WEBVTT

NOTE duration: "01:07:19.840"

NOTE Confidence: 0.9689161

00:00:06.000 --> 00:00:07.460 Alright. Welcome, everyone.

NOTE Confidence: 0.92498195

00:00:07.919 --> 00:00:09.599 This is Milo Shares Breast

NOTE Confidence: 0.92498195

00:00:09.599 --> 00:00:11.039 Cancer Awareness Month. This is

NOTE Confidence: 0.92498195

00:00:11.039 --> 00:00:12.500 the first of three presentations,

NOTE Confidence: 0.9200714

00:00:13.525 --> 00:00:14.985 and this one is called

NOTE Confidence: 0.9200714

00:00:15.045 --> 00:00:17.545 understanding breast health, screening genetics

NOTE Confidence: 0.9200714

00:00:17.685 --> 00:00:18.585 and prevention.

NOTE Confidence: 0.9645146

00:00:19.925 --> 00:00:21.125 And I'm John Lewin. I'm

NOTE Confidence: 0.9645146

00:00:21.125 --> 00:00:22.825 the moderator for this session,

NOTE Confidence: 0.9996225

00:00:23.525 --> 00:00:24.665 and we have

NOTE Confidence: 0.9976756

00:00:26.005 --> 00:00:26.505 three

NOTE Confidence: 0.9662023

00:00:30.560 --> 00:00:31.060 experts.

NOTE Confidence: 0.8134527

00:00:39.920 --> 00:00:41.600 So we have doctor Pris

NOTE Confidence: 0.8134527

00:00:41.600 --> 00:00:42.100 Salafi,

NOTE Confidence: 0.97221607

00:00:42.455 --> 00:00:43.575 who's my colleague in the

NOTE Confidence: 0.97221607

00:00:43.575 --> 00:00:45.115 department of radiology and biomedical

NOTE Confidence: 0.97221607

00:00:45.255 --> 00:00:45.755 imaging,

NOTE Confidence: 0.99881667

00:00:46.614 --> 00:00:47.895 and she will be talking

NOTE Confidence: 0.99881667

00:00:47.895 --> 00:00:48.395 about

NOTE Confidence: 0.79008615

00:00:49.095 --> 00:00:49.595 screening,

NOTE Confidence: 0.9278706

00:00:50.055 --> 00:00:51.354 and Tracy Battaglia,

NOTE Confidence: 0.99708635

00:00:52.055 --> 00:00:53.595 who is professor of medicine

NOTE Confidence: 0.95546746

00:00:54.215 --> 00:00:56.215 and associate director community outreach

NOTE Confidence: 0.95546746

00:00:56.215 --> 00:00:57.335 and engagement for the Yale

NOTE Confidence: 0.95546746

00:00:57.335 --> 00:00:58.235 Cancer Center,

NOTE Confidence: 0.9379923

00:00:59.309 --> 00:01:00.370 and Linda Erwin,

NOTE Confidence: 0.8956978

00:01:00.910 --> 00:01:02.510 who's associate dean of research,

NOTE Confidence: 0.8956978

00:01:02.510 --> 00:01:04.670 and Susan Dwight Bliss professor

NOTE Confidence: 0.8956978

00:01:04.670 --> 00:01:05.330 of epidemiology,

NOTE Confidence: 0.974626

00:01:06.990 --> 00:01:08.590 deputy director of the Yale

NOTE Confidence: 0.974626

00:01:08.590 --> 00:01:09.950 Cancer Center, who will be

NOTE Confidence: 0.974626

00:01:09.950 --> 00:01:11.009 talking about

NOTE Confidence: 0.99872816

00:01:11.310 --> 00:01:12.130 risk modification.

NOTE Confidence: 0.9579723

00:01:13.635 --> 00:01:15.555 And so without any further

NOTE Confidence: 0.9579723

00:01:15.555 --> 00:01:17.155 ado, I will stop sharing

NOTE Confidence: 0.9579723

00:01:17.155 --> 00:01:18.535 my screen, and doctor Lottie

NOTE Confidence: 0.9579723

00:01:18.755 --> 00:01:19.895 can start her presentation.

NOTE Confidence: 0.9990747

00:01:25.075 --> 00:01:25.575 Okay.

NOTE Confidence: 0.99957633

00:01:30.600 --> 00:01:31.960 I hope everyone is having

NOTE Confidence: 0.99957633

00:01:31.960 --> 00:01:32.940 a good evening.

NOTE Confidence: 0.97888434

00:01:33.560 --> 00:01:35.080 I'm gonna briefly talk about

NOTE Confidence: 0.97888434

00:01:35.080 --> 00:01:37.660 breast cancer, current screening recommendations.

NOTE Confidence: 0.94527376

00:01:42.685 --> 00:01:44.125 We all are aware or

NOTE Confidence: 0.94527376

00:01:44.125 --> 00:01:45.745 have heard of the US

NOTE Confidence: 0.90711194

00:01:46.045 --> 00:01:46.545 Preventative

NOTE Confidence: 0.9961201

00:01:47.084 --> 00:01:47.585 Services

NOTE Confidence: 0.8734088

00:01:47.885 --> 00:01:48.785 Task Force.

NOTE Confidence: 0.9769033

00:01:49.725 --> 00:01:51.245 This is a task force

NOTE Confidence: 0.9769033

00:01:51.245 --> 00:01:52.305 that is,

NOTE Confidence: 0.99978137

00:01:53.485 --> 00:01:54.945 assigned by the government

NOTE Confidence: 0.9992325

00:01:55.245 --> 00:01:58.170 to look at medical data

NOTE Confidence: 0.9992325

00:01:58.229 --> 00:01:59.290 and make recommendations

NOTE Confidence: 0.99942887

00:01:59.670 --> 00:02:00.490 for screening

NOTE Confidence: 0.927843

00:02:00.869 --> 00:02:01.369 different,

NOTE Confidence: 0.99990094

00:02:01.909 --> 00:02:02.810 types of

NOTE Confidence: 0.80713016

00:02:04.070 --> 00:02:04.570 diseases.

NOTE Confidence: 0.97713506

00:02:05.190 --> 00:02:07.430 But specific to breast cancer

NOTE Confidence: 0.97713506

00:02:07.430 --> 00:02:09.510 screening, they just modified their

NOTE Confidence: 0.97713506

00:02:09.510 --> 00:02:10.010 recommendation,

NOTE Confidence: 0.9577225

00:02:11.395 --> 00:02:13.014 recently last year,

NOTE Confidence: 0.9942133

00:02:13.395 --> 00:02:15.635 and they lowered the start

NOTE Confidence: 0.9942133

00:02:15.635 --> 00:02:16.775 age for screening.

NOTE Confidence: 0.98700565

00:02:17.235 --> 00:02:19.315 Now they recommend women aged

NOTE Confidence: 0.98700565

00:02:19.315 --> 00:02:21.315 forty to seventy four get

NOTE Confidence: 0.98700565

00:02:21.315 --> 00:02:23.794 screened. However, their recommendation says,

NOTE Confidence: 0.9955578

00:02:24.195 --> 00:02:25.255 every two years.

NOTE Confidence: 0.9958671

00:02:25.770 --> 00:02:27.930 And, women seventy five years

NOTE Confidence: 0.9958671

00:02:27.930 --> 00:02:28.590 or older,

NOTE Confidence: 0.9744242

00:02:29.370 --> 00:02:30.750 they said that there isn't

NOTE Confidence: 0.9744242

00:02:30.810 --> 00:02:31.310 sufficient,

NOTE Confidence: 0.99419886

00:02:32.410 --> 00:02:34.410 evidence to assess the balance

NOTE Confidence: 0.99419886

00:02:34.410 --> 00:02:35.610 of benefits and harms of

NOTE Confidence: 0.99419886

00:02:35.610 --> 00:02:37.550 screening mammography in this population.

NOTE Confidence: 0.9480716

00:02:38.250 --> 00:02:40.010 They also recommended that women

NOTE Confidence: 0.9480716

00:02:40.010 --> 00:02:41.230 with dense breast,

NOTE Confidence: 0.97272134

00:02:42.465 --> 00:02:44.145 that there isn't enough evidence

NOTE Confidence: 0.97272134

00:02:44.145 --> 00:02:45.345 to assess the balance of

NOTE Confidence: 0.97272134

00:02:45.345 --> 00:02:46.485 benefits and harms.

NOTE Confidence: 0.98868084

00:02:47.264 --> 00:02:47.764 Now

NOTE Confidence: 0.9967633

00:02:48.145 --> 00:02:49.585 we can talk about an

NOTE Confidence: 0.9967633

00:02:49.585 --> 00:02:51.185 hour about the data they

NOTE Confidence: 0.9967633

00:02:51.185 --> 00:02:52.485 looked at and

NOTE Confidence: 0.9567433

00:02:54.080 --> 00:02:55.919 what they considered harms and

NOTE Confidence: 0.9567433

00:02:55.919 --> 00:02:57.520 benefits. But one thing they

NOTE Confidence: 0.9567433

00:02:57.520 --> 00:02:59.460 considered a harm of screening

NOTE Confidence: 0.9567433

00:02:59.680 --> 00:03:02.000 was anxiety of women and,

NOTE Confidence: 0.9567433

00:03:02.240 --> 00:03:03.860 potential callback rates.

NOTE Confidence: 0.990177

00:03:05.040 --> 00:03:06.480 Briefly, I just wanna say

NOTE Confidence: 0.990177

00:03:06.480 --> 00:03:07.300 that when

NOTE Confidence: 0.9526587

00:03:07.965 --> 00:03:09.805 screening mammography is the standard

NOTE Confidence: 0.9526587

00:03:09.805 --> 00:03:11.245 of care, and this is

NOTE Confidence: 0.9526587

00:03:11.245 --> 00:03:12.925 going back decades, and we

NOTE Confidence: 0.9526587

00:03:12.925 --> 00:03:13.325 have,

NOTE Confidence: 0.99883276

00:03:14.605 --> 00:03:16.845 extensive research proving that screening

NOTE Confidence: 0.99883276

00:03:16.845 --> 00:03:17.345 mammography

NOTE Confidence: 0.9438533

00:03:18.045 --> 00:03:19.025 saves lives.

NOTE Confidence: 0.9656664

00:03:19.805 --> 00:03:21.325 Women who had a screening

NOTE Confidence: 0.9656664

00:03:21.325 --> 00:03:23.165 mammogram compared to women who

NOTE Confidence: 0.9656664

00:03:23.165 --> 00:03:25.620 didn't definitely live longer, and,

NOTE Confidence: 0.9656664

00:03:25.860 --> 00:03:27.080 that's how we know.

NOTE Confidence: 0.9935157

00:03:28.660 --> 00:03:30.200 Everything else, ultrasound

NOTE Confidence: 0.9684024

00:03:30.500 --> 00:03:31.239 and MRI

NOTE Confidence: 0.95643955

00:03:31.700 --> 00:03:34.260 and other modalities that I

NOTE Confidence: 0.95643955

00:03:34.260 --> 00:03:35.620 will talk about, like contrast

NOTE Confidence: 0.95643955

00:03:35.620 --> 00:03:36.599 enhanced mammography,

NOTE Confidence: 0.9664041

00:03:37.115 --> 00:03:38.395 we don't have enough data

NOTE Confidence: 0.9664041

00:03:38.395 --> 00:03:40.075 to know decades worth of

NOTE Confidence: 0.9664041

00:03:40.075 --> 00:03:41.595 data to know if these

NOTE Confidence: 0.9664041

00:03:41.595 --> 00:03:42.335 are actually

NOTE Confidence: 0.9512812

00:03:43.275 --> 00:03:45.595 making women die less of

NOTE Confidence: 0.9512812

00:03:45.595 --> 00:03:46.495 a breast cancer.

NOTE Confidence: 0.8986184

00:03:49.290 --> 00:03:50.190 So current

NOTE Confidence: 0.91828907

00:03:50.730 --> 00:03:51.230 guidelines,

NOTE Confidence: 0.9700121

00:03:51.850 --> 00:03:53.690 this is a table that

NOTE Confidence: 0.9700121

00:03:53.690 --> 00:03:55.290 is talking about the different

NOTE Confidence: 0.9700121

00:03:55.290 --> 00:03:57.770 societies, medical societies talking about

NOTE Confidence: 0.9700121

00:03:57.770 --> 00:03:58.830 screening guidelines.

NOTE Confidence: 0.9921256

00:04:00.170 --> 00:04:01.370 I talked about the,

NOTE Confidence: 0.9786743

00:04:01.770 --> 00:04:03.210 task force. It says start

NOTE Confidence: 0.9786743

00:04:03.210 --> 00:04:04.910 at forty every two years.

NOTE Confidence: 0.89151824

00:04:05.235 --> 00:04:07.155 And then different societies like

NOTE Confidence: 0.89151824

00:04:07.155 --> 00:04:08.935 ACOG is the OB GYN,

NOTE Confidence: 0.9451038

00:04:09.235 --> 00:04:11.875 society, American Cancer Society, American

NOTE Confidence: 0.9451038

00:04:11.875 --> 00:04:12.935 Medical Association,

NOTE Confidence: 0.9964468

00:04:13.715 --> 00:04:15.075 they all pretty much are

NOTE Confidence: 0.9964468

00:04:15.075 --> 00:04:15.575 recommending

NOTE Confidence: 0.98235893

00:04:15.875 --> 00:04:17.395 starting at forty. And for

NOTE Confidence: 0.98235893

00:04:17.395 --> 00:04:19.154 the most part, annual screening

NOTE Confidence: 0.98235893

00:04:19.154 --> 00:04:19.895 is recommended.

NOTE Confidence: 0.9902033

00:04:20.539 --> 00:04:22.220 For women older than seventy

NOTE Confidence: 0.9902033

00:04:22.220 --> 00:04:23.979 five, it's based on shared

NOTE Confidence: 0.9902033

00:04:23.979 --> 00:04:26.380 decision making. If people are

NOTE Confidence: 0.9902033

00:04:26.380 --> 00:04:27.740 in good health, if women

NOTE Confidence: 0.9902033

00:04:27.740 --> 00:04:28.940 are in good health and

NOTE Confidence: 0.9902033

00:04:28.940 --> 00:04:30.139 they have at least ten

NOTE Confidence: 0.9902033

00:04:30.139 --> 00:04:32.300 more life, years ahead of

NOTE Confidence: 0.9902033

00:04:32.300 --> 00:04:32.800 them,

NOTE Confidence: 0.9901078

00:04:33.354 --> 00:04:34.314 it's a good idea to

NOTE Confidence: 0.9901078

00:04:34.314 --> 00:04:36.235 continue with mammography. But that's

NOTE Confidence: 0.9901078

00:04:36.235 --> 00:04:37.435 a personal choice, and it

NOTE Confidence: 0.9901078

00:04:37.435 --> 00:04:38.955 can be discussed with,

NOTE Confidence: 0.9994931

00:04:39.754 --> 00:04:41.375 their primary care physicians

NOTE Confidence: 0.99016744

00:04:41.995 --> 00:04:43.995 and, come to a decision

NOTE Confidence: 0.99016744

00:04:43.995 --> 00:04:45.935 that's appropriate for that individual.

NOTE Confidence: 0.97190505

00:04:46.830 --> 00:04:48.270 I am a radiologist, so

NOTE Confidence: 0.97190505

00:04:48.270 --> 00:04:50.110 I'm gonna talk about American

NOTE Confidence: 0.97190505

00:04:50.110 --> 00:04:52.110 College of Radiology and Society

NOTE Confidence: 0.97190505

00:04:52.110 --> 00:04:53.650 of Breast Imaging recommendations,

NOTE Confidence: 0.93291306

00:04:54.589 --> 00:04:56.589 which basically says start at

NOTE Confidence: 0.93291306

00:04:56.589 --> 00:04:57.089 forty.

NOTE Confidence: 0.97000974

00:04:57.470 --> 00:04:58.850 Every year, get a mammogram,

NOTE Confidence: 0.97000974

00:04:59.070 --> 00:05:00.190 and there is no age

NOTE Confidence: 0.97000974

00:05:00.190 --> 00:05:00.690 limit.

NOTE Confidence: 0.9971794

00:05:01.065 --> 00:05:02.845 But, obviously, we do consider

NOTE Confidence: 0.9971794

00:05:02.904 --> 00:05:04.365 individual health status.

NOTE Confidence: 0.994789

00:05:06.025 --> 00:05:06.525 So,

NOTE Confidence: 0.9983683

00:05:07.385 --> 00:05:08.925 American College of Radiology

NOTE Confidence: 0.89056134

00:05:09.385 --> 00:05:09.885 recently,

NOTE Confidence: 0.99634224

00:05:10.345 --> 00:05:11.705 in the last few years,

NOTE Confidence: 0.99634224

00:05:11.705 --> 00:05:12.765 changed their recommendations

NOTE Confidence: 0.9863489

00:05:13.305 --> 00:05:14.365 in terms of,

NOTE Confidence: 0.99920624

00:05:14.985 --> 00:05:15.485 breast

NOTE Confidence: 0.9458164

00:05:16.420 --> 00:05:17.240 care. And,

NOTE Confidence: 0.9897278

00:05:18.100 --> 00:05:19.540 they brought to light the

NOTE Confidence: 0.9897278

00:05:19.540 --> 00:05:21.220 importance of having a risk

NOTE Confidence: 0.9897278

00:05:21.220 --> 00:05:21.720 assessment

NOTE Confidence: 0.87445426

00:05:22.100 --> 00:05:22.839 for women,

NOTE Confidence: 0.9952544

00:05:23.140 --> 00:05:24.900 and they're recommending that women

NOTE Confidence: 0.9952544

00:05:24.900 --> 00:05:26.120 get a risk assessment

NOTE Confidence: 0.9747958

00:05:26.820 --> 00:05:28.260 by age twenty five. Every

NOTE Confidence: 0.9747958

00:05:28.260 --> 00:05:29.880 woman should know if they're

NOTE Confidence: 0.9747958

00:05:29.940 --> 00:05:31.435 high risk, low risk, if

NOTE Confidence: 0.9747958

00:05:31.435 --> 00:05:33.595 they're average risk, discuss as

NOTE Confidence: 0.9747958

00:05:33.595 --> 00:05:34.654 far as they know,

NOTE Confidence: 0.9965267

00:05:35.755 --> 00:05:37.435 discuss that with their primary

NOTE Confidence: 0.9965267

00:05:37.435 --> 00:05:39.294 care or, their gynecologist

NOTE Confidence: 0.9956719

00:05:39.755 --> 00:05:40.895 so that they can

NOTE Confidence: 0.9987469

00:05:41.354 --> 00:05:41.854 appropriately

NOTE Confidence: 0.9985872

00:05:42.154 --> 00:05:43.914 be screened starting at that

NOTE Confidence: 0.9985872

00:05:43.914 --> 00:05:44.414 age.

NOTE Confidence: 0.9995734

00:05:45.750 --> 00:05:46.250 So

NOTE Confidence: 0.972624

00:05:46.710 --> 00:05:48.490 high risk women, as determined

NOTE Confidence: 0.9984135

00:05:48.870 --> 00:05:49.850 by the risk

NOTE Confidence: 0.8868446

00:05:50.550 --> 00:05:53.190 assessment models, are deemed high

NOTE Confidence: 0.8868446

00:05:53.190 --> 00:05:53.690 risk.

NOTE Confidence: 0.99599457

00:05:54.550 --> 00:05:56.390 If they desire anything more

NOTE Confidence: 0.99599457

00:05:56.390 --> 00:05:57.290 than a mammogram,

NOTE Confidence: 0.9989006

00:05:58.205 --> 00:05:59.964 because they're high risk, they

NOTE Confidence: 0.9989006

00:05:59.964 --> 00:06:01.664 should get some other supplemental

NOTE Confidence: 0.9989006

00:06:01.884 --> 00:06:02.384 screening.

NOTE Confidence: 0.96956426

00:06:02.925 --> 00:06:04.764 So MRI has been our

NOTE Confidence: 0.96956426

00:06:04.764 --> 00:06:06.764 traditional screening tool for those

NOTE Confidence: 0.96956426

00:06:06.764 --> 00:06:08.284 women. If for some reason

NOTE Confidence: 0.96956426

00:06:08.284 --> 00:06:10.705 they can't undergo MRI screening,

NOTE Confidence: 0.9854987

00:06:11.460 --> 00:06:12.500 and there could be the

NOTE Confidence: 0.9854987

00:06:12.500 --> 00:06:14.120 different reasons for that,

NOTE Confidence: 0.9143202

00:06:14.660 --> 00:06:16.260 definitely ultrasound and,

NOTE Confidence: 0.9947929

00:06:16.820 --> 00:06:18.820 institutions that have contrast enhanced

NOTE Confidence: 0.9947929

00:06:18.820 --> 00:06:19.320 mammography,

NOTE Confidence: 0.9889368

00:06:20.500 --> 00:06:22.440 they should undergo that,

NOTE Confidence: 0.99989104

00:06:22.900 --> 00:06:23.400 procedure.

NOTE Confidence: 0.9987492

00:06:24.275 --> 00:06:25.235 I will talk a little

NOTE Confidence: 0.9987492

00:06:25.235 --> 00:06:26.835 bit more about that, in

NOTE Confidence: 0.9987492

00:06:26.835 --> 00:06:27.415 a bit.

NOTE Confidence: 0.9779237

00:06:28.035 --> 00:06:29.815 Women who have dense breasts

NOTE Confidence: 0.9979947

00:06:30.275 --> 00:06:31.975 and are not necessarily

NOTE Confidence: 0.9616906

00:06:32.355 --> 00:06:34.295 high risk, but they want

NOTE Confidence: 0.9616906

00:06:34.435 --> 00:06:34.935 supplemental

NOTE Confidence: 0.9953747

00:06:35.235 --> 00:06:35.735 screening,

NOTE Confidence: 0.95197695

00:06:36.490 --> 00:06:37.529 they can get a breast

NOTE Confidence: 0.95197695

00:06:37.529 --> 00:06:40.490 MRI. However, sometimes insurances don't

NOTE Confidence: 0.95197695

00:06:40.490 --> 00:06:42.750 cover that. Most insurances don't

NOTE Confidence: 0.95197695

00:06:42.889 --> 00:06:44.750 or the they're cost prohibitive

NOTE Confidence: 0.8485385

00:06:45.370 --> 00:06:46.509 or there's a contraindication

NOTE Confidence: 0.9941139

00:06:46.889 --> 00:06:48.029 for getting an MRI.

NOTE Confidence: 0.98125225

00:06:48.544 --> 00:06:50.305 It's important that these women

NOTE Confidence: 0.98125225

00:06:50.305 --> 00:06:52.165 know they have options. Ultrasound

NOTE Confidence: 0.98125225

00:06:52.385 --> 00:06:54.005 or contrast enhanced mammography

NOTE Confidence: 0.9993016

00:06:54.385 --> 00:06:55.205 should be considered.

NOTE Confidence: 0.9831684

00:06:55.985 --> 00:06:58.245 If someone is intermediate risk,

NOTE Confidence: 0.9831684

00:06:58.464 --> 00:06:59.925 and, again, these are calculated

NOTE Confidence: 0.9831684

00:07:00.145 --> 00:07:02.009 lifetime risks with which my

NOTE Confidence: 0.9831684

00:07:02.009 --> 00:07:03.289 colleagues will talk about,

NOTE Confidence: 0.9942854

00:07:03.690 --> 00:07:04.430 in a minute.

NOTE Confidence: 0.8181908

00:07:06.569 --> 00:07:08.569 The and and have dense

NOTE Confidence: 0.8181908

00:07:08.569 --> 00:07:09.069 breasts.

NOTE Confidence: 0.9507058

00:07:09.449 --> 00:07:10.889 Of course, they should continue

NOTE Confidence: 0.9507058

00:07:10.889 --> 00:07:12.889 with mammography but also get

NOTE Confidence: 0.9507058

00:07:12.889 --> 00:07:14.830 MRI or, ultrasound.

NOTE Confidence: 0.9938572

00:07:17.075 --> 00:07:18.115 So just to talk about

NOTE Confidence: 0.9938572

00:07:18.115 --> 00:07:19.335 mammographic density,

NOTE Confidence: 0.9708342

00:07:20.275 --> 00:07:22.055 mammograms are black and white

NOTE Confidence: 0.9708342

00:07:22.275 --> 00:07:23.895 and gray. And, basically,

NOTE Confidence: 0.9978099

00:07:24.355 --> 00:07:26.035 anything that's gray or black

NOTE Confidence: 0.9978099

00:07:26.035 --> 00:07:26.775 is good.

NOTE Confidence: 0.97010773

00:07:27.635 --> 00:07:28.675 This is the opposite of

NOTE Confidence: 0.97010773

00:07:28.675 --> 00:07:29.475 real life,

NOTE Confidence: 0.9817528

00:07:29.875 --> 00:07:31.980 and white is glandular breast

NOTE Confidence: 0.9817528

00:07:31.980 --> 00:07:32.960 tissue. However,

NOTE Confidence: 0.9814979

00:07:33.340 --> 00:07:33.840 cancer,

NOTE Confidence: 0.91881543

00:07:34.700 --> 00:07:35.200 cysts,

NOTE Confidence: 0.9826143

00:07:35.580 --> 00:07:37.820 benign masses, anything else that

NOTE Confidence: 0.9826143

00:07:37.820 --> 00:07:39.260 is not tracked will also

NOTE Confidence: 0.9826143

00:07:39.260 --> 00:07:40.080 be white.

NOTE Confidence: 0.9886548

00:07:40.540 --> 00:07:42.080 So when we are going

NOTE Confidence: 0.9886548

00:07:42.220 --> 00:07:43.900 from left to right, we

NOTE Confidence: 0.9886548

00:07:43.900 --> 00:07:45.180 are seeing an increase in

NOTE Confidence: 0.9886548

00:07:45.180 --> 00:07:46.560 the breast tissue density.

NOTE Confidence: 0.9620168

00:07:47.365 --> 00:07:49.044 This, the right side is

NOTE Confidence: 0.9620168

00:07:49.044 --> 00:07:51.625 considered an extremely dense mammogram,

NOTE Confidence: 0.9620168

00:07:51.925 --> 00:07:53.125 and you can see that

NOTE Confidence: 0.9620168

00:07:53.125 --> 00:07:55.125 the majority of this breast

NOTE Confidence: 0.9620168

00:07:55.125 --> 00:07:56.824 is white. And if

NOTE Confidence: 0.98474133

00:07:57.365 --> 00:07:58.805 this breast had a small

NOTE Confidence: 0.98474133

00:07:58.805 --> 00:08:00.324 cancer in it, it would

NOTE Confidence: 0.98474133

00:08:00.324 --> 00:08:01.979 be very difficult to see

NOTE Confidence: 0.98474133

00:08:01.979 --> 00:08:03.419 it because it's gonna blend

NOTE Confidence: 0.98474133

00:08:03.419 --> 00:08:04.780 in with the adjacent breast

NOTE Confidence: 0.98474133

00:08:04.780 --> 00:08:06.800 tissue. And this is why

NOTE Confidence: 0.98474133

00:08:06.860 --> 00:08:08.620 it's important that women who

NOTE Confidence: 0.98474133

00:08:08.620 --> 00:08:10.479 have extremely dense breasts

NOTE Confidence: 0.9986797

00:08:11.020 --> 00:08:13.360 should consider additional supplemental

NOTE Confidence: 0.97728413

00:08:13.660 --> 00:08:15.500 screening. This is a fatty

NOTE Confidence: 0.97728413

00:08:15.500 --> 00:08:16.000 breast,

NOTE Confidence: 0.95980585

00:08:16.895 --> 00:08:17.395 and,

NOTE Confidence: 0.97933936

00:08:18.495 --> 00:08:19.455 you can see that if

NOTE Confidence: 0.97933936

00:08:19.455 --> 00:08:20.735 there was a mass this

NOTE Confidence: 0.97933936

00:08:20.735 --> 00:08:22.255 is a normal structure here.

NOTE Confidence: 0.97933936

00:08:22.255 --> 00:08:23.215 But let's say there was

NOTE Confidence: 0.97933936

00:08:23.215 --> 00:08:24.335 a mass, it would be

NOTE Confidence: 0.97933936

00:08:24.335 --> 00:08:25.375 white, and it would be

NOTE Confidence: 0.97933936

00:08:25.375 --> 00:08:25.875 extremely

NOTE Confidence: 0.9991967

00:08:26.575 --> 00:08:28.115 easy to appreciate it.

NOTE Confidence: 0.9544583

00:08:29.615 --> 00:08:30.095 About

NOTE Confidence: 0.97915524

00:08:31.259 --> 00:08:33.100 of the four categories, half

NOTE Confidence: 0.97915524

00:08:33.100 --> 00:08:34.620 are dense and half are

NOTE Confidence: 0.97915524

00:08:34.620 --> 00:08:36.540 not dense. And about half

NOTE Confidence: 0.97915524

00:08:36.540 --> 00:08:37.279 the population

NOTE Confidence: 0.942545

00:08:37.660 --> 00:08:39.100 has dense breasts and half

NOTE Confidence: 0.942545

00:08:39.100 --> 00:08:40.480 the population doesn't.

NOTE Confidence: 0.9601466

00:08:41.500 --> 00:08:43.200 The last one, the extremely

NOTE Confidence: 0.9601466

00:08:43.260 --> 00:08:43.760 dense,

NOTE Confidence: 0.95274353

00:08:44.675 --> 00:08:46.515 category is about ten percent

NOTE Confidence: 0.95274353

00:08:46.515 --> 00:08:48.274 of women. So not very

NOTE Confidence: 0.95274353

00:08:48.274 --> 00:08:50.054 common, but extremely important.

NOTE Confidence: 0.98887014

00:08:51.475 --> 00:08:53.235 Density by itself is also

NOTE Confidence: 0.98887014

00:08:53.235 --> 00:08:54.295 a risk factor.

NOTE Confidence: 0.97639054

00:08:54.675 --> 00:08:56.295 So women who have denser

NOTE Confidence: 0.97639054

00:08:56.434 --> 00:08:58.610 breasts have a higher risk

NOTE Confidence: 0.97639054

00:08:58.610 --> 00:09:00.690 for developing breast cancer compared

NOTE Confidence: 0.97639054

00:09:00.690 --> 00:09:01.809 to women who have a

NOTE Confidence: 0.97639054

00:09:01.809 --> 00:09:04.370 fatty breast. For example, one

NOTE Confidence: 0.97639054

00:09:04.370 --> 00:09:05.190 and four,

NOTE Confidence: 0.957653

00:09:05.570 --> 00:09:07.330 the four, which is extremely

NOTE Confidence: 0.957653

00:09:07.330 --> 00:09:08.690 dense breast, has a four

NOTE Confidence: 0.957653

00:09:08.690 --> 00:09:09.190 times

NOTE Confidence: 0.99124944

00:09:09.730 --> 00:09:11.835 more risk of developing breast

NOTE Confidence: 0.99124944

00:09:11.835 --> 00:09:13.355 cancer compared to a fatty

NOTE Confidence: 0.99124944

00:09:13.355 --> 00:09:15.275 breast and about two times

NOTE Confidence: 0.99124944

00:09:15.275 --> 00:09:16.895 higher than an average breast.

NOTE Confidence: 0.99680406

00:09:18.475 --> 00:09:20.715 So when we have, increased

NOTE Confidence: 0.99680406

00:09:20.715 --> 00:09:21.215 density

NOTE Confidence: 0.9807355

00:09:21.995 --> 00:09:23.835 from, again, left to right,

NOTE Confidence: 0.9807355

00:09:23.835 --> 00:09:25.054 we can see the density

NOTE Confidence: 0.9807355

00:09:25.115 --> 00:09:26.120 of the breast or the

NOTE Confidence: 0.9807355

00:09:26.120 --> 00:09:27.740 whiteness is increasing.

NOTE Confidence: 0.99788547

00:09:28.679 --> 00:09:30.700 That lowers our sensitivity

NOTE Confidence: 0.99776936

00:09:31.080 --> 00:09:33.160 of mammography and increases the

NOTE Confidence: 0.99776936

00:09:33.160 --> 00:09:35.320 risk of cancer not being

NOTE Confidence: 0.99776936

00:09:35.320 --> 00:09:35.820 detected.

NOTE Confidence: 0.99594253

00:09:36.440 --> 00:09:37.800 I don't like using the

NOTE Confidence: 0.99594253

00:09:37.800 --> 00:09:39.960 word missing cancer. We're not

NOTE Confidence: 0.99594253

00:09:39.960 --> 00:09:41.295 missing it. We're just not

NOTE Confidence: 0.99594253

00:09:41.454 --> 00:09:42.894 seeing it. We're not detecting

NOTE Confidence: 0.99594253

00:09:42.894 --> 00:09:44.495 it. So as we go

NOTE Confidence: 0.99594253

00:09:44.495 --> 00:09:46.415 from left to right, you

NOTE Confidence: 0.99594253

00:09:46.415 --> 00:09:47.554 can see that,

NOTE Confidence: 0.9897106

00:09:48.095 --> 00:09:50.434 the risk increases for nondetection

NOTE Confidence: 0.9811959

00:09:50.815 --> 00:09:52.654 of breast cancer, and the

NOTE Confidence: 0.9811959

00:09:52.654 --> 00:09:54.095 extremely dense breast has a

NOTE Confidence: 0.9811959

00:09:54.095 --> 00:09:55.800 more than sixty percent risk

NOTE Confidence: 0.9811959

00:09:56.040 --> 00:09:57.260 of, nondetection.

NOTE Confidence: 0.9935711

00:09:59.800 --> 00:10:01.320 So in order to look

NOTE Confidence: 0.9935711

00:10:01.320 --> 00:10:01.820 at,

NOTE Confidence: 0.991106

00:10:03.160 --> 00:10:04.940 dense breast and utility

NOTE Confidence: 0.9553883

00:10:05.399 --> 00:10:07.339 of, additional supplemental

NOTE Confidence: 0.9994323

00:10:07.640 --> 00:10:08.140 screening,

NOTE Confidence: 0.9659328

00:10:08.525 --> 00:10:10.285 there were several trials that

NOTE Confidence: 0.9659328

00:10:10.285 --> 00:10:11.665 were recently published.

NOTE Confidence: 0.91787183

00:10:12.285 --> 00:10:13.885 One was the DENSE trial,

NOTE Confidence: 0.91787183

00:10:13.885 --> 00:10:14.945 which is the

NOTE Confidence: 0.93854594

00:10:15.804 --> 00:10:17.165 the dense tissue and early

NOTE Confidence: 0.93854594

00:10:17.165 --> 00:10:19.325 breast neoplasm screening. This was

NOTE Confidence: 0.93854594

00:10:19.325 --> 00:10:20.445 a very good trial. It

NOTE Confidence: 0.93854594

00:10:20.445 --> 00:10:22.205 was randomized controlled trial. It

NOTE Confidence: 0.93854594

00:10:22.205 --> 00:10:23.265 was in the Netherlands.

NOTE Confidence: 0.9559296

00:10:24.140 --> 00:10:26.220 And they added MRI in

NOTE Confidence: 0.9559296

00:10:26.220 --> 00:10:27.740 a population of fifty to

NOTE Confidence: 0.9559296

00:10:27.740 --> 00:10:29.120 seventy five year olds,

NOTE Confidence: 0.97278005

00:10:29.500 --> 00:10:31.420 women, who had extremely dense

NOTE Confidence: 0.97278005

00:10:31.420 --> 00:10:33.100 breast tissue and had a

NOTE Confidence: 0.97278005

00:10:33.100 --> 00:10:34.080 normal mammogram.

NOTE Confidence: 0.9906828

00:10:34.780 --> 00:10:36.400 And they wanted to see,

NOTE Confidence: 0.9678935

00:10:37.145 --> 00:10:39.304 different things, but one was

NOTE Confidence: 0.9678935

00:10:39.304 --> 00:10:40.665 they wanted to see patients

NOTE Confidence: 0.9678935

00:10:40.665 --> 00:10:42.445 who had that added MRI.

NOTE Confidence: 0.9678935

00:10:42.665 --> 00:10:43.645 Do they have

NOTE Confidence: 0.9655552

00:10:44.184 --> 00:10:45.945 a lower rate of interval

NOTE Confidence: 0.9655552

00:10:45.945 --> 00:10:46.445 cancer?

NOTE Confidence: 0.9724742

00:10:46.825 --> 00:10:48.905 Interval cancers are cancers that

NOTE Confidence: 0.9724742

00:10:48.905 --> 00:10:50.605 develop in between screening,

NOTE Confidence: 0.84577155

00:10:52.940 --> 00:10:53.440 timelines.

NOTE Confidence: 0.9775748

00:10:54.059 --> 00:10:55.420 And for them, it was

NOTE Confidence: 0.9775748

00:10:55.420 --> 00:10:57.260 every two years. They also

NOTE Confidence: 0.9775748

00:10:57.260 --> 00:10:58.620 looked at other things. For

NOTE Confidence: 0.9775748

00:10:58.620 --> 00:10:59.980 example, they wanted to see

NOTE Confidence: 0.9775748

00:10:59.980 --> 00:11:01.420 what is the detection rate

NOTE Confidence: 0.9775748

00:11:01.420 --> 00:11:02.160 of MRI.

NOTE Confidence: 0.97795343

00:11:03.020 --> 00:11:04.320 Are there false positives?

NOTE Confidence: 0.93782026

00:11:04.715 --> 00:11:05.835 What kind of tumors are

NOTE Confidence: 0.93782026

00:11:05.835 --> 00:11:08.075 detected by MR and some

NOTE Confidence: 0.93782026

00:11:08.075 --> 00:11:08.895 other characteristics?

NOTE Confidence: 0.99520665

00:11:10.155 --> 00:11:11.515 They were lucky. They looked

NOTE Confidence: 0.99520665

00:11:11.515 --> 00:11:13.115 at forty thousand women, and

NOTE Confidence: 0.99520665

00:11:13.115 --> 00:11:14.655 about eight thousand of them

NOTE Confidence: 0.99520665

00:11:14.875 --> 00:11:16.495 had the supplemental MRI.

NOTE Confidence: 0.9721481

00:11:17.059 --> 00:11:18.420 And what they saw that

NOTE Confidence: 0.9721481

00:11:18.420 --> 00:11:20.600 the rates of interval cancer

NOTE Confidence: 0.9721481

00:11:20.820 --> 00:11:22.679 was about half in women

NOTE Confidence: 0.9721481

00:11:22.740 --> 00:11:24.500 who had MRI compared to

NOTE Confidence: 0.9721481

00:11:24.500 --> 00:11:25.720 mammogram only.

NOTE Confidence: 0.99275297

00:11:26.020 --> 00:11:27.059 So it was two point

NOTE Confidence: 0.99275297

00:11:27.059 --> 00:11:28.820 five per thousand compared to

NOTE Confidence: 0.99275297

00:11:28.820 --> 00:11:29.320 five.

NOTE Confidence: 0.9974493

00:11:29.925 --> 00:11:30.425 And,

NOTE Confidence: 0.99597424

00:11:30.885 --> 00:11:32.885 basically, this was great news.

NOTE Confidence: 0.99597424

00:11:32.885 --> 00:11:34.885 I should also make a

NOTE Confidence: 0.99597424

00:11:34.885 --> 00:11:36.404 note that these are average

NOTE Confidence: 0.99597424

00:11:36.404 --> 00:11:38.165 risk patients, not high risk

NOTE Confidence: 0.99597424

00:11:38.165 --> 00:11:38.665 patients.

NOTE Confidence: 0.9899289

00:11:39.205 --> 00:11:40.404 And the women who had

NOTE Confidence: 0.9899289

00:11:40.404 --> 00:11:42.184 the MRI, they had about

NOTE Confidence: 0.9899289

00:11:42.404 --> 00:11:43.304 over sixteen

NOTE Confidence: 0.99657947

00:11:43.845 --> 00:11:44.505 per thousand

NOTE Confidence: 0.9474767

00:11:45.670 --> 00:11:47.590 rate of cancer detection, which

NOTE Confidence: 0.9474767

00:11:47.590 --> 00:11:49.290 is great. Again, mammography

NOTE Confidence: 0.88283443

00:11:49.670 --> 00:11:51.429 alone finds if you have

NOTE Confidence: 0.88283443

00:11:51.429 --> 00:11:51.929 tomosynthesis,

NOTE Confidence: 0.9809192

00:11:52.710 --> 00:11:54.150 on average, four or five

NOTE Confidence: 0.9809192

00:11:54.150 --> 00:11:55.450 cancers per thousand.

NOTE Confidence: 0.9281742

00:11:56.950 --> 00:11:59.385 Another trial called BRAID breast

NOTE Confidence: 0.9281742

00:11:59.545 --> 00:12:01.705 Screening Risk Adaptive Imaging for

NOTE Confidence: 0.9281742

00:12:01.705 --> 00:12:02.205 Density

NOTE Confidence: 0.97241646

00:12:02.745 --> 00:12:04.585 wanted to see, in addition

NOTE Confidence: 0.97241646

00:12:04.585 --> 00:12:05.325 to mammography,

NOTE Confidence: 0.99415135

00:12:06.105 --> 00:12:07.005 other supplemental

NOTE Confidence: 0.87995005

00:12:07.385 --> 00:12:08.525 screening imaging,

NOTE Confidence: 0.99228585

00:12:10.025 --> 00:12:10.525 tools

NOTE Confidence: 0.5685766

00:12:10.905 --> 00:12:11.405 effect.

NOTE Confidence: 0.9996073

00:12:11.940 --> 00:12:12.600 For example,

NOTE Confidence: 0.98144954

00:12:13.300 --> 00:12:15.480 ultrasound, contrast enhanced mammography,

NOTE Confidence: 0.99972177

00:12:15.860 --> 00:12:16.760 and MRI

NOTE Confidence: 0.9695965

00:12:17.380 --> 00:12:19.000 in detection of breast cancer.

NOTE Confidence: 0.9409447

00:12:19.380 --> 00:12:21.160 They had about nine thousand

NOTE Confidence: 0.9409447

00:12:21.220 --> 00:12:23.940 patients. Six thousand completed those

NOTE Confidence: 0.9409447

00:12:23.940 --> 00:12:24.440 extra

NOTE Confidence: 0.9416477

00:12:24.980 --> 00:12:25.480 modalities.

NOTE Confidence: 0.99828935

00:12:26.535 --> 00:12:27.015 And,

NOTE Confidence: 0.9973027

00:12:27.335 --> 00:12:29.255 the cancer detection rates were

NOTE Confidence: 0.9973027

00:12:29.255 --> 00:12:30.475 really great,

NOTE Confidence: 0.9994822

00:12:30.855 --> 00:12:31.255 for

NOTE Confidence: 0.9025464

00:12:32.135 --> 00:12:34.295 and more abbreviated MRI is

NOTE Confidence: 0.9025464

00:12:34.295 --> 00:12:36.375 just the shorter version shorter

NOTE Confidence: 0.9025464

00:12:36.375 --> 00:12:38.315 time version of contrast enhanced

NOTE Confidence: 0.9025464

00:12:38.375 --> 00:12:38.875 MRI.

NOTE Confidence: 0.9970659

00:12:39.380 --> 00:12:40.899 And in that population, they

NOTE Confidence: 0.9970659

00:12:40.899 --> 00:12:42.760 had about seventeen per thousand,

NOTE Confidence: 0.97541547

00:12:43.300 --> 00:12:44.279 detected cancers.

NOTE Confidence: 0.99200803

00:12:44.980 --> 00:12:46.279 Contrast enhanced mammography

NOTE Confidence: 0.9689756

00:12:46.580 --> 00:12:48.679 was even higher, nineteen ish,

NOTE Confidence: 0.9689756

00:12:48.820 --> 00:12:49.140 and,

NOTE Confidence: 0.9960326

00:12:49.779 --> 00:12:51.779 ultrasound was only about four

NOTE Confidence: 0.9960326

00:12:51.779 --> 00:12:53.000 point two per thousand.

NOTE Confidence: 0.9999077

00:12:53.754 --> 00:12:54.574 You can see

NOTE Confidence: 0.97622633

00:12:55.194 --> 00:12:56.495 that. And in that population,

NOTE Confidence: 0.98670346

00:12:57.274 --> 00:12:59.754 the, cancer detection rate was

NOTE Confidence: 0.98670346

00:12:59.754 --> 00:13:01.115 eight point four per thousand.

NOTE Confidence: 0.98670346

00:13:01.115 --> 00:13:02.154 So you can actually look

NOTE Confidence: 0.98670346

00:13:02.154 --> 00:13:03.535 at the numbers and appreciate

NOTE Confidence: 0.98670346

00:13:03.675 --> 00:13:05.514 that ultrasound was just slightly

NOTE Confidence: 0.98670346

00:13:05.514 --> 00:13:07.890 better, but MRI and contrast

NOTE Confidence: 0.98670346

00:13:07.890 --> 00:13:09.650 enhanced mammogram more than doubled

NOTE Confidence: 0.98670346

00:13:09.650 --> 00:13:10.150 it.

NOTE Confidence: 0.9814122

00:13:12.290 --> 00:13:13.970 Tumor size was also much

NOTE Confidence: 0.9814122

00:13:13.970 --> 00:13:15.490 smaller. On the average, it

NOTE Confidence: 0.9814122

00:13:15.490 --> 00:13:17.170 was about a centimeter in

NOTE Confidence: 0.9814122

00:13:17.170 --> 00:13:19.010 women who had the MRI

NOTE Confidence: 0.9814122

00:13:19.010 --> 00:13:20.630 and contrast enhanced mammogram.

NOTE Confidence: 0.856616

00:13:21.250 --> 00:13:21.410 And,

NOTE Confidence: 0.9652307

00:13:22.315 --> 00:13:24.315 ultrasound detected tumors were slightly

NOTE Confidence: 0.9652307

00:13:24.315 --> 00:13:25.675 larger, about double the size,

NOTE Confidence: 0.9652307

00:13:25.675 --> 00:13:26.655 twenty two millimeters.

NOTE Confidence: 0.99903053

00:13:27.355 --> 00:13:28.335 These are averages.

NOTE Confidence: 0.99968433

00:13:29.035 --> 00:13:30.235 So you can see that

NOTE Confidence: 0.99968433

00:13:30.235 --> 00:13:31.295 earlier detection

NOTE Confidence: 0.8161725

00:13:31.675 --> 00:13:32.175 is,

NOTE Confidence: 0.99948955

00:13:33.115 --> 00:13:33.615 key

NOTE Confidence: 0.98118055

00:13:34.075 --> 00:13:34.575 with

NOTE Confidence: 0.99976987

00:13:35.440 --> 00:13:36.899 contrast enhanced modalities.

NOTE Confidence: 0.99304104

00:13:37.679 --> 00:13:38.559 Now just to say a

NOTE Confidence: 0.99304104

00:13:38.559 --> 00:13:40.399 little bit about contrast enhanced

NOTE Confidence: 0.99304104

00:13:40.399 --> 00:13:40.899 mammography,

NOTE Confidence: 0.9749879

00:13:42.079 --> 00:13:44.240 the premise is that tiny

NOTE Confidence: 0.9749879

00:13:44.240 --> 00:13:46.000 little tumors, anything more than

NOTE Confidence: 0.9749879

00:13:46.000 --> 00:13:47.620 two millimeter, will demonstrate

NOTE Confidence: 0.92413706

00:13:48.160 --> 00:13:48.660 angiogenesis,

NOTE Confidence: 0.9751584

00:13:49.184 --> 00:13:50.545 and that means that they're

NOTE Confidence: 0.9751584

00:13:50.545 --> 00:13:52.405 gonna grow new blood vessels.

NOTE Confidence: 0.96308404

00:13:52.945 --> 00:13:54.725 These blood vessels are leaky.

NOTE Confidence: 0.96308404

00:13:54.945 --> 00:13:56.225 And when we inject a

NOTE Confidence: 0.96308404

00:13:56.225 --> 00:13:58.565 contrast material through an intravenous,

NOTE Confidence: 0.8510862

00:13:59.745 --> 00:14:00.245 access,

NOTE Confidence: 0.9638945

00:14:01.184 --> 00:14:02.225 they go to the breast,

NOTE Confidence: 0.9638945

00:14:02.225 --> 00:14:03.420 and they accumulate

NOTE Confidence: 0.9978614

00:14:03.720 --> 00:14:05.100 in these tumors.

NOTE Confidence: 0.98637736

00:14:05.880 --> 00:14:07.160 We can detect them with

NOTE Confidence: 0.98637736

00:14:07.160 --> 00:14:08.679 two two ways. One is

NOTE Confidence: 0.98637736

00:14:08.679 --> 00:14:10.679 contrast enhanced mammography, and one

NOTE Confidence: 0.98637736

00:14:10.679 --> 00:14:11.340 is MR.

NOTE Confidence: 0.96526605

00:14:12.520 --> 00:14:14.540 A lot of people, patients,

NOTE Confidence: 0.96526605

00:14:14.760 --> 00:14:17.240 physicians know about, MRI. I

NOTE Confidence: 0.96526605

00:14:17.240 --> 00:14:18.285 won't go into into detail

NOTE Confidence: 0.96526605

00:14:18.285 --> 00:14:20.045 about that. But contrast enhanced

NOTE Confidence: 0.96526605

00:14:20.045 --> 00:14:22.065 mammogram is essentially a mammogram

NOTE Confidence: 0.980617

00:14:22.845 --> 00:14:24.205 that is obtained before and

NOTE Confidence: 0.980617

00:14:24.205 --> 00:14:26.445 after administration of contrast, and

NOTE Confidence: 0.980617

00:14:26.445 --> 00:14:27.505 this is an example

NOTE Confidence: 0.983882

00:14:27.964 --> 00:14:28.545 of that.

NOTE Confidence: 0.94601923

00:14:29.725 --> 00:14:31.170 When patients undergo contrast

NOTE Confidence: 0.80780697

00:14:32.290 --> 00:14:33.410 enhanced mammography, they get a

NOTE Confidence: 0.80780697

00:14:33.410 --> 00:14:35.329 normal mammogram, which is,

NOTE Confidence: 0.8888343

00:14:36.050 --> 00:14:37.730 this image here, and this

NOTE Confidence: 0.8888343

00:14:37.730 --> 00:14:38.930 is another view of the

NOTE Confidence: 0.8888343

00:14:38.930 --> 00:14:40.450 same. It's labeled left CC

NOTE Confidence: 0.8888343

00:14:40.450 --> 00:14:41.510 and left MLL.

NOTE Confidence: 0.9786378

00:14:42.209 --> 00:14:42.950 And then

NOTE Confidence: 0.8696323

00:14:43.490 --> 00:14:44.470 another image,

NOTE Confidence: 0.87231374

00:14:45.175 --> 00:14:47.015 mammogram image is obtained. Those

NOTE Confidence: 0.87231374

00:14:47.015 --> 00:14:48.315 images are subtracted,

NOTE Confidence: 0.99976873

00:14:48.695 --> 00:14:49.755 and what remains

NOTE Confidence: 0.98218143

00:14:50.135 --> 00:14:52.215 is anything that picks up

NOTE Confidence: 0.98218143

00:14:52.215 --> 00:14:53.895 the dye. So in these

NOTE Confidence: 0.98218143

00:14:53.895 --> 00:14:55.255 two images, you can see

NOTE Confidence: 0.98218143

00:14:55.255 --> 00:14:56.695 that there's a tiny little

NOTE Confidence: 0.98218143

00:14:56.695 --> 00:14:58.455 mass that shows up in

NOTE Confidence: 0.98218143

00:14:58.455 --> 00:14:59.515 the left breast,

NOTE Confidence: 0.99366236

00:14:59.980 --> 00:15:02.060 and it's completely obscured. You

NOTE Confidence: 0.99366236

00:15:02.060 --> 00:15:03.500 don't see anything like that

NOTE Confidence: 0.99366236

00:15:03.500 --> 00:15:04.880 because this is an extremely

NOTE Confidence: 0.99366236

00:15:04.940 --> 00:15:05.840 dense mammogram.

NOTE Confidence: 0.9724141

00:15:06.940 --> 00:15:07.440 And,

NOTE Confidence: 0.9964162

00:15:08.940 --> 00:15:10.640 so contrast enhanced mammography

NOTE Confidence: 0.99967664

00:15:11.100 --> 00:15:12.540 is a mammogram that is

NOTE Confidence: 0.99967664

00:15:12.540 --> 00:15:14.300 really not affected by breast

NOTE Confidence: 0.99967664

00:15:14.300 --> 00:15:14.800 density.

NOTE Confidence: 0.99902165

00:15:17.885 --> 00:15:18.385 So

NOTE Confidence: 0.98268396

00:15:18.765 --> 00:15:19.985 let me just oops.

NOTE Confidence: 0.99016714

00:15:21.165 --> 00:15:22.385 I lost my

NOTE Confidence: 0.7181283

00:15:24.045 --> 00:15:24.545 chair.

NOTE Confidence: 0.8318082

00:15:32.680 --> 00:15:33.180 Alright.

NOTE Confidence: 0.9125697

00:15:33.640 --> 00:15:35.240 What we don't have answer,

NOTE Confidence: 0.9125697

00:15:35.240 --> 00:15:37.080 there are several questions with,

NOTE Confidence: 0.9806693

00:15:38.040 --> 00:15:39.720 in general and what these

NOTE Confidence: 0.9806693

00:15:39.720 --> 00:15:41.080 trials that I mentioned have

NOTE Confidence: 0.9806693

00:15:41.080 --> 00:15:41.900 not answered.

NOTE Confidence: 0.99869335

00:15:42.840 --> 00:15:43.980 We know that mammography

NOTE Confidence: 0.99949074

00:15:44.280 --> 00:15:46.460 saves lives by lowering by

NOTE Confidence: 0.99949074

00:15:46.755 --> 00:15:49.095 decreasing mortality from breast cancer.

NOTE Confidence: 0.98713434

00:15:49.715 --> 00:15:51.155 We don't know that about

NOTE Confidence: 0.98713434

00:15:51.155 --> 00:15:53.415 MRI or contrast enhanced mammography.

NOTE Confidence: 0.99700963

00:15:54.435 --> 00:15:54.935 So,

NOTE Confidence: 0.99320686

00:15:55.795 --> 00:15:56.915 there's a lot of research

NOTE Confidence: 0.99320686

00:15:56.915 --> 00:15:58.675 being done about that. Hopefully,

NOTE Confidence: 0.99320686

00:15:58.675 --> 00:16:00.089 we'll have that answer at

NOTE Confidence: 0.99320686

00:16:00.089 --> 00:16:01.449 some point. We also don't

NOTE Confidence: 0.99320686

00:16:01.449 --> 00:16:02.810 know how feasible it is

NOTE Confidence: 0.99320686

00:16:02.810 --> 00:16:03.790 to have these,

NOTE Confidence: 0.99984396

00:16:04.649 --> 00:16:05.470 other supplemental

NOTE Confidence: 0.8855322

00:16:05.930 --> 00:16:06.430 tests,

NOTE Confidence: 0.999207

00:16:08.009 --> 00:16:09.389 in terms of logistics,

NOTE Confidence: 0.96308506

00:16:09.769 --> 00:16:10.750 cost, capacity

NOTE Confidence: 0.9862381

00:16:11.690 --> 00:16:13.470 for women who are not

NOTE Confidence: 0.9862381

00:16:13.769 --> 00:16:14.750 at high risk.

NOTE Confidence: 0.9891214

00:16:15.415 --> 00:16:16.935 As you know, demand for

NOTE Confidence: 0.9891214

00:16:16.935 --> 00:16:18.695 imaging is very high. We

NOTE Confidence: 0.9891214

00:16:18.695 --> 00:16:21.195 have very low, MRI capacities,

NOTE Confidence: 0.9891214

00:16:21.335 --> 00:16:22.795 and contrast enhanced mammography

NOTE Confidence: 0.9996836

00:16:23.415 --> 00:16:25.335 is not available at every

NOTE Confidence: 0.9996836

00:16:25.335 --> 00:16:25.835 institution.

NOTE Confidence: 0.9996926

00:16:26.615 --> 00:16:28.235 At Yale, we are

NOTE Confidence: 0.9928585

00:16:31.009 --> 00:16:33.250 increasing our MRI capacity at

NOTE Confidence: 0.9928585

00:16:33.250 --> 00:16:34.149 different sites.

NOTE Confidence: 0.9789442

00:16:34.610 --> 00:16:36.370 However, we are sharing with

NOTE Confidence: 0.9789442

00:16:36.370 --> 00:16:38.129 other body parts. You know,

NOTE Confidence: 0.9789442

00:16:38.129 --> 00:16:39.329 everybody wants to have an

NOTE Confidence: 0.9789442

00:16:39.329 --> 00:16:41.110 MR. It's a highly utilized,

NOTE Confidence: 0.7509724

00:16:41.889 --> 00:16:42.225 test.

NOTE Confidence: 0.9848963

00:16:42.865 --> 00:16:44.065 And we don't have enough

NOTE Confidence: 0.9848963

00:16:44.065 --> 00:16:46.065 slots to do diagnostic MRs,

NOTE Confidence: 0.9848963

00:16:46.065 --> 00:16:47.425 to do high risk screening,

NOTE Confidence: 0.9848963

00:16:47.425 --> 00:16:49.264 and also average screening of

NOTE Confidence: 0.9848963

00:16:49.264 --> 00:16:50.865 the women who have dense

NOTE Confidence: 0.9848963

00:16:50.865 --> 00:16:51.365 breasts.

NOTE Confidence: 0.97068894

00:16:52.065 --> 00:16:53.345 We will be starting a

NOTE Confidence: 0.97068894

00:16:53.345 --> 00:16:55.584 contrast enhanced mammography program in

NOTE Confidence: 0.97068894

00:16:55.584 --> 00:16:56.625 the next six months or

NOTE Confidence: 0.97068894

00:16:56.625 --> 00:16:58.110 so. We'll be doing it

NOTE Confidence: 0.97068894

00:16:58.110 --> 00:17:00.270 on both, two campuses at,

NOTE Confidence: 0.63882846

00:17:00.670 --> 00:17:01.170 Smilo

NOTE Confidence: 0.93374175

00:17:01.790 --> 00:17:03.810 and at our North Haven

NOTE Confidence: 0.93374175

00:17:03.950 --> 00:17:06.350 campus. And, that'll be great.

NOTE Confidence: 0.93374175

00:17:06.350 --> 00:17:07.170 It'll be,

NOTE Confidence: 0.9980894

00:17:08.350 --> 00:17:10.109 very, very exciting for us

NOTE Confidence: 0.9980894

00:17:10.109 --> 00:17:11.410 to start that program

NOTE Confidence: 0.9919467

00:17:11.815 --> 00:17:12.795 and offer women,

NOTE Confidence: 0.918112

00:17:13.575 --> 00:17:15.355 additional supplemental screening.

NOTE Confidence: 0.99821377

00:17:21.335 --> 00:17:21.835 Alright.

NOTE Confidence: 0.99392176

00:17:25.830 --> 00:17:27.450 Alright. Very nice.

NOTE Confidence: 0.951239

00:17:28.230 --> 00:17:29.050 Doctor Battaglia?

NOTE Confidence: 0.95326364

00:17:30.869 --> 00:17:32.070 I'll pull up my slides.

NOTE Confidence: 0.95326364

00:17:32.070 --> 00:17:33.590 Good evening, everyone. I see

NOTE Confidence: 0.95326364

00:17:33.590 --> 00:17:34.630 there's a couple of questions

NOTE Confidence: 0.95326364

00:17:34.630 --> 00:17:35.350 in the chat, John. I

NOTE Confidence: 0.95326364

00:17:35.350 --> 00:17:36.230 don't know if you wanna

NOTE Confidence: 0.95326364

00:17:36.230 --> 00:17:37.270 take one or two while

NOTE Confidence: 0.95326364

00:17:37.270 --> 00:17:37.520 I'm

NOTE Confidence: 0.9758668

00:17:38.655 --> 00:17:39.775 If you would like, we

NOTE Confidence: 0.9758668

00:17:39.775 --> 00:17:41.055 definitely will have time at

NOTE Confidence: 0.9758668

00:17:41.055 --> 00:17:42.595 the very end for everybody's

NOTE Confidence: 0.9758668

00:17:42.655 --> 00:17:44.735 question. Well, pretty much. So

NOTE Confidence: 0.9758668

00:17:44.735 --> 00:17:45.795 one of our attendees

NOTE Confidence: 0.7907873

00:17:46.494 --> 00:17:47.955 asked, doctor Lottie,

NOTE Confidence: 0.9462609

00:17:48.415 --> 00:17:50.355 about invasive lobular cancer.

NOTE Confidence: 0.9893535

00:17:50.815 --> 00:17:51.855 How would that show up

NOTE Confidence: 0.9893535

00:17:51.855 --> 00:17:53.475 on a contrast enhanced mammogram?

NOTE Confidence: 0.9963155

00:17:54.169 --> 00:17:55.630 So similar to MRI,

NOTE Confidence: 0.9922103

00:17:56.409 --> 00:17:57.710 it will show up,

NOTE Confidence: 0.9968691

00:17:58.330 --> 00:17:59.869 because lobular cancer

NOTE Confidence: 0.89379245

00:18:00.570 --> 00:18:02.270 also has, neovascularity.

NOTE Confidence: 0.9815482

00:18:04.890 --> 00:18:06.650 As you know, lobular cancer

NOTE Confidence: 0.9815482

00:18:06.650 --> 00:18:07.850 is not a very common

NOTE Confidence: 0.9815482

00:18:07.850 --> 00:18:09.289 cancer. It's about ten percent

NOTE Confidence: 0.9815482

00:18:09.289 --> 00:18:11.554 of our cancers. And, occasionally,

NOTE Confidence: 0.9387631

00:18:11.934 --> 00:18:13.695 it may not enhance. It

NOTE Confidence: 0.9387631

00:18:13.695 --> 00:18:14.655 may not take up the

NOTE Confidence: 0.9387631

00:18:14.655 --> 00:18:16.355 dive similar to MRI.

NOTE Confidence: 0.98981017

00:18:16.895 --> 00:18:18.035 And that's why

NOTE Confidence: 0.8058353

00:18:20.575 --> 00:18:22.446 screening mammography, the two the

NOTE Confidence: 0.8058353

00:18:22.446 --> 00:18:22.527 actual mammogram portion of it

NOTE Confidence: 0.8058353

00:18:22.527 --> 00:18:22.962 is super helpful. We read

NOTE Confidence: 0.8058353

00:18:22.962 --> 00:18:23.190 those

NOTE Confidence: 0.8554492

00:18:34.869 --> 00:18:36.250 based on a

NOTE Confidence: 0.99522364

00:18:37.065 --> 00:18:38.924 previous biopsy or diagnosis

NOTE Confidence: 0.9640901

00:18:39.225 --> 00:18:40.125 or whatever,

NOTE Confidence: 0.9972313

00:18:41.144 --> 00:18:42.664 we can either do contrast

NOTE Confidence: 0.9972313

00:18:42.664 --> 00:18:43.565 enhanced mammography

NOTE Confidence: 0.97496665

00:18:43.865 --> 00:18:45.705 or MRI for extent of

NOTE Confidence: 0.97496665

00:18:45.705 --> 00:18:46.664 disease and,

NOTE Confidence: 0.99454355

00:18:47.625 --> 00:18:49.085 other diagnostic workup.

NOTE Confidence: 0.971243

00:18:51.460 --> 00:18:53.059 Alright. Very good. Let's move

NOTE Confidence: 0.971243

00:18:53.059 --> 00:18:53.940 on to the next talk,

NOTE Confidence: 0.971243

00:18:53.940 --> 00:18:55.640 and I will promise we'll

NOTE Confidence: 0.9772467

00:18:56.020 --> 00:18:57.380 get to everybody's questions at

NOTE Confidence: 0.9772467

00:18:57.380 --> 00:18:59.380 the end. Okay. Great. Thank

NOTE Confidence: 0.9772467

00:18:59.380 --> 00:19:00.500 you so much. Good evening,

NOTE Confidence: 0.9772467

00:19:00.500 --> 00:19:01.460 everyone. It's great to be

NOTE Confidence: 0.9772467

00:19:01.460 --> 00:19:02.260 here with you all to

NOTE Confidence: 0.9772467

00:19:02.260 --> 00:19:03.780 kick off breast cancer awareness

NOTE Confidence: 0.9772467

00:19:03.780 --> 00:19:04.695 month. I see,

NOTE Confidence: 0.9997964

00:19:05.095 --> 00:19:06.154 only one of

NOTE Confidence: 0.98375404

00:19:06.455 --> 00:19:07.734 our panelists has pink on

NOTE Confidence: 0.98375404

00:19:07.734 --> 00:19:09.734 today. So, Melinda, you you

NOTE Confidence: 0.98375404

00:19:09.734 --> 00:19:10.855 have it on. You have

NOTE Confidence: 0.98375404

00:19:10.855 --> 00:19:12.294 it on. So I'm here

NOTE Confidence: 0.98375404

00:19:12.294 --> 00:19:14.455 to, take you, through an

NOTE Confidence: 0.98375404

00:19:14.455 --> 00:19:16.375 overview of high risk breast

NOTE Confidence: 0.98375404

00:19:16.375 --> 00:19:18.054 health care. I'm gonna talk

NOTE Confidence: 0.98375404

00:19:18.054 --> 00:19:19.174 a little bit about risk

NOTE Confidence: 0.98375404

00:19:19.174 --> 00:19:19.674 assessments,

NOTE Confidence: 0.99897075

00:19:20.280 --> 00:19:21.880 risk assessment that was alluded

NOTE Confidence: 0.99897075

00:19:21.880 --> 00:19:22.780 to in the

NOTE Confidence: 0.99071044

00:19:23.160 --> 00:19:24.760 the first presentation on breast

NOTE Confidence: 0.99071044

00:19:24.760 --> 00:19:25.260 imaging

NOTE Confidence: 0.9929729

00:19:25.800 --> 00:19:27.560 and, our approach to risk

NOTE Confidence: 0.9929729

00:19:27.560 --> 00:19:29.320 reduction strategies for those who

NOTE Confidence: 0.9929729

00:19:29.320 --> 00:19:30.460 do have high risk.

NOTE Confidence: 0.9638429

00:19:31.160 --> 00:19:32.600 My background is I'm a

NOTE Confidence: 0.9638429

00:19:32.600 --> 00:19:34.680 general internist, women's health provider,

NOTE Confidence: 0.9638429

00:19:34.680 --> 00:19:35.820 and preventive medicine,

NOTE Confidence: 0.9786648

00:19:36.304 --> 00:19:38.005 physician. And so I'm a

NOTE Confidence: 0.9786648

00:19:38.145 --> 00:19:39.585 practicing clinician in our high

NOTE Confidence: 0.9786648

00:19:39.585 --> 00:19:40.725 risk breast practice.

NOTE Confidence: 0.9786867

00:19:45.184 --> 00:19:46.545 So, you know, what we've,

NOTE Confidence: 0.9998653

00:19:47.105 --> 00:19:47.605 historically

NOTE Confidence: 0.9943296

00:19:47.984 --> 00:19:50.225 approached breast cancer screening is

NOTE Confidence: 0.9943296

00:19:50.225 --> 00:19:52.260 using age based screening.

NOTE Confidence: 0.9916825

00:19:54.000 --> 00:19:54.660 And so

NOTE Confidence: 0.98036426

00:19:55.520 --> 00:19:56.720 many of us are familiar

NOTE Confidence: 0.98036426

00:19:56.720 --> 00:19:58.640 with recommendations for screening based

NOTE Confidence: 0.98036426

00:19:58.640 --> 00:19:59.780 on age alone.

NOTE Confidence: 0.9885221

00:20:00.400 --> 00:20:01.679 And we know now that

NOTE Confidence: 0.9885221

00:20:01.679 --> 00:20:03.539 age based screening really ignores

NOTE Confidence: 0.9885221

00:20:03.600 --> 00:20:04.960 the range, the very sort

NOTE Confidence: 0.9885221

00:20:04.960 --> 00:20:06.315 of broad range of risk

NOTE Confidence: 0.9885221

00:20:06.554 --> 00:20:07.355 factors that,

NOTE Confidence: 0.9737399

00:20:08.875 --> 00:20:11.034 influence our individual risks for

NOTE Confidence: 0.9737399

00:20:11.034 --> 00:20:12.014 future cancer.

NOTE Confidence: 0.984548

00:20:12.475 --> 00:20:13.754 And as we sort of

NOTE Confidence: 0.984548

00:20:13.754 --> 00:20:14.494 have advances

NOTE Confidence: 0.9393019

00:20:14.955 --> 00:20:16.095 in cancer diagnosis

NOTE Confidence: 0.9990201

00:20:16.554 --> 00:20:17.294 and treatment,

NOTE Confidence: 0.82723665

00:20:18.154 --> 00:20:18.794 we are,

NOTE Confidence: 0.9989974

00:20:19.789 --> 00:20:22.109 increasingly providing personalized care to

NOTE Confidence: 0.9989974

00:20:22.109 --> 00:20:23.809 patients based on their individual

NOTE Confidence: 0.9782586

00:20:24.109 --> 00:20:26.270 presentation. And so the age

NOTE Confidence: 0.9782586

00:20:26.270 --> 00:20:28.210 based sort of screening ignores

NOTE Confidence: 0.9782586

00:20:28.350 --> 00:20:29.390 sort of where we are

NOTE Confidence: 0.9782586

00:20:29.390 --> 00:20:31.169 in our understanding of cancer.

NOTE Confidence: 0.97554404

00:20:33.095 --> 00:20:34.534 Twenty twenty two was the

NOTE Confidence: 0.97554404

00:20:34.534 --> 00:20:35.815 first year that one of

NOTE Confidence: 0.97554404

00:20:35.815 --> 00:20:36.315 the,

NOTE Confidence: 0.96253854

00:20:37.095 --> 00:20:39.095 professional organizations called the National

NOTE Confidence: 0.96253854

00:20:39.095 --> 00:20:40.234 Comprehensive Cancer,

NOTE Confidence: 0.8296127

00:20:41.654 --> 00:20:43.274 Cancer Center recommendation

NOTE Confidence: 0.9960756

00:20:43.734 --> 00:20:45.095 made the recommendations for the

NOTE Confidence: 0.9960756

00:20:45.095 --> 00:20:45.755 first time

NOTE Confidence: 0.9893132

00:20:46.429 --> 00:20:48.190 for individual risk assessment by

NOTE Confidence: 0.9893132

00:20:48.190 --> 00:20:49.549 age twenty five, and then

NOTE Confidence: 0.9893132

00:20:49.549 --> 00:20:51.169 the American College of Radiology,

NOTE Confidence: 0.9893132

00:20:51.309 --> 00:20:52.750 as we heard, followed suit,

NOTE Confidence: 0.9893132

00:20:52.750 --> 00:20:53.869 I think, the following year

NOTE Confidence: 0.9893132

00:20:53.869 --> 00:20:55.169 in twenty twenty three.

NOTE Confidence: 0.9990996

00:20:56.109 --> 00:20:57.650 So high risk guidelines

NOTE Confidence: 0.9701064

00:20:58.190 --> 00:21:00.475 now exist from several professional

NOTE Confidence: 0.9701064

00:21:00.775 --> 00:21:01.275 organizations,

NOTE Confidence: 0.98871505

00:21:01.575 --> 00:21:02.935 and they promote the use

NOTE Confidence: 0.98871505

00:21:02.935 --> 00:21:04.695 of risk prediction models to

NOTE Confidence: 0.98871505

00:21:04.695 --> 00:21:05.915 estimate an individual's

NOTE Confidence: 0.97418714

00:21:06.295 --> 00:21:07.655 patient's risk. So we're gonna

NOTE Confidence: 0.97418714

00:21:07.655 --> 00:21:08.615 talk a little bit about

NOTE Confidence: 0.97418714

00:21:08.615 --> 00:21:09.115 that.

NOTE Confidence: 0.9997094

00:21:10.295 --> 00:21:11.435 When we think about

NOTE Confidence: 0.99360496

00:21:11.850 --> 00:21:13.530 high risk breast health care

NOTE Confidence: 0.99360496

00:21:13.530 --> 00:21:15.369 in general, I think about

NOTE Confidence: 0.99360496

00:21:15.369 --> 00:21:16.970 sort of four general areas.

NOTE Confidence: 0.99360496

00:21:16.970 --> 00:21:18.030 The first is

NOTE Confidence: 0.99892646

00:21:19.049 --> 00:21:20.730 identifying whether or not a

NOTE Confidence: 0.99892646

00:21:20.730 --> 00:21:22.510 patient is at high risk.

NOTE Confidence: 0.9993403

00:21:25.244 --> 00:21:25.984 High risk

NOTE Confidence: 0.9998746

00:21:26.365 --> 00:21:26.865 assessment

NOTE Confidence: 0.96415687

00:21:27.165 --> 00:21:28.445 can be made through the

NOTE Confidence: 0.96415687

00:21:28.445 --> 00:21:30.845 identification of pathogenic variants through

NOTE Confidence: 0.96415687

00:21:30.845 --> 00:21:32.205 genetic testing. So, we need

NOTE Confidence: 0.96415687

00:21:32.205 --> 00:21:32.705 to,

NOTE Confidence: 0.9984426

00:21:33.405 --> 00:21:34.945 in the process of identifying

NOTE Confidence: 0.9984426

00:21:35.085 --> 00:21:37.505 risk, ask ourselves if patients

NOTE Confidence: 0.9984426

00:21:37.645 --> 00:21:38.385 are eligible

NOTE Confidence: 0.9977938

00:21:39.119 --> 00:21:41.040 for genetic testing based on

NOTE Confidence: 0.9977938

00:21:41.040 --> 00:21:43.380 a threshold of potential risk

NOTE Confidence: 0.95128536

00:21:43.920 --> 00:21:45.300 based on family history.

NOTE Confidence: 0.9759324

00:21:46.960 --> 00:21:48.640 We also utilize, in the

NOTE Confidence: 0.9759324

00:21:48.640 --> 00:21:50.560 absence of a pathogenic variant,

NOTE Confidence: 0.9759324

00:21:50.560 --> 00:21:52.640 these risk prediction models, which

NOTE Confidence: 0.9759324

00:21:52.640 --> 00:21:55.065 really give a calculated estimate

NOTE Confidence: 0.9759324

00:21:55.065 --> 00:21:56.285 based on a comprehensive

NOTE Confidence: 0.9929416

00:21:56.665 --> 00:21:58.425 list of risk factors for

NOTE Confidence: 0.9929416

00:21:58.425 --> 00:21:59.725 an individual patient.

NOTE Confidence: 0.9815563

00:22:00.425 --> 00:22:01.865 But there's many nuances to

NOTE Confidence: 0.9815563

00:22:01.865 --> 00:22:02.825 this model, so I'm gonna

NOTE Confidence: 0.9815563

00:22:02.825 --> 00:22:03.865 introduce you to a few

NOTE Confidence: 0.9815563

00:22:03.865 --> 00:22:04.525 of them.

NOTE Confidence: 0.99298984

00:22:04.984 --> 00:22:06.105 And then based on this

NOTE Confidence: 0.99298984

00:22:06.105 --> 00:22:08.240 information, we can provide risk

NOTE Confidence: 0.99298984

00:22:08.240 --> 00:22:10.159 reduction strategies to a patient

NOTE Confidence: 0.99298984

00:22:10.159 --> 00:22:12.159 based on what thresholds that

NOTE Confidence: 0.99298984

00:22:12.159 --> 00:22:13.619 they have in their personal

NOTE Confidence: 0.99298984

00:22:13.679 --> 00:22:14.179 risk.

NOTE Confidence: 0.99592865

00:22:15.760 --> 00:22:16.960 So we already heard in

NOTE Confidence: 0.99592865

00:22:16.960 --> 00:22:18.100 the previous presentation

NOTE Confidence: 0.98729837

00:22:18.559 --> 00:22:19.840 the definition of what is

NOTE Confidence: 0.98729837

00:22:19.840 --> 00:22:21.220 considered high risk.

NOTE Confidence: 0.99287826

00:22:21.755 --> 00:22:23.595 So a lifetime breast cancer

NOTE Confidence: 0.99287826

00:22:23.595 --> 00:22:25.355 risk greater than twenty percent

NOTE Confidence: 0.99287826

00:22:25.355 --> 00:22:26.635 is considered to be in

NOTE Confidence: 0.99287826

00:22:26.635 --> 00:22:28.635 the high risk range. So

NOTE Confidence: 0.99287826

00:22:28.635 --> 00:22:29.595 we're gonna hear more about

NOTE Confidence: 0.99287826

00:22:29.595 --> 00:22:30.095 that.

NOTE Confidence: 0.9854471

00:22:32.475 --> 00:22:34.095 So how do we determine

NOTE Confidence: 0.9854471

00:22:34.235 --> 00:22:35.640 who is at high risk?

NOTE Confidence: 0.9854471

00:22:35.720 --> 00:22:36.840 In order to do that,

NOTE Confidence: 0.9854471

00:22:36.840 --> 00:22:38.359 we need to take a

NOTE Confidence: 0.9854471

00:22:38.359 --> 00:22:38.859 comprehensive

NOTE Confidence: 0.9994775

00:22:39.240 --> 00:22:41.260 review of an individual patient's

NOTE Confidence: 0.9994775

00:22:41.320 --> 00:22:42.140 risk factors,

NOTE Confidence: 0.99975604

00:22:43.400 --> 00:22:43.900 including

NOTE Confidence: 0.98602134

00:22:44.200 --> 00:22:45.880 inherited gene mutations. And so

NOTE Confidence: 0.98602134

00:22:45.880 --> 00:22:47.080 we're gonna walk through that

NOTE Confidence: 0.98602134

00:22:47.080 --> 00:22:47.900 in a moment.

NOTE Confidence: 0.9773572

00:22:48.304 --> 00:22:49.424 But I just wanna point

NOTE Confidence: 0.9773572

00:22:49.424 --> 00:22:51.505 out that while we place

NOTE Confidence: 0.9773572

00:22:51.505 --> 00:22:52.725 a large emphasis

NOTE Confidence: 0.9836151

00:22:53.265 --> 00:22:55.905 around genetic pathogenic variants or

NOTE Confidence: 0.9836151

00:22:55.905 --> 00:22:57.105 carrying the gene that puts

NOTE Confidence: 0.9836151

00:22:57.105 --> 00:22:58.304 you at risk for breast

NOTE Confidence: 0.9836151

00:22:58.304 --> 00:22:58.804 cancer,

NOTE Confidence: 0.99942863

00:23:00.145 --> 00:23:01.044 these pathogenic

NOTE Confidence: 0.9997279

00:23:01.345 --> 00:23:01.845 variants

NOTE Confidence: 0.98985845

00:23:03.179 --> 00:23:04.779 are responsible for a very

NOTE Confidence: 0.98985845

00:23:04.779 --> 00:23:06.619 small percentage of breast cancer

NOTE Confidence: 0.98985845

00:23:06.619 --> 00:23:08.460 cases. So the estimates are

NOTE Confidence: 0.98985845

00:23:08.460 --> 00:23:10.059 somewhere between five and ten

NOTE Confidence: 0.98985845

00:23:10.059 --> 00:23:10.559 percent

NOTE Confidence: 0.99247146

00:23:11.259 --> 00:23:13.200 of these harmful variants. And

NOTE Confidence: 0.99247146

00:23:13.340 --> 00:23:14.779 many of us are familiar

NOTE Confidence: 0.99247146

00:23:14.779 --> 00:23:15.195 with

NOTE Confidence: 0.926713

00:23:15.674 --> 00:23:17.514 the high risk penetrance genes

NOTE Confidence: 0.926713

00:23:17.514 --> 00:23:19.034 of the BRCA1 and the

NOTE Confidence: 0.926713

00:23:19.034 --> 00:23:20.255 BRCA2 mutations,

NOTE Confidence: 0.9737717

00:23:21.274 --> 00:23:22.575 but the field of genetics

NOTE Confidence: 0.9737717

00:23:22.715 --> 00:23:24.894 is rapidly expanding and evolving

NOTE Confidence: 0.9737717

00:23:24.955 --> 00:23:26.475 and we now know about

NOTE Confidence: 0.9737717

00:23:26.475 --> 00:23:28.634 many other pathologic variants. And

NOTE Confidence: 0.9737717

00:23:28.634 --> 00:23:29.134 so

NOTE Confidence: 0.9919454

00:23:29.520 --> 00:23:31.920 when we, pursue genetic testing,

NOTE Confidence: 0.9919454

00:23:31.920 --> 00:23:33.280 we often do a sort

NOTE Confidence: 0.9919454

00:23:33.280 --> 00:23:35.760 of expanded panel looking at

NOTE Confidence: 0.9919454

00:23:35.760 --> 00:23:37.300 a number of different variants.

NOTE Confidence: 0.99081737

00:23:37.840 --> 00:23:39.760 The high risk penetrance genes

NOTE Confidence: 0.99081737

00:23:39.760 --> 00:23:40.660 listed here,

NOTE Confidence: 0.7970257

00:23:41.760 --> 00:23:43.244 confer a risk of,

NOTE Confidence: 0.97608656

00:23:43.885 --> 00:23:45.165 a high risk a risk

NOTE Confidence: 0.97608656

00:23:45.165 --> 00:23:46.684 of lifetime risk as high

NOTE Confidence: 0.97608656

00:23:46.684 --> 00:23:48.225 as sixty to eighty percent.

NOTE Confidence: 0.95030636

00:23:49.645 --> 00:23:51.744 Whereas these moderate risk penetrance

NOTE Confidence: 0.95030636

00:23:51.965 --> 00:23:53.905 genes listed on this slide

NOTE Confidence: 0.95030636

00:23:54.045 --> 00:23:55.405 confer risk more in the

NOTE Confidence: 0.95030636

00:23:55.405 --> 00:23:57.005 twenty to thirty percent range.

NOTE Confidence: 0.95030636

00:23:57.005 --> 00:23:58.285 So it helps us sort

NOTE Confidence: 0.95030636

00:23:58.285 --> 00:24:00.210 of categorize a patient's future

NOTE Confidence: 0.95030636

00:24:00.210 --> 00:24:00.710 risk.

NOTE Confidence: 0.9934729

00:24:02.850 --> 00:24:04.290 So as a clinician, one

NOTE Confidence: 0.9934729

00:24:04.290 --> 00:24:05.170 of the first things we

NOTE Confidence: 0.9934729

00:24:05.170 --> 00:24:06.930 do when we're caring for

NOTE Confidence: 0.9934729

00:24:06.930 --> 00:24:08.290 patients, whether this is in

NOTE Confidence: 0.9934729

00:24:08.290 --> 00:24:09.730 primary care or in a

NOTE Confidence: 0.9934729

00:24:09.730 --> 00:24:11.994 specialty practice, is we ask

NOTE Confidence: 0.9934729

00:24:11.994 --> 00:24:14.015 ourselves, is my patient eligible

NOTE Confidence: 0.9934729

00:24:14.075 --> 00:24:15.294 for genetic testing?

NOTE Confidence: 0.9944191

00:24:15.994 --> 00:24:17.275 And because this field is

NOTE Confidence: 0.9944191

00:24:17.275 --> 00:24:19.215 so rapidly evolving and

NOTE Confidence: 0.9928356

00:24:20.315 --> 00:24:21.615 the professional guidelines

NOTE Confidence: 0.99891967

00:24:22.075 --> 00:24:23.215 change rapidly

NOTE Confidence: 0.99823827

00:24:23.835 --> 00:24:25.115 in response to what we

NOTE Confidence: 0.99823827

00:24:25.115 --> 00:24:26.415 understand about genetics,

NOTE Confidence: 0.999431

00:24:27.359 --> 00:24:28.640 we have tools in our

NOTE Confidence: 0.999431

00:24:28.640 --> 00:24:30.400 electronic health record that support

NOTE Confidence: 0.999431

00:24:30.400 --> 00:24:32.559 our providers in making decisions

NOTE Confidence: 0.999431

00:24:32.559 --> 00:24:34.020 about who might be eligible.

NOTE Confidence: 0.995499

00:24:35.440 --> 00:24:36.980 And I share this because,

NOTE Confidence: 0.99452156

00:24:38.400 --> 00:24:39.680 I think it's important to

NOTE Confidence: 0.99452156

00:24:39.680 --> 00:24:40.180 know,

NOTE Confidence: 0.9729258

00:24:40.875 --> 00:24:42.475 as a patient that this

NOTE Confidence: 0.9729258

00:24:42.475 --> 00:24:44.075 is a really complex field

NOTE Confidence: 0.9729258

00:24:44.075 --> 00:24:46.095 that not all providers are,

NOTE Confidence: 0.9858496

00:24:47.675 --> 00:24:48.795 skilled at, and there are

NOTE Confidence: 0.9858496

00:24:48.795 --> 00:24:50.155 tools like this that support

NOTE Confidence: 0.9858496

00:24:50.155 --> 00:24:51.275 our providers. And you can

NOTE Confidence: 0.9858496

00:24:51.275 --> 00:24:52.955 see here that we have

NOTE Confidence: 0.9858496

00:24:52.955 --> 00:24:54.700 tools that have a have

NOTE Confidence: 0.9858496

00:24:54.700 --> 00:24:56.300 a a tab for each

NOTE Confidence: 0.9858496

00:24:56.300 --> 00:24:58.220 disease because the indications for

NOTE Confidence: 0.9858496

00:24:58.220 --> 00:24:58.720 testing

NOTE Confidence: 0.9990328

00:24:59.580 --> 00:25:01.020 differ based on the cancer

NOTE Confidence: 0.9990328

00:25:01.020 --> 00:25:01.520 disease.

NOTE Confidence: 0.99191594

00:25:02.220 --> 00:25:04.220 So, from a breast cancer

NOTE Confidence: 0.99191594

00:25:04.220 --> 00:25:05.740 perspective, if you have a

NOTE Confidence: 0.99191594

00:25:05.740 --> 00:25:07.420 known mutation, there's no need

NOTE Confidence: 0.99191594

00:25:07.420 --> 00:25:08.540 to refer you to a

NOTE Confidence: 0.99191594

00:25:08.540 --> 00:25:09.040 genetic,

NOTE Confidence: 0.9863923

00:25:10.465 --> 00:25:11.845 counseling or testing.

NOTE Confidence: 0.99362797

00:25:13.025 --> 00:25:14.225 But if you've had genetic

NOTE Confidence: 0.99362797

00:25:14.225 --> 00:25:15.905 testing, for example, greater than

NOTE Confidence: 0.99362797

00:25:15.905 --> 00:25:17.265 ten years ago, you may

NOTE Confidence: 0.99362797

00:25:17.265 --> 00:25:19.505 benefit from repeat testing because

NOTE Confidence: 0.99362797

00:25:19.505 --> 00:25:20.625 of the advances in the

NOTE Confidence: 0.99362797

00:25:20.625 --> 00:25:21.605 extended panels.

NOTE Confidence: 0.9859056

00:25:23.870 --> 00:25:24.850 So, this slide,

NOTE Confidence: 0.98839337

00:25:25.470 --> 00:25:26.510 lists for you,

NOTE Confidence: 0.99942666

00:25:27.870 --> 00:25:28.530 the professional

NOTE Confidence: 0.9970567

00:25:28.910 --> 00:25:29.410 organization

NOTE Confidence: 0.9972498

00:25:29.790 --> 00:25:30.290 recommendations

NOTE Confidence: 0.98778063

00:25:30.670 --> 00:25:32.450 around who should be tested

NOTE Confidence: 0.98778063

00:25:32.590 --> 00:25:34.430 or considered for testing for

NOTE Confidence: 0.98778063

00:25:34.430 --> 00:25:35.730 a pathogenic variant.

NOTE Confidence: 0.9467866

00:25:36.345 --> 00:25:37.465 And so I draw your

NOTE Confidence: 0.9467866

00:25:37.465 --> 00:25:38.445 attention to,

NOTE Confidence: 0.9192404

00:25:38.905 --> 00:25:40.345 the underlying text that says

NOTE Confidence: 0.9192404

00:25:40.345 --> 00:25:42.105 personal history and of breast

NOTE Confidence: 0.9192404

00:25:42.105 --> 00:25:43.164 cancer and.

NOTE Confidence: 0.9715673

00:25:44.105 --> 00:25:45.544 So if you have a

NOTE Confidence: 0.9715673

00:25:45.544 --> 00:25:47.625 diagnosis of breast cancer and

NOTE Confidence: 0.9715673

00:25:47.625 --> 00:25:49.005 meet any of the criteria

NOTE Confidence: 0.9715673

00:25:49.225 --> 00:25:50.490 on this list, you should

NOTE Confidence: 0.9715673

00:25:50.490 --> 00:25:53.050 receive genetic testing, ideally, before

NOTE Confidence: 0.9715673

00:25:53.050 --> 00:25:54.810 you initiate any treatment to

NOTE Confidence: 0.9715673

00:25:54.810 --> 00:25:55.310 inform

NOTE Confidence: 0.9998253

00:25:56.010 --> 00:25:57.230 your treatment decisions.

NOTE Confidence: 0.99780744

00:25:58.410 --> 00:25:58.890 So,

NOTE Confidence: 0.9728379

00:25:59.530 --> 00:26:01.290 having breast cancer at a

NOTE Confidence: 0.9728379

00:26:01.290 --> 00:26:02.570 young age under the age

NOTE Confidence: 0.9728379

00:26:02.570 --> 00:26:04.010 of fifty is a red

NOTE Confidence: 0.9728379

00:26:04.010 --> 00:26:05.640 flag for a potential

NOTE Confidence: 0.9971336

00:26:06.345 --> 00:26:08.345 pathogenic variant. So every woman

NOTE Confidence: 0.9971336

00:26:08.345 --> 00:26:09.545 under the age of fifty

NOTE Confidence: 0.9971336

00:26:09.545 --> 00:26:11.145 diagnosed with breast cancer should

NOTE Confidence: 0.9971336

00:26:11.145 --> 00:26:11.885 get tested.

NOTE Confidence: 0.9998171

00:26:13.625 --> 00:26:14.925 There are other indications

NOTE Confidence: 0.99695843

00:26:15.385 --> 00:26:16.125 of genetic,

NOTE Confidence: 0.9843116

00:26:16.825 --> 00:26:18.605 variants, and that also includes

NOTE Confidence: 0.9843116

00:26:18.744 --> 00:26:19.740 the type of cancer that

NOTE Confidence: 0.9843116

00:26:19.740 --> 00:26:20.940 you have. So if you're

NOTE Confidence: 0.9843116

00:26:20.940 --> 00:26:22.940 diagnosed with a breast cancer

NOTE Confidence: 0.9843116

00:26:22.940 --> 00:26:24.140 that is what we call

NOTE Confidence: 0.9843116

00:26:24.140 --> 00:26:25.040 triple negative

NOTE Confidence: 0.9752584

00:26:25.740 --> 00:26:27.200 or hormone negative,

NOTE Confidence: 0.9808122

00:26:28.780 --> 00:26:30.060 then that that is also

NOTE Confidence: 0.9808122

00:26:30.060 --> 00:26:31.600 an indication for testing.

NOTE Confidence: 0.99988383

00:26:32.075 --> 00:26:33.035 If you have a family

NOTE Confidence: 0.99988383

00:26:33.035 --> 00:26:33.535 history

NOTE Confidence: 0.9801319

00:26:33.915 --> 00:26:35.755 of a male breast cancer

NOTE Confidence: 0.9801319

00:26:35.755 --> 00:26:37.035 in your family, that's an

NOTE Confidence: 0.9801319

00:26:37.115 --> 00:26:38.095 another indication.

NOTE Confidence: 0.9971673

00:26:40.155 --> 00:26:41.675 But even patients who have

NOTE Confidence: 0.9971673

00:26:41.675 --> 00:26:43.195 not been affected by cancer

NOTE Confidence: 0.9971673

00:26:43.195 --> 00:26:45.295 are eligible for for testing

NOTE Confidence: 0.9971673

00:26:45.434 --> 00:26:47.250 if any of their family

NOTE Confidence: 0.9971673

00:26:47.250 --> 00:26:49.190 members who had breast cancer

NOTE Confidence: 0.99642134

00:26:49.650 --> 00:26:50.710 meet those criteria.

NOTE Confidence: 0.9991247

00:26:52.610 --> 00:26:53.970 So if a patient meets

NOTE Confidence: 0.9991247

00:26:53.970 --> 00:26:54.790 those criteria,

NOTE Confidence: 0.93906623

00:26:55.890 --> 00:26:57.730 their options in our health

NOTE Confidence: 0.93906623

00:26:57.730 --> 00:27:00.115 system are to go on

NOTE Confidence: 0.93906623

00:27:00.115 --> 00:27:02.615 and see a genetics counselor

NOTE Confidence: 0.93906623

00:27:02.675 --> 00:27:03.555 in our Smilogentics,

NOTE Confidence: 0.8933496

00:27:05.555 --> 00:27:06.695 clinic clinic,

NOTE Confidence: 0.9870015

00:27:08.035 --> 00:27:09.555 or we have tools now

NOTE Confidence: 0.9870015

00:27:09.555 --> 00:27:11.075 for our primary care physicians

NOTE Confidence: 0.9870015

00:27:11.075 --> 00:27:12.035 to do what we call

NOTE Confidence: 0.9870015

00:27:12.035 --> 00:27:13.715 point of care genetic testing

NOTE Confidence: 0.9870015

00:27:13.715 --> 00:27:14.695 in their practices,

NOTE Confidence: 0.9889256

00:27:15.530 --> 00:27:17.630 understanding that while we have,

NOTE Confidence: 0.9973103

00:27:18.490 --> 00:27:18.990 over

NOTE Confidence: 0.9866762

00:27:19.929 --> 00:27:22.090 a dozen counselors, we can't

NOTE Confidence: 0.9866762

00:27:22.090 --> 00:27:23.530 always meet the demand of

NOTE Confidence: 0.9866762

00:27:23.530 --> 00:27:24.570 all the patients that get

NOTE Confidence: 0.9866762

00:27:24.570 --> 00:27:25.690 referred to us. So we

NOTE Confidence: 0.9866762

00:27:25.690 --> 00:27:27.049 have new tools to support

NOTE Confidence: 0.9866762

00:27:27.049 --> 00:27:27.549 our

NOTE Confidence: 0.9978112

00:27:28.095 --> 00:27:29.535 primary care providers to do

NOTE Confidence: 0.9978112

00:27:29.535 --> 00:27:31.075 point of care genetic testing,

NOTE Confidence: 0.9998255

00:27:31.535 --> 00:27:32.734 which is often a blood

NOTE Confidence: 0.9998255

00:27:32.734 --> 00:27:33.234 test.

NOTE Confidence: 0.9994291

00:27:34.895 --> 00:27:36.095 In the absence of a

NOTE Confidence: 0.9994291

00:27:36.095 --> 00:27:37.315 pathogenic mutation

NOTE Confidence: 0.97299844

00:27:37.695 --> 00:27:38.895 or if a patient is

NOTE Confidence: 0.97299844

00:27:38.895 --> 00:27:40.815 not deemed eligible for genetic

NOTE Confidence: 0.97299844

00:27:40.815 --> 00:27:41.315 testing,

NOTE Confidence: 0.9876217

00:27:43.080 --> 00:27:45.480 Clinicians rely upon these risk

NOTE Confidence: 0.9876217

00:27:45.480 --> 00:27:47.320 prediction models, and there are

NOTE Confidence: 0.9876217

00:27:47.320 --> 00:27:48.859 many of them out there.

NOTE Confidence: 0.99987006

00:27:49.400 --> 00:27:50.220 This slide

NOTE Confidence: 0.9843942

00:27:50.680 --> 00:27:52.200 provides a table of the

NOTE Confidence: 0.9843942

00:27:52.520 --> 00:27:54.460 probably the top five,

NOTE Confidence: 0.96722823

00:27:54.840 --> 00:27:57.015 most commonly utilized or most

NOTE Confidence: 0.96722823

00:27:57.335 --> 00:27:58.375 validated and and,

NOTE Confidence: 0.94724214

00:28:01.175 --> 00:28:01.675 usable,

NOTE Confidence: 0.99807644

00:28:02.375 --> 00:28:03.755 tools that are out there.

NOTE Confidence: 0.97882956

00:28:04.535 --> 00:28:06.135 And so when we do

NOTE Confidence: 0.97882956

00:28:06.135 --> 00:28:07.895 these risk assessment models, they

NOTE Confidence: 0.97882956

00:28:07.895 --> 00:28:09.515 provide us with two numbers

NOTE Confidence: 0.97882956

00:28:09.655 --> 00:28:11.340 of of interest that guide

NOTE Confidence: 0.97882956

00:28:11.340 --> 00:28:12.880 through the professional organizations'

NOTE Confidence: 0.9778583

00:28:14.859 --> 00:28:17.179 recommendations for risk reduction strategies.

NOTE Confidence: 0.9778583

00:28:17.179 --> 00:28:18.320 We look at a lifetime

NOTE Confidence: 0.9778583

00:28:18.380 --> 00:28:19.820 risk and we look at

NOTE Confidence: 0.9778583

00:28:19.820 --> 00:28:21.659 a five year risk. And

NOTE Confidence: 0.9778583

00:28:21.659 --> 00:28:22.480 those thresholds,

NOTE Confidence: 0.9996541

00:28:22.859 --> 00:28:24.059 if you reach a lifetime

NOTE Confidence: 0.9996541

00:28:24.059 --> 00:28:25.359 risk greater than twenty,

NOTE Confidence: 0.9896532

00:28:25.934 --> 00:28:27.215 you may be eligible for

NOTE Confidence: 0.9896532

00:28:27.215 --> 00:28:29.294 supplemental breast cancer screening with

NOTE Confidence: 0.9896532

00:28:29.294 --> 00:28:31.294 MRI or other modalities as

NOTE Confidence: 0.9896532

00:28:31.294 --> 00:28:32.595 we just talked about.

NOTE Confidence: 0.99869394

00:28:34.414 --> 00:28:35.075 If you

NOTE Confidence: 0.9871166

00:28:36.174 --> 00:28:37.534 reach a risk threshold of

NOTE Confidence: 0.9871166

00:28:37.534 --> 00:28:38.820 greater than one point six

NOTE Confidence: 0.9871166

00:28:39.059 --> 00:28:40.500 seven, you may also be

NOTE Confidence: 0.9871166

00:28:40.500 --> 00:28:42.759 eligible for risk reduction strategies

NOTE Confidence: 0.9871166

00:28:42.899 --> 00:28:45.059 using medications, what we call

NOTE Confidence: 0.9871166

00:28:45.059 --> 00:28:45.559 chemoprevention.

NOTE Confidence: 0.9995

00:28:46.820 --> 00:28:48.179 There are several drugs that

NOTE Confidence: 0.9995

00:28:48.179 --> 00:28:50.039 are available that can

NOTE Confidence: 0.8916789

00:28:50.580 --> 00:28:51.399 act as,

NOTE Confidence: 0.99747086

00:28:53.065 --> 00:28:54.665 that can reduce your future

NOTE Confidence: 0.99747086

00:28:54.665 --> 00:28:56.345 risk of a hormone positive

NOTE Confidence: 0.99747086

00:28:56.345 --> 00:28:57.165 breast cancer.

NOTE Confidence: 0.9968338

00:28:58.825 --> 00:29:00.505 So here's a snapshot of

NOTE Confidence: 0.9968338

00:29:00.505 --> 00:29:01.805 one of the most commonly

NOTE Confidence: 0.9968338

00:29:01.865 --> 00:29:03.625 used tools that you too

NOTE Confidence: 0.9968338

00:29:03.625 --> 00:29:05.325 can can go and calculate

NOTE Confidence: 0.9968338

00:29:05.545 --> 00:29:06.445 on your own.

NOTE Confidence: 0.9517956

00:29:07.040 --> 00:29:08.160 There is the sort of

NOTE Confidence: 0.9517956

00:29:08.160 --> 00:29:09.760 website where you can download

NOTE Confidence: 0.9517956

00:29:09.760 --> 00:29:10.260 this,

NOTE Confidence: 0.9873673

00:29:10.960 --> 00:29:11.460 this,

NOTE Confidence: 0.91251224

00:29:12.160 --> 00:29:13.540 risk prediction model,

NOTE Confidence: 0.98547757

00:29:14.240 --> 00:29:15.200 and this is the kind

NOTE Confidence: 0.98547757

00:29:15.200 --> 00:29:16.400 of output that you will

NOTE Confidence: 0.98547757

00:29:16.400 --> 00:29:17.520 get. What I'm trying to

NOTE Confidence: 0.98547757

00:29:17.520 --> 00:29:18.480 show you on the slide

NOTE Confidence: 0.98547757

00:29:18.480 --> 00:29:20.095 is several things. One is

NOTE Confidence: 0.98547757

00:29:20.095 --> 00:29:21.535 the type of information you

NOTE Confidence: 0.98547757

00:29:21.535 --> 00:29:22.674 need to be able to

NOTE Confidence: 0.9979417

00:29:23.014 --> 00:29:23.514 answer

NOTE Confidence: 0.9950418

00:29:23.855 --> 00:29:25.135 the questions to get an

NOTE Confidence: 0.9950418

00:29:25.135 --> 00:29:25.635 answer

NOTE Confidence: 0.8952469

00:29:26.655 --> 00:29:28.174 and also showing you the

NOTE Confidence: 0.8952469

00:29:28.174 --> 00:29:28.674 results

NOTE Confidence: 0.96534663

00:29:28.975 --> 00:29:29.955 when you change

NOTE Confidence: 0.9555522

00:29:30.255 --> 00:29:32.150 the race of the patient

NOTE Confidence: 0.9555522

00:29:32.150 --> 00:29:33.830 from white to black. And

NOTE Confidence: 0.9555522

00:29:33.830 --> 00:29:34.570 you can see

NOTE Confidence: 0.98314124

00:29:35.190 --> 00:29:36.630 in the same patient who's

NOTE Confidence: 0.98314124

00:29:36.630 --> 00:29:38.150 forty two, had their first

NOTE Confidence: 0.98314124

00:29:38.150 --> 00:29:39.610 menstrual period at ten,

NOTE Confidence: 0.99319625

00:29:40.309 --> 00:29:41.669 had their first baby at

NOTE Confidence: 0.99319625

00:29:41.669 --> 00:29:43.429 thirty five years old, had

NOTE Confidence: 0.99319625

00:29:43.429 --> 00:29:45.110 two prior breast biopsies that

NOTE Confidence: 0.99319625

00:29:45.110 --> 00:29:46.090 were not cancer,

NOTE Confidence: 0.99908125

00:29:47.625 --> 00:29:49.385 had no atypia on those

NOTE Confidence: 0.99908125

00:29:49.385 --> 00:29:50.525 biopsy results,

NOTE Confidence: 0.94898254

00:29:51.225 --> 00:29:53.065 had one first degree relative,

NOTE Confidence: 0.94898254

00:29:53.065 --> 00:29:54.505 so that's mother, daughter, or

NOTE Confidence: 0.94898254

00:29:54.505 --> 00:29:56.525 sister, in this case, one

NOTE Confidence: 0.94898254

00:29:56.745 --> 00:29:58.125 mom with breast cancer,

NOTE Confidence: 0.9664796

00:29:59.730 --> 00:30:01.330 and and we calculate that

NOTE Confidence: 0.9664796

00:30:01.330 --> 00:30:02.710 risk for a black woman.

NOTE Confidence: 0.9664796

00:30:02.850 --> 00:30:03.890 The results are on the

NOTE Confidence: 0.9664796

00:30:03.890 --> 00:30:05.570 left of this screen. So

NOTE Confidence: 0.9664796

00:30:05.570 --> 00:30:06.770 you could see they don't

NOTE Confidence: 0.9664796

00:30:06.930 --> 00:30:08.690 this particular patient who's black

NOTE Confidence: 0.9664796

00:30:08.690 --> 00:30:09.670 with those characteristics

NOTE Confidence: 0.9996659

00:30:10.130 --> 00:30:11.330 does not reach the five

NOTE Confidence: 0.9996659

00:30:11.330 --> 00:30:12.470 year risk threshold

NOTE Confidence: 0.9722414

00:30:13.515 --> 00:30:14.815 for chemo prevention

NOTE Confidence: 0.98516786

00:30:15.195 --> 00:30:16.955 based on this model, nor

NOTE Confidence: 0.98516786

00:30:16.955 --> 00:30:18.395 do they risk reach the

NOTE Confidence: 0.98516786

00:30:18.395 --> 00:30:19.915 high risk threshold for a

NOTE Confidence: 0.98516786

00:30:19.915 --> 00:30:21.775 lifetime risk greater than twenty

NOTE Confidence: 0.9977137

00:30:22.155 --> 00:30:22.895 for MRI.

NOTE Confidence: 0.99788296

00:30:23.675 --> 00:30:25.035 But if you change nothing

NOTE Confidence: 0.99788296

00:30:25.035 --> 00:30:26.015 but the race,

NOTE Confidence: 0.9983886

00:30:26.650 --> 00:30:28.030 this model actually

NOTE Confidence: 0.99678713

00:30:28.410 --> 00:30:30.010 suggests that this patient is

NOTE Confidence: 0.99678713

00:30:30.010 --> 00:30:31.450 eligible for both of those

NOTE Confidence: 0.99678713

00:30:31.450 --> 00:30:31.950 things.

NOTE Confidence: 0.9982246

00:30:32.330 --> 00:30:33.710 And some of this reflects

NOTE Confidence: 0.9982246

00:30:33.770 --> 00:30:35.290 the incidence rates of breast

NOTE Confidence: 0.9982246

00:30:35.290 --> 00:30:37.290 cancer between races, but it

NOTE Confidence: 0.9982246

00:30:37.290 --> 00:30:38.270 also demonstrates

NOTE Confidence: 0.9998293

00:30:39.345 --> 00:30:40.165 how imperfect

NOTE Confidence: 0.96999985

00:30:40.785 --> 00:30:42.065 the models are that we

NOTE Confidence: 0.96999985

00:30:42.065 --> 00:30:44.245 have that sometime contribute

NOTE Confidence: 0.99942493

00:30:45.105 --> 00:30:45.684 to inequities

NOTE Confidence: 0.9973001

00:30:45.985 --> 00:30:47.585 in our ability to care

NOTE Confidence: 0.9973001

00:30:47.585 --> 00:30:49.184 for patients. And so I

NOTE Confidence: 0.9973001

00:30:49.184 --> 00:30:50.645 I I share this

NOTE Confidence: 0.9918

00:30:51.320 --> 00:30:52.520 to also give sort of

NOTE Confidence: 0.9918

00:30:52.520 --> 00:30:54.040 an abundance of caution that

NOTE Confidence: 0.9918

00:30:54.040 --> 00:30:55.480 there are other models that

NOTE Confidence: 0.9918

00:30:55.480 --> 00:30:57.179 don't take race into consideration

NOTE Confidence: 0.9918

00:30:57.320 --> 00:30:58.700 that may be more appropriate.

NOTE Confidence: 0.97827613

00:31:00.600 --> 00:31:01.880 So the other model that

NOTE Confidence: 0.97827613

00:31:01.880 --> 00:31:03.559 is widely used and,

NOTE Confidence: 0.98272794

00:31:04.534 --> 00:31:06.315 and recommended by many professional

NOTE Confidence: 0.98272794

00:31:06.375 --> 00:31:07.975 organizations is something called the

NOTE Confidence: 0.98272794

00:31:07.975 --> 00:31:09.434 Tyra Cusick model.

NOTE Confidence: 0.9342097

00:31:10.375 --> 00:31:11.735 In parentheses, I have the

NOTE Confidence: 0.9342097

00:31:11.735 --> 00:31:13.495 word IBIS there because that

NOTE Confidence: 0.9342097

00:31:13.495 --> 00:31:14.695 in my that is the

NOTE Confidence: 0.9342097

00:31:14.695 --> 00:31:15.654 way that you can find

NOTE Confidence: 0.9342097

00:31:15.654 --> 00:31:16.774 it if you Google it

NOTE Confidence: 0.9342097

00:31:16.774 --> 00:31:17.015 on

NOTE Confidence: 0.9292924

00:31:17.760 --> 00:31:18.800 if you go and Google

NOTE Confidence: 0.9292924

00:31:18.800 --> 00:31:20.240 Tyra Cusick, you're gonna get

NOTE Confidence: 0.9292924

00:31:20.240 --> 00:31:21.780 a bunch of different options

NOTE Confidence: 0.99130577

00:31:22.400 --> 00:31:24.080 with web based version that

NOTE Confidence: 0.99130577

00:31:24.080 --> 00:31:25.520 that are really easy to

NOTE Confidence: 0.99130577

00:31:25.520 --> 00:31:26.980 use because they're pretty

NOTE Confidence: 0.898405

00:31:27.600 --> 00:31:28.880 and they seem really easy

NOTE Confidence: 0.898405

00:31:28.880 --> 00:31:29.620 to answer.

NOTE Confidence: 0.9870054

00:31:30.045 --> 00:31:31.505 But those are not validated.

NOTE Confidence: 0.9870054

00:31:31.725 --> 00:31:33.645 The only validated one is

NOTE Confidence: 0.9870054

00:31:33.645 --> 00:31:35.325 on this, website that I

NOTE Confidence: 0.9870054

00:31:35.325 --> 00:31:36.445 list for you here. You

NOTE Confidence: 0.9870054

00:31:36.445 --> 00:31:37.885 actually have to download the

NOTE Confidence: 0.9870054

00:31:37.885 --> 00:31:39.165 software, and it's a little

NOTE Confidence: 0.9870054

00:31:39.165 --> 00:31:41.245 cumbersome to use. And it's

NOTE Confidence: 0.9870054

00:31:41.245 --> 00:31:42.845 kind of easy to make

NOTE Confidence: 0.9870054

00:31:42.845 --> 00:31:44.525 mistakes and get the wrong

NOTE Confidence: 0.9870054

00:31:44.525 --> 00:31:45.740 answer. So,

NOTE Confidence: 0.98838896

00:31:47.559 --> 00:31:48.920 when I talk about these

NOTE Confidence: 0.98838896

00:31:48.920 --> 00:31:50.120 risk models, I like to

NOTE Confidence: 0.98838896

00:31:50.120 --> 00:31:51.080 say it's sort of like

NOTE Confidence: 0.98838896

00:31:51.080 --> 00:31:52.600 garbage in, garbage out. If

NOTE Confidence: 0.98838896

00:31:52.600 --> 00:31:53.640 you don't put the right

NOTE Confidence: 0.98838896

00:31:53.640 --> 00:31:55.240 information in, you're gonna get

NOTE Confidence: 0.98838896

00:31:55.240 --> 00:31:56.520 an answer that's not really

NOTE Confidence: 0.98838896

00:31:56.520 --> 00:31:57.980 reflective of your risk.

NOTE Confidence: 0.97781235

00:31:59.414 --> 00:32:00.695 So in this case, this

NOTE Confidence: 0.97781235

00:32:00.695 --> 00:32:02.154 model takes into consideration

NOTE Confidence: 0.9978151

00:32:03.014 --> 00:32:04.774 many more risk factors than

NOTE Confidence: 0.9978151

00:32:04.774 --> 00:32:06.534 the the breast cancer prevention

NOTE Confidence: 0.9978151

00:32:06.534 --> 00:32:07.575 tool that I showed you

NOTE Confidence: 0.9978151

00:32:07.575 --> 00:32:08.075 first.

NOTE Confidence: 0.9365523

00:32:08.375 --> 00:32:10.215 It takes into account your

NOTE Confidence: 0.9365523

00:32:10.215 --> 00:32:11.430 height and your weight,

NOTE Confidence: 0.98326457

00:32:12.150 --> 00:32:13.350 whether you're not you have

NOTE Confidence: 0.98326457

00:32:13.350 --> 00:32:15.930 an Ashkenazi Jewish ancestral background,

NOTE Confidence: 0.9888448

00:32:16.390 --> 00:32:17.830 what your breast density is.

NOTE Confidence: 0.9888448

00:32:17.830 --> 00:32:19.030 We just heard about the

NOTE Confidence: 0.9888448

00:32:19.030 --> 00:32:19.530 the

NOTE Confidence: 0.99977374

00:32:20.150 --> 00:32:21.990 how breast density is another

NOTE Confidence: 0.99977374

00:32:21.990 --> 00:32:23.350 additional risk factor that we

NOTE Confidence: 0.99977374

00:32:23.350 --> 00:32:24.650 need to take into consideration.

NOTE Confidence: 0.9998411

00:32:25.534 --> 00:32:27.154 It also takes into account

NOTE Confidence: 0.9970977

00:32:27.615 --> 00:32:29.455 family members outside your first

NOTE Confidence: 0.9970977

00:32:29.455 --> 00:32:31.455 degree relatives and family members

NOTE Confidence: 0.9970977

00:32:31.455 --> 00:32:32.835 with ovarian cancer.

NOTE Confidence: 0.99630266

00:32:33.375 --> 00:32:34.575 It also allows you to

NOTE Confidence: 0.99630266

00:32:34.575 --> 00:32:35.615 say whether or not you

NOTE Confidence: 0.99630266

00:32:35.615 --> 00:32:36.654 or any of your family

NOTE Confidence: 0.99630266

00:32:36.654 --> 00:32:38.015 members who've been affected have

NOTE Confidence: 0.99630266

00:32:38.015 --> 00:32:38.515 had

NOTE Confidence: 0.97205186

00:32:39.240 --> 00:32:40.140 genetic testing.

NOTE Confidence: 0.9626911

00:32:41.560 --> 00:32:42.780 But you can make mistakes.

NOTE Confidence: 0.9348891

00:32:44.440 --> 00:32:45.340 If you don't,

NOTE Confidence: 0.90367126

00:32:48.040 --> 00:32:49.640 use the right age of

NOTE Confidence: 0.90367126

00:32:49.640 --> 00:32:49.880 die

NOTE Confidence: 0.9455178

00:32:50.600 --> 00:32:52.095 of the family members when

NOTE Confidence: 0.9455178

00:32:52.095 --> 00:32:54.015 you enter the information and

NOTE Confidence: 0.9455178

00:32:54.015 --> 00:32:55.135 asks you for an age,

NOTE Confidence: 0.9455178

00:32:55.135 --> 00:32:56.255 if you give their current

NOTE Confidence: 0.9455178

00:32:56.255 --> 00:32:56.755 age

NOTE Confidence: 0.9745702

00:32:57.215 --> 00:32:58.255 and not the age of

NOTE Confidence: 0.9745702

00:32:58.255 --> 00:32:58.995 the diagnosis

NOTE Confidence: 0.9985226

00:32:59.375 --> 00:33:00.255 at the time of their

NOTE Confidence: 0.9985226

00:33:00.255 --> 00:33:01.555 diagnosis of cancer

NOTE Confidence: 0.95082235

00:33:02.655 --> 00:33:04.675 or you don't include unaffected

NOTE Confidence: 0.95082235

00:33:04.975 --> 00:33:05.875 family members,

NOTE Confidence: 0.9767151

00:33:07.390 --> 00:33:08.370 you can overestimate

NOTE Confidence: 0.9996363

00:33:08.750 --> 00:33:09.250 risk

NOTE Confidence: 0.9979187

00:33:09.550 --> 00:33:11.470 or underestimate risk. And so

NOTE Confidence: 0.9979187

00:33:11.470 --> 00:33:12.990 it's really hard to use

NOTE Confidence: 0.9979187

00:33:12.990 --> 00:33:14.270 these models if you don't

NOTE Confidence: 0.9979187

00:33:14.270 --> 00:33:14.930 have experience,

NOTE Confidence: 0.9996704

00:33:15.870 --> 00:33:17.090 utilizing them.

NOTE Confidence: 0.99054223

00:33:18.605 --> 00:33:19.565 So I'll share here with

NOTE Confidence: 0.99054223

00:33:19.565 --> 00:33:20.845 you the results of this

NOTE Confidence: 0.99054223

00:33:20.845 --> 00:33:22.865 model with that same patient

NOTE Confidence: 0.8831709

00:33:23.645 --> 00:33:24.765 putting in some,

NOTE Confidence: 0.9733147

00:33:25.165 --> 00:33:26.765 you know, average sort of,

NOTE Confidence: 0.9733147

00:33:27.085 --> 00:33:28.045 age of first,

NOTE Confidence: 0.9576708

00:33:28.765 --> 00:33:29.265 average,

NOTE Confidence: 0.9836562

00:33:29.725 --> 00:33:31.085 examples of, like, height and

NOTE Confidence: 0.9836562

00:33:31.085 --> 00:33:31.585 weight.

NOTE Confidence: 0.9839725

00:33:32.340 --> 00:33:33.780 And this gives this is

NOTE Confidence: 0.9839725

00:33:33.780 --> 00:33:34.820 a example of what the

NOTE Confidence: 0.9839725

00:33:34.820 --> 00:33:36.419 printout might look like. And

NOTE Confidence: 0.9839725

00:33:36.419 --> 00:33:38.100 so you might remember the

NOTE Confidence: 0.9839725

00:33:38.100 --> 00:33:39.620 last slide, we had a

NOTE Confidence: 0.9839725

00:33:39.620 --> 00:33:41.780 range of lifetime risk between

NOTE Confidence: 0.9839725

00:33:41.780 --> 00:33:43.559 sixteen and twenty something percent.

NOTE Confidence: 0.9724319

00:33:44.100 --> 00:33:45.539 This one suggests the lifetime

NOTE Confidence: 0.9724319

00:33:45.539 --> 00:33:46.500 risk, if you look up

NOTE Confidence: 0.9724319

00:33:46.500 --> 00:33:48.184 in that right upper corner,

NOTE Confidence: 0.9724319

00:33:48.245 --> 00:33:49.684 is twenty six point five

NOTE Confidence: 0.9724319

00:33:49.684 --> 00:33:50.184 percent.

NOTE Confidence: 0.9811389

00:33:50.565 --> 00:33:51.765 And the five year risk

NOTE Confidence: 0.9811389

00:33:51.765 --> 00:33:53.144 on the other was between

NOTE Confidence: 0.98121667

00:33:54.164 --> 00:33:55.524 one point five and three,

NOTE Confidence: 0.98121667

00:33:55.524 --> 00:33:56.725 and this five year risk

NOTE Confidence: 0.98121667

00:33:56.725 --> 00:33:58.164 is two point one. So

NOTE Confidence: 0.98121667

00:33:58.164 --> 00:33:58.985 it just demonstrates

NOTE Confidence: 0.9877361

00:33:59.445 --> 00:34:01.030 sort of, you know, how

NOTE Confidence: 0.9877361

00:34:01.169 --> 00:34:03.169 imprecise these models are even

NOTE Confidence: 0.9877361

00:34:03.169 --> 00:34:04.130 though they are the best

NOTE Confidence: 0.9877361

00:34:04.130 --> 00:34:05.090 that we have to give

NOTE Confidence: 0.9877361

00:34:05.090 --> 00:34:05.750 us guidance.

NOTE Confidence: 0.99848163

00:34:07.809 --> 00:34:09.170 I wanna make a comment

NOTE Confidence: 0.99848163

00:34:09.170 --> 00:34:10.070 about polygenic

NOTE Confidence: 0.9827136

00:34:10.450 --> 00:34:11.985 risk scores, which are risk

NOTE Confidence: 0.9827136

00:34:12.145 --> 00:34:13.585 scores that you may get

NOTE Confidence: 0.9827136

00:34:13.585 --> 00:34:15.205 if you get genetic testing

NOTE Confidence: 0.9827136

00:34:15.345 --> 00:34:16.085 and provide,

NOTE Confidence: 0.9733503

00:34:18.705 --> 00:34:19.985 if you have genetic testing,

NOTE Confidence: 0.9733503

00:34:19.985 --> 00:34:21.765 they're looking at multiple

NOTE Confidence: 0.93338877

00:34:22.305 --> 00:34:23.925 of your genetic variants

NOTE Confidence: 0.9925491

00:34:24.385 --> 00:34:25.745 to try to estimate a

NOTE Confidence: 0.9925491

00:34:25.745 --> 00:34:27.185 score for you. And these

NOTE Confidence: 0.9925491

00:34:27.185 --> 00:34:27.685 often

NOTE Confidence: 0.9987222

00:34:28.359 --> 00:34:28.859 overestimate

NOTE Confidence: 0.9832117

00:34:29.160 --> 00:34:30.599 risk and make people really

NOTE Confidence: 0.9832117

00:34:30.599 --> 00:34:32.040 anxious that they get back

NOTE Confidence: 0.9832117

00:34:32.040 --> 00:34:34.119 during their genetic testing. If

NOTE Confidence: 0.9832117

00:34:34.119 --> 00:34:35.560 they have no pathogenic variant

NOTE Confidence: 0.9832117

00:34:35.560 --> 00:34:36.780 and then they get this,

NOTE Confidence: 0.9989624

00:34:37.400 --> 00:34:38.280 I think we have to

NOTE Confidence: 0.9989624

00:34:38.280 --> 00:34:39.980 be really cautious that these

NOTE Confidence: 0.9689593

00:34:41.435 --> 00:34:43.915 scores actually are overestimate risk

NOTE Confidence: 0.9689593

00:34:43.915 --> 00:34:45.355 and are not really ready

NOTE Confidence: 0.9689593

00:34:45.355 --> 00:34:46.495 for prime time.

NOTE Confidence: 0.9910034

00:34:48.155 --> 00:34:49.275 So I just wanna make

NOTE Confidence: 0.9910034

00:34:49.275 --> 00:34:51.535 one point about atypia. Atypia

NOTE Confidence: 0.9910034

00:34:51.755 --> 00:34:53.355 is a finding on breast

NOTE Confidence: 0.9910034

00:34:53.355 --> 00:34:55.680 biopsy that is another risk

NOTE Confidence: 0.9910034

00:34:55.760 --> 00:34:57.359 factor for future cancer that

NOTE Confidence: 0.9910034

00:34:57.359 --> 00:34:59.200 needs to be taken into

NOTE Confidence: 0.9910034

00:34:59.200 --> 00:34:59.700 consideration.

NOTE Confidence: 0.97750676

00:35:00.319 --> 00:35:01.119 So if you had a

NOTE Confidence: 0.97750676

00:35:01.119 --> 00:35:02.480 biopsy, you wanna know whether

NOTE Confidence: 0.97750676

00:35:02.480 --> 00:35:03.520 or not there was any

NOTE Confidence: 0.97750676

00:35:03.520 --> 00:35:04.660 atypia present.

NOTE Confidence: 0.99885297

00:35:06.719 --> 00:35:08.000 This is an additional risk

NOTE Confidence: 0.99885297

00:35:08.000 --> 00:35:09.700 factor that confers an intermediate

NOTE Confidence: 0.99885297

00:35:09.920 --> 00:35:10.420 risk.

NOTE Confidence: 0.9967835

00:35:11.465 --> 00:35:12.825 This is another tool that

NOTE Confidence: 0.9967835

00:35:12.825 --> 00:35:14.605 we utilize with our providers

NOTE Confidence: 0.9967835

00:35:14.745 --> 00:35:16.185 to help guide them on

NOTE Confidence: 0.9967835

00:35:16.185 --> 00:35:17.465 who should go on for

NOTE Confidence: 0.9967835

00:35:17.465 --> 00:35:19.705 surgery with atypia and or

NOTE Confidence: 0.9967835

00:35:19.705 --> 00:35:20.765 who might be eligible

NOTE Confidence: 0.9997233

00:35:21.465 --> 00:35:23.405 for risk reduction strategies.

NOTE Confidence: 0.9688707

00:35:25.370 --> 00:35:27.450 I wanna highlight that because

NOTE Confidence: 0.9688707

00:35:27.450 --> 00:35:28.750 this is such a complicated

NOTE Confidence: 0.9688707

00:35:28.969 --> 00:35:30.650 area, we get referrals from

NOTE Confidence: 0.9688707

00:35:30.650 --> 00:35:32.330 primary care physicians and OB

NOTE Confidence: 0.9688707

00:35:32.330 --> 00:35:34.090 GYNs and self referrals from

NOTE Confidence: 0.9688707

00:35:34.090 --> 00:35:34.590 patients

NOTE Confidence: 0.97588897

00:35:35.290 --> 00:35:36.570 to support them in helping

NOTE Confidence: 0.97588897

00:35:36.570 --> 00:35:37.930 them estimate their own risk

NOTE Confidence: 0.97588897

00:35:37.930 --> 00:35:39.870 and determine their eligibility for

NOTE Confidence: 0.9977482

00:35:40.275 --> 00:35:41.795 genetic testing. And if you

NOTE Confidence: 0.9977482

00:35:41.795 --> 00:35:42.674 were to come to see

NOTE Confidence: 0.9977482

00:35:42.674 --> 00:35:44.114 any of our providers across

NOTE Confidence: 0.9977482

00:35:44.114 --> 00:35:44.775 our network,

NOTE Confidence: 0.99970317

00:35:45.395 --> 00:35:46.275 this is the type of

NOTE Confidence: 0.99970317

00:35:46.275 --> 00:35:47.875 clinical care and counseling that

NOTE Confidence: 0.99970317

00:35:47.875 --> 00:35:48.775 we would provide.

NOTE Confidence: 0.9416959

00:35:49.395 --> 00:35:50.434 We don't have time to

NOTE Confidence: 0.9416959

00:35:50.434 --> 00:35:52.035 go into to these,

NOTE Confidence: 0.9925087

00:35:52.515 --> 00:35:54.454 all these different strategies, but

NOTE Confidence: 0.9955041

00:35:54.930 --> 00:35:56.950 we talk about prevention strategies

NOTE Confidence: 0.9955041

00:35:57.010 --> 00:35:59.010 and early detection strategies. And

NOTE Confidence: 0.9955041

00:35:59.010 --> 00:36:00.150 based on the individual

NOTE Confidence: 0.9929166

00:36:00.450 --> 00:36:00.950 risk

NOTE Confidence: 0.99914265

00:36:01.650 --> 00:36:02.950 and the patient preferences,

NOTE Confidence: 0.9934012

00:36:03.890 --> 00:36:05.170 we can talk and counsel

NOTE Confidence: 0.9934012

00:36:05.170 --> 00:36:06.609 about lifestyle and behavior that

NOTE Confidence: 0.9934012

00:36:06.609 --> 00:36:07.730 we're gonna hear about from

NOTE Confidence: 0.9934012

00:36:07.730 --> 00:36:08.710 doctor Erwin,

NOTE Confidence: 0.9090837

00:36:09.485 --> 00:36:09.985 chemoprevention

NOTE Confidence: 0.990895

00:36:10.285 --> 00:36:12.045 or medications to reduce your

NOTE Confidence: 0.990895

00:36:12.045 --> 00:36:12.545 risk,

NOTE Confidence: 0.99935645

00:36:13.165 --> 00:36:14.545 risk reduction mastectomy

NOTE Confidence: 0.974182

00:36:14.925 --> 00:36:16.445 for those with lifetime risk

NOTE Confidence: 0.974182

00:36:16.445 --> 00:36:17.825 greater than forty percent,

NOTE Confidence: 0.9671823

00:36:18.605 --> 00:36:20.145 and then their early detection

NOTE Confidence: 0.9671823

00:36:20.205 --> 00:36:22.045 options are not preventing cancer,

NOTE Confidence: 0.9671823

00:36:22.045 --> 00:36:23.325 but finding it early. And

NOTE Confidence: 0.9671823

00:36:23.325 --> 00:36:25.210 that includes self exam, clinical

NOTE Confidence: 0.97766376

00:36:25.829 --> 00:36:27.269 exam, and the breast imaging

NOTE Confidence: 0.97766376

00:36:27.269 --> 00:36:28.309 that we just heard about

NOTE Confidence: 0.97766376

00:36:28.309 --> 00:36:29.289 from doctor Laffey.

NOTE Confidence: 0.98599637

00:36:30.549 --> 00:36:31.989 So I'm gonna stop there

NOTE Confidence: 0.98599637

00:36:31.989 --> 00:36:32.950 because I know I took

NOTE Confidence: 0.98599637

00:36:32.950 --> 00:36:33.910 more time than I should

NOTE Confidence: 0.98599637

00:36:33.910 --> 00:36:35.190 have, and I'm gonna pass

NOTE Confidence: 0.98599637

00:36:35.190 --> 00:36:36.469 it to my colleague, doctor

NOTE Confidence: 0.98599637

00:36:36.469 --> 00:36:36.969 Erwin.

NOTE Confidence: 0.8292215

00:36:44.925 --> 00:36:45.425 Okay.

NOTE Confidence: 0.98952067

00:36:45.805 --> 00:36:46.625 Thank you.

NOTE Confidence: 0.9984153

00:36:47.485 --> 00:36:49.265 And I'm gonna try to

NOTE Confidence: 0.99858445

00:36:52.219 --> 00:36:53.739 get it into the right

NOTE Confidence: 0.99858445

00:36:53.739 --> 00:36:54.239 mode.

NOTE Confidence: 0.9284503

00:37:02.859 --> 00:37:04.300 You could maybe answer a

NOTE Confidence: 0.9284503

00:37:04.300 --> 00:37:06.320 question while I'm doing this.

NOTE Confidence: 0.9975519

00:37:09.395 --> 00:37:10.455 Did I freeze?

NOTE Confidence: 0.90570164

00:37:15.235 --> 00:37:16.915 You're good. You're I think

NOTE Confidence: 0.90570164

00:37:16.915 --> 00:37:18.195 we see the center mode,

NOTE Confidence: 0.90570164

00:37:18.195 --> 00:37:19.635 though. Are you you're not

NOTE Confidence: 0.90570164

00:37:19.635 --> 00:37:20.695 full screen yet?

NOTE Confidence: 0.9642575

00:37:22.590 --> 00:37:24.270 Okay. Good. Switch your screen.

NOTE Confidence: 0.9642575

00:37:24.270 --> 00:37:25.470 I was scared. I thought

NOTE Confidence: 0.9642575

00:37:25.470 --> 00:37:26.370 I froze.

NOTE Confidence: 0.9899753

00:37:27.870 --> 00:37:29.150 I thought I froze, but

NOTE Confidence: 0.9899753

00:37:29.150 --> 00:37:30.450 I'm good. I'm not frozen.

NOTE Confidence: 0.9970223

00:37:32.030 --> 00:37:32.510 Alright.

NOTE Confidence: 0.98692006

00:37:32.910 --> 00:37:34.190 I was thinking maybe we

NOTE Confidence: 0.98692006

00:37:34.190 --> 00:37:35.230 can answer some of the

NOTE Confidence: 0.98692006

00:37:35.230 --> 00:37:36.510 questions in the chat while

NOTE Confidence: 0.98692006

00:37:36.510 --> 00:37:38.085 I'm presenting just in case

NOTE Confidence: 0.98692006

00:37:38.085 --> 00:37:39.125 we don't get to all

NOTE Confidence: 0.98692006

00:37:39.125 --> 00:37:40.425 of the, questions.

NOTE Confidence: 0.9484186

00:37:40.965 --> 00:37:42.265 Good evening, everyone.

NOTE Confidence: 0.95159966

00:37:42.885 --> 00:37:44.405 My name is Melinda Erwin.

NOTE Confidence: 0.95159966

00:37:44.405 --> 00:37:45.445 I'm a professor in the

NOTE Confidence: 0.95159966

00:37:45.445 --> 00:37:46.484 Yale School of Public Health

NOTE Confidence: 0.95159966

00:37:46.484 --> 00:37:47.685 and deputy director in the

NOTE Confidence: 0.95159966

00:37:47.685 --> 00:37:49.305 Yale Cancer Center. And I'm,

NOTE Confidence: 0.9713369

00:37:50.360 --> 00:37:51.800 going to share with you

NOTE Confidence: 0.9713369

00:37:51.800 --> 00:37:53.100 breast cancer prevention.

NOTE Confidence: 0.96996707

00:37:54.040 --> 00:37:55.160 And I'm gonna really focus

NOTE Confidence: 0.96996707

00:37:55.160 --> 00:37:57.320 on beyond individual risk factors

NOTE Confidence: 0.96996707

00:37:57.320 --> 00:37:58.780 and more how the environment

NOTE Confidence: 0.96996707

00:37:58.920 --> 00:38:00.440 and systems shape our risk

NOTE Confidence: 0.96996707

00:38:00.440 --> 00:38:01.580 for breast cancer.

NOTE Confidence: 0.9898103

00:38:03.255 --> 00:38:04.775 Also, I wanna first start

NOTE Confidence: 0.9898103

00:38:04.775 --> 00:38:06.614 with acknowledging that breast cancer

NOTE Confidence: 0.9898103

00:38:06.614 --> 00:38:08.214 mortality rates have decreased by

NOTE Confidence: 0.9898103

00:38:08.214 --> 00:38:09.734 forty four percent since the

NOTE Confidence: 0.9898103

00:38:09.734 --> 00:38:11.734 peak in nineteen ninety. And

NOTE Confidence: 0.9898103

00:38:11.734 --> 00:38:13.835 much of this success in

NOTE Confidence: 0.9350973

00:38:14.214 --> 00:38:16.055 reduced mortality rates is because

NOTE Confidence: 0.9350973

00:38:16.055 --> 00:38:18.020 of what, doctor Laffey said

NOTE Confidence: 0.9350973

00:38:18.020 --> 00:38:19.540 in our early detection and

NOTE Confidence: 0.9350973

00:38:19.540 --> 00:38:21.640 our our ability to screen

NOTE Confidence: 0.9350973

00:38:21.780 --> 00:38:23.219 breast cancer, which results in

NOTE Confidence: 0.9350973

00:38:23.219 --> 00:38:25.080 an earlier stage at diagnosis,

NOTE Confidence: 0.98293847

00:38:25.780 --> 00:38:26.760 and then also,

NOTE Confidence: 0.9993436

00:38:27.460 --> 00:38:27.960 amazing

NOTE Confidence: 0.99957293

00:38:28.260 --> 00:38:28.760 advancements

NOTE Confidence: 0.98442024

00:38:29.060 --> 00:38:30.820 in treating breast cancer. And

NOTE Confidence: 0.98442024

00:38:30.820 --> 00:38:32.260 so those together have really

NOTE Confidence: 0.98442024

00:38:32.260 --> 00:38:32.685 helped,

NOTE Confidence: 0.9976633

00:38:33.645 --> 00:38:35.825 reduce breast cancer mortality rates.

NOTE Confidence: 0.9995749

00:38:36.445 --> 00:38:37.965 But what about preventing breast

NOTE Confidence: 0.9995749

00:38:37.965 --> 00:38:38.465 cancer

NOTE Confidence: 0.9732616

00:38:38.925 --> 00:38:40.125 outright so that,

NOTE Confidence: 0.9956876

00:38:41.085 --> 00:38:42.045 we don't have to deal

NOTE Confidence: 0.9956876

00:38:42.045 --> 00:38:42.864 with treatment?

NOTE Confidence: 0.9919646

00:38:43.325 --> 00:38:44.205 So I know this is

NOTE Confidence: 0.9919646

00:38:44.205 --> 00:38:45.485 a busy slide, but it

NOTE Confidence: 0.9919646

00:38:45.485 --> 00:38:47.080 highlights many of the risk

NOTE Confidence: 0.9919646

00:38:47.080 --> 00:38:49.160 factors for breast cancer. And

NOTE Confidence: 0.9919646

00:38:49.160 --> 00:38:50.119 if you look sort of

NOTE Confidence: 0.9919646

00:38:50.119 --> 00:38:51.400 at the top going to

NOTE Confidence: 0.9919646

00:38:51.400 --> 00:38:51.900 the

NOTE Confidence: 0.99266434

00:38:52.359 --> 00:38:52.859 clockwise,

NOTE Confidence: 0.9995914

00:38:53.880 --> 00:38:54.940 in purple

NOTE Confidence: 0.9859941

00:38:55.640 --> 00:38:57.739 are, the non modifiable

NOTE Confidence: 0.9444016

00:38:58.280 --> 00:38:59.180 risk factors.

NOTE Confidence: 0.8846068

00:38:59.480 --> 00:38:59.980 And,

NOTE Confidence: 0.87023425

00:39:00.414 --> 00:39:02.035 Doctor Battaglia mentioned,

NOTE Confidence: 0.92859507

00:39:02.734 --> 00:39:03.234 germline

NOTE Confidence: 0.9410038

00:39:03.614 --> 00:39:04.114 mutations.

NOTE Confidence: 0.9898074

00:39:05.135 --> 00:39:06.575 And while those aren't sort

NOTE Confidence: 0.9898074

00:39:06.575 --> 00:39:08.015 of modifiable, there are ways

NOTE Confidence: 0.9898074

00:39:08.015 --> 00:39:08.835 that we can,

NOTE Confidence: 0.9987115

00:39:10.094 --> 00:39:11.375 be aware from them and

NOTE Confidence: 0.9987115

00:39:11.375 --> 00:39:13.135 change our screening guidelines. And

NOTE Confidence: 0.9987115

00:39:13.135 --> 00:39:14.755 then the other non modifiable

NOTE Confidence: 0.98226583

00:39:15.135 --> 00:39:17.190 are female sex, older age,

NOTE Confidence: 0.95155066

00:39:17.570 --> 00:39:19.010 certain race and ethnic groups

NOTE Confidence: 0.95155066

00:39:19.010 --> 00:39:20.130 have a higher risk of

NOTE Confidence: 0.95155066

00:39:20.130 --> 00:39:20.870 breast cancer,

NOTE Confidence: 0.997565

00:39:21.570 --> 00:39:22.550 family history,

NOTE Confidence: 0.9302504

00:39:23.170 --> 00:39:24.850 breast density, previous history of

NOTE Confidence: 0.9302504

00:39:24.850 --> 00:39:26.050 breast cancer and age at

NOTE Confidence: 0.9302504

00:39:26.050 --> 00:39:26.550 menarche,

NOTE Confidence: 0.92158306

00:39:27.410 --> 00:39:28.530 or a first period, and

NOTE Confidence: 0.92158306

00:39:28.530 --> 00:39:29.830 then age at menopause.

NOTE Confidence: 0.9400071

00:39:30.555 --> 00:39:32.714 The green factors on sort

NOTE Confidence: 0.9400071

00:39:32.714 --> 00:39:34.555 of from the six P

NOTE Confidence: 0.9400071

00:39:34.555 --> 00:39:35.675 at the bottom to the

NOTE Confidence: 0.9400071

00:39:35.675 --> 00:39:37.135 top of the circle are

NOTE Confidence: 0.9400071

00:39:37.275 --> 00:39:39.135 what we call modifiable factors.

NOTE Confidence: 0.9980985

00:39:39.435 --> 00:39:41.214 And these are primarily related

NOTE Confidence: 0.9980985

00:39:41.355 --> 00:39:42.974 to lifestyle behaviors.

NOTE Confidence: 0.9991331

00:39:43.790 --> 00:39:45.410 So our body composition

NOTE Confidence: 0.9917886

00:39:45.710 --> 00:39:47.710 or, whether we're overweight or

NOTE Confidence: 0.9917886

00:39:47.710 --> 00:39:48.210 obese,

NOTE Confidence: 0.9992821

00:39:48.910 --> 00:39:49.890 physical activity,

NOTE Confidence: 0.8290197

00:39:50.270 --> 00:39:51.489 diet and alcohol,

NOTE Confidence: 0.9437647

00:39:51.869 --> 00:39:53.489 as well as oral contraceptive,

NOTE Confidence: 0.9778184

00:39:53.869 --> 00:39:55.950 contraceptives and hormone replacement therapy

NOTE Confidence: 0.9778184

00:39:55.950 --> 00:39:56.690 in the postmenopausal

NOTE Confidence: 0.9987917

00:39:57.070 --> 00:39:58.635 years. So I'm gonna focus

NOTE Confidence: 0.9987917

00:39:58.635 --> 00:40:00.415 on those for the remainder

NOTE Confidence: 0.9987917

00:40:00.555 --> 00:40:01.375 of the talk.

NOTE Confidence: 0.994598

00:40:04.075 --> 00:40:06.094 Unfortunately, over the past three

NOTE Confidence: 0.994598

00:40:06.155 --> 00:40:07.935 decades, we've seen a significant

NOTE Confidence: 0.994598

00:40:08.155 --> 00:40:09.755 increase in the prevalence of

NOTE Confidence: 0.994598

00:40:09.755 --> 00:40:11.515 obesity, not only in the

NOTE Confidence: 0.994598

00:40:11.515 --> 00:40:13.570 US but globally. In fact,

NOTE Confidence: 0.994598

00:40:13.630 --> 00:40:14.530 every country

NOTE Confidence: 0.99724704

00:40:15.150 --> 00:40:17.070 across the globe has seen

NOTE Confidence: 0.99724704

00:40:17.070 --> 00:40:18.930 increased rates of obesity.

NOTE Confidence: 0.97325593

00:40:19.310 --> 00:40:20.670 Obesity is defined as a

NOTE Confidence: 0.97325593

00:40:20.670 --> 00:40:22.510 body mass index of thirty

NOTE Confidence: 0.97325593

00:40:22.510 --> 00:40:23.950 or greater and body mass

NOTE Confidence: 0.97325593

00:40:23.950 --> 00:40:25.810 index is basically our weight

NOTE Confidence: 0.99070555

00:40:26.195 --> 00:40:28.114 adjusted for height. It's an

NOTE Confidence: 0.99070555

00:40:28.114 --> 00:40:29.955 imperfect measure because it does

NOTE Confidence: 0.99070555

00:40:29.955 --> 00:40:31.475 not take into consideration the

NOTE Confidence: 0.99070555

00:40:31.475 --> 00:40:32.675 amount of muscle you have

NOTE Confidence: 0.99070555

00:40:32.675 --> 00:40:34.195 versus adiposity. And we know

NOTE Confidence: 0.99070555

00:40:34.195 --> 00:40:35.015 muscle weighs

NOTE Confidence: 0.98427373

00:40:35.315 --> 00:40:37.155 more than body fat, but

NOTE Confidence: 0.98427373

00:40:37.155 --> 00:40:38.755 on a population level, it's

NOTE Confidence: 0.98427373

00:40:38.755 --> 00:40:40.055 a pretty good indicator.

NOTE Confidence: 0.98937505

00:40:40.435 --> 00:40:42.170 And what's concerning is seeing

NOTE Confidence: 0.98937505

00:40:42.170 --> 00:40:42.670 that,

NOTE Confidence: 0.90800726

00:40:43.050 --> 00:40:44.489 back in the seventies rates

NOTE Confidence: 0.90800726

00:40:44.489 --> 00:40:45.230 of obesity

NOTE Confidence: 0.9358297

00:40:45.690 --> 00:40:47.930 were, in women's seventeen percent

NOTE Confidence: 0.9358297

00:40:47.930 --> 00:40:49.290 and now they're up to

NOTE Confidence: 0.9358297

00:40:49.290 --> 00:40:50.510 forty two percent.

NOTE Confidence: 0.967298

00:40:51.210 --> 00:40:52.650 And during this same time

NOTE Confidence: 0.967298

00:40:52.650 --> 00:40:53.850 period over the last thirty

NOTE Confidence: 0.967298

00:40:53.850 --> 00:40:54.730 or forty years, we've seen

NOTE Confidence: 0.967298

00:40:54.730 --> 00:40:56.110 a significant reduction

NOTE Confidence: 0.96972775

00:40:56.545 --> 00:40:58.165 in physical activity levels.

NOTE Confidence: 0.9882436

00:40:58.465 --> 00:40:59.985 And much of this is

NOTE Confidence: 0.9882436

00:40:59.985 --> 00:41:01.905 because of technological advances. We

NOTE Confidence: 0.9882436

00:41:01.905 --> 00:41:03.105 can do our work from

NOTE Confidence: 0.9882436

00:41:03.105 --> 00:41:04.485 home, from a laptop,

NOTE Confidence: 0.9982744

00:41:04.864 --> 00:41:06.225 even from an iPhone. So

NOTE Confidence: 0.9982744

00:41:06.225 --> 00:41:07.825 this has created a society

NOTE Confidence: 0.9982744

00:41:07.825 --> 00:41:08.805 that is very

NOTE Confidence: 0.9796849

00:41:09.309 --> 00:41:09.809 sedentary.

NOTE Confidence: 0.9966688

00:41:10.109 --> 00:41:11.150 So it's not so much

NOTE Confidence: 0.9966688

00:41:11.150 --> 00:41:12.690 about doing exercise,

NOTE Confidence: 0.97472584

00:41:13.069 --> 00:41:14.430 but are we sitting too

NOTE Confidence: 0.97472584

00:41:14.430 --> 00:41:15.549 much and how to reduce

NOTE Confidence: 0.97472584

00:41:15.549 --> 00:41:16.609 our sitting time?

NOTE Confidence: 0.99209005

00:41:17.069 --> 00:41:18.670 I present these two slides

NOTE Confidence: 0.99209005

00:41:18.670 --> 00:41:19.869 to make the point that

NOTE Confidence: 0.99209005

00:41:19.869 --> 00:41:21.230 this is not something that's

NOTE Confidence: 0.99209005

00:41:21.230 --> 00:41:22.690 happening on an individual

NOTE Confidence: 0.9845432

00:41:22.989 --> 00:41:24.765 level, but on a societal

NOTE Confidence: 0.9845432

00:41:24.985 --> 00:41:26.525 and global level.

NOTE Confidence: 0.9192915

00:41:26.825 --> 00:41:28.364 And therefore, the interventions

NOTE Confidence: 0.99967

00:41:28.905 --> 00:41:29.405 needed

NOTE Confidence: 0.9874115

00:41:29.705 --> 00:41:31.385 to reverse these trends in

NOTE Confidence: 0.9874115

00:41:31.385 --> 00:41:32.685 obesity and inactivity

NOTE Confidence: 0.99700826

00:41:33.305 --> 00:41:34.585 have to be at the

NOTE Confidence: 0.99700826

00:41:34.585 --> 00:41:35.085 environmental,

NOTE Confidence: 0.99028796

00:41:35.625 --> 00:41:37.565 societal, and policy level.

NOTE Confidence: 0.9982886

00:41:40.080 --> 00:41:40.820 And so

NOTE Confidence: 0.9657643

00:41:41.280 --> 00:41:42.800 discussing that, you you may

NOTE Confidence: 0.9657643

00:41:42.800 --> 00:41:44.260 have heard the term obesogenic

NOTE Confidence: 0.9657643

00:41:44.480 --> 00:41:45.680 environment, and this is the

NOTE Confidence: 0.9657643

00:41:45.680 --> 00:41:47.140 fact that we have widespread

NOTE Confidence: 0.9657643

00:41:47.200 --> 00:41:49.120 availability and marketing of high

NOTE Confidence: 0.9657643

00:41:49.120 --> 00:41:50.820 calorie and processed foods.

NOTE Confidence: 0.98223084

00:41:51.200 --> 00:41:52.640 There is recent research showing

NOTE Confidence: 0.98223084

00:41:52.640 --> 00:41:54.160 that more than fifty percent

NOTE Confidence: 0.98223084

00:41:54.160 --> 00:41:55.460 of the foods people

NOTE Confidence: 0.99803776

00:41:55.785 --> 00:41:57.724 consume per day are highly

NOTE Confidence: 0.99803776

00:41:57.785 --> 00:41:59.244 ultra processed foods.

NOTE Confidence: 0.9761179

00:41:59.625 --> 00:42:00.984 This is partly because that's

NOTE Confidence: 0.9761179

00:42:00.984 --> 00:42:02.924 what available everywhere. It's ubiquitous.

NOTE Confidence: 0.97077346

00:42:04.825 --> 00:42:06.265 It's cheaper and it's easier

NOTE Confidence: 0.97077346

00:42:06.265 --> 00:42:08.344 and access is everywhere. So

NOTE Confidence: 0.97077346

00:42:08.344 --> 00:42:09.704 we have limited access to

NOTE Confidence: 0.97077346

00:42:09.704 --> 00:42:10.204 affordable,

NOTE Confidence: 0.99895453

00:42:10.505 --> 00:42:12.480 healthy foods. We also have

NOTE Confidence: 0.99895453

00:42:12.480 --> 00:42:14.239 an urban design that favors

NOTE Confidence: 0.99895453

00:42:14.239 --> 00:42:16.180 cars over walking and biking

NOTE Confidence: 0.96907526

00:42:16.480 --> 00:42:18.320 and work environments with long

NOTE Confidence: 0.96907526

00:42:18.320 --> 00:42:20.719 sedentary or sitting hours. And

NOTE Confidence: 0.96907526

00:42:20.719 --> 00:42:21.620 then lastly,

NOTE Confidence: 0.9861229

00:42:22.160 --> 00:42:23.360 in our free time, we're

NOTE Confidence: 0.9861229

00:42:23.360 --> 00:42:25.280 consumed with social media, which

NOTE Confidence: 0.9861229

00:42:25.280 --> 00:42:27.164 is leading to more sedentary

NOTE Confidence: 0.99592495

00:42:27.545 --> 00:42:28.045 behaviors.

NOTE Confidence: 0.99929136

00:42:30.184 --> 00:42:31.644 So what are the mechanisms

NOTE Confidence: 0.99929136

00:42:31.785 --> 00:42:33.384 of how, some of these

NOTE Confidence: 0.99929136

00:42:33.384 --> 00:42:33.884 modifiable

NOTE Confidence: 0.9785989

00:42:34.184 --> 00:42:36.184 lifestyle factors related to body

NOTE Confidence: 0.9785989

00:42:36.184 --> 00:42:37.644 weight, physical inactivity,

NOTE Confidence: 0.98926735

00:42:38.105 --> 00:42:39.870 poor diet, and alcohol might

NOTE Confidence: 0.9590233

00:42:40.190 --> 00:42:41.810 increase risk for breast cancer.

NOTE Confidence: 0.9912501

00:42:42.110 --> 00:42:43.230 Well, we know that they're

NOTE Confidence: 0.9912501

00:42:43.230 --> 00:42:44.530 primarily through estrogen,

NOTE Confidence: 0.9567726

00:42:45.150 --> 00:42:47.310 inflammation, and metabolic markers such

NOTE Confidence: 0.9567726

00:42:47.310 --> 00:42:48.050 as insulin.

NOTE Confidence: 0.977576

00:42:49.390 --> 00:42:50.350 Delving down a little bit

NOTE Confidence: 0.977576

00:42:50.350 --> 00:42:51.230 deeper, we know in our

NOTE Confidence: 0.977576

00:42:51.230 --> 00:42:51.730 postmenopausal

NOTE Confidence: 0.93856305

00:42:52.190 --> 00:42:53.890 years when women stop producing

NOTE Confidence: 0.93856305

00:42:53.950 --> 00:42:55.650 estrogen via their ovaries,

NOTE Confidence: 0.85072243

00:42:56.005 --> 00:42:56.825 they continued

NOTE Confidence: 0.9904474

00:42:57.125 --> 00:42:58.645 to produce it in their,

NOTE Confidence: 0.87545174

00:42:59.205 --> 00:43:01.224 adipocytes and their body fat.

NOTE Confidence: 0.99744344

00:43:01.765 --> 00:43:02.724 And this is from the

NOTE Confidence: 0.99744344

00:43:02.724 --> 00:43:04.105 conversion of androgens

NOTE Confidence: 0.9921544

00:43:04.405 --> 00:43:06.505 to estrogens via the enzyme

NOTE Confidence: 0.9921544

00:43:06.724 --> 00:43:07.224 aromatase.

NOTE Confidence: 0.99297816

00:43:08.100 --> 00:43:09.300 We know that this is

NOTE Confidence: 0.99297816

00:43:09.300 --> 00:43:11.460 really important because in women

NOTE Confidence: 0.99297816

00:43:11.460 --> 00:43:13.640 who have estrogen receptor positive

NOTE Confidence: 0.99297816

00:43:13.700 --> 00:43:14.440 breast cancers,

NOTE Confidence: 0.8828208

00:43:14.820 --> 00:43:16.340 they're prescribed a standard of

NOTE Confidence: 0.8828208

00:43:16.340 --> 00:43:17.480 care and aromatase

NOTE Confidence: 0.9857335

00:43:17.860 --> 00:43:18.360 inhibitor,

NOTE Confidence: 0.99779505

00:43:18.900 --> 00:43:20.820 which inhibits the conversion of

NOTE Confidence: 0.99779505

00:43:20.820 --> 00:43:21.320 androgens

NOTE Confidence: 0.99797046

00:43:21.860 --> 00:43:22.520 to estrogens.

NOTE Confidence: 0.99519444

00:43:23.195 --> 00:43:24.395 So this is really showing

NOTE Confidence: 0.99519444

00:43:24.395 --> 00:43:26.015 that estrogen is a primary,

NOTE Confidence: 0.99973613

00:43:26.715 --> 00:43:27.215 mechanism

NOTE Confidence: 0.9766225

00:43:27.675 --> 00:43:29.055 that mediates certain

NOTE Confidence: 0.9997524

00:43:29.355 --> 00:43:29.855 modifiable

NOTE Confidence: 0.9994197

00:43:30.155 --> 00:43:32.235 and other factors related to

NOTE Confidence: 0.9994197

00:43:32.235 --> 00:43:32.975 breast cancer.

NOTE Confidence: 0.9648917

00:43:33.435 --> 00:43:34.955 So research on trying to

NOTE Confidence: 0.9648917

00:43:34.955 --> 00:43:36.895 reduce estrogen levels systemically,

NOTE Confidence: 0.99925125

00:43:37.670 --> 00:43:38.730 as well as reducing

NOTE Confidence: 0.98993987

00:43:39.030 --> 00:43:39.530 inflammation,

NOTE Confidence: 0.990879

00:43:40.710 --> 00:43:42.390 and insulin and other metabolic

NOTE Confidence: 0.990879

00:43:42.390 --> 00:43:42.890 markers

NOTE Confidence: 0.9631665

00:43:43.350 --> 00:43:43.989 is really,

NOTE Confidence: 0.9996929

00:43:44.710 --> 00:43:46.469 important to better understand the

NOTE Confidence: 0.9996929

00:43:46.469 --> 00:43:47.530 right type of intervention

NOTE Confidence: 0.9903581

00:43:47.830 --> 00:43:49.770 for certain types of of

NOTE Confidence: 0.9903581

00:43:49.910 --> 00:43:50.410 people.

NOTE Confidence: 0.9909336

00:43:52.364 --> 00:43:53.825 You've heard a lot recently

NOTE Confidence: 0.9909336

00:43:53.885 --> 00:43:55.985 about alcohol and how alcohol

NOTE Confidence: 0.9909336

00:43:56.045 --> 00:43:58.205 increases breast cancer risk. And

NOTE Confidence: 0.9909336

00:43:58.205 --> 00:43:59.485 the way this works is

NOTE Confidence: 0.9909336

00:43:59.485 --> 00:44:00.785 alcohol or ethanol

NOTE Confidence: 0.9695387

00:44:01.325 --> 00:44:02.765 can, when we drink it,

NOTE Confidence: 0.9695387

00:44:02.765 --> 00:44:03.885 it's more of a focus

NOTE Confidence: 0.9695387

00:44:03.885 --> 00:44:05.585 on there's a dose response

NOTE Confidence: 0.9695387

00:44:05.725 --> 00:44:07.165 effect here. So one drink

NOTE Confidence: 0.9695387

00:44:07.165 --> 00:44:09.290 might be okay and not

NOTE Confidence: 0.9695387

00:44:09.350 --> 00:44:10.390 much of a risk, maybe

NOTE Confidence: 0.9695387

00:44:10.390 --> 00:44:12.230 a a lifetime five percent

NOTE Confidence: 0.9695387

00:44:12.230 --> 00:44:13.510 higher risk, but it's if

NOTE Confidence: 0.9695387

00:44:13.510 --> 00:44:14.630 you have two or three

NOTE Confidence: 0.9695387

00:44:14.630 --> 00:44:15.989 or four in a day.

NOTE Confidence: 0.9695387

00:44:15.989 --> 00:44:17.510 That's where your risk of

NOTE Confidence: 0.9695387

00:44:17.510 --> 00:44:19.290 breast cancer really increases.

NOTE Confidence: 0.99675465

00:44:19.925 --> 00:44:20.905 And that's through,

NOTE Confidence: 0.9882833

00:44:21.364 --> 00:44:23.445 how alcohol or ethanol is,

NOTE Confidence: 0.9882833

00:44:23.765 --> 00:44:25.065 converted in the enzyme,

NOTE Confidence: 0.98122585

00:44:25.925 --> 00:44:27.765 that of ADH that then

NOTE Confidence: 0.98122585

00:44:27.765 --> 00:44:28.825 leads to,

NOTE Confidence: 0.999217

00:44:29.364 --> 00:44:30.984 a chemical that can cause

NOTE Confidence: 0.999217

00:44:31.205 --> 00:44:32.344 chromosome rearrangement

NOTE Confidence: 0.9991711

00:44:32.645 --> 00:44:34.344 and mistakes in our DNA.

NOTE Confidence: 0.9819976

00:44:35.130 --> 00:44:35.630 So,

NOTE Confidence: 0.9320676

00:44:36.329 --> 00:44:37.930 prudent, you know, wanna be

NOTE Confidence: 0.9320676

00:44:37.930 --> 00:44:39.950 modest with our alcohol intake.

NOTE Confidence: 0.99120444

00:44:41.450 --> 00:44:42.489 So I wanna go back

NOTE Confidence: 0.99120444

00:44:42.489 --> 00:44:43.950 to talking about the lifestyle,

NOTE Confidence: 0.98320353

00:44:44.969 --> 00:44:46.430 these factors in the environment.

NOTE Confidence: 0.98320353

00:44:46.489 --> 00:44:47.609 We know that lifestyle risk

NOTE Confidence: 0.98320353

00:44:47.609 --> 00:44:48.890 factors are shaped by the

NOTE Confidence: 0.98320353

00:44:48.890 --> 00:44:50.505 environments we live in and

NOTE Confidence: 0.98320353

00:44:50.505 --> 00:44:52.025 that our lifestyle choices are

NOTE Confidence: 0.98320353

00:44:52.025 --> 00:44:54.105 strongly influenced by the environments,

NOTE Confidence: 0.98320353

00:44:54.105 --> 00:44:55.484 the policies and systems,

NOTE Confidence: 0.91626936

00:44:56.025 --> 00:44:57.704 and that our environments often

NOTE Confidence: 0.91626936

00:44:57.704 --> 00:44:59.805 promote unhealthy eating and sedentary

NOTE Confidence: 0.91626936

00:44:59.864 --> 00:45:01.864 behavior, and that access to

NOTE Confidence: 0.91626936

00:45:01.864 --> 00:45:02.864 places to exercise affordable, healthy

NOTE Confidence: 0.91626936

00:45:02.864 --> 00:45:03.065 food and supportive policies are

NOTE Confidence: 0.91626936

00:45:03.065 --> 00:45:03.815 key to

NOTE Confidence: 0.88387704

00:45:04.469 --> 00:45:06.070 food and supportive policies are

NOTE Confidence: 0.88387704

00:45:06.070 --> 00:45:07.050 key to prevention.

NOTE Confidence: 0.96429944

00:45:07.590 --> 00:45:09.030 And I wanna dig deeper

NOTE Confidence: 0.96429944

00:45:09.030 --> 00:45:10.330 on the the sort of

NOTE Confidence: 0.96429944

00:45:10.550 --> 00:45:11.050 reducing

NOTE Confidence: 0.9969271

00:45:11.350 --> 00:45:12.650 sedentary behavior

NOTE Confidence: 0.9970836

00:45:13.430 --> 00:45:14.869 and making sure you understand

NOTE Confidence: 0.9970836

00:45:14.869 --> 00:45:16.630 the importance of this. This

NOTE Confidence: 0.9970836

00:45:16.630 --> 00:45:18.070 figure here is based on

NOTE Confidence: 0.9970836

00:45:18.070 --> 00:45:18.570 hundreds

NOTE Confidence: 0.98469305

00:45:19.635 --> 00:45:20.455 of prospective

NOTE Confidence: 0.9638175

00:45:20.915 --> 00:45:21.895 cohort studies

NOTE Confidence: 0.92513245

00:45:22.195 --> 00:45:24.275 that have enrolled individuals, let's

NOTE Confidence: 0.92513245

00:45:24.275 --> 00:45:25.975 say at around age forty

NOTE Confidence: 0.92513245

00:45:26.275 --> 00:45:27.875 or thirty or twenty and

NOTE Confidence: 0.92513245

00:45:27.875 --> 00:45:29.715 followed them to fifty, sixty,

NOTE Confidence: 0.92513245

00:45:29.715 --> 00:45:30.835 seventy, eighty years of age

NOTE Confidence: 0.92513245

00:45:30.835 --> 00:45:32.455 one and looked at mortality

NOTE Confidence: 0.94280624

00:45:33.075 --> 00:45:33.975 as the outcome.

NOTE Confidence: 0.9821318

00:45:34.320 --> 00:45:34.820 Cancer,

NOTE Confidence: 0.9727258

00:45:35.360 --> 00:45:36.739 mortality, as well as cardiovascular

NOTE Confidence: 0.9727258

00:45:36.880 --> 00:45:37.380 mortality.

NOTE Confidence: 0.96484756

00:45:37.840 --> 00:45:39.120 And what's really important to

NOTE Confidence: 0.96484756

00:45:39.120 --> 00:45:41.040 recognize in this figure is

NOTE Confidence: 0.96484756

00:45:41.040 --> 00:45:43.360 this drop that going from

NOTE Confidence: 0.96484756

00:45:43.360 --> 00:45:45.200 nothing, being very sedentary to

NOTE Confidence: 0.96484756

00:45:45.200 --> 00:45:46.594 just doing something

NOTE Confidence: 0.9555353

00:45:46.974 --> 00:45:48.035 is where you see

NOTE Confidence: 0.9181227

00:45:49.215 --> 00:45:50.255 the most bang for your

NOTE Confidence: 0.9181227

00:45:50.255 --> 00:45:51.075 buck, the biggest,

NOTE Confidence: 0.9988682

00:45:51.855 --> 00:45:52.355 reduction

NOTE Confidence: 0.96218294

00:45:52.815 --> 00:45:54.655 in breast cancer risk or

NOTE Confidence: 0.96218294

00:45:54.655 --> 00:45:55.155 mortality,

NOTE Confidence: 0.99668527

00:45:56.494 --> 00:45:58.255 implying that just doing something

NOTE Confidence: 0.99668527

00:45:58.255 --> 00:46:00.039 is better than nothing. It

NOTE Confidence: 0.99668527

00:46:00.039 --> 00:46:01.319 doesn't have to be training

NOTE Confidence: 0.99668527

00:46:01.319 --> 00:46:02.219 for a marathon.

NOTE Confidence: 0.96023107

00:46:03.079 --> 00:46:04.680 The goal, the recommended amount

NOTE Confidence: 0.96023107

00:46:04.680 --> 00:46:05.400 is two and a half

NOTE Confidence: 0.96023107

00:46:05.400 --> 00:46:06.839 hours per week of of

NOTE Confidence: 0.96023107

00:46:06.839 --> 00:46:08.839 moderate intensity, such as brisk

NOTE Confidence: 0.96023107

00:46:08.839 --> 00:46:10.359 walking, but it's really important

NOTE Confidence: 0.96023107

00:46:10.359 --> 00:46:11.719 that the research has shown

NOTE Confidence: 0.96023107

00:46:11.719 --> 00:46:13.420 that really just doing something

NOTE Confidence: 0.96023107

00:46:13.480 --> 00:46:14.380 can be beneficial.

NOTE Confidence: 0.99821204

00:46:15.494 --> 00:46:17.174 This same figure comes up

NOTE Confidence: 0.99821204

00:46:17.174 --> 00:46:17.994 time and again

NOTE Confidence: 0.95358026

00:46:18.295 --> 00:46:20.154 in studies looking at walking.

NOTE Confidence: 0.9400374

00:46:20.855 --> 00:46:22.234 And these are from pedometers

NOTE Confidence: 0.9400374

00:46:22.454 --> 00:46:23.815 from iPhones. When you look

NOTE Confidence: 0.9400374

00:46:23.815 --> 00:46:24.934 at how much steps you've

NOTE Confidence: 0.9400374

00:46:24.934 --> 00:46:25.994 taken or Fitbits

NOTE Confidence: 0.96021384

00:46:26.454 --> 00:46:27.974 showing once again a similar

NOTE Confidence: 0.96021384

00:46:27.974 --> 00:46:29.280 curve that going from very

NOTE Confidence: 0.96021384

00:46:29.280 --> 00:46:30.800 little walking less than a

NOTE Confidence: 0.96021384

00:46:30.800 --> 00:46:32.000 thousand steps per day, which

NOTE Confidence: 0.96021384

00:46:32.000 --> 00:46:33.280 is only a half a

NOTE Confidence: 0.96021384

00:46:33.280 --> 00:46:34.820 mile in all of our

NOTE Confidence: 0.97987616

00:46:35.120 --> 00:46:36.480 steps per day, not in

NOTE Confidence: 0.97987616

00:46:36.480 --> 00:46:37.600 kind of going for a

NOTE Confidence: 0.97987616

00:46:37.600 --> 00:46:38.880 walk, but from when you

NOTE Confidence: 0.97987616

00:46:38.880 --> 00:46:39.840 wait till you go to

NOTE Confidence: 0.97987616

00:46:39.840 --> 00:46:41.614 bed at night. So going

NOTE Confidence: 0.97987616

00:46:41.614 --> 00:46:42.515 from a thousand

NOTE Confidence: 0.9643311

00:46:42.895 --> 00:46:44.175 and trying to increase it

NOTE Confidence: 0.9643311

00:46:44.175 --> 00:46:45.614 a thousand steps per day

NOTE Confidence: 0.9643311

00:46:45.614 --> 00:46:46.355 or more,

NOTE Confidence: 0.99901754

00:46:46.815 --> 00:46:47.795 has a significant

NOTE Confidence: 0.9902764

00:46:48.094 --> 00:46:49.555 reduction in risk for

NOTE Confidence: 0.96832156

00:46:50.015 --> 00:46:51.295 all cause mortality, as well

NOTE Confidence: 0.96832156

00:46:51.295 --> 00:46:52.675 as breast cancer mortality.

NOTE Confidence: 0.9805592

00:46:53.500 --> 00:46:55.180 Two thousand steps per day

NOTE Confidence: 0.9805592

00:46:55.180 --> 00:46:56.640 is equivalent to a mile.

NOTE Confidence: 0.9665921

00:46:56.940 --> 00:46:58.060 So if you can kinda

NOTE Confidence: 0.9665921

00:46:58.060 --> 00:46:59.820 think about increasing five hundred

NOTE Confidence: 0.9665921

00:46:59.820 --> 00:47:01.020 or a thousand steps per

NOTE Confidence: 0.9665921

00:47:01.020 --> 00:47:02.620 day throughout your day, then

NOTE Confidence: 0.9665921

00:47:02.620 --> 00:47:03.980 that's gonna really help lower

NOTE Confidence: 0.9665921

00:47:03.980 --> 00:47:04.719 your risk.

NOTE Confidence: 0.9991598

00:47:05.955 --> 00:47:07.895 What about the dietary guidelines?

NOTE Confidence: 0.95432657

00:47:08.355 --> 00:47:09.155 There are a number of

NOTE Confidence: 0.95432657

00:47:09.155 --> 00:47:10.675 guidelines that are listed on

NOTE Confidence: 0.95432657

00:47:10.675 --> 00:47:12.055 the left here, but overall,

NOTE Confidence: 0.99641997

00:47:12.755 --> 00:47:14.515 what's recommended is a,

NOTE Confidence: 0.95245326

00:47:15.155 --> 00:47:15.815 a plant,

NOTE Confidence: 0.99971116

00:47:16.515 --> 00:47:17.655 based diet

NOTE Confidence: 0.9950412

00:47:18.060 --> 00:47:18.560 where,

NOTE Confidence: 0.98042774

00:47:19.660 --> 00:47:21.500 animal products are are maybe

NOTE Confidence: 0.98042774

00:47:21.500 --> 00:47:22.940 one third of what we

NOTE Confidence: 0.98042774

00:47:22.940 --> 00:47:24.400 eat in a a day.

NOTE Confidence: 0.967717

00:47:24.860 --> 00:47:26.140 We really wanna focus on

NOTE Confidence: 0.967717

00:47:26.140 --> 00:47:27.680 increasing our fruits and vegetables

NOTE Confidence: 0.967717

00:47:27.739 --> 00:47:29.100 in our fiber, which is

NOTE Confidence: 0.967717

00:47:29.100 --> 00:47:30.719 in our fruits and vegetables.

NOTE Confidence: 0.9683822

00:47:32.195 --> 00:47:33.315 So we now have a

NOTE Confidence: 0.9683822

00:47:33.315 --> 00:47:34.515 really good food label, as

NOTE Confidence: 0.9683822

00:47:34.515 --> 00:47:35.235 you can see on the

NOTE Confidence: 0.9683822

00:47:35.235 --> 00:47:36.515 right, that tells you how

NOTE Confidence: 0.9683822

00:47:36.515 --> 00:47:38.275 much grams of fiber you

NOTE Confidence: 0.9683822

00:47:38.275 --> 00:47:39.635 get in various foods, as

NOTE Confidence: 0.9683822

00:47:39.635 --> 00:47:40.755 well as how much added

NOTE Confidence: 0.9683822

00:47:40.755 --> 00:47:42.035 sugar, that's new to the

NOTE Confidence: 0.9683822

00:47:42.035 --> 00:47:43.395 food labels. And that was

NOTE Confidence: 0.9683822

00:47:43.395 --> 00:47:44.614 a significant

NOTE Confidence: 0.96080196

00:47:44.915 --> 00:47:46.515 FDA policy change that came

NOTE Confidence: 0.96080196

00:47:46.515 --> 00:47:47.395 out just a couple of

NOTE Confidence: 0.96080196

00:47:47.395 --> 00:47:49.690 years ago, requiring that added

NOTE Confidence: 0.96080196

00:47:49.690 --> 00:47:51.469 sugars be pulled out on

NOTE Confidence: 0.96080196

00:47:51.690 --> 00:47:53.210 the full food label, because

NOTE Confidence: 0.96080196

00:47:53.210 --> 00:47:54.810 it was very confusing to

NOTE Confidence: 0.96080196

00:47:54.810 --> 00:47:55.310 consumers.

NOTE Confidence: 0.9942385

00:47:55.850 --> 00:47:57.050 For example, if you're drinking

NOTE Confidence: 0.9942385

00:47:57.050 --> 00:47:58.489 orange juice and it shows

NOTE Confidence: 0.9942385

00:47:58.489 --> 00:47:59.469 a lot of sugars,

NOTE Confidence: 0.99456686

00:47:59.930 --> 00:48:01.335 but, it might be that

NOTE Confidence: 0.99456686

00:48:01.335 --> 00:48:03.255 that's not added sugars to

NOTE Confidence: 0.99456686

00:48:03.255 --> 00:48:04.775 the orange juice. So more

NOTE Confidence: 0.99456686

00:48:04.775 --> 00:48:05.815 important to look at the

NOTE Confidence: 0.99456686

00:48:05.815 --> 00:48:07.094 amount of added sugars on

NOTE Confidence: 0.99456686

00:48:07.094 --> 00:48:08.535 the food label than than

NOTE Confidence: 0.99456686

00:48:08.535 --> 00:48:09.755 the overall sugars.

NOTE Confidence: 0.9854741

00:48:10.614 --> 00:48:12.775 We wanna, maintain or increase

NOTE Confidence: 0.9854741

00:48:12.775 --> 00:48:13.975 our protein per day to

NOTE Confidence: 0.9854741

00:48:13.975 --> 00:48:15.175 about one point two grams

NOTE Confidence: 0.9854741

00:48:15.175 --> 00:48:15.915 per kilograms.

NOTE Confidence: 0.988178

00:48:17.440 --> 00:48:19.440 Generally, most people eat plenty

NOTE Confidence: 0.988178

00:48:19.440 --> 00:48:21.060 of protein in their diet,

NOTE Confidence: 0.988178

00:48:21.200 --> 00:48:22.480 even though there seems to

NOTE Confidence: 0.988178

00:48:22.480 --> 00:48:23.700 be a lot of advertising

NOTE Confidence: 0.988178

00:48:23.840 --> 00:48:24.960 out there to get more

NOTE Confidence: 0.988178

00:48:24.960 --> 00:48:26.800 protein, but most people eat

NOTE Confidence: 0.988178

00:48:26.800 --> 00:48:27.700 plenty of protein.

NOTE Confidence: 0.9723545

00:48:28.080 --> 00:48:29.200 And in thinking about the

NOTE Confidence: 0.9723545

00:48:29.200 --> 00:48:30.400 type of protein you get,

NOTE Confidence: 0.9723545

00:48:30.400 --> 00:48:31.700 having it from fish,

NOTE Confidence: 0.96219367

00:48:32.355 --> 00:48:34.195 and and maybe poultry and

NOTE Confidence: 0.96219367

00:48:34.195 --> 00:48:36.855 reducing it from processed meat,

NOTE Confidence: 0.96219367

00:48:36.915 --> 00:48:38.035 which in turn will also

NOTE Confidence: 0.96219367

00:48:38.035 --> 00:48:39.395 reduce your amount of sodium

NOTE Confidence: 0.96219367

00:48:39.395 --> 00:48:40.375 and low saturated

NOTE Confidence: 0.99706626

00:48:41.155 --> 00:48:41.655 fat.

NOTE Confidence: 0.97642833

00:48:44.195 --> 00:48:45.810 What about supplements? So the

NOTE Confidence: 0.97642833

00:48:45.810 --> 00:48:47.650 American Institute for Cancer Research

NOTE Confidence: 0.97642833

00:48:47.650 --> 00:48:48.770 as well as the American

NOTE Confidence: 0.97642833

00:48:48.770 --> 00:48:49.830 Cancer Society,

NOTE Confidence: 0.998067

00:48:50.850 --> 00:48:51.750 and NCI

NOTE Confidence: 0.9845598

00:48:52.370 --> 00:48:53.890 do recommend that you do

NOTE Confidence: 0.9845598

00:48:53.890 --> 00:48:55.489 not rely on supplements for

NOTE Confidence: 0.9845598

00:48:55.489 --> 00:48:56.390 cancer prevention

NOTE Confidence: 0.973445

00:48:56.770 --> 00:48:58.515 and, to reduce your risk

NOTE Confidence: 0.973445

00:48:58.515 --> 00:48:59.555 of cancer, to choose a

NOTE Confidence: 0.973445

00:48:59.555 --> 00:49:00.994 balanced diet with a variety

NOTE Confidence: 0.973445

00:49:00.994 --> 00:49:01.654 of foods.

NOTE Confidence: 0.9975229

00:49:02.434 --> 00:49:04.275 And those diagnosed with breast

NOTE Confidence: 0.9975229

00:49:04.275 --> 00:49:05.795 cancer or any cancer, it

NOTE Confidence: 0.9975229

00:49:05.795 --> 00:49:07.255 is critically important

NOTE Confidence: 0.9997673

00:49:07.635 --> 00:49:09.075 to share the supplements that

NOTE Confidence: 0.9997673

00:49:09.075 --> 00:49:10.775 you're taking with your provider

NOTE Confidence: 0.9994327

00:49:11.310 --> 00:49:12.910 because they could interact with

NOTE Confidence: 0.9994327

00:49:12.910 --> 00:49:14.210 the treatments you're receiving

NOTE Confidence: 0.981784

00:49:14.670 --> 00:49:16.270 and reduce the efficacy of

NOTE Confidence: 0.981784

00:49:16.270 --> 00:49:16.930 the treatments.

NOTE Confidence: 0.9860699

00:49:17.469 --> 00:49:18.910 But guidelines are that you

NOTE Confidence: 0.9860699

00:49:18.910 --> 00:49:20.270 should not rely on supplements

NOTE Confidence: 0.9860699

00:49:20.270 --> 00:49:21.550 for cancer prevention. In fact,

NOTE Confidence: 0.9860699

00:49:21.550 --> 00:49:22.750 it's important to recognize the

NOTE Confidence: 0.9860699

00:49:22.750 --> 00:49:23.650 word supplement.

NOTE Confidence: 0.97920126

00:49:24.030 --> 00:49:25.815 If you are low in

NOTE Confidence: 0.97920126

00:49:25.815 --> 00:49:27.335 that level, it helps to

NOTE Confidence: 0.97920126

00:49:27.335 --> 00:49:28.695 supplement. But if many people

NOTE Confidence: 0.97920126

00:49:28.695 --> 00:49:29.515 are already,

NOTE Confidence: 0.9889578

00:49:30.775 --> 00:49:32.535 getting enough vitamins and minerals

NOTE Confidence: 0.9889578

00:49:32.535 --> 00:49:33.895 from their diet and having

NOTE Confidence: 0.9889578

00:49:33.895 --> 00:49:34.395 additional

NOTE Confidence: 0.9638555

00:49:34.935 --> 00:49:36.295 supplements on top of that

NOTE Confidence: 0.9638555

00:49:36.295 --> 00:49:37.815 is not any added benefit,

NOTE Confidence: 0.9638555

00:49:37.815 --> 00:49:38.695 and in fact, it could

NOTE Confidence: 0.9638555

00:49:38.695 --> 00:49:39.435 be harm.

NOTE Confidence: 0.9324513

00:49:40.940 --> 00:49:41.739 So I just wanted to

NOTE Confidence: 0.9324513

00:49:41.739 --> 00:49:42.619 quickly highlight,

NOTE Confidence: 0.9916888

00:49:43.180 --> 00:49:44.779 where the research some of

NOTE Confidence: 0.9916888

00:49:44.779 --> 00:49:46.219 the studies that we've done

NOTE Confidence: 0.9916888

00:49:46.219 --> 00:49:46.719 of,

NOTE Confidence: 0.83149785

00:49:48.140 --> 00:49:49.440 diet and exercise

NOTE Confidence: 0.98326015

00:49:49.980 --> 00:49:51.599 and weight management interventions

NOTE Confidence: 0.9907971

00:49:51.900 --> 00:49:53.660 and the effect on breast

NOTE Confidence: 0.9907971

00:49:53.660 --> 00:49:55.775 cancer risk and outcomes. This

NOTE Confidence: 0.9907971

00:49:55.775 --> 00:49:57.155 was a trial we completed

NOTE Confidence: 0.9706977

00:49:57.614 --> 00:49:57.935 about,

NOTE Confidence: 0.97276187

00:49:58.415 --> 00:49:59.614 ten years ago now, and

NOTE Confidence: 0.97276187

00:49:59.614 --> 00:50:00.835 it was in postmenopausal

NOTE Confidence: 0.96549255

00:50:01.375 --> 00:50:02.835 women without breast cancer.

NOTE Confidence: 0.9492736

00:50:03.215 --> 00:50:04.435 But it was a forearm

NOTE Confidence: 0.9492736

00:50:04.655 --> 00:50:06.495 randomized trial of diet alone,

NOTE Confidence: 0.97970444

00:50:06.975 --> 00:50:08.335 of all the recommendations I

NOTE Confidence: 0.97970444

00:50:08.335 --> 00:50:08.995 just mentioned,

NOTE Confidence: 0.9933623

00:50:09.295 --> 00:50:10.995 exercise, which was basically

NOTE Confidence: 0.9795171

00:50:11.640 --> 00:50:13.559 brisk walking for two hours

NOTE Confidence: 0.9795171

00:50:13.559 --> 00:50:14.839 per week, and then the

NOTE Confidence: 0.9795171

00:50:14.839 --> 00:50:16.380 combination of diet and exercise.

NOTE Confidence: 0.9795171

00:50:16.520 --> 00:50:17.960 And really the takeaway here

NOTE Confidence: 0.9795171

00:50:17.960 --> 00:50:19.880 is all the negative signs

NOTE Confidence: 0.9795171

00:50:19.880 --> 00:50:21.319 you see in all of

NOTE Confidence: 0.9795171

00:50:21.319 --> 00:50:22.219 these markers,

NOTE Confidence: 0.9717487

00:50:22.520 --> 00:50:24.945 biomarkers related to breast cancer.

NOTE Confidence: 0.9717487

00:50:24.945 --> 00:50:26.145 So higher levels of these

NOTE Confidence: 0.9717487

00:50:26.145 --> 00:50:27.425 increase your risk of breast

NOTE Confidence: 0.9717487

00:50:27.425 --> 00:50:27.925 cancer,

NOTE Confidence: 0.97681

00:50:28.465 --> 00:50:29.525 except for SHBG.

NOTE Confidence: 0.99073845

00:50:30.625 --> 00:50:31.344 And so,

NOTE Confidence: 0.9533817

00:50:31.825 --> 00:50:33.265 these inter the diet and

NOTE Confidence: 0.9533817

00:50:33.265 --> 00:50:35.985 exercise interventions, significant reductions in

NOTE Confidence: 0.9533817

00:50:35.985 --> 00:50:36.485 insulin,

NOTE Confidence: 0.89749736

00:50:37.890 --> 00:50:38.390 in

NOTE Confidence: 0.95262307

00:50:38.690 --> 00:50:40.210 CRP, a marker of chronic

NOTE Confidence: 0.95262307

00:50:40.210 --> 00:50:41.910 inflammation, and in our estrogens.

NOTE Confidence: 0.9549727

00:50:42.450 --> 00:50:43.489 And then the figure on

NOTE Confidence: 0.9549727

00:50:43.489 --> 00:50:45.329 the right shows estrogen levels,

NOTE Confidence: 0.9549727

00:50:45.329 --> 00:50:46.369 which is the most,

NOTE Confidence: 0.80875516

00:50:47.250 --> 00:50:47.750 common,

NOTE Confidence: 0.9917655

00:50:48.690 --> 00:50:49.910 estrogen in postmenopausal

NOTE Confidence: 0.9363885

00:50:50.289 --> 00:50:51.829 women, and you can see,

NOTE Confidence: 0.97316545

00:50:52.565 --> 00:50:54.404 just the significant reduction in

NOTE Confidence: 0.97316545

00:50:54.404 --> 00:50:56.884 estrogen levels with diet, exercise,

NOTE Confidence: 0.97316545

00:50:56.884 --> 00:50:57.704 and the combination

NOTE Confidence: 0.9905394

00:50:58.404 --> 00:50:59.844 of about ten to fifteen

NOTE Confidence: 0.9905394

00:50:59.844 --> 00:51:01.525 percent. And this was within

NOTE Confidence: 0.9905394

00:51:01.525 --> 00:51:03.204 three months of a healthy

NOTE Confidence: 0.9905394

00:51:03.204 --> 00:51:04.904 eating and exercise program.

NOTE Confidence: 0.96984553

00:51:06.609 --> 00:51:08.290 We just completed a trial

NOTE Confidence: 0.96984553

00:51:08.290 --> 00:51:09.969 in women who were receiving

NOTE Confidence: 0.96984553

00:51:09.969 --> 00:51:10.469 chemotherapy

NOTE Confidence: 0.9216192

00:51:10.770 --> 00:51:11.910 for breast cancer,

NOTE Confidence: 0.98191345

00:51:12.450 --> 00:51:13.329 and what we were able

NOTE Confidence: 0.98191345

00:51:13.329 --> 00:51:14.290 to show in working with

NOTE Confidence: 0.98191345

00:51:14.290 --> 00:51:15.510 the registered dietitian,

NOTE Confidence: 0.9705504

00:51:16.290 --> 00:51:17.489 on our team, those who

NOTE Confidence: 0.9705504

00:51:17.489 --> 00:51:19.030 were randomized to receiving

NOTE Confidence: 0.9512163

00:51:19.425 --> 00:51:21.985 receiving counseling of healthy eating

NOTE Confidence: 0.9512163

00:51:21.985 --> 00:51:23.745 and exercise over the year

NOTE Confidence: 0.9512163

00:51:23.745 --> 00:51:25.605 from their diagnosis through chemotherapy.

NOTE Confidence: 0.9291755

00:51:26.065 --> 00:51:27.525 And at one year, we,

NOTE Confidence: 0.9944438

00:51:28.385 --> 00:51:29.665 working with our dietitian, they

NOTE Confidence: 0.9944438

00:51:29.665 --> 00:51:30.785 were able to increase their

NOTE Confidence: 0.9944438

00:51:30.785 --> 00:51:32.165 physical activity levels

NOTE Confidence: 0.97783065

00:51:32.489 --> 00:51:33.050 and the,

NOTE Confidence: 0.989337

00:51:33.610 --> 00:51:35.370 the diet quality, the quality

NOTE Confidence: 0.989337

00:51:35.370 --> 00:51:36.410 of the foods they were

NOTE Confidence: 0.989337

00:51:36.410 --> 00:51:38.030 eating during chemotherapy.

NOTE Confidence: 0.97934705

00:51:38.810 --> 00:51:39.690 And what is,

NOTE Confidence: 0.99947214

00:51:40.170 --> 00:51:42.090 quite remarkable is that this

NOTE Confidence: 0.99947214

00:51:42.090 --> 00:51:42.590 intervention

NOTE Confidence: 0.96610194

00:51:43.290 --> 00:51:44.730 led to a fifty three

NOTE Confidence: 0.96610194

00:51:44.730 --> 00:51:45.230 percent,

NOTE Confidence: 0.9848628

00:51:46.135 --> 00:51:48.615 pathologic complete response rate compared

NOTE Confidence: 0.9848628

00:51:48.615 --> 00:51:50.375 to twenty eight percent in

NOTE Confidence: 0.9848628

00:51:50.375 --> 00:51:52.295 the usual care group. Both

NOTE Confidence: 0.9848628

00:51:52.295 --> 00:51:54.375 groups were receiving chemotherapy, but

NOTE Confidence: 0.9848628

00:51:54.375 --> 00:51:56.235 those that had were randomized

NOTE Confidence: 0.9848628

00:51:56.295 --> 00:51:56.775 to the,

NOTE Confidence: 0.99395174

00:51:57.335 --> 00:51:59.115 exercise and nutrition intervention

NOTE Confidence: 0.9996985

00:51:59.670 --> 00:52:01.530 had less breast cancer

NOTE Confidence: 0.99621207

00:52:01.989 --> 00:52:03.349 at surgery. So this was

NOTE Confidence: 0.99621207

00:52:03.349 --> 00:52:04.630 a group of women receiving

NOTE Confidence: 0.99621207

00:52:04.630 --> 00:52:05.369 new adjuvant

NOTE Confidence: 0.92795455

00:52:05.670 --> 00:52:06.170 chemotherapy

NOTE Confidence: 0.98817325

00:52:07.270 --> 00:52:08.790 and then had surgery. And

NOTE Confidence: 0.98817325

00:52:08.790 --> 00:52:10.069 at the time of surgery,

NOTE Confidence: 0.98817325

00:52:10.069 --> 00:52:11.349 those in the intervention group,

NOTE Confidence: 0.98817325

00:52:11.349 --> 00:52:12.790 there was less evidence of

NOTE Confidence: 0.98817325

00:52:12.790 --> 00:52:13.609 breast cancer.

NOTE Confidence: 0.9883416

00:52:15.285 --> 00:52:16.724 What is the mechanism of

NOTE Confidence: 0.9883416

00:52:16.724 --> 00:52:18.645 that? Well, in this trial

NOTE Confidence: 0.9883416

00:52:18.645 --> 00:52:20.565 also, with women with breast

NOTE Confidence: 0.9883416

00:52:20.565 --> 00:52:21.065 cancer,

NOTE Confidence: 0.94222575

00:52:22.085 --> 00:52:23.525 we showed that really that

NOTE Confidence: 0.94222575

00:52:23.525 --> 00:52:25.204 this intervention led to favorable

NOTE Confidence: 0.94222575

00:52:25.204 --> 00:52:27.125 changes in body composition, but

NOTE Confidence: 0.94222575

00:52:27.125 --> 00:52:27.625 also

NOTE Confidence: 0.9081566

00:52:27.930 --> 00:52:30.329 reduction in c reactive protein,

NOTE Confidence: 0.9081566

00:52:30.329 --> 00:52:31.310 which is inflammation,

NOTE Confidence: 0.9805133

00:52:31.690 --> 00:52:32.750 insulin, and leptin.

NOTE Confidence: 0.9687118

00:52:34.969 --> 00:52:36.489 So I just wanna, touch

NOTE Confidence: 0.9687118

00:52:36.489 --> 00:52:39.290 upon anti obesity medications because,

NOTE Confidence: 0.9687118

00:52:39.609 --> 00:52:41.130 I know that this is,

NOTE Confidence: 0.97432023

00:52:42.035 --> 00:52:43.315 a lot of patients and

NOTE Confidence: 0.97432023

00:52:43.315 --> 00:52:44.915 people, people with and without

NOTE Confidence: 0.97432023

00:52:44.915 --> 00:52:46.835 cancer are very interested in

NOTE Confidence: 0.97432023

00:52:46.835 --> 00:52:48.055 the role of these medications,

NOTE Confidence: 0.97432023

00:52:48.114 --> 00:52:49.815 which are remarkable,

NOTE Confidence: 0.9910668

00:52:50.675 --> 00:52:52.215 really profound in the amount

NOTE Confidence: 0.9910668

00:52:52.355 --> 00:52:54.215 of weight loss and adiposity,

NOTE Confidence: 0.98403275

00:52:55.340 --> 00:52:57.180 loss that occurs with these

NOTE Confidence: 0.98403275

00:52:57.180 --> 00:52:58.480 medications, which are,

NOTE Confidence: 0.9445963

00:52:59.340 --> 00:53:00.860 now sort of called GLP

NOTE Confidence: 0.9445963

00:53:00.860 --> 00:53:01.360 one,

NOTE Confidence: 0.9487881

00:53:01.980 --> 00:53:04.239 glucagon like protein one receptor

NOTE Confidence: 0.9487881

00:53:04.380 --> 00:53:04.880 agonists.

NOTE Confidence: 0.99912757

00:53:05.900 --> 00:53:08.320 There's really limited research

NOTE Confidence: 0.9813668

00:53:08.655 --> 00:53:10.575 on these anti BC medications

NOTE Confidence: 0.9813668

00:53:10.575 --> 00:53:12.415 and breast cancer risk or

NOTE Confidence: 0.9813668

00:53:12.415 --> 00:53:13.935 outcomes among those with breast

NOTE Confidence: 0.9813668

00:53:13.935 --> 00:53:14.435 cancer.

NOTE Confidence: 0.95025736

00:53:14.735 --> 00:53:16.255 It is being conducted now.

NOTE Confidence: 0.95025736

00:53:16.255 --> 00:53:17.935 It's evolving. So in one

NOTE Confidence: 0.95025736

00:53:17.935 --> 00:53:19.535 year and in two, three

NOTE Confidence: 0.95025736

00:53:19.535 --> 00:53:21.295 years, there'll be more research

NOTE Confidence: 0.95025736

00:53:21.295 --> 00:53:22.335 out there. But right now

NOTE Confidence: 0.95025736

00:53:22.335 --> 00:53:23.635 there's very limited

NOTE Confidence: 0.999244

00:53:24.210 --> 00:53:26.290 information about these medications in

NOTE Confidence: 0.999244

00:53:26.290 --> 00:53:27.670 regards to breast cancer.

NOTE Confidence: 0.9807116

00:53:28.290 --> 00:53:29.330 We do know that the,

NOTE Confidence: 0.9807116

00:53:29.890 --> 00:53:31.250 the mechanism is they cause

NOTE Confidence: 0.9807116

00:53:31.250 --> 00:53:32.609 significant weight loss up to

NOTE Confidence: 0.9807116

00:53:32.609 --> 00:53:34.390 about twenty, twenty five percent

NOTE Confidence: 0.88062453

00:53:34.690 --> 00:53:35.190 loss,

NOTE Confidence: 0.97966135

00:53:35.650 --> 00:53:37.594 and metabolic changes such as

NOTE Confidence: 0.97966135

00:53:37.594 --> 00:53:38.875 the ones I just mentioned,

NOTE Confidence: 0.97966135

00:53:38.875 --> 00:53:39.855 all these metabolic

NOTE Confidence: 0.9802575

00:53:40.395 --> 00:53:40.895 markers.

NOTE Confidence: 0.99202275

00:53:42.875 --> 00:53:44.075 Most of the studies that

NOTE Confidence: 0.99202275

00:53:44.075 --> 00:53:45.614 are done are observational,

NOTE Confidence: 0.9591324

00:53:46.635 --> 00:53:48.075 looking at outcomes except for

NOTE Confidence: 0.9591324

00:53:48.075 --> 00:53:49.434 the trials of testing the

NOTE Confidence: 0.9591324

00:53:49.434 --> 00:53:51.090 medication on weight loss. But

NOTE Confidence: 0.9591324

00:53:51.090 --> 00:53:52.850 in regards to cancer, they're

NOTE Confidence: 0.9591324

00:53:52.850 --> 00:53:54.450 observational and so there isn't

NOTE Confidence: 0.9591324

00:53:54.450 --> 00:53:55.670 a cause and effect,

NOTE Confidence: 0.8734665

00:53:56.770 --> 00:53:58.310 relationship yet established.

NOTE Confidence: 0.98819566

00:53:59.250 --> 00:54:01.090 Most important, if you are

NOTE Confidence: 0.98819566

00:54:01.090 --> 00:54:01.590 considering

NOTE Confidence: 0.9952648

00:54:01.890 --> 00:54:02.950 one of these medications,

NOTE Confidence: 0.997561

00:54:03.755 --> 00:54:05.775 discuss it with your provider,

NOTE Confidence: 0.99363375

00:54:06.155 --> 00:54:07.614 especially if you've been diagnosed

NOTE Confidence: 0.99363375

00:54:07.675 --> 00:54:08.655 with cancer.

NOTE Confidence: 0.99543875

00:54:11.915 --> 00:54:13.195 I always get this question.

NOTE Confidence: 0.99543875

00:54:13.195 --> 00:54:14.555 I think it's really important.

NOTE Confidence: 0.9824772

00:54:15.275 --> 00:54:16.875 Many people follow the diet

NOTE Confidence: 0.9824772

00:54:16.875 --> 00:54:18.395 and physical activity guidelines, and

NOTE Confidence: 0.9824772

00:54:18.395 --> 00:54:19.750 they can still develop breast

NOTE Confidence: 0.9824772

00:54:19.750 --> 00:54:21.370 cancer, and it's very frustrating.

NOTE Confidence: 0.9715433

00:54:22.070 --> 00:54:23.030 So it's important to note

NOTE Confidence: 0.9715433

00:54:23.030 --> 00:54:24.870 that a healthy lifestyle lowers

NOTE Confidence: 0.9715433

00:54:24.870 --> 00:54:26.490 risk but does not eliminate

NOTE Confidence: 0.9715433

00:54:26.550 --> 00:54:26.950 it.

NOTE Confidence: 0.99292266

00:54:27.830 --> 00:54:29.110 Whether you like this analogy

NOTE Confidence: 0.99292266

00:54:29.110 --> 00:54:30.150 or not, I think it's

NOTE Confidence: 0.99292266

00:54:30.150 --> 00:54:31.590 simple and can be,

NOTE Confidence: 0.9989664

00:54:31.910 --> 00:54:32.410 helpful.

NOTE Confidence: 0.95576876

00:54:32.825 --> 00:54:33.865 It's like wearing a seat

NOTE Confidence: 0.95576876

00:54:33.865 --> 00:54:35.945 belt, which, lowers your chance

NOTE Confidence: 0.95576876

00:54:35.945 --> 00:54:37.945 of severe injury in a

NOTE Confidence: 0.95576876

00:54:37.945 --> 00:54:38.985 car crash, but it does

NOTE Confidence: 0.95576876

00:54:38.985 --> 00:54:39.885 not guarantee

NOTE Confidence: 0.9304424

00:54:40.185 --> 00:54:41.785 safety, but it lowers your

NOTE Confidence: 0.9304424

00:54:41.785 --> 00:54:42.285 risk.

NOTE Confidence: 0.99763477

00:54:42.585 --> 00:54:43.405 Much like

NOTE Confidence: 0.940294

00:54:43.705 --> 00:54:44.765 screening and,

NOTE Confidence: 0.98837537

00:54:45.305 --> 00:54:47.305 leads to earlier detection and

NOTE Confidence: 0.98837537

00:54:47.305 --> 00:54:47.805 practicing,

NOTE Confidence: 0.97517955

00:54:48.880 --> 00:54:50.080 you know, changing some of

NOTE Confidence: 0.97517955

00:54:50.080 --> 00:54:52.080 the modifiable risk factors, it

NOTE Confidence: 0.97517955

00:54:52.080 --> 00:54:53.219 lowers your risk.

NOTE Confidence: 0.9867704

00:54:53.680 --> 00:54:55.760 But most importantly, breast cancer

NOTE Confidence: 0.9867704

00:54:55.760 --> 00:54:57.360 is influenced by a mix

NOTE Confidence: 0.9867704

00:54:57.360 --> 00:54:58.820 of factors that are genetic,

NOTE Confidence: 0.9867704

00:54:58.880 --> 00:54:59.380 reproductive

NOTE Confidence: 0.98672837

00:54:59.680 --> 00:55:01.219 history, hormones, environment,

NOTE Confidence: 0.9676895

00:55:01.600 --> 00:55:02.864 and chance.

NOTE Confidence: 0.9903571

00:55:03.405 --> 00:55:05.085 And that for women already

NOTE Confidence: 0.9903571

00:55:05.085 --> 00:55:05.585 diagnosed,

NOTE Confidence: 0.9941482

00:55:06.125 --> 00:55:08.625 these modifiable factors might also

NOTE Confidence: 0.9941482

00:55:08.685 --> 00:55:10.925 improve treatment tolerance, reduce recurrence

NOTE Confidence: 0.9941482

00:55:10.925 --> 00:55:12.685 risk, and improve outcomes. So

NOTE Confidence: 0.9941482

00:55:12.685 --> 00:55:14.065 even if you've been practicing

NOTE Confidence: 0.9941482

00:55:14.125 --> 00:55:15.485 these healthy behaviors and you're

NOTE Confidence: 0.9941482

00:55:15.485 --> 00:55:17.425 still diagnosed with breast cancer,

NOTE Confidence: 0.99969876

00:55:18.010 --> 00:55:18.510 maintaining

NOTE Confidence: 0.9990896

00:55:19.050 --> 00:55:21.130 a healthy diet and exercise

NOTE Confidence: 0.9990896

00:55:21.130 --> 00:55:22.830 can help with your prognosis.

NOTE Confidence: 0.98381513

00:55:25.050 --> 00:55:26.489 Okay. I think my last

NOTE Confidence: 0.98381513

00:55:26.489 --> 00:55:27.690 slide here, I just wanna

NOTE Confidence: 0.98381513

00:55:27.690 --> 00:55:28.830 touch upon postmenopausal

NOTE Confidence: 0.98248744

00:55:29.290 --> 00:55:30.970 hormone replacement therapy because there's

NOTE Confidence: 0.98248744

00:55:30.970 --> 00:55:31.950 been a lot

NOTE Confidence: 0.9426306

00:55:33.215 --> 00:55:35.055 of information on this, especially

NOTE Confidence: 0.9426306

00:55:35.055 --> 00:55:36.655 on social media, and it

NOTE Confidence: 0.9426306

00:55:36.655 --> 00:55:38.114 can get very confusing

NOTE Confidence: 0.9907527

00:55:38.735 --> 00:55:39.475 to individuals.

NOTE Confidence: 0.9873455

00:55:40.735 --> 00:55:42.175 HRT, as you might know,

NOTE Confidence: 0.9873455

00:55:42.175 --> 00:55:44.655 replaces estrogen and progesterone hormones

NOTE Confidence: 0.9873455

00:55:44.655 --> 00:55:46.515 that decline during menopause.

NOTE Confidence: 0.99906474

00:55:47.369 --> 00:55:48.190 And HRT

NOTE Confidence: 0.99583805

00:55:48.650 --> 00:55:50.890 reduces menopausal symptoms and also

NOTE Confidence: 0.99583805

00:55:50.890 --> 00:55:52.349 protects against osteoporosis.

NOTE Confidence: 0.96165246

00:55:53.849 --> 00:55:56.009 Breast cancer risk increases with

NOTE Confidence: 0.96165246

00:55:56.009 --> 00:55:57.549 longer use of HRT.

NOTE Confidence: 0.99738246

00:55:58.730 --> 00:55:59.230 Recent

NOTE Confidence: 0.97630346

00:55:59.690 --> 00:56:00.809 research that came out in

NOTE Confidence: 0.97630346

00:56:00.809 --> 00:56:02.170 the last couple years showed

NOTE Confidence: 0.97630346

00:56:02.170 --> 00:56:04.055 that the risk was less

NOTE Confidence: 0.97630346

00:56:04.055 --> 00:56:05.815 in women from age fifty

NOTE Confidence: 0.97630346

00:56:05.815 --> 00:56:07.494 to fifty nine than in

NOTE Confidence: 0.97630346

00:56:07.494 --> 00:56:09.335 women sixty or older. So

NOTE Confidence: 0.97630346

00:56:09.335 --> 00:56:10.934 many women might take HRT

NOTE Confidence: 0.97630346

00:56:10.934 --> 00:56:12.214 in their 50s and then

NOTE Confidence: 0.97630346

00:56:12.214 --> 00:56:13.755 stop it when the menopausal

NOTE Confidence: 0.9623096

00:56:14.055 --> 00:56:15.035 symptoms subside.

NOTE Confidence: 0.99468136

00:56:15.339 --> 00:56:17.099 And research recently has shown

NOTE Confidence: 0.99468136

00:56:17.099 --> 00:56:18.559 that that's a lower risk.

NOTE Confidence: 0.9679429

00:56:19.660 --> 00:56:21.099 It's also really important to

NOTE Confidence: 0.9679429

00:56:21.099 --> 00:56:22.940 note that hormone therapy, which

NOTE Confidence: 0.9679429

00:56:22.940 --> 00:56:24.780 is also called endocrine therapy

NOTE Confidence: 0.9679429

00:56:24.780 --> 00:56:25.760 for breast cancer,

NOTE Confidence: 0.99797624

00:56:26.219 --> 00:56:27.819 should not be confused with

NOTE Confidence: 0.99797624

00:56:27.819 --> 00:56:28.319 HRT.

NOTE Confidence: 0.9983271

00:56:29.075 --> 00:56:31.094 HRT and endocrine therapy produce

NOTE Confidence: 0.9983271

00:56:31.234 --> 00:56:32.214 opposite effects.

NOTE Confidence: 0.9994897

00:56:32.594 --> 00:56:34.515 Endocrine therapy for breast cancer

NOTE Confidence: 0.9994897

00:56:34.515 --> 00:56:36.134 is a medication to lower

NOTE Confidence: 0.9994897

00:56:36.194 --> 00:56:37.174 hormone levels

NOTE Confidence: 0.8798553

00:56:37.474 --> 00:56:39.494 systemically like aromatase inhibitors

NOTE Confidence: 0.9261283

00:56:39.954 --> 00:56:41.315 or block the action of

NOTE Confidence: 0.9261283

00:56:41.315 --> 00:56:42.994 the hormone at the receptor,

NOTE Confidence: 0.9261283

00:56:42.994 --> 00:56:43.974 such as tamoxifen,

NOTE Confidence: 0.98474246

00:56:44.619 --> 00:56:45.980 which in turn lowers risk

NOTE Confidence: 0.98474246

00:56:45.980 --> 00:56:47.440 of breast cancer recurrence

NOTE Confidence: 0.9870576

00:56:47.739 --> 00:56:49.099 and also can be used

NOTE Confidence: 0.9870576

00:56:49.099 --> 00:56:50.719 in women at high risk

NOTE Confidence: 0.9870576

00:56:50.859 --> 00:56:52.239 for for breast cancer.

NOTE Confidence: 0.96088696

00:56:54.060 --> 00:56:55.500 Most important is to discuss

NOTE Confidence: 0.96088696

00:56:55.500 --> 00:56:57.260 the potential benefits and risk

NOTE Confidence: 0.96088696

00:56:57.260 --> 00:56:58.635 of HRT with a health

NOTE Confidence: 0.96088696

00:56:58.715 --> 00:57:00.895 care provider before starting treatment.

NOTE Confidence: 0.9760079

00:57:02.235 --> 00:57:03.755 So in closing, I just

NOTE Confidence: 0.9760079

00:57:03.755 --> 00:57:04.495 want to,

NOTE Confidence: 0.9713916

00:57:05.515 --> 00:57:07.195 kinda remind again that thirty

NOTE Confidence: 0.9713916

00:57:07.195 --> 00:57:08.475 percent of breast cancers could

NOTE Confidence: 0.9713916

00:57:08.475 --> 00:57:10.415 be prevented through lifestyle changes,

NOTE Confidence: 0.9713916

00:57:10.555 --> 00:57:12.395 yet lifestyle is driven by

NOTE Confidence: 0.9713916

00:57:12.395 --> 00:57:14.160 the world around us, the

NOTE Confidence: 0.9713916

00:57:14.160 --> 00:57:16.079 food industry, urban design, and

NOTE Confidence: 0.9713916

00:57:16.079 --> 00:57:16.980 social norms.

NOTE Confidence: 0.9992877

00:57:17.359 --> 00:57:19.059 We know that changing habits,

NOTE Confidence: 0.9594082

00:57:19.440 --> 00:57:21.040 especially in a world full

NOTE Confidence: 0.9594082

00:57:21.040 --> 00:57:22.799 of stress, limited access to

NOTE Confidence: 0.9594082

00:57:22.799 --> 00:57:24.400 healthy foods and environments that

NOTE Confidence: 0.9594082

00:57:24.400 --> 00:57:26.400 don't encourage physical activity is

NOTE Confidence: 0.9594082

00:57:26.400 --> 00:57:27.140 not easy.

NOTE Confidence: 0.99430394

00:57:27.440 --> 00:57:28.825 So, you know, hoping that

NOTE Confidence: 0.99430394

00:57:28.825 --> 00:57:30.425 there'll be policies and systems

NOTE Confidence: 0.99430394

00:57:30.425 --> 00:57:30.925 changes

NOTE Confidence: 0.9991284

00:57:31.225 --> 00:57:32.585 that can make the healthy

NOTE Confidence: 0.9991284

00:57:32.585 --> 00:57:33.085 choice

NOTE Confidence: 0.9025983

00:57:33.385 --> 00:57:34.765 the easy choice.

NOTE Confidence: 0.9959817

00:57:35.785 --> 00:57:37.625 And important to note that

NOTE Confidence: 0.9959817

00:57:37.625 --> 00:57:40.125 progress is uneven across populations

NOTE Confidence: 0.9429616

00:57:40.790 --> 00:57:42.490 and that access to care,

NOTE Confidence: 0.9429616

00:57:42.550 --> 00:57:45.130 socioeconomic status and environmental exposures

NOTE Confidence: 0.9627431

00:57:45.510 --> 00:57:47.609 contribute to disparities. And unfortunately,

NOTE Confidence: 0.975735

00:57:48.230 --> 00:57:49.910 there are disparities in breast

NOTE Confidence: 0.975735

00:57:49.910 --> 00:57:51.450 cancer incidence and mortality.

NOTE Confidence: 0.95299226

00:57:52.230 --> 00:57:53.589 And so lastly, every step

NOTE Confidence: 0.95299226

00:57:53.589 --> 00:57:55.369 we take toward healthier habits

NOTE Confidence: 0.95299226

00:57:55.430 --> 00:57:55.930 matters,

NOTE Confidence: 0.9687022

00:57:56.265 --> 00:57:57.865 Small changes add up such

NOTE Confidence: 0.9687022

00:57:57.865 --> 00:57:59.724 as just focusing on reducing

NOTE Confidence: 0.9687022

00:57:59.865 --> 00:58:02.025 sedentary behavior, and that combined

NOTE Confidence: 0.9687022

00:58:02.025 --> 00:58:03.645 with community level efforts

NOTE Confidence: 0.99826264

00:58:04.025 --> 00:58:05.865 will reduce breast cancer risk

NOTE Confidence: 0.99826264

00:58:05.865 --> 00:58:07.484 and improve overall health.

NOTE Confidence: 0.9969454

00:58:08.530 --> 00:58:10.450 So with that, I will

NOTE Confidence: 0.9969454

00:58:10.450 --> 00:58:11.510 stop sharing.

NOTE Confidence: 0.99947315

00:58:15.570 --> 00:58:16.470 That is great.

NOTE Confidence: 0.91383255

00:58:16.930 --> 00:58:18.310 Thank you, doctor Arun.

NOTE Confidence: 0.99521583

00:58:18.850 --> 00:58:19.650 We do have a few

NOTE Confidence: 0.99521583

00:58:19.650 --> 00:58:20.150 questions

NOTE Confidence: 0.91700304

00:58:21.105 --> 00:58:23.045 that have been submitted and

NOTE Confidence: 0.90322894

00:58:24.545 --> 00:58:26.145 couple of the two that,

NOTE Confidence: 0.90322894

00:58:26.385 --> 00:58:27.345 we've answered a few of

NOTE Confidence: 0.90322894

00:58:27.345 --> 00:58:29.505 them directly, but, couple that

NOTE Confidence: 0.90322894

00:58:29.505 --> 00:58:31.365 are out there radiology questions.

NOTE Confidence: 0.89592487

00:58:31.905 --> 00:58:33.750 So doctor Latvie can take

NOTE Confidence: 0.89592487

00:58:33.750 --> 00:58:34.870 the first one and maybe

NOTE Confidence: 0.89592487

00:58:34.870 --> 00:58:36.090 I'll take the second one.

NOTE Confidence: 0.94456226

00:58:36.870 --> 00:58:38.310 So a questioner asks and

NOTE Confidence: 0.94456226

00:58:38.310 --> 00:58:39.910 she's a breast cancer survivor

NOTE Confidence: 0.94456226

00:58:39.910 --> 00:58:41.290 more than two decades ago.

NOTE Confidence: 0.95684785

00:58:41.830 --> 00:58:43.350 And she says, yes. If

NOTE Confidence: 0.95684785

00:58:43.350 --> 00:58:44.710 mammogram and ultrasound are done

NOTE Confidence: 0.95684785

00:58:44.710 --> 00:58:46.550 and compared to past results

NOTE Confidence: 0.95684785

00:58:46.550 --> 00:58:47.430 and found to be a

NOTE Confidence: 0.95684785

00:58:47.430 --> 00:58:48.790 change, what is the next

NOTE Confidence: 0.95684785

00:58:48.790 --> 00:58:50.025 step? So if there's a

NOTE Confidence: 0.95684785

00:58:50.025 --> 00:58:50.905 change on your mammogram and

NOTE Confidence: 0.95684785

00:58:50.905 --> 00:58:52.265 your ultrasound, what do you

NOTE Confidence: 0.95684785

00:58:52.265 --> 00:58:52.925 do next?

NOTE Confidence: 0.9389723

00:58:56.265 --> 00:58:57.724 And you're muted, Brisa.

NOTE Confidence: 0.9578161

00:58:59.145 --> 00:59:00.345 There we go. Sorry about

NOTE Confidence: 0.9578161

00:59:00.345 --> 00:59:01.860 that. If a patient

NOTE Confidence: 0.9813902

00:59:02.420 --> 00:59:03.620 is found to have a

NOTE Confidence: 0.9813902

00:59:03.620 --> 00:59:06.260 mammographic or sonographic abnormality without

NOTE Confidence: 0.9813902

00:59:06.260 --> 00:59:07.940 any other symptoms, that is

NOTE Confidence: 0.9813902

00:59:07.940 --> 00:59:09.800 called a callback from screening.

NOTE Confidence: 0.98794836

00:59:10.500 --> 00:59:12.340 Generally, women are asked to

NOTE Confidence: 0.98794836

00:59:12.340 --> 00:59:14.920 return for additional specific dedicated

NOTE Confidence: 0.98794836

00:59:15.060 --> 00:59:16.180 diagnostic imaging,

NOTE Confidence: 0.9861844

00:59:17.225 --> 00:59:19.805 which means additional mammographic views,

NOTE Confidence: 0.9987358

00:59:20.265 --> 00:59:21.325 targeted ultrasound

NOTE Confidence: 0.95035726

00:59:21.785 --> 00:59:24.105 with, generally presence of the

NOTE Confidence: 0.95035726

00:59:24.105 --> 00:59:24.605 radiologist

NOTE Confidence: 0.95939225

00:59:24.985 --> 00:59:25.885 who can assess.

NOTE Confidence: 0.93407273

00:59:26.425 --> 00:59:26.665 And,

NOTE Confidence: 0.984245

00:59:27.305 --> 00:59:28.285 then the radiologist

NOTE Confidence: 0.91177493

00:59:28.740 --> 00:59:29.220 can,

NOTE Confidence: 0.9998543

00:59:29.780 --> 00:59:30.280 determine

NOTE Confidence: 0.9421054

00:59:30.580 --> 00:59:31.860 if there is a need

NOTE Confidence: 0.9421054

00:59:31.860 --> 00:59:33.640 to perform a neal biopsy,

NOTE Confidence: 0.99767184

00:59:34.260 --> 00:59:35.960 follow-up, or do nothing.

NOTE Confidence: 0.94827974

00:59:39.220 --> 00:59:40.580 Yep. So that yeah. So

NOTE Confidence: 0.94827974

00:59:40.580 --> 00:59:41.700 that's a great answer. I

NOTE Confidence: 0.94827974

00:59:41.700 --> 00:59:43.160 hope that answers your question.

NOTE Confidence: 0.96189797

00:59:43.845 --> 00:59:44.805 You'll get called back, and

NOTE Confidence: 0.96189797

00:59:44.805 --> 00:59:46.165 we'll do additional workup with

NOTE Confidence: 0.96189797

00:59:46.165 --> 00:59:47.365 other images. So the other

NOTE Confidence: 0.96189797

00:59:47.365 --> 00:59:49.525 radiology question is what is

NOTE Confidence: 0.96189797

00:59:49.525 --> 00:59:50.744 molecular breast imaging?

NOTE Confidence: 0.9903348

00:59:52.325 --> 00:59:54.425 And so, molecular breast imaging

NOTE Confidence: 0.9903348

00:59:54.645 --> 00:59:56.665 is a nuclear medicine study.

NOTE Confidence: 0.9911101

00:59:57.160 --> 00:59:58.620 So there's a radioactive

NOTE Confidence: 0.97698873

00:59:59.000 --> 01:00:00.300 substance called technetium

NOTE Confidence: 0.6401178

01:00:00.920 --> 01:00:01.420 and

NOTE Confidence: 0.9753185

01:00:02.200 --> 01:00:03.800 and it's and a form

NOTE Confidence: 0.9753185

01:00:03.800 --> 01:00:05.000 of it is used very

NOTE Confidence: 0.9753185

01:00:05.000 --> 01:00:06.680 commonly in different medical tests,

NOTE Confidence: 0.9753185

01:00:06.680 --> 01:00:07.800 especially a test of the

NOTE Confidence: 0.9753185

01:00:07.800 --> 01:00:09.684 heart. And what they found

NOTE Confidence: 0.9753185

01:00:09.684 --> 01:00:11.125 when they were testing people's

NOTE Confidence: 0.9753185

01:00:11.125 --> 01:00:12.565 hearts is that breast cancers

NOTE Confidence: 0.9753185

01:00:12.565 --> 01:00:13.464 would light up

NOTE Confidence: 0.977221

01:00:13.925 --> 01:00:15.545 in this test. So the

NOTE Confidence: 0.9832914

01:00:15.925 --> 01:00:17.045 the substance that they were

NOTE Confidence: 0.9832914

01:00:17.045 --> 01:00:17.545 giving

NOTE Confidence: 0.9759635

01:00:18.085 --> 01:00:18.964 to look at the heart

NOTE Confidence: 0.9759635

01:00:18.964 --> 01:00:20.085 would go to breast cancers.

NOTE Confidence: 0.9759635

01:00:20.085 --> 01:00:21.125 So they realized they could

NOTE Confidence: 0.9759635

01:00:21.125 --> 01:00:22.244 turn this into an imaging

NOTE Confidence: 0.9759635

01:00:22.244 --> 01:00:24.010 test, and it's a it's

NOTE Confidence: 0.9759635

01:00:24.010 --> 01:00:25.130 an imaging test that has

NOTE Confidence: 0.9759635

01:00:25.130 --> 01:00:25.950 good sensitivity.

NOTE Confidence: 0.9986376

01:00:26.650 --> 01:00:28.250 It finds cancers at a

NOTE Confidence: 0.9986376

01:00:28.250 --> 01:00:29.230 similar level

NOTE Confidence: 0.9852706

01:00:29.930 --> 01:00:31.790 to MRI and contrast mammography.

NOTE Confidence: 0.9852706

01:00:31.930 --> 01:00:32.970 It hasn't been studied as

NOTE Confidence: 0.9852706

01:00:32.970 --> 01:00:34.590 much. It has some downsides,

NOTE Confidence: 0.9852706

01:00:34.650 --> 01:00:35.770 though, as opposed to a

NOTE Confidence: 0.9852706

01:00:35.770 --> 01:00:37.610 contrast mammogram, which takes about

NOTE Confidence: 0.9852706

01:00:37.610 --> 01:00:39.285 five minutes or an MRI

NOTE Confidence: 0.9852706

01:00:39.285 --> 01:00:40.345 which takes about

NOTE Confidence: 0.95497006

01:00:40.645 --> 01:00:41.865 ten to twenty minutes,

NOTE Confidence: 0.99887395

01:00:42.484 --> 01:00:43.385 every image

NOTE Confidence: 0.9339189

01:00:43.685 --> 01:00:45.445 on molecular breast imaging is

NOTE Confidence: 0.9339189

01:00:45.445 --> 01:00:47.224 about fifteen minutes, five zero.

NOTE Confidence: 0.9339189

01:00:47.445 --> 01:00:49.045 It has gone down with,

NOTE Confidence: 0.93837464

01:00:49.525 --> 01:00:50.345 better equipment,

NOTE Confidence: 0.95619905

01:00:50.820 --> 01:00:52.280 but it's a longer scan,

NOTE Confidence: 0.9809385

01:00:53.380 --> 01:00:54.660 and it doesn't quite give

NOTE Confidence: 0.9809385

01:00:54.660 --> 01:00:55.400 the anatomy.

NOTE Confidence: 0.9992552

01:00:55.700 --> 01:00:57.060 It doesn't give it doesn't

NOTE Confidence: 0.9992552

01:00:57.060 --> 01:00:58.120 show us the anatomy

NOTE Confidence: 0.9510577

01:00:58.820 --> 01:01:00.600 like MRI or contrast mammography

NOTE Confidence: 0.9510577

01:01:00.660 --> 01:01:01.880 does. So it hasn't,

NOTE Confidence: 0.8616938

01:01:03.220 --> 01:01:04.600 been as widely accepted.

NOTE Confidence: 0.93035406

01:01:05.155 --> 01:01:06.595 But, it's a test. Basically,

NOTE Confidence: 0.93035406

01:01:06.595 --> 01:01:07.795 you get injected with a

NOTE Confidence: 0.93035406

01:01:07.795 --> 01:01:09.155 radioactive substance, and then you

NOTE Confidence: 0.93035406

01:01:09.155 --> 01:01:09.815 get damaged.

NOTE Confidence: 0.99681026

01:01:13.155 --> 01:01:13.975 So we

NOTE Confidence: 0.7502117

01:01:14.755 --> 01:01:15.255 are,

NOTE Confidence: 0.99137795

01:01:17.635 --> 01:01:19.335 there's no more questions on

NOTE Confidence: 0.99137795

01:01:19.475 --> 01:01:20.855 the chat. We can

NOTE Confidence: 0.999804

01:01:21.210 --> 01:01:21.950 stay for

NOTE Confidence: 0.84351844

01:01:22.570 --> 01:01:24.030 another five minutes or

NOTE Confidence: 0.9388372

01:01:24.650 --> 01:01:25.690 if one of our panelists

NOTE Confidence: 0.9388372

01:01:25.690 --> 01:01:26.750 would like to

NOTE Confidence: 0.9523876

01:01:28.410 --> 01:01:30.250 add something, I'd be happy

NOTE Confidence: 0.9523876

01:01:30.250 --> 01:01:31.290 to listen or I can

NOTE Confidence: 0.9523876

01:01:31.290 --> 01:01:32.030 ask questions.

NOTE Confidence: 0.9891029

01:01:36.704 --> 01:01:38.065 Actually, one of our listeners

NOTE Confidence: 0.9891029

01:01:38.065 --> 01:01:39.204 had a question about

NOTE Confidence: 0.9334132

01:01:39.505 --> 01:01:40.484 the risk models.

NOTE Confidence: 0.872528

01:01:41.505 --> 01:01:41.904 And,

NOTE Confidence: 0.7646749

01:01:42.305 --> 01:01:43.285 so, Tracy,

NOTE Confidence: 0.8744294

01:01:43.664 --> 01:01:44.164 yes.

NOTE Confidence: 0.947757

01:01:45.184 --> 01:01:45.585 So,

NOTE Confidence: 0.95172817

01:01:46.144 --> 01:01:47.444 and don't forget to unmute.

NOTE Confidence: 0.97065115

01:01:48.880 --> 01:01:50.740 You mentioned two websites,

NOTE Confidence: 0.96987456

01:01:51.119 --> 01:01:52.100 one of which,

NOTE Confidence: 0.90786594

01:01:54.640 --> 01:01:55.680 you know, that one of

NOTE Confidence: 0.90786594

01:01:55.680 --> 01:01:56.480 which is web based, and

NOTE Confidence: 0.90786594

01:01:56.480 --> 01:01:57.119 the other one you had

NOTE Confidence: 0.90786594

01:01:57.119 --> 01:01:58.800 to download software. Can anybody

NOTE Confidence: 0.90786594

01:01:58.800 --> 01:01:59.840 download that software, or do

NOTE Confidence: 0.90786594

01:01:59.840 --> 01:02:00.880 you have to get permission?

NOTE Confidence: 0.90786594

01:02:00.880 --> 01:02:01.460 It's free.

NOTE Confidence: 0.99141157

01:02:02.835 --> 01:02:04.035 It's free. It's just the

NOTE Confidence: 0.99141157

01:02:04.035 --> 01:02:05.734 interface is not very intuitive.

NOTE Confidence: 0.99141157

01:02:05.955 --> 01:02:07.175 It's kinda complicated.

NOTE Confidence: 0.99988127

01:02:07.635 --> 01:02:08.775 It's not clear

NOTE Confidence: 0.9794855

01:02:09.075 --> 01:02:10.535 exactly what they're asking.

NOTE Confidence: 0.9331215

01:02:11.234 --> 01:02:12.355 So I I think it's

NOTE Confidence: 0.9331215

01:02:12.355 --> 01:02:13.955 easy to make mistakes using

NOTE Confidence: 0.9331215

01:02:13.955 --> 01:02:14.695 that model.

NOTE Confidence: 0.9997175

01:02:15.980 --> 01:02:16.720 There are

NOTE Confidence: 0.96319973

01:02:17.099 --> 01:02:17.599 other,

NOTE Confidence: 0.96778715

01:02:18.299 --> 01:02:19.339 versions of it on the

NOTE Confidence: 0.96778715

01:02:19.339 --> 01:02:20.779 web that are, like, pretty

NOTE Confidence: 0.96778715

01:02:20.779 --> 01:02:22.559 interface and clear questions,

NOTE Confidence: 0.97680134

01:02:23.260 --> 01:02:24.380 but I don't think that

NOTE Confidence: 0.97680134

01:02:24.380 --> 01:02:26.140 they're validated, and so I

NOTE Confidence: 0.97680134

01:02:26.140 --> 01:02:26.960 wouldn't necessarily

NOTE Confidence: 0.9868564

01:02:27.260 --> 01:02:28.779 encourage using them. So, I

NOTE Confidence: 0.9868564

01:02:28.779 --> 01:02:29.579 mean, I think you could

NOTE Confidence: 0.9868564

01:02:29.579 --> 01:02:30.765 go ahead and assess assess

NOTE Confidence: 0.9868564

01:02:30.765 --> 01:02:31.885 your own risk and print

NOTE Confidence: 0.9868564

01:02:31.885 --> 01:02:33.005 out your results and bring

NOTE Confidence: 0.9868564

01:02:33.005 --> 01:02:33.984 it to your provider.

NOTE Confidence: 0.9933556

01:02:35.164 --> 01:02:36.525 Anytime I see a patient

NOTE Confidence: 0.9933556

01:02:36.525 --> 01:02:37.484 and they bring me a

NOTE Confidence: 0.9933556

01:02:37.484 --> 01:02:38.545 risk model

NOTE Confidence: 0.99669087

01:02:38.845 --> 01:02:39.345 result

NOTE Confidence: 0.9857774

01:02:39.885 --> 01:02:41.404 without the information of what

NOTE Confidence: 0.9857774

01:02:41.404 --> 01:02:42.684 went into it, I just

NOTE Confidence: 0.9857774

01:02:42.684 --> 01:02:43.885 repeat it because I don't

NOTE Confidence: 0.9857774

01:02:43.885 --> 01:02:45.030 know what went into that

NOTE Confidence: 0.9857774

01:02:45.270 --> 01:02:46.970 calculation to give the result.

NOTE Confidence: 0.98801416

01:02:48.870 --> 01:02:50.310 So I I think the

NOTE Confidence: 0.98801416

01:02:50.310 --> 01:02:51.430 the message I would give

NOTE Confidence: 0.98801416

01:02:51.430 --> 01:02:51.930 is

NOTE Confidence: 0.9652572

01:02:52.790 --> 01:02:53.910 these are not easy to

NOTE Confidence: 0.9652572

01:02:53.910 --> 01:02:54.410 interpret

NOTE Confidence: 0.9221306

01:02:54.710 --> 01:02:56.230 and don't panic. If you

NOTE Confidence: 0.9221306

01:02:56.230 --> 01:02:57.370 get a very high

NOTE Confidence: 0.9447367

01:02:58.150 --> 01:02:59.430 risk, you should review it

NOTE Confidence: 0.9447367

01:02:59.430 --> 01:03:00.865 with a a a provider

NOTE Confidence: 0.9447367

01:03:00.865 --> 01:03:02.225 who has experience using the

NOTE Confidence: 0.9447367

01:03:02.225 --> 01:03:02.725 models.

NOTE Confidence: 0.95879364

01:03:04.305 --> 01:03:05.585 Yeah. So someone who's used

NOTE Confidence: 0.95879364

01:03:05.585 --> 01:03:06.865 the models, I would definitely

NOTE Confidence: 0.95879364

01:03:06.865 --> 01:03:08.465 concur. There are little things

NOTE Confidence: 0.95879364

01:03:08.465 --> 01:03:09.425 that can make a big

NOTE Confidence: 0.95879364

01:03:09.425 --> 01:03:09.925 difference.

NOTE Confidence: 0.9571514

01:03:11.025 --> 01:03:12.305 Height and weight are one.

NOTE Confidence: 0.9571514

01:03:12.305 --> 01:03:13.185 You have to put those

NOTE Confidence: 0.9571514

01:03:13.185 --> 01:03:14.405 in to be accurate.

NOTE Confidence: 0.99671805

01:03:14.760 --> 01:03:16.040 And if you're so if

NOTE Confidence: 0.99671805

01:03:16.040 --> 01:03:17.320 you're tall, it increases your

NOTE Confidence: 0.99671805

01:03:17.320 --> 01:03:18.600 risk of breast cancer, which

NOTE Confidence: 0.99671805

01:03:18.600 --> 01:03:19.960 is not intuitive, but it's

NOTE Confidence: 0.99671805

01:03:19.960 --> 01:03:21.320 in the model. One thing

NOTE Confidence: 0.99671805

01:03:21.320 --> 01:03:22.360 that seems to drive it

NOTE Confidence: 0.99671805

01:03:22.360 --> 01:03:22.860 for

NOTE Confidence: 0.9964601

01:03:23.400 --> 01:03:24.440 a lot of our patients

NOTE Confidence: 0.9964601

01:03:24.440 --> 01:03:25.560 is having a first child

NOTE Confidence: 0.9964601

01:03:25.560 --> 01:03:26.840 after thirty, which has become

NOTE Confidence: 0.9964601

01:03:26.840 --> 01:03:27.820 extremely common.

NOTE Confidence: 0.9354259

01:03:28.885 --> 01:03:30.565 And so, yeah, then would

NOTE Confidence: 0.9354259

01:03:30.565 --> 01:03:31.285 you like to comment on

NOTE Confidence: 0.9354259

01:03:31.285 --> 01:03:32.745 that, doctor Taglia?

NOTE Confidence: 0.9791856

01:03:34.325 --> 01:03:35.445 Yeah. I mean, I think,

NOTE Confidence: 0.9791856

01:03:35.765 --> 01:03:36.485 you know, we take a

NOTE Confidence: 0.9791856

01:03:36.485 --> 01:03:37.225 lot of,

NOTE Confidence: 0.99686366

01:03:38.965 --> 01:03:39.945 of the reproductive

NOTE Confidence: 0.99355936

01:03:42.320 --> 01:03:44.340 history into account for,

NOTE Confidence: 0.96257764

01:03:44.960 --> 01:03:46.160 breast cancer risk. And the

NOTE Confidence: 0.96257764

01:03:46.160 --> 01:03:46.880 way that I like to

NOTE Confidence: 0.96257764

01:03:46.880 --> 01:03:47.680 think about it is it's

NOTE Confidence: 0.96257764

01:03:47.680 --> 01:03:48.980 really just to sort of,

NOTE Confidence: 0.998733

01:03:50.160 --> 01:03:50.660 the

NOTE Confidence: 0.99031043

01:03:51.040 --> 01:03:52.320 the amount of time an

NOTE Confidence: 0.99031043

01:03:52.320 --> 01:03:52.820 individual

NOTE Confidence: 0.99888474

01:03:53.120 --> 01:03:53.620 has

NOTE Confidence: 0.9959364

01:03:55.065 --> 01:03:57.165 exposure to estrogen unopposed.

NOTE Confidence: 0.99710125

01:03:57.945 --> 01:03:59.805 And so when you have

NOTE Confidence: 0.99710125

01:04:00.025 --> 01:04:01.565 your period very early

NOTE Confidence: 0.9730797

01:04:02.105 --> 01:04:03.065 and you don't go through

NOTE Confidence: 0.9730797

01:04:03.065 --> 01:04:04.765 menopause until very late

NOTE Confidence: 0.92444414

01:04:05.545 --> 01:04:06.744 and you don't have a

NOTE Confidence: 0.92444414

01:04:06.744 --> 01:04:07.244 child

NOTE Confidence: 0.98550767

01:04:07.809 --> 01:04:09.329 at all or have a

NOTE Confidence: 0.98550767

01:04:09.329 --> 01:04:11.109 child at an older age,

NOTE Confidence: 0.98550767

01:04:11.329 --> 01:04:12.930 you're not opposing any of

NOTE Confidence: 0.98550767

01:04:12.930 --> 01:04:14.609 the natural hormones of sort

NOTE Confidence: 0.98550767

01:04:14.609 --> 01:04:16.390 of your normal cycles

NOTE Confidence: 0.97601837

01:04:16.770 --> 01:04:18.450 that interfere sort of that

NOTE Confidence: 0.97601837

01:04:18.450 --> 01:04:19.569 may sort of be,

NOTE Confidence: 0.9996497

01:04:19.970 --> 01:04:21.910 contributing to breast cancer risk.

NOTE Confidence: 0.9911491

01:04:22.695 --> 01:04:24.295 So having children younger for

NOTE Confidence: 0.9911491

01:04:24.295 --> 01:04:24.795 whatever

NOTE Confidence: 0.98370326

01:04:26.455 --> 01:04:28.375 reason, having any children is

NOTE Confidence: 0.98370326

01:04:28.375 --> 01:04:29.895 protective. Having children at a

NOTE Confidence: 0.98370326

01:04:29.895 --> 01:04:31.415 younger age probably has something

NOTE Confidence: 0.98370326

01:04:31.415 --> 01:04:32.535 to do with the breast

NOTE Confidence: 0.98370326

01:04:32.535 --> 01:04:33.035 development

NOTE Confidence: 0.99806315

01:04:33.415 --> 01:04:34.855 and the opposition of the

NOTE Confidence: 0.99806315

01:04:34.855 --> 01:04:35.355 hormones.

NOTE Confidence: 0.8808293

01:04:38.430 --> 01:04:39.550 Great. And,

NOTE Confidence: 0.95182085

01:04:44.190 --> 01:04:45.950 that's I've yeah. I have

NOTE Confidence: 0.95182085

01:04:45.950 --> 01:04:47.730 no other questions to ask.

NOTE Confidence: 0.85547477

01:04:51.055 --> 01:04:52.335 Oh, and doctor Laffey is

NOTE Confidence: 0.85547477

01:04:52.335 --> 01:04:53.315 typing an answer,

NOTE Confidence: 0.9705217

01:04:53.695 --> 01:04:55.055 looks like, to one last

NOTE Confidence: 0.9705217

01:04:55.055 --> 01:04:55.555 question.

NOTE Confidence: 0.9083961

01:04:56.175 --> 01:04:57.775 Anything else anybody would like

NOTE Confidence: 0.9083961

01:04:57.775 --> 01:04:58.895 to add? Oh, I see.

NOTE Confidence: 0.9083961

01:04:58.895 --> 01:05:00.415 If any if anyone's still

NOTE Confidence: 0.9083961

01:05:00.415 --> 01:05:00.895 on,

NOTE Confidence: 0.9825729

01:05:01.215 --> 01:05:02.575 and does have questions, feel

NOTE Confidence: 0.9825729

01:05:02.575 --> 01:05:04.015 free to email me directly

NOTE Confidence: 0.9825729

01:05:04.015 --> 01:05:05.375 at melinda dot erwin at

NOTE Confidence: 0.9825729

01:05:05.375 --> 01:05:07.069 yale dot edu. I'm happy

NOTE Confidence: 0.9825729

01:05:07.069 --> 01:05:08.950 to answer questions later on

NOTE Confidence: 0.9825729

01:05:08.950 --> 01:05:09.609 as well.

NOTE Confidence: 0.86362296

01:05:09.910 --> 01:05:11.029 And I I have one

NOTE Confidence: 0.86362296

01:05:11.029 --> 01:05:12.170 question, doctor Erwin.

NOTE Confidence: 0.932489

01:05:14.549 --> 01:05:16.009 So exercise we know

NOTE Confidence: 0.82749444

01:05:16.630 --> 01:05:17.130 and

NOTE Confidence: 0.96112317

01:05:18.549 --> 01:05:20.069 being thinner reduces your risk

NOTE Confidence: 0.96112317

01:05:20.069 --> 01:05:21.815 of postmenopausal breast cancer. Does

NOTE Confidence: 0.96112317

01:05:21.815 --> 01:05:22.934 the same thing apply to

NOTE Confidence: 0.96112317

01:05:22.934 --> 01:05:23.434 premenopausal

NOTE Confidence: 0.99948496

01:05:23.734 --> 01:05:24.474 breast cancer?

NOTE Confidence: 0.9698454

01:05:25.734 --> 01:05:27.974 So for exercise, yes. It

NOTE Confidence: 0.9698454

01:05:27.974 --> 01:05:29.815 lowers your risk from you

NOTE Confidence: 0.9698454

01:05:29.815 --> 01:05:31.595 know, if you exercise childhood,

NOTE Confidence: 0.9698454

01:05:31.894 --> 01:05:32.394 premenopausal

NOTE Confidence: 0.89693594

01:05:32.775 --> 01:05:34.234 years, later on is

NOTE Confidence: 0.8962019

01:05:34.615 --> 01:05:36.375 a significant lower risk for

NOTE Confidence: 0.8962019

01:05:36.375 --> 01:05:36.875 developing

NOTE Confidence: 0.9998033

01:05:37.230 --> 01:05:38.130 breast cancer.

NOTE Confidence: 0.9695919

01:05:38.670 --> 01:05:40.190 The research with obesity is

NOTE Confidence: 0.9695919

01:05:40.190 --> 01:05:41.630 a little confusing because it's

NOTE Confidence: 0.9695919

01:05:41.630 --> 01:05:43.890 related to estrogen and and,

NOTE Confidence: 0.96191436

01:05:44.510 --> 01:05:45.710 whether you have a twenty

NOTE Confidence: 0.96191436

01:05:45.710 --> 01:05:47.630 eight day cycle. And so

NOTE Confidence: 0.96191436

01:05:47.630 --> 01:05:49.710 sometimes if you have high

NOTE Confidence: 0.96191436

01:05:49.710 --> 01:05:50.990 amounts of body fat, you

NOTE Confidence: 0.96191436

01:05:50.990 --> 01:05:52.704 might not have a a

NOTE Confidence: 0.96191436

01:05:52.704 --> 01:05:53.925 menstrual cycle that's,

NOTE Confidence: 0.97198945

01:05:54.305 --> 01:05:55.825 every twenty eight days. And

NOTE Confidence: 0.97198945

01:05:55.825 --> 01:05:57.425 so it kinda confounds the

NOTE Confidence: 0.97198945

01:05:57.425 --> 01:05:59.525 relationship with breast cancer risk.

NOTE Confidence: 0.97198945

01:05:59.665 --> 01:06:01.105 However, with that said, we

NOTE Confidence: 0.97198945

01:06:01.105 --> 01:06:02.484 know that weight gain

NOTE Confidence: 0.9440117

01:06:02.785 --> 01:06:04.724 from adolescence through adulthood,

NOTE Confidence: 0.9997017

01:06:05.770 --> 01:06:06.270 independent

NOTE Confidence: 0.97576714

01:06:06.650 --> 01:06:07.950 of your BMI,

NOTE Confidence: 0.99330884

01:06:08.410 --> 01:06:10.010 is associated with increased breast

NOTE Confidence: 0.99330884

01:06:10.010 --> 01:06:10.830 cancer risk.

NOTE Confidence: 0.992337

01:06:11.130 --> 01:06:12.410 So I think two messages

NOTE Confidence: 0.992337

01:06:12.410 --> 01:06:13.770 I always like to to

NOTE Confidence: 0.992337

01:06:13.770 --> 01:06:14.730 tell people is to try

NOTE Confidence: 0.992337

01:06:14.730 --> 01:06:16.510 to prevent weight gain

NOTE Confidence: 0.99324846

01:06:16.890 --> 01:06:18.250 and to try to reduce

NOTE Confidence: 0.99324846

01:06:18.250 --> 01:06:18.750 sedentary

NOTE Confidence: 0.9991354

01:06:19.370 --> 01:06:19.870 behaviors.

NOTE Confidence: 0.99853903

01:06:23.075 --> 01:06:24.835 Alright. Well, I'd like to

NOTE Confidence: 0.99853903

01:06:24.835 --> 01:06:25.335 thank

NOTE Confidence: 0.9910019

01:06:25.795 --> 01:06:27.335 our panelists again

NOTE Confidence: 0.59898245

01:06:28.355 --> 01:06:28.835 and,

NOTE Confidence: 0.9727932

01:06:30.355 --> 01:06:32.435 let everyone know that we

NOTE Confidence: 0.9727932

01:06:32.435 --> 01:06:33.415 have two more

NOTE Confidence: 0.9878773

01:06:33.970 --> 01:06:35.170 of these webinars. The next

NOTE Confidence: 0.9878773

01:06:35.170 --> 01:06:36.850 one is October ninth, and

NOTE Confidence: 0.9878773

01:06:36.850 --> 01:06:37.350 it's

NOTE Confidence: 0.9242297

01:06:38.050 --> 01:06:39.650 entitled early stage breast cancer,

NOTE Confidence: 0.9242297

01:06:39.650 --> 01:06:41.090 what patients and families should

NOTE Confidence: 0.9242297

01:06:41.090 --> 01:06:41.590 know.

NOTE Confidence: 0.9731258

01:06:42.450 --> 01:06:43.650 And the one after that

NOTE Confidence: 0.9731258

01:06:43.650 --> 01:06:45.410 is October sixteenth, so these

NOTE Confidence: 0.9731258

01:06:45.410 --> 01:06:47.350 are all on Thursday nights.

NOTE Confidence: 0.9349147

01:06:47.765 --> 01:06:49.445 And October sixteenth is progress

NOTE Confidence: 0.9349147

01:06:49.445 --> 01:06:51.365 in metastatic breast cancer research

NOTE Confidence: 0.9349147

01:06:51.365 --> 01:06:53.045 and treatment. Talk about the

NOTE Confidence: 0.9349147

01:06:53.045 --> 01:06:54.025 ways we are,

NOTE Confidence: 0.99777454

01:06:54.645 --> 01:06:55.845 have improved the treatment of

NOTE Confidence: 0.99777454

01:06:55.845 --> 01:06:57.865 metastatic breast cancer. It's,

NOTE Confidence: 0.9992109

01:06:58.805 --> 01:07:00.245 it's been quite astonishing over

NOTE Confidence: 0.9992109

01:07:00.245 --> 01:07:01.065 the past decade

NOTE Confidence: 0.87187713

01:07:01.365 --> 01:07:03.125 what has the advances we've

NOTE Confidence: 0.87187713

01:07:03.125 --> 01:07:04.160 had. So,

NOTE Confidence: 0.9865295

01:07:07.579 --> 01:07:09.420 that is all. Looks like

NOTE Confidence: 0.9865295

01:07:09.420 --> 01:07:10.559 we're good. Okay.

NOTE Confidence: 0.87384415

01:07:12.220 --> 01:07:13.119 Thanks, everyone.

NOTE Confidence: 0.99427414

01:07:13.980 --> 01:07:15.819 And, Eliza, unless you have

NOTE Confidence: 0.99427414

01:07:15.819 --> 01:07:17.260 any other things, we will

NOTE Confidence: 0.99427414

01:07:17.260 --> 01:07:17.920 say goodbye.