgery.

NOTE Confidence: 0.82080436

00:56:44.810 --> 00:56:46.658 We're not coming to the radiation,

NOTE Confidence: 0.82080436

00:56:46.660 --> 00:56:48.982 so in a way this would be part of
NOTE Confidence: 0.82080436

00:56:48.982 --> 00:56:50.713 omitting radiation and the Lord
NOTE Confidence: 0.82080436

00:56:50.713 --> 00:56:52.819 trial is somewhat similar as well.
NOTE Confidence: 0.82080436

00:56:52.820 --> 00:56:53.928 I'm for my homework.
NOTE Confidence: 0.82080436

00:56:53.928 --> 00:56:56.343 I feel I need to learn a little
NOTE Confidence: 0.82080436

00:56:56.343 --> 00:56:58.048 bit more about these trials,
NOTE Confidence: 0.82080436

00:56:58.050 --> 00:57:00.514 so I'll give you guys some homework too,
NOTE Confidence: 0.82080436

00:57:00.520 --> 00:57:02.920 but I felt that it would not be
NOTE Confidence: 0.82080436

00:57:02.920 --> 00:57:04.519 complete without bringing it up,
NOTE Confidence: 0.82080436

00:57:04.520 --> 00:57:06.215 but I think it's interesting
NOTE Confidence: 0.82080436

00:57:06.215 --> 00:57:08.235 you know the question that seems
NOTE Confidence: 0.82080436

00:57:08.235 --> 00:57:10.069 to be being asked if I'm is,
NOTE Confidence: 0.82080436

00:57:10.070 --> 00:57:11.360 can screen detected low risk
NOTE Confidence: 0.82080436

00:57:11.360 --> 00:57:13.126 DCIS be managed by an active
NOTE Confidence: 0.82080436

00:57:13.126 --> 00:57:14.818 surveillance strategy rather than.
NOTE Confidence: 0.82080436

00:57:14.820 --> 00:57:15.176 Surgery.

NOTE Confidence: 0.82080436
00:57:15.176 --> 00:57:16.244 So in summary,
NOTE Confidence: 0.82080436
00:57:16.244 --> 00:57:18.929 we are seeing you know in real
NOTE Confidence: 0.82080436
00:57:18.929 --> 00:57:21.761 time and working further towards a
NOTE Confidence: 0.82080436
00:57:21.761 --> 00:57:24.116 deescalation of radiation therapy for
NOTE Confidence: 0.82080436
00:57:24.116 --> 00:57:26.261 appropriate patients in regard to
NOTE Confidence: 0.82080436
00:57:26.261 --> 00:57:28.705 the number of treatment visits infractions,
NOTE Confidence: 0.82080436
00:57:28.705 --> 00:57:30.630 the volume of tissue treated,
NOTE Confidence: 0.82080436
00:57:30.630 --> 00:57:32.166 and the appropriate emission
NOTE Confidence: 0.82080436
00:57:32.166 --> 00:57:33.318 of radiation therapy,
NOTE Confidence: 0.82080436
00:57:33.320 --> 00:57:35.776 and I'd like to thank you if you
NOTE Confidence: 0.82080436
00:57:35.776 --> 00:57:38.488 have any questions about any of the
NOTE Confidence: 0.82080436
00:57:38.488 --> 00:57:41.789 references or would like to discuss further.
NOTE Confidence: 0.82080436
00:57:41.790 --> 00:57:44.286 That's my contact info,
NOTE Confidence: 0.82080436
00:57:44.286 --> 00:57:44.910 thanks.
NOTE Confidence: 0.82080436
00:57:44.910 --> 00:57:45.280 Thank
NOTE Confidence: 0.85066074

00:57:45.280 --> 00:57:47.446 you so much Doctor Knowlton wow
NOTE Confidence: 0.85066074

00:57:47.446 --> 00:57:49.640 three really fantastic talks and I
NOTE Confidence: 0.85066074

00:57:49.640 --> 00:57:51.355 really appreciate everyone's time and
NOTE Confidence: 0.85066074

00:57:51.355 --> 00:57:53.645 effort in our audience for listening
NOTE Confidence: 0.85066074

00:57:53.645 --> 00:57:55.640 and putting in some questions.
NOTE Confidence: 0.85066074

00:57:55.640 --> 00:57:57.860 Please feel free to put in.
NOTE Confidence: 0.85066074

00:57:57.860 --> 00:58:00.576 More questions will be happy to answer
NOTE Confidence: 0.85066074

00:58:00.576 --> 00:58:03.934 them and while we wait for those I have
NOTE Confidence: 0.85066074

00:58:03.934 --> 00:58:06.370 a couple just listening to the talks.
NOTE Confidence: 0.85066074

00:58:06.370 --> 00:58:08.590 Maybe I'll start with Doctor, Doctor
NOTE Confidence: 0.85066074

00:58:08.590 --> 00:58:11.550 Hooley and a little bit about the contrast.
NOTE Confidence: 0.85066074

00:58:11.550 --> 00:58:13.770 Enhance image Ng for screening and
NOTE Confidence: 0.85066074

00:58:13.770 --> 00:58:16.438 how you can do that without contrast.
NOTE Confidence: 0.85066074

00:58:16.440 --> 00:58:19.560 Potentially I was.
NOTE Confidence: 0.85066074

00:58:19.560 --> 00:58:21.076 You know like more,
NOTE Confidence: 0.85066074

00:58:21.076 --> 00:58:23.846 but you know you know where we're

NOTE Confidence: 0.85066074

00:58:23.846 --> 00:58:26.723 at in the United States and maybe

NOTE Confidence: 0.85066074

00:58:26.723 --> 00:58:28.359 where we're going and

NOTE Confidence: 0.8140599

00:58:28.360 --> 00:58:30.760 be great to hear about that.

NOTE Confidence: 0.8140599

00:58:30.760 --> 00:58:33.455 Sure, so uh, MRI has shown that

NOTE Confidence: 0.8140599

00:58:33.455 --> 00:58:35.504 contrast enhanced screening has the

NOTE Confidence: 0.8140599

00:58:35.504 --> 00:58:37.560 highest cancer detection rate, right?

NOTE Confidence: 0.8140599

00:58:37.560 --> 00:58:39.560 So because cancers are vascular,

NOTE Confidence: 0.8140599

00:58:39.560 --> 00:58:41.008 and so you know,

NOTE Confidence: 0.8140599

00:58:41.008 --> 00:58:43.960 that's the way it's going with contrast,

NOTE Confidence: 0.8140599

00:58:43.960 --> 00:58:44.870 enhanced mammography,

NOTE Confidence: 0.8140599

00:58:44.870 --> 00:58:47.600 and even like in the breast

NOTE Confidence: 0.8140599

00:58:47.600 --> 00:58:49.460 imaging which all require.

NOTE Confidence: 0.8140599

00:58:49.460 --> 00:58:51.040 You know Ivy contrast.

NOTE Confidence: 0.8140599

00:58:51.040 --> 00:58:53.410 There are some studies looking at

NOTE Confidence: 0.8140599

00:58:53.481 --> 00:58:55.876 MRI and diffusion weighted images,

NOTE Confidence: 0.8140599

00:58:55.880 --> 00:58:58.448 or some people who say that
NOTE Confidence: 0.8140599

00:58:58.448 --> 00:59:00.160 they will never happen.
NOTE Confidence: 0.8140599

00:59:00.160 --> 00:59:02.746 Some people say that it will
NOTE Confidence: 0.8140599

00:59:02.746 --> 00:59:04.957 perhaps somehow happen that you
NOTE Confidence: 0.8140599

00:59:04.957 --> 00:59:07.007 could do MRI with diffusion,
NOTE Confidence: 0.8140599

00:59:07.010 --> 00:59:09.716 weighted imaging or some other technique
NOTE Confidence: 0.8140599

00:59:09.716 --> 00:59:12.331 that some really smart people are
NOTE Confidence: 0.8140599

00:59:12.331 --> 00:59:14.886 going to invent and figure out some
NOTE Confidence: 0.8140599

00:59:14.886 --> 00:59:18.037 some sequences where we can look at
NOTE Confidence: 0.8140599

00:59:18.037 --> 00:59:20.391 vascularity without Ivy contrast injection.
NOTE Confidence: 0.8140599

00:59:20.391 --> 00:59:23.096 Likewise, there are also some
NOTE Confidence: 0.8140599

00:59:23.096 --> 00:59:25.260 ultrasound products out there.
NOTE Confidence: 0.8140599

00:59:25.260 --> 00:59:27.176 Randy Butler participated in
NOTE Confidence: 0.8140599

00:59:27.176 --> 00:59:29.092 an auto acoustics ultrasound
NOTE Confidence: 0.8140599

00:59:29.092 --> 00:59:31.610 study that was the optoacoustic.
NOTE Confidence: 0.8140599

00:59:31.610 --> 00:59:33.482 Ultrasound equipment was just

NOTE Confidence: 0.8140599

00:59:33.482 --> 00:59:35.822 FDA approved last January and

NOTE Confidence: 0.8140599

00:59:35.822 --> 00:59:38.378 it's basically looking at heating

NOTE Confidence: 0.8140599

00:59:38.378 --> 00:59:40.390 lasers and heating lights.

NOTE Confidence: 0.8140599

00:59:40.390 --> 00:59:43.156 Laser light and heating the blood

NOTE Confidence: 0.8140599

00:59:43.156 --> 00:59:45.000 vessels and looking determining

NOTE Confidence: 0.8140599

00:59:45.080 --> 00:59:47.710 oxygenation within the blood vessels.

NOTE Confidence: 0.8140599

00:59:47.710 --> 00:59:51.189 And she published a couple of articles.

NOTE Confidence: 0.8140599

00:59:51.190 --> 00:59:51.964 Common radiology,

NOTE Confidence: 0.8140599

00:59:51.964 --> 00:59:54.286 which is our top journal showing

NOTE Confidence: 0.8140599

00:59:54.286 --> 00:59:55.928 the vascularity within tumors

NOTE Confidence: 0.8140599

00:59:55.928 --> 00:59:57.948 and superimposing that over a

NOTE Confidence: 0.8140599

00:59:57.948 --> 00:59:59.601 traditional ultrasound so that

NOTE Confidence: 0.8140599

00:59:59.601 --> 01:00:01.476 is vascular based without without

NOTE Confidence: 0.8140599

01:00:01.476 --> 01:00:04.710 contrast and there's some other.

NOTE Confidence: 0.8140599

01:00:04.710 --> 01:00:05.760 New ultrasound techniques.

NOTE Confidence: 0.8140599

01:00:05.760 --> 01:00:07.860 Also that are a little bit
NOTE Confidence: 0.8140599

01:00:07.860 --> 01:00:08.989 different that measure.
NOTE Confidence: 0.8140599

01:00:08.990 --> 01:00:11.138 They can measure vascularity as well,
NOTE Confidence: 0.8140599

01:00:11.140 --> 01:00:15.820 so those are the ones that right now are.
NOTE Confidence: 0.8140599

01:00:15.820 --> 01:00:17.748 Active you know, and we could see it.
NOTE Confidence: 0.8140599

01:00:17.750 --> 01:00:18.232 You know,
NOTE Confidence: 0.8140599

01:00:18.232 --> 01:00:20.160 in five or ten years or maybe sooner.
NOTE Confidence: 0.8140599

01:00:20.160 --> 01:00:20.642 Who knows.
NOTE Confidence: 0.8140599

01:00:20.642 --> 01:00:20.883 Well,
NOTE Confidence: 0.8140599

01:00:20.883 --> 01:00:22.570 actually opt acoustics is already out there,
NOTE Confidence: 0.8140599

01:00:22.570 --> 01:00:24.946 so you have to wear fancy
NOTE Confidence: 0.8140599

01:00:24.946 --> 01:00:26.530 space classes and stuff.
NOTE Confidence: 0.8140599

01:00:26.530 --> 01:00:26.920 Awesome,
NOTE Confidence: 0.8297859

01:00:26.920 --> 01:00:29.678 thank you a question for Doctor Abraham.
NOTE Confidence: 0.8297859

01:00:29.680 --> 01:00:32.263 What are some of the signs or
NOTE Confidence: 0.8297859

01:00:32.263 --> 01:00:34.277 indications that you know clinicians

NOTE Confidence: 0.8297859

01:00:34.277 --> 01:00:36.767 out there should be aware of,

NOTE Confidence: 0.8297859

01:00:36.770 --> 01:00:39.242 for you know for those that end up

NOTE Confidence: 0.8297859

01:00:39.242 --> 01:00:40.866 getting implants for reconstruction

NOTE Confidence: 0.8297859

01:00:40.866 --> 01:00:43.226 with the implant associated anaplastic

NOTE Confidence: 0.8297859

01:00:43.226 --> 01:00:46.710 large cell lymphoma, which is, you know,

NOTE Confidence: 0.8297859

01:00:46.710 --> 01:00:51.168 gotten some press in the last year or two.

NOTE Confidence: 0.8297859

01:00:51.170 --> 01:00:53.744 Dial yeah, so first of all the the presence

NOTE Confidence: 0.8297859

01:00:53.744 --> 01:00:56.332 of a textured implant which is obviously

NOTE Confidence: 0.8297859

01:00:56.332 --> 01:00:59.009 for somebody who's not a plastic surgeon.

NOTE Confidence: 0.8297859

01:00:59.010 --> 01:01:00.720 Maybe a little bit challenging.

NOTE Confidence: 0.8297859

01:01:00.720 --> 01:01:03.107 So if there's any concern you know,

NOTE Confidence: 0.8297859

01:01:03.110 --> 01:01:05.494 have the patient go back to the plastic

NOTE Confidence: 0.8297859

01:01:05.494 --> 01:01:08.221 surgeon so you know because we are at

NOTE Confidence: 0.8297859

01:01:08.221 --> 01:01:10.041 this point considering removing them

NOTE Confidence: 0.8297859

01:01:10.041 --> 01:01:12.645 sort of prophylactically and then any change,

NOTE Confidence: 0.8297859

01:01:12.650 --> 01:01:14.014 particularly a delayed ceroma,
NOTE Confidence: 0.8297859

01:01:14.014 --> 01:01:16.060 is what is classically referred to.
NOTE Confidence: 0.8297859

01:01:16.060 --> 01:01:18.230 So you know in in breast surgery
NOTE Confidence: 0.8297859

01:01:18.230 --> 01:01:19.810 seromas are not uncommon,
NOTE Confidence: 0.8297859

01:01:19.810 --> 01:01:22.323 but you know, at the time of
NOTE Confidence: 0.8297859

01:01:22.323 --> 01:01:24.180 surgery or immediately following.
NOTE Confidence: 0.8297859

01:01:24.180 --> 01:01:25.262 Postmastectomy radiation,
NOTE Confidence: 0.8297859

01:01:25.262 --> 01:01:29.590 but if there is a saroma that develops
NOTE Confidence: 0.8297859

01:01:29.680 --> 01:01:33.200 and delayed fashion to 310 years after an
NOTE Confidence: 0.8297859

01:01:33.200 --> 01:01:36.450 implant is placed at sign for concern.
NOTE Confidence: 0.8297859

01:01:36.450 --> 01:01:38.906 Thank you and maybe a last question.
NOTE Confidence: 0.8297859

01:01:38.910 --> 01:01:39.966 For doctor Knowlton.
NOTE Confidence: 0.8297859

01:01:39.966 --> 01:01:41.320 You know, I I,
NOTE Confidence: 0.8297859

01:01:41.320 --> 01:01:41.970 you know,
NOTE Confidence: 0.8297859

01:01:41.970 --> 01:01:44.380 often we see patients that are over
NOTE Confidence: 0.8297859

01:01:44.380 --> 01:01:47.061 the age of 70 small your positive

NOTE Confidence: 0.8297859

01:01:47.061 --> 01:01:49.231 breast cancers and you know with

NOTE Confidence: 0.8297859

01:01:49.231 --> 01:01:51.585 the LGB data that you showed you

NOTE Confidence: 0.8297859

01:01:51.585 --> 01:01:53.005 know undergoing breast conservation

NOTE Confidence: 0.8297859

01:01:53.005 --> 01:01:54.780 and forgoing radiation and you

NOTE Confidence: 0.8297859

01:01:54.835 --> 01:01:56.510 know doing anti estrogen therapy.

NOTE Confidence: 0.8297859

01:01:56.510 --> 01:01:58.792 But have you also seen the converse

NOTE Confidence: 0.8297859

01:01:58.792 --> 01:02:01.346 where some would just prefer to do a

NOTE Confidence: 0.8297859

01:02:01.346 --> 01:02:03.398 short course of radiation as opposed

NOTE Confidence: 0.8297859

01:02:03.398 --> 01:02:05.306 to putting themselves through?

NOTE Confidence: 0.8297859

01:02:05.310 --> 01:02:07.977 You know 5 plus years of anti

NOTE Confidence: 0.8297859

01:02:07.977 --> 01:02:08.739 estrogen therapy.

NOTE Confidence: 0.8297859

01:02:08.740 --> 01:02:11.503 I guess like if we bias a patient one

NOTE Confidence: 0.8297859

01:02:11.503 --> 01:02:14.428 way or the other when they get to you,

NOTE Confidence: 0.8297859

01:02:14.430 --> 01:02:15.378 how is that

NOTE Confidence: 0.8341066

01:02:15.380 --> 01:02:17.900 discussion go that I see this every week?

NOTE Confidence: 0.8341066

01:02:17.900 --> 01:02:19.480 I would say every week.
NOTE Confidence: 0.8341066

01:02:19.480 --> 01:02:22.324 So and you know, I listen to the patient.
NOTE Confidence: 0.8341066

01:02:22.330 --> 01:02:25.274 Many of them come in with some biases
NOTE Confidence: 0.8341066

01:02:25.274 --> 01:02:27.439 against the endocrine therapy.
NOTE Confidence: 0.8341066

01:02:27.440 --> 01:02:29.582 So that doctor Google doesn't do
NOTE Confidence: 0.8341066

01:02:29.582 --> 01:02:31.010 endocrine therapy much justice.
NOTE Confidence: 0.8341066

01:02:31.010 --> 01:02:33.714 So I talked to them about data showing
NOTE Confidence: 0.8341066

01:02:33.714 --> 01:02:36.302 that you know at least half of
NOTE Confidence: 0.8341066

01:02:36.302 --> 01:02:38.860 patients really don't get any of these.
NOTE Confidence: 0.8341066

01:02:38.860 --> 01:02:41.002 You know, joint aches or hot
NOTE Confidence: 0.8341066

01:02:41.002 --> 01:02:42.430 flashes and that's placebo.
NOTE Confidence: 0.8341066

01:02:42.430 --> 01:02:44.220 Patients got the same amount.
NOTE Confidence: 0.8341066

01:02:44.220 --> 01:02:47.076 Maybe they should just give it a try.
NOTE Confidence: 0.8341066

01:02:47.080 --> 01:02:49.334 I discussed the benefit of helping prevent
NOTE Confidence: 0.8341066

01:02:49.334 --> 01:02:51.720 breast cancer in the contralateral breast.
NOTE Confidence: 0.8341066

01:02:51.720 --> 01:02:54.219 An IV after I finish my spiel,

NOTE Confidence: 0.8341066

01:02:54.220 --> 01:02:56.852 it's attempting to get them to be

NOTE Confidence: 0.8341066

01:02:56.852 --> 01:02:58.559 more open to AI or.

NOTE Confidence: 0.8341066

01:02:58.560 --> 01:03:00.402 Tim, sometimes they will try it

NOTE Confidence: 0.8341066

01:03:00.402 --> 01:03:02.523 and we'll check back in with each

NOTE Confidence: 0.8341066

01:03:02.523 --> 01:03:04.179 other in two to three months.

NOTE Confidence: 0.8341066

01:03:04.180 --> 01:03:06.259 And if they're still taking it in,

NOTE Confidence: 0.8341066

01:03:06.260 --> 01:03:07.145 tolerating it super,

NOTE Confidence: 0.8341066

01:03:07.145 --> 01:03:08.325 or if they're not,

NOTE Confidence: 0.8341066

01:03:08.330 --> 01:03:10.650 then I have come back and done the

NOTE Confidence: 0.8341066

01:03:10.650 --> 01:03:12.468 radiation at that point or even,

NOTE Confidence: 0.8341066

01:03:12.470 --> 01:03:14.640 or some if they might give my

NOTE Confidence: 0.8341066

01:03:14.640 --> 01:03:16.505 initials feel an they still tell

NOTE Confidence: 0.8341066

01:03:16.505 --> 01:03:18.872 me I'm not by I'm not going to

NOTE Confidence: 0.8341066

01:03:18.872 --> 01:03:21.055 take it no matter what I say, OK,

NOTE Confidence: 0.8341066

01:03:21.055 --> 01:03:23.415 I hear you and then we would either.

NOTE Confidence: 0.8341066

01:03:23.420 --> 01:03:24.221 Do you know?
NOTE Confidence: 0.8341066

01:03:24.221 --> 01:03:25.823 Depending on the characteristics of the
NOTE Confidence: 0.8341066

01:03:25.823 --> 01:03:27.569 tumor and the patients comorbidities,
NOTE Confidence: 0.8341066

01:03:27.570 --> 01:03:30.530 we may do a fast regimen of once a week,
NOTE Confidence: 0.8341066

01:03:30.530 --> 01:03:32.898 or you may do the moderately hypo frack.
NOTE Confidence: 0.8341066

01:03:32.900 --> 01:03:33.554 The 15.
NOTE Confidence: 0.8341066

01:03:33.554 --> 01:03:35.189 Plus or minus a boost,
NOTE Confidence: 0.8341066

01:03:35.190 --> 01:03:37.353 so I certainly do see that that
NOTE Confidence: 0.8341066

01:03:37.353 --> 01:03:39.040 quite quite often every week.
NOTE Confidence: 0.8348222

01:03:39.860 --> 01:03:42.335 Ann and maybe just to finish off on on
NOTE Confidence: 0.8348222

01:03:42.335 --> 01:03:45.093 that when they you said maybe try anti
NOTE Confidence: 0.8348222

01:03:45.093 --> 01:03:47.159 estrogen therapy for a month or two.
NOTE Confidence: 0.8348222

01:03:47.160 --> 01:03:49.671 Is there kind of a cut off where you
NOTE Confidence: 0.8348222

01:03:49.671 --> 01:03:52.098 would say that if they went with
NOTE Confidence: 0.8348222

01:03:52.098 --> 01:03:54.095 anti estrogen and decided to stop
NOTE Confidence: 0.8348222

01:03:54.095 --> 01:03:56.271 and wanted to come back to you to

NOTE Confidence: 0.8348222

01:03:56.280 --> 01:03:57.800 radiation where you'd feel comfortable.

NOTE Confidence: 0.8677446

01:03:58.580 --> 01:04:00.090 Well, that's a good question.

NOTE Confidence: 0.8677446

01:04:00.090 --> 01:04:01.956 You know two or three months

NOTE Confidence: 0.8677446

01:04:01.956 --> 01:04:03.700 I wouldn't even blink an eye,

NOTE Confidence: 0.8677446

01:04:03.700 --> 01:04:05.460 especially if they were taking

NOTE Confidence: 0.8677446

01:04:05.460 --> 01:04:07.519 endocrine therapy for the bulk of

NOTE Confidence: 0.8677446

01:04:07.519 --> 01:04:09.415 that I have done up to six months.

NOTE Confidence: 0.8677446

01:04:09.420 --> 01:04:11.526 I have done it, but at that point we

NOTE Confidence: 0.8677446

01:04:11.526 --> 01:04:13.781 may ask the patient to have another

NOTE Confidence: 0.8677446

01:04:13.781 --> 01:04:15.740 Mamo before starting the radiation.

NOTE Confidence: 0.8677446

01:04:15.740 --> 01:04:17.552 And sometimes I'll bring those patients

NOTE Confidence: 0.8677446

01:04:17.552 --> 01:04:19.349 up in our multidisciplinary tumor board.

NOTE Confidence: 0.8677446

01:04:19.350 --> 01:04:22.005 I did have one patient where it was a

NOTE Confidence: 0.8677446

01:04:22.005 --> 01:04:24.170 year out, but she was substantially high.

NOTE Confidence: 0.8677446

01:04:24.170 --> 01:04:25.670 Risk enough that I presented,

NOTE Confidence: 0.8677446

01:04:25.670 --> 01:04:27.242 or at our multidisciplinary

NOTE Confidence: 0.8677446

01:04:27.242 --> 01:04:28.814 tumor board we got.

NOTE Confidence: 0.8677446

01:04:28.820 --> 01:04:30.938 Breast imaging no evidence that not.

NOTE Confidence: 0.8677446

01:04:30.940 --> 01:04:32.700 There's nothing suspicious on that,

NOTE Confidence: 0.8677446

01:04:32.700 --> 01:04:34.470 and I did offer radiation,

NOTE Confidence: 0.8677446

01:04:34.470 --> 01:04:36.437 but beyond six months I would really

NOTE Confidence: 0.8677446

01:04:36.437 --> 01:04:38.311 want to have a multidisciplinary

NOTE Confidence: 0.8677446

01:04:38.311 --> 01:04:39.760 discussion about that.

NOTE Confidence: 0.86417127

01:04:41.020 --> 01:04:43.015 Thank you and again thank you all

NOTE Confidence: 0.86417127

01:04:43.015 --> 01:04:45.044 so much for these three wonderful

NOTE Confidence: 0.86417127

01:04:45.044 --> 01:04:47.252 presentations I I learned so much

NOTE Confidence: 0.86417127

01:04:47.252 --> 01:04:49.546 in the course of the last hour and

NOTE Confidence: 0.86417127

01:04:49.546 --> 01:04:52.020 a half and the great thing is that

NOTE Confidence: 0.86417127

01:04:52.020 --> 01:04:54.321 this is recorded so others could go

NOTE Confidence: 0.86417127

01:04:54.321 --> 01:04:56.561 back and be able to look at that.

NOTE Confidence: 0.86417127

01:04:56.570 --> 01:04:58.165 Really thank the audience for

NOTE Confidence: 0.86417127

01:04:58.165 --> 01:05:00.360 joining us for this series of three

NOTE Confidence: 0.86417127

01:05:00.360 --> 01:05:02.236 breast CME's here at Yale and and

NOTE Confidence: 0.86417127

01:05:02.236 --> 01:05:03.908 look forward to continuing them

NOTE Confidence: 0.86417127

01:05:03.908 --> 01:05:05.588 in the next academic year.

NOTE Confidence: 0.86417127

01:05:05.590 --> 01:05:07.767 So with that thank you so much.

NOTE Confidence: 0.86417127

01:05:07.770 --> 01:05:09.320 Have a great weekend. Thank

NOTE Confidence: 0.86417127

01:05:09.320 --> 01:05:10.310 you, thank you.