WEBVTT

00:00:00.000 --> 00:00:02.796 Support for Yale Cancer Answers comes

00:00:02.796 --> 00:00:05.243 from AstraZeneca providing important

00:00:05.243 --> 00:00:07.753 treatment options for patients with

00:00:07.753 --> 00:00:10.256 different types of lung, bladder,

00:00:10.256 --> 00:00:12.686 ovarian, breast and blood cancers.

00:00:12.690 --> 00:00:14.814 More information at astrazeneca-us.com.

00:00:14.814 --> 00:00:17.634 Welcome to Yale Cancer Answers with your

00:00:17.634 --> 00:00:19.958 host doctor Anees Chagpar. Yale Cancer

00:00:19.958 --> 00:00:22.037 Answers features the latest information

00:00:22.037 --> 00:00:24.563 on cancer care by welcoming oncologists

00:00:24.625 --> 00:00:26.865 and specialists who are on the forefront

00:00:26.865 --> 00:00:29.640 of the battle to fight cancer. This week

00:00:29.640 --> 00:00:32.368 it's a conversation about the role of surgery

00:00:32.368 --> 00:00:35.068 and breast cancer with Doctor Tristen Park.

00:00:35.070 --> 00:00:37.982 Dr Park is an assistant professor of surgical

00:00:37.982 --> 00:00:40.500 oncology at the Yale School of Medicine,

NOTE Confidence: 0.931252002716064

00:00:40.500 --> 00:00:42.672 where doctor Chagpar is a

NOTE Confidence: 0.931252002716064

00:00:42.672 --> 00:00:44.120 professor of surgical oncology.

NOTE Confidence: 0.928291499614716

00:00:45.080 --> 00:00:47.951 Why don't you start by telling

NOTE Confidence: 0.928291499614716

00:00:47.951 --> 00:00:50.675 us a little bit about breast cancer?

NOTE Confidence: 0.928291499614716

00:00:50.680 --> 00:00:52.780 We know that it's incredibly common,

NOTE Confidence: 0.928291499614716

00:00:52.780 --> 00:00:55.279 so tell us a little bit about

NOTE Confidence: 0.928291499614716

00:00:55.279 --> 00:00:57.330 how it's found and

NOTE Confidence: 0.928291499614716

00:00:57.330 --> 00:00:58.374 how it's treated.

NOTE Confidence: 0.928291499614716

00:00:58.374 --> 00:01:01.230 So this is one of the reasons why

NOTE Confidence: 0.928291499614716

00:01:01.230 --> 00:01:03.624 I chose to go into breast cancer.

NOTE Confidence: 0.928291499614716

00:01:03.630 --> 00:01:05.562 I feel like breast cancer is

NOTE Confidence: 0.928291499614716

00:01:05.562 --> 00:01:07.830 one of the fields in oncology,

NOTE Confidence: 0.928291499614716

00:01:07.830 --> 00:01:09.930 especially the surgical treatment of it,

NOTE Confidence: 0.928291499614716

00:01:09.930 --> 00:01:11.760 that has evolved so drastically

NOTE Confidence: 0.928291499614716

00:01:11.760 --> 00:01:13.974 in a positive way that I

NOTE Confidence: 0.928291499614716

00:01:13.974 --> 00:01:15.529 really wanted to take part

NOTE Confidence: 0.928291499614716

00:01:15.530 --> 00:01:20.906 in its care. So as of 2020

NOTE Confidence: 0.928291499614716

00:01:20.910 --> 00:01:22.800 the treatment of breast cancer,

NOTE Confidence: 0.928291499614716

00:01:22.800 --> 00:01:24.680 the detection of breast cancer

NOTE Confidence: 0.928291499614716

00:01:24.680 --> 00:01:26.560 actually has morphed to the point

NOTE Confidence: 0.928291499614716

00:01:26.621 --> 00:01:28.861 where a lot of these cancers are

NOTE Confidence: 0.928291499614716

00:01:28.861 --> 00:01:30.340 caught by screening modalities

NOTE Confidence: 0.928291499614716

00:01:30.340 --> 00:01:32.600 such as mammogram and ultrasound.

NOTE Confidence: 0.928291499614716

00:01:32.600 --> 00:01:34.104 Many, many decades ago,

NOTE Confidence: 0.928291499614716

00:01:34.104 --> 00:01:35.608 before this was implemented,

NOTE Confidence: 0.928291499614716

00:01:35.610 --> 00:01:37.800 these types of cancers would be

NOTE Confidence: 0.928291499614716

00:01:37.800 --> 00:01:40.506 caught in a much later stage where

NOTE Confidence: 0.928291499614716

00:01:40.506 --> 00:01:43.530 the patient would be able to feel it.

NOTE Confidence: 0.928291499614716

00:01:43.530 --> 00:01:43.906 Fortunately,

NOTE Confidence: 0.928291499614716

00:01:43.906 --> 00:01:45.786 in this day and age,

NOTE Confidence: 0.928291499614716

00:01:45.790 --> 00:01:47.680 that's a more rare occurrence,

NOTE Confidence: 0.928291499614716

00:01:47.680 --> 00:01:49.882 and we capture these cancers through

NOTE Confidence: 0.928291499614716

00:01:49.882 --> 00:01:51.350 screening modalities implemented by

NOTE Confidence: 0.928291499614716

00:01:51.402 --> 00:01:53.387 general practitioners and obese humans.

NOTE Confidence: 0.928291499614716

00:01:53.390 --> 00:01:58.054 And we catch them at very early stage

NOTE Confidence: 0.928291499614716

00:01:58.060 --> 00:01:59.524 where the patients

NOTE Confidence: 0.928291499614716

00:01:59.524 --> 00:02:00.988 generally can't even feel

NOTE Confidence: 0.912426471710205

00:02:00.990 --> 00:02:03.104 it, and people will

NOTE Confidence: 0.912426471710205

00:02:03.104 --> 00:02:05.379 go for their regular mammogram.

NOTE Confidence: 0.912426471710205

00:02:05.380 --> 00:02:07.837 I suppose one of the other questions

NOTE Confidence: 0.912426471710205

00:02:07.837 --> 00:02:10.092 in this field

NOTE Confidence: 0.912426471710205

00:02:10.092 --> 00:02:11.600 and is always controversial,

NOTE Confidence: 0.912426471710205

00:02:11.600 --> 00:02:14.162 is the question that many people may

NOTE Confidence: 0.912426471710205

00:02:14.162 --> 00:02:16.358 be asking themselves, which is when

NOTE Confidence: 0.912426471710205

00:02:16.360 --> 00:02:18.556 should I start having a mammogram?

NOTE Confidence: 0.912426471710205

00:02:18.560 --> 00:02:20.126 Well, the

NOTE Confidence: 0.912426471710205

00:02:20.126 --> 00:02:23.124 guidelines are all over the place

00:02:26.730 --> 00:02:29.622 I generally see patients and recommend

NOTE Confidence: 0.912426471710205

00:02:29.622 --> 00:02:32.380 patients to start getting their annual

NOTE Confidence: 0.912426471710205

00:02:32.380 --> 00:02:35.012 mammograms at the age of 40. There

NOTE Confidence: 0.912426471710205

00:02:35.012 --> 00:02:37.427 have been adjustments and different

NOTE Confidence: 0.912426471710205

00:02:37.427 --> 00:02:42.500 entities such as the USPSTF

NOTE Confidence: 0.912426471710205

00:02:42.500 --> 00:02:45.531 prolonged or delayed the age of

NOTE Confidence: 0.912426471710205

00:02:45.531 --> 00:02:48.466 screening up till the age of 50,

NOTE Confidence: 0.912426471710205

00:02:48.470 --> 00:02:52.094 but in general I see patients that have

NOTE Confidence: 0.912426471710205

00:02:52.094 --> 00:02:54.437 started screening at the age of 40,

NOTE Confidence: 0.912426471710205

00:02:54.440 --> 00:02:56.430 and that's the general recommendation.

NOTE Confidence: 0.912426471710205

00:02:56.430 --> 00:02:58.420 And so you know

NOTE Confidence: 0.910819232463837

00:02:58.420 --> 00:03:00.390 people out there should know

NOTE Confidence: 0.910819232463837

00:03:00.390 --> 00:03:02.360 that getting mammograms

NOTE Confidence: 0.910819232463837

00:03:02.432 --> 00:03:04.402 are really effective in terms

NOTE Confidence: 0.910819232463837

00:03:04.402 --> 00:03:06.372 of finding these cancers early,

NOTE Confidence: 0.910819232463837

00:03:06.380 --> 00:03:08.372 which really allows them to be

NOTE Confidence: 0.910819232463837

00:03:08.372 --> 00:03:10.808 treated in the most efficacious way

NOTE Confidence: 0.910819232463837

00:03:10.808 --> 00:03:12.888 and actually improves survival.

NOTE Confidence: 0.910819232463837

00:03:12.890 --> 00:03:14.972 So let's suppose somebody goes for

NOTE Confidence: 0.910819232463837

00:03:14.972 --> 00:03:17.054 a mammogram, and they find something

NOTE Confidence: 0.910819232463837

00:03:17.054 --> 00:03:18.784 that they didn't otherwise feel.

NOTE Confidence: 0.910819232463837

00:03:18.790 --> 00:03:20.194 They felt absolutely fine,

NOTE Confidence: 0.910819232463837

00:03:20.194 --> 00:03:22.300 and then they are shocked and

NOTE Confidence: 0.910819232463837

00:03:22.372 --> 00:03:24.097 horrified that the radiologist wants

NOTE Confidence: 0.910819232463837

00:03:24.097 --> 00:03:26.769 to do a biopsy and does a biopsy,

NOTE Confidence: 0.910819232463837

00:03:26.770 --> 00:03:28.154 and lo and behold,

NOTE Confidence: 0.910819232463837

00:03:28.154 --> 00:03:29.884 it comes back breast cancer.

NOTE Confidence: 0.910819232463837

00:03:29.890 --> 00:03:31.625 What is the conversation that

NOTE Confidence: 0.910819232463837

00:03:31.625 --> 00:03:33.013 you have with these

NOTE Confidence: 0.923470258712769

00:03:33.020 --> 00:03:34.408 patients at that point?

NOTE Confidence: 0.923470258712769

00:03:34.408 --> 00:03:37.220 At this point, I tell the patient that

NOTE Confidence: 0.923470258712769

00:03:37.220 --> 00:03:40.524 the current cancer that was

NOTE Confidence: 0.923470258712769

00:03:40.524 --> 00:03:42.923 detected is generally very small

NOTE Confidence: 0.923470258712769

00:03:42.923 --> 00:03:46.059 and in the average patient this

NOTE Confidence: 0.923470258712769

00:03:46.059 --> 00:03:49.075 happens to be a generally favorable

NOTE Confidence: 0.923470258712769

00:03:49.075 --> 00:03:51.560 receptor profile or the blueprint

NOTE Confidence: 0.923470258712769

00:03:51.560 --> 00:03:54.428 of the cancer is quite favorable.

NOTE Confidence: 0.923470258712769

00:03:54.430 --> 00:03:56.820 It's generally estrogen receptor positive,

NOTE Confidence: 0.923470258712769

00:03:56.820 --> 00:03:59.382 lower grade, and this is generally

NOTE Confidence: 0.923470258712769

00:03:59.382 --> 00:04:02.080 more in the older population,

NOTE Confidence: 0.923470258712769

00:04:02.080 --> 00:04:05.580 so I at this point I usually

NOTE Confidence: 0.923470258712769

00:04:05.580 --> 00:04:08.829 tell them that this is not a

NOTE Confidence: 0.923470258712769

00:04:08.830 --> 00:04:11.310 death sentence by any means,

NOTE Confidence: 0.923470258712769

00:04:11.310 --> 00:04:15.756 and that this is treated on a routine basis.

NOTE Confidence: 0.923470258712769

00:04:15.760 --> 00:04:18.028 Most commonly and most likely,

NOTE Confidence: 0.923470258712769

00:04:18.030 --> 00:04:20.298 the bulk of the patients I see,

NOTE Confidence: 0.923470258712769

00:04:20.300 --> 00:04:21.920 particularly as a surgical oncologist,

NOTE Confidence: 0.923470258712769

00:04:21.920 --> 00:04:24.174 will not die from their breast cancer,

NOTE Confidence: 0.923470258712769

00:04:24.180 --> 00:04:26.034 but will die of other natural

NOTE Confidence: 0.923470258712769

00:04:26.034 --> 00:04:27.750 means outside of their cancer.

NOTE Confidence: 0.920580327510834

00:04:27.750 --> 00:04:29.370 And you know,

NOTE Confidence: 0.920580327510834

00:04:29.370 --> 00:04:30.662 breast cancers are really

NOTE Confidence: 0.920580327510834

00:04:30.662 --> 00:04:31.954 well treated these days.

NOTE Confidence: 0.920580327510834

00:04:31.960 --> 00:04:34.344 Tell us a little bit about the modalities

NOTE Confidence: 0.920580327510834

00:04:34.344 --> 00:04:36.499 by which breast cancer is treated.

NOTE Confidence: 0.920580327510834

00:04:36.500 --> 00:04:38.120 I mean, you're a surgeon,

NOTE Confidence: 0.920580327510834

00:04:38.120 --> 00:04:40.339 so clearly surgery is one of the

NOTE Confidence: 0.920580327510834

00:04:40.339 --> 00:04:42.328 mainstays of treatment of breast cancer.

NOTE Confidence: 0.920580327510834

00:04:42.330 --> 00:04:44.262 So what are the surgical options

NOTE Confidence: 0.920580327510834

00:04:44.262 --> 00:04:45.890 that patients have these days?

NOTE Confidence: 0.90922600030899

00:04:45.950 --> 00:04:48.350 In this day and age we're

NOTE Confidence: 0.90922600030899

00:04:48.350 --> 00:04:50.819 very lucky to have several modalities,

NOTE Confidence: 0.90922600030899

00:04:50.820 --> 00:04:52.208 surgical modalities available for

NOTE Confidence: 0.90922600030899

00:04:52.208 --> 00:04:53.943 the treatment of breast cancer.

NOTE Confidence: 0.90922600030899

00:04:53.950 --> 00:04:55.690 Way back in the day,

00:04:58.362 --> 00:05:00.980 back well over 50 plus

NOTE Confidence: 0.90922600030899

00:05:00.980 --> 00:05:03.468 years ago, there was only one option

NOTE Confidence: 0.90922600030899

00:05:03.468 --> 00:05:05.784 which is removing the whole breast,

NOTE Confidence: 0.90922600030899

00:05:05.790 --> 00:05:08.566 otherwise known as mastectomy.

NOTE Confidence: 0.90922600030899

00:05:08.570 --> 00:05:10.034 But now with

NOTE Confidence: 0.90922600030899

00:05:10.034 --> 00:05:11.986 modern surgical and multidisciplinary

NOTE Confidence: 0.90922600030899

00:05:11.986 --> 00:05:14.824 management we're able to do something

NOTE Confidence: 0.90922600030899

00:05:14.824 --> 00:05:16.560 called Breast Conservation Therapy

NOTE Confidence: 0.90922600030899

00:05:16.560 --> 00:05:19.340 where we just remove the tumor

NOTE Confidence: 0.90922600030899

00:05:19.340 --> 00:05:22.164 if it's small enough and the ratio of

NOTE Confidence: 0.90922600030899

00:05:22.164 --> 00:05:24.628 the breast and the tumor is favorable

NOTE Confidence: 0.90922600030899

00:05:24.628 --> 00:05:26.917 and supplement that local resection

NOTE Confidence: 0.90922600030899

00:05:26.917 --> 00:05:29.707 of the tumor with something called

NOTE Confidence: 0.90922600030899

00:05:29.783 --> 00:05:31.967 whole breast radiation therapy.

NOTE Confidence: 0.90922600030899

00:05:31.970 --> 00:05:34.357 Which can give you a cancer free

NOTE Confidence: 0.90922600030899

00:05:34.357 --> 00:05:36.557 result that's nearly identical to what

NOTE Confidence: 0.90922600030899

00:05:36.557 --> 00:05:38.783 we would traditionally have to do,

NOTE Confidence: 0.90922600030899

00:05:38.790 --> 00:05:40.950 which is remove the whole breast.

NOTE Confidence: 0.90922600030899

00:05:40.950 --> 00:05:42.018 So how do

NOTE Confidence: 0.916658520698547

00:05:42.020 --> 00:05:44.126 you do breast conserving surgery if

NOTE Confidence: 0.916658520698547

00:05:44.126 --> 00:05:46.690 you can't see or feel this tumor?

NOTE Confidence: 0.916658520698547

00:05:46.690 --> 00:05:48.778 I mean, these women wouldn't have

NOTE Confidence: 0.916658520698547

00:05:48.778 --> 00:05:50.999 been able to feel this tumor.

NOTE Confidence: 0.916658520698547

00:05:51.000 --> 00:05:53.148 It just got picked up incidentally,

NOTE Confidence: 0.916658520698547

00:05:53.150 --> 00:05:54.128 on a mammogram.

NOTE Confidence: 0.916658520698547

00:05:54.128 --> 00:05:56.410 So how do you know that you're

NOTE Confidence: 0.916658520698547

00:05:56.486 --> 00:05:58.898 getting out the spot that actually

NOTE Confidence: 0.916658520698547

00:05:58.900 --> 00:05:59.992 had the cancer?

NOTE Confidence: 0.916658520698547

00:05:59.992 --> 00:06:02.540 So this is one of my favorite

NOTE Confidence: 0.916658520698547

00:06:02.540 --> 00:06:05.204 elements of my job is we get to use

NOTE Confidence: 0.916658520698547

00:06:05.204 --> 00:06:07.571 all this wonderful technology to help

NOTE Confidence: 0.916658520698547

00:06:07.571 --> 00:06:10.867 us find this tumor in a situation where

NOTE Confidence: 0.916658520698547

00:06:10.867 --> 00:06:13.327 otherwise my naked eyes,

NOTE Confidence: 0.916658520698547

00:06:13.330 --> 00:06:15.682 my hands and the patient wouldn't

NOTE Confidence: 0.916658520698547

00:06:15.682 --> 00:06:18.538 be able to tell me where it is.

NOTE Confidence: 0.916658520698547

00:06:18.540 --> 00:06:20.592 So basically we use a combination

NOTE Confidence: 0.916658520698547

00:06:20.592 --> 00:06:23.388 of imaging as well as localizing

NOTE Confidence: 0.916658520698547

00:06:23.390 --> 00:06:25.395 technologies to help us pinpoint

NOTE Confidence: 0.916658520698547

00:06:25.395 --> 00:06:26.999 exactly where it is.

NOTE Confidence: 0.916658520698547

00:06:27.000 --> 00:06:29.005 The most classical one is

NOTE Confidence: 0.916658520698547

00:06:29.005 --> 00:06:30.609 something called a wire,

NOTE Confidence: 0.916658520698547

00:06:30.610 --> 00:06:33.818 which basically the patient comes in and

NOTE Confidence: 0.916658520698547

00:06:33.820 --> 00:06:36.015 my radiology colleagues using either

NOTE Confidence: 0.916658520698547

00:06:36.015 --> 00:06:38.645 a mammogram or an ultrasound can

NOTE Confidence: 0.916658520698547

00:06:38.645 --> 00:06:40.829 pinpoint exactly where it is and

NOTE Confidence: 0.916658520698547

00:06:40.829 --> 00:06:43.153 place this little wire that basically

NOTE Confidence: 0.916658520698547

00:06:43.153 --> 00:06:45.848 points to exactly where the tumor is,

NOTE Confidence: 0.916658520698547

00:06:45.850 --> 00:06:48.450 and I use this wire to help me

NOTE Confidence: 0.916658520698547

00:06:48.450 --> 00:06:51.573 in the operation and find

NOTE Confidence: 0.916658520698547

00:06:51.573 --> 00:06:53.477 exactly where to resect.

NOTE Confidence: 0.916658520698547

00:06:53.480 --> 00:06:55.972 And then I get to use another

NOTE Confidence: 0.916658520698547

00:06:55.972 --> 00:06:58.209 very fun hightech machine,

NOTE Confidence: 0.916658520698547

00:06:58.210 --> 00:07:00.842 which I call it a mini mammogram

NOTE Confidence: 0.916658520698547

00:07:00.842 --> 00:07:02.907 machine inside the operating room

NOTE Confidence: 0.916658520698547

00:07:02.907 --> 00:07:05.475 where I could place the specimen

NOTE Confidence: 0.916658520698547

00:07:05.475 --> 00:07:08.220 inside and confirm with all of

NOTE Confidence: 0.916658520698547

00:07:08.220 --> 00:07:10.424 that technology that I indeed

NOTE Confidence: 0.916658520698547

00:07:10.424 --> 00:07:12.788 took the suspicious area out.

NOTE Confidence: 0.916658520698547

00:07:12.790 --> 00:07:15.814 Now that's the wire that kind of

NOTE Confidence: 0.916658520698547

00:07:15.814 --> 00:07:18.038 physically points to where the

NOTE Confidence: 0.916658520698547

00:07:18.038 --> 00:07:20.677 tumor is is being replaced by these

NOTE Confidence: 0.916658520698547

00:07:20.677 --> 00:07:23.485 other non wire localization methods.

NOTE Confidence: 0.916658520698547

00:07:23.490 --> 00:07:24.768 This includes little

NOTE Confidence: 0.916658520698547

00:07:24.768 --> 00:07:27.324 gadgets that are the size

NOTE Confidence: 0.916658520698547

00:07:27.324 --> 00:07:31.025 of like a grain of rice that uses

NOTE Confidence: 0.916658520698547

00:07:31.025 --> 00:07:32.880 different either radioactivity or

NOTE Confidence: 0.916658520698547

00:07:32.880 --> 00:07:34.900 radio frequency or magnetic

NOTE Confidence: 0.916658520698547

00:07:34.900 --> 00:07:37.240 waves to help us detect it.

NOTE Confidence: 0.916658520698547

00:07:37.240 --> 00:07:40.602 And I get to use something that's in the

NOTE Confidence: 0.916658520698547

00:07:40.602 --> 00:07:43.416 similar vein as like a Geiger counter,

NOTE Confidence: 0.916658520698547

00:07:43.420 --> 00:07:46.444 and I get to use that to tell

NOTE Confidence: 0.916658520698547

00:07:46.444 --> 00:07:48.440 me exactly where to go.

NOTE Confidence: 0.916658520698547

00:07:48.440 --> 00:07:52.432 So as of two 2020 we have all

NOTE Confidence: 0.916658520698547

00:07:52.432 --> 00:07:54.832 these wonderful modalities to

NOTE Confidence: 0.916658520698547

00:07:54.832 --> 00:07:58.047 find exactly where these tiny

NOTE Confidence: 0.916658520698547

00:07:58.047 --> 00:08:01.650 tumors are and bring minimal

NOTE Confidence: 0.916658520698547

00:08:01.650 --> 00:08:03.170 harm to the patient

NOTE Confidence: 0.919329047203064

00:08:03.170 --> 00:08:05.585 and so for many of these patients

NOTE Confidence: 0.919329047203064

00:08:05.585 --> 00:08:07.730 who have very small cancers,

NOTE Confidence: 0.919329047203064

00:08:07.730 --> 00:08:11.150 you can use technology to help you to find

NOTE Confidence: 0.919329047203064

00:08:11.150 --> 00:08:14.189 exactly where the cancer is and remove it.

NOTE Confidence: 0.919329047203064

00:08:14.190 --> 00:08:16.848 Sometimes patients may have, you know,

NOTE Confidence: 0.919329047203064

00:08:16.848 --> 00:08:18.364 widespread calcifications or calcium

NOTE Confidence: 0.919329047203064

00:08:18.364 --> 00:08:21.028 spots that show up on their mammogram,

NOTE Confidence: 0.919329047203064

00:08:21.030 --> 00:08:23.690 that may in fact be pre cancer,

NOTE Confidence: 0.919329047203064

00:08:23.690 --> 00:08:27.110 but if that is all over the breast,

NOTE Confidence: 0.919329047203064

00:08:27.110 --> 00:08:30.530 is there still a role for mastectomy in these

NOTE Confidence: 0.917119550704956

00:08:30.530 --> 00:08:31.892 patients?

NOTE Confidence: 0.917119550704956

00:08:31.892 --> 00:08:34.616 Certainly if they have large areas of

NOTE Confidence: 0.917119550704956

00:08:34.616 --> 00:08:36.487 calcifications that we generally

14

NOTE Confidence: 0.917119550704956

00:08:36.487 --> 00:08:38.722 confirm with additional biopsies that

NOTE Confidence: 0.917119550704956

00:08:38.722 --> 00:08:41.232 these are either

NOTE Confidence: 0.917119550704956

00:08:41.232 --> 00:08:43.542 early stage cancer or pre cancer.

NOTE Confidence: 0.917119550704956

00:08:43.550 --> 00:08:45.302 I would definitely recommend

NOTE Confidence: 0.917119550704956

00:08:45.302 --> 00:08:47.930 the patient to have a mastectomy,

NOTE Confidence: 0.917119550704956

00:08:47.930 --> 00:08:50.048 but fortunately in this day and

NOTE Confidence: 0.917119550704956

00:08:50.048 --> 00:08:52.536 age we could also have wonderful

NOTE Confidence: 0.917119550704956

00:08:52.536 --> 00:08:54.030 reconstructive options

NOTE Confidence: 0.917119550704956

00:08:54.030 --> 00:08:57.041 working side by side with our

NOTE Confidence: 0.917119550704956

00:08:57.041 --> 00:08:59.276 plastic surgery colleagues and have

NOTE Confidence: 0.917119550704956

00:08:59.276 --> 00:09:01.890 results where it looks much better.

NOTE Confidence: 0.917119550704956

00:09:01.890 --> 00:09:05.328 Or if not, it looks just as good as

NOTE Confidence: 0.913508892059326

00:09:05.330 --> 00:09:07.794 we started.

NOTE Confidence: 0.913508892059326

00:09:07.794 --> 00:09:10.130 Tell us a little bit about how that works.

NOTE Confidence: 0.913508892059326

00:09:10.130 --> 00:09:12.811 I mean, do you operate with the

NOTE Confidence: 0.913508892059326

00:09:12.811 --> 00:09:15.289 plastic surgeons all at the same time?

00:09:15.290 --> 00:09:17.510 Do they use implants? Do they

00:09:17.510 --> 00:09:19.242 use people's own tissue?

00:09:19.242 --> 00:09:23.036 How does that work?

00:09:23.036 --> 00:09:26.002 Generally we work at the same time and sometimes start at

00:09:26.002 --> 00:09:28.955 the same time and we work as a big team,

00:09:28.955 --> 00:09:31.955 so that's actually a lot of fun and

00:09:31.960 --> 00:09:34.378 the way that the plastic surgeons

00:09:34.378 --> 00:09:36.905 can reconstruct the breast once I've

00:09:36.905 --> 00:09:39.025 removed it includes using implants,

00:09:39.030 --> 00:09:41.526 and in some cases some patients

00:09:41.530 --> 00:09:44.554 could also use their natural tissues

00:09:44.554 --> 00:09:48.175 that are found either in the belly area,

00:09:48.180 --> 00:09:51.292 the leg area, or the bottom area to

00:09:51.292 --> 00:09:53.035 reconstruct a breast that's actually

00:09:53.035 --> 00:09:55.260 made from their own tissues.

NOTE Confidence: 0.913508892059326

00:09:55.260 --> 00:09:58.165 This is a much longer procedure obviously,

NOTE Confidence: 0.913508892059326

00:09:58.170 --> 00:10:00.660 but has a lot of benefits,

NOTE Confidence: 0.913508892059326

00:10:00.660 --> 00:10:03.670 including feeling more natural.

NOTE Confidence: 0.913508892059326

00:10:03.670 --> 00:10:04.075 Accordingly,

NOTE Confidence: 0.913508892059326

00:10:04.075 --> 00:10:06.505 as the patient ages as well,

NOTE Confidence: 0.921601116657257

00:10:06.510 --> 00:10:09.399 a lot of times we

NOTE Confidence: 0.921601116657257

00:10:09.399 --> 00:10:12.098 partner with the plastic surgeons really

NOTE Confidence: 0.921601116657257

00:10:12.098 --> 00:10:15.010 to get an optimal aesthetic result.

NOTE Confidence: 0.921601116657257

00:10:15.010 --> 00:10:17.691 There's now a concept that has come about

NOTE Confidence: 0.921601116657257

00:10:17.691 --> 00:10:19.692 called oncoplastic surgery where

NOTE Confidence: 0.921601116657257

00:10:19.692 --> 00:10:22.032 people are are kind of combining

NOTE Confidence: 0.921601116657257

00:10:22.032 --> 00:10:23.919 oncology and plastic surgery.

NOTE Confidence: 0.921601116657257

00:10:23.920 --> 00:10:26.350 Even when doing these smaller resections.

NOTE Confidence: 0.921601116657257

00:10:26.350 --> 00:10:29.262 Do you do that? Tell us a little

NOTE Confidence: 0.921601116657257

00:10:29.262 --> 00:10:31.620 bit about that concept.

NOTE Confidence: 0.921601116657257

00:10:31.620 --> 00:10:33.680 I think this is a

NOTE Confidence: 0.921601116657257

00:10:33.680 --> 00:10:35.640 developing concept in America.

NOTE Confidence: 0.921601116657257

00:10:35.640 --> 00:10:38.712 I think it's done more so in certain

NOTE Confidence: 0.921601116657257

00:10:38.712 --> 00:10:41.441 parts of America as well as I

NOTE Confidence: 0.921601116657257

00:10:41.441 --> 00:10:44.259 think it's done more so in Europe.

NOTE Confidence: 0.921601116657257

00:10:44.260 --> 00:10:46.628 But I'm a big proponent of it

NOTE Confidence: 0.921601116657257

00:10:46.628 --> 00:10:49.700 and I try to incorporate

NOTE Confidence: 0.921601116657257

00:10:49.700 --> 00:10:52.095 oncoplastic techniques in my surgeries,

NOTE Confidence: 0.921601116657257

00:10:52.100 --> 00:10:54.015 particularly since I feel like

NOTE Confidence: 0.921601116657257

00:10:54.015 --> 00:10:56.810 as of 2020 and as a surgeon,

NOTE Confidence: 0.921601116657257

00:10:56.810 --> 00:10:59.652 I'm able to treat these patients and

NOTE Confidence: 0.921601116657257

00:10:59.652 --> 00:11:01.668 resect their cancers and hopefully

NOTE Confidence: 0.921601116657257

00:11:01.668 --> 00:11:05.070 they'll be living for another 20 to 50 years.

NOTE Confidence: 0.921601116657257

00:11:05.070 --> 00:11:07.842 And I want them to be happy

NOTE Confidence: 0.921601116657257

00:11:07.842 --> 00:11:09.620 with how they look.

NOTE Confidence: 0.921601116657257

00:11:09.620 --> 00:11:11.882 So this includes more minor things

NOTE Confidence: 0.921601116657257

00:11:11.882 --> 00:11:13.929 such as very strategic incision

NOTE Confidence: 0.921601116657257

00:11:13.929 --> 00:11:16.249 placement where it's well hidden.

NOTE Confidence: 0.921601116657257

00:11:16.250 --> 00:11:19.378 It could be in areas of the breast

NOTE Confidence: 0.921601116657257

00:11:19.378 --> 00:11:22.038 where there's like a natural crease,

NOTE Confidence: 0.921601116657257

00:11:22.040 --> 00:11:23.980 or there's a natural shadowing

NOTE Confidence: 0.921601116657257

00:11:23.980 --> 00:11:27.010 so that the scar is quite hidden.

NOTE Confidence: 0.921601116657257

00:11:27.010 --> 00:11:29.080 This also could include once

NOTE Confidence: 0.921601116657257

00:11:29.080 --> 00:11:31.150 you remove the actual tumor,

NOTE Confidence: 0.921601116657257

00:11:31.150 --> 00:11:33.694 the tissues or the breast tissues

NOTE Confidence: 0.921601116657257

00:11:33.694 --> 00:11:35.760 that are surrounding it are

NOTE Confidence: 0.921601116657257

00:11:35.760 --> 00:11:38.511 moved around a bit so that the

NOTE Confidence: 0.921601116657257

00:11:38.511 --> 00:11:41.470 cavity that's left behind is not as

NOTE Confidence: 0.921601116657257

00:11:41.470 --> 00:11:44.020 obvious, not completely filled up,

NOTE Confidence: 0.921601116657257

00:11:44.020 --> 00:11:46.260 and there's another wonderful option

NOTE Confidence: 0.921601116657257

00:11:46.260 --> 00:11:48.924 called oncoplastic reduction where if

NOTE Confidence: 0.921601116657257

00:11:48.924 --> 00:11:51.444 the patient starts off quite large breasted,

NOTE Confidence: 0.921601116657257

00:11:51.450 --> 00:11:54.341 we could remove a tumor and then

NOTE Confidence: 0.921601116657257

00:11:54.341 --> 00:11:56.967 the plastic surgeon could do a

NOTE Confidence: 0.921601116657257

00:11:56.967 --> 00:11:59.147 classical style reduction of that

NOTE Confidence: 0.921601116657257

00:11:59.147 --> 00:12:01.972 breast and then also do a reduction

NOTE Confidence: 0.921601116657257

00:12:01.972 --> 00:12:04.670 of the other breast so that she

NOTE Confidence: 0.921601116657257

00:12:04.670 --> 00:12:07.160 ends up both with the tumor

NOTE Confidence: 0.921601116657257

00:12:07.160 --> 00:12:09.482 removed and both breasts that

NOTE Confidence: 0.921601116657257

00:12:09.482 --> 00:12:12.070 look quite symmetrical and a lot of

NOTE Confidence: 0.921601116657257

00:12:12.070 --> 00:12:14.014 times in these larger breasted women

NOTE Confidence: 0.921601116657257

00:12:14.020 --> 00:12:16.547 it also has the added benefit of

00:12:17.180 --> 00:12:19.700 the relief of back pain and the other

NOTE Confidence: 0.921601116657257

00:12:19.770 --> 00:12:22.320 issues that occurred with that

NOTE Confidence: 0.920851767063141

00:12:22.320 --> 00:12:24.847 prior.

NOTE Confidence: 0.920851767063141

00:12:24.850 --> 00:12:25.933 As you said,

NOTE Confidence: 0.920851767063141

00:12:25.933 --> 00:12:28.099 is not necessarily a death sentence.

NOTE Confidence: 0.920851767063141

00:12:28.100 --> 00:12:30.627 There are many surgical options for women,

NOTE Confidence: 0.920851767063141

00:12:30.630 --> 00:12:32.430 especially when they present early.

NOTE Confidence: 0.920851767063141

00:12:32.430 --> 00:12:34.824 Now, you mentioned some of the adjuvent

NOTE Confidence: 0.920851767063141

00:12:34.824 --> 00:12:37.447 therapies that we also use in the

NOTE Confidence: 0.920851767063141

00:12:37.447 --> 00:12:38.975 importance of a multidisciplinary

NOTE Confidence: 0.920851767063141

00:12:38.980 --> 00:12:41.220 team. One of the things you talked

NOTE Confidence: 0.920851767063141

00:12:41.220 --> 00:12:42.733 about was radiation therapy

NOTE Confidence: 0.920851767063141

00:12:42.733 --> 00:12:44.669 after breast conserving surgery.

NOTE Confidence: 0.920851767063141

00:12:44.670 --> 00:12:47.454 Can you tell us a little bit more

NOTE Confidence: 0.920851767063141

00:12:47.454 --> 00:12:49.887 about that and what things people

NOTE Confidence: 0.920851767063141

00:12:49.887 --> 00:12:52.359 might have to look forward to

NOTE Confidence: 0.920851767063141

00:12:52.442 --> 00:12:54.899 in terms of the side effects of

NOTE Confidence: 0.942838966846466

00:12:54.900 --> 00:12:57.924 radiation, how long it is and so on?

NOTE Confidence: 0.942838966846466

00:12:57.930 --> 00:13:00.120 Certainly so again, we're very blessed

NOTE Confidence: 0.942838966846466

00:13:00.120 --> 00:13:02.896 in this modern times that this radiation

NOTE Confidence: 0.942838966846466

00:13:02.896 --> 00:13:05.386 treatment can be very seamless and

NOTE Confidence: 0.942838966846466

00:13:05.386 --> 00:13:07.602 incorporated to one schedule in a

NOTE Confidence: 0.942838966846466

00:13:07.602 --> 00:13:09.337 way that causes minimal disruption.

NOTE Confidence: 0.942838966846466

00:13:09.340 --> 00:13:11.155 I usually tell

NOTE Confidence: 0.942838966846466

00:13:11.155 --> 00:13:12.607 patients that it's

NOTE Confidence: 0.942838966846466

00:13:12.610 --> 00:13:14.716 around 30 minutes

NOTE Confidence: 0.942838966846466

00:13:14.716 --> 00:13:17.300 door to door and that you could

NOTE Confidence: 0.942838966846466

00:13:17.300 --> 00:13:19.862 fit it in during your lunch hour.

NOTE Confidence: 0.942838966846466

00:13:19.870 --> 00:13:22.048 Or you could go before work,

NOTE Confidence: 0.942838966846466

00:13:22.050 --> 00:13:24.584 or you could drop by after work.

NOTE Confidence: 0.942838966846466

00:13:24.590 --> 00:13:26.907 It lasts about four to six weeks

NOTE Confidence: 0.942838966846466

00:13:26.907 --> 00:13:29.137 depending on the plan that the

NOTE Confidence: 0.942838966846466

00:13:29.137 --> 00:13:31.477 radiation oncologist maps out for you,

NOTE Confidence: 0.942838966846466

00:13:31.480 --> 00:13:33.718 and they basically radiate the chest

NOTE Confidence: 0.942838966846466

00:13:33.718 --> 00:13:36.199 wall of the side of the tumor.

NOTE Confidence: 0.942838966846466

00:13:36.200 --> 00:13:38.378 So we call it whole breast

NOTE Confidence: 0.942838966846466

00:13:38.378 --> 00:13:39.467 radiation therapy.

NOTE Confidence: 0.942838966846466

00:13:39.470 --> 00:13:41.420 Most common side effects include

NOTE Confidence: 0.942838966846466

00:13:41.420 --> 00:13:43.580 during the time of the radiation,

NOTE Confidence: 0.942838966846466

00:13:43.580 --> 00:13:45.380 patients generally feel some

NOTE Confidence: 0.942838966846466

00:13:45.380 --> 00:13:46.820 level of fatigue,

NOTE Confidence: 0.942838966846466

00:13:46.820 --> 00:13:48.260 but most patients actually

NOTE Confidence: 0.942838966846466

00:13:48.260 --> 00:13:49.700 could work through it.

NOTE Confidence: 0.942838966846466

00:13:49.700 --> 00:13:52.580 They work full time and they do note

NOTE Confidence: 0.942838966846466

00:13:52.580 --> 00:13:54.632 that fatigue, but it's not limiting.

NOTE Confidence: 0.942838966846466

00:13:54.632 --> 00:13:56.297 The fatigue goes away

NOTE Confidence: 0.942838966846466

00:13:56.297 --> 00:13:57.979 once the radiation stops.

NOTE Confidence: 0.942838966846466

00:13:57.980 --> 00:14:00.188 The other most common side effect

NOTE Confidence: 0.942838966846466

00:14:00.188 --> 00:14:02.419 would include changes to

NOTE Confidence: 0.942838966846466

00:14:02.419 --> 00:14:04.813 the skin and texture of the breast.

NOTE Confidence: 0.942838966846466

00:14:04.820 --> 00:14:06.620 This includes a darkening of

NOTE Confidence: 0.942838966846466

23

00:14:06.620 --> 00:14:08.420 the skin like you had

NOTE Confidence: 0.942838966846466

00:14:08.420 --> 00:14:10.290 a deep tan and

NOTE Confidence: 0.942838966846466

00:14:10.290 --> 00:14:12.586 also, the breast tissue could get more

NOTE Confidence: 0.942838966846466

00:14:12.586 --> 00:14:14.570 firm and slightly more contracted.

NOTE Confidence: 0.942838966846466

00:14:14.570 --> 00:14:16.445 Sometimes patients consider that a

NOTE Confidence: 0.942838966846466

00:14:16.445 --> 00:14:19.034 positive because it's a more

NOTE Confidence: 0.942838966846466

00:14:19.034 --> 00:14:20.996 firm feeling which some people like.

00:14:21.357 --> 00:14:23.499 So it sounds like there are

NOTE Confidence: 0.925083458423615

00:14:23.500 --> 00:14:25.636 lots of options for breast cancer.

NOTE Confidence: 0.925083458423615

00:14:25.640 --> 00:14:27.800 We're going to learn a little

NOTE Confidence: 0.925083458423615

00:14:27.800 --> 00:14:30.351 bit more right after we take a

NOTE Confidence: 0.925083458423615

00:14:30.351 --> 00:14:32.415 short break for a medical minute.

NOTE Confidence: 0.925083458423615

00:14:32.420 --> 00:14:33.500 Please stay tuned.

NOTE Confidence: 0.925083458423615

00:14:33.500 --> 00:14:35.522 Support for Yale Cancer Answers comes

NOTE Confidence: 0.925083458423615

00:14:35.522 --> 00:14:38.136 from AstraZeneca. The beyond pink campaign

NOTE Confidence: 0.925083458423615

00:14:38.136 --> 00:14:40.536 aims to empower metastatic breast cancer

NOTE Confidence: 0.925083458423615

00:14:40.536 --> 00:14:43.243 patients and their loved ones to learn more

NOTE Confidence: 0.925083458423615

00:14:43.243 --> 00:14:46.160 about their diagnosis and making

NOTE Confidence: 0.925083458423615

00:14:46.160 --> 00:14:51.280 decisions. Learn more at lifebeyondpink com.

NOTE Confidence: 0.925083458423615

00:14:51.280 --> 00:14:53.890 This is a medical minute about

NOTE Confidence: 0.925083458423615

00:14:53.890 --> 00:14:55.630 survivorship. Completing treatment for

NOTE Confidence: 0.925083458423615

00:14:55.696 --> 00:14:58.000 cancer is a very exciting milestone,

NOTE Confidence: 0.925083458423615

00:14:58.000 --> 00:15:01.213 but cancer and its treatment can be a life

NOTE Confidence: 0.925083458423615

00:15:01.213 --> 00:15:03.880 changing experience for cancer survivors.

NOTE Confidence: 0.925083458423615

00:15:03.880 --> 00:15:06.400 The return to normal activities and

NOTE Confidence: 0.925083458423615

00:15:06.400 --> 00:15:08.538 relationships can be difficult and

NOTE Confidence: 0.925083458423615

00:15:08.538 --> 00:15:10.866 some survivors face long term side

NOTE Confidence: 0.925083458423615

00:15:10.866 --> 00:15:13.120 effects resulting from their treatment,

NOTE Confidence: 0.925083458423615

00:15:13.120 --> 00:15:14.380 including heart problems,

NOTE Confidence: 0.925083458423615

00:15:14.380 --> 00:15:15.640 osteoporosis, fertility issues,

NOTE Confidence: 0.925083458423615

00:15:15.640 --> 00:15:18.580 an an increased risk of 2nd cancers.

NOTE Confidence: 0.925083458423615

00:15:18.580 --> 00:15:20.680 Resources are available to help

NOTE Confidence: 0.925083458423615

00:15:20.680 --> 00:15:22.360 keep cancer survivors well

NOTE Confidence: 0.925083458423615

00:15:22.360 --> 00:15:24.740 and focused on healthy living.

NOTE Confidence: 0.925083458423615

00:15:24.740 --> 00:15:26.852 More information is available

NOTE Confidence: 0.925083458423615

00:15:26.852 --> 00:15:27.908 at yalecancercenter.org.

NOTE Confidence: 0.925083458423615

00:15:27.910 --> 00:15:31.078 You're listening to Connecticut public radio.

NOTE Confidence: 0.928482055664063

00:15:32.040 --> 00:15:33.960 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.928482055664063

00:15:33.960 --> 00:15:35.700 This is doctor Anees Chagpar

NOTE Confidence: 0.928482055664063

00:15:35.700 --> 00:15:37.633 and I'm joined tonight by

NOTE Confidence: 0.928482055664063

00:15:37.633 --> 00:15:39.398 my guest doctor Tristen Park.

NOTE Confidence: 0.928482055664063

00:15:39.400 --> 00:15:41.230 We're talking about the role of

NOTE Confidence: 0.928482055664063

00:15:41.230 --> 00:15:43.119 surgery in breast cancer and right

NOTE Confidence: 0.928482055664063

00:15:43.119 --> 00:15:45.254 before the break we talked about many

NOTE Confidence: 0.928482055664063

00:15:45.254 --> 00:15:46.970 surgical options varying from breast

NOTE Confidence: 0.928482055664063

00:15:46.970 --> 00:15:48.998 conserving surgery which we can do

NOTE Confidence: 0.928482055664063

00:15:49.000 --> 00:15:50.764 for even non palpable tumors all the

NOTE Confidence: 0.928482055664063

00:15:50.764 --> 00:15:53.166 way up to mastectomies that we can

NOTE Confidence: 0.928482055664063

00:15:53.166 --> 00:15:54.754 do with immediate reconstruction.

NOTE Confidence: 0.928482055664063

00:15:54.760 --> 00:15:57.320 And we talked a little bit about radiation,

NOTE Confidence: 0.928482055664063

00:15:57.320 --> 00:15:59.096 which is one of the ancillary

NOTE Confidence: 0.928482055664063

00:15:59.096 --> 00:16:00.723 adjuvant therapies that we use

NOTE Confidence: 0.928482055664063

00:16:00.723 --> 00:16:02.247 after breast conserving surgery

NOTE Confidence: 0.928482055664063

00:16:02.250 --> 00:16:03.985 that allows outcomes to be

NOTE Confidence: 0.928482055664063

00:16:03.985 --> 00:16:06.560 equivalent to that of a mastectomy,

00:16:07.754 --> 00:16:10.540 but one of the questions that

NOTE Confidence: 0.928482055664063

00:16:10.630 --> 00:16:13.614 people often ask is do I need chemo?

NOTE Confidence: 0.928482055664063

00:16:13.620 --> 00:16:16.427 Can you talk a little bit about

NOTE Confidence: 0.928482055664063

00:16:16.427 --> 00:16:17.930 who needs chemotherapy and

NOTE Confidence: 0.916508376598358

00:16:17.930 --> 00:16:20.667 who doesn't in terms of breast cancer?

NOTE Confidence: 0.916508376598358

00:16:20.670 --> 00:16:22.418 Certainly.

NOTE Confidence: 0.916508376598358

00:16:22.418 --> 00:16:24.603 Chemotherapy is the systemic kind

NOTE Confidence: 0.916508376598358

00:16:24.603 --> 00:16:27.227 of treatment for breast cancer,

NOTE Confidence: 0.916508376598358

00:16:27.230 --> 00:16:30.688 and generally in patients that have larger,

NOTE Confidence: 0.916508376598358

00:16:30.690 --> 00:16:32.662 tumors or tumors

NOTE Confidence: 0.916508376598358

00:16:32.662 --> 00:16:34.634 that are higher grade,

NOTE Confidence: 0.916508376598358

00:16:34.640 --> 00:16:38.070 meaning at the cellular level that

NOTE Confidence: 0.916508376598358

00:16:38.070 --> 00:16:41.058 the cancer cells are more active,

NOTE Confidence: 0.916508376598358

00:16:41.060 --> 00:16:44.546 or if they have evidence that the

NOTE Confidence: 0.916508376598358

00:16:44.546 --> 00:16:47.575 disease has spread to either the

NOTE Confidence: 0.916508376598358

00:16:47.575 --> 00:16:50.449 lymph nodes or to other organs,

NOTE Confidence: 0.916508376598358

00:16:50.450 --> 00:16:52.418 chemotherapy is then recommended.

NOTE Confidence: 0.928462624549866

00:16:52.440 --> 00:16:56.080 And on this show,

NOTE Confidence: 0.928462624549866

00:16:56.080 --> 00:16:59.636 we've talked a lot about different kinds

NOTE Confidence: 0.928462624549866

00:16:59.636 --> 00:17:02.449 of chemotherapy, but before we get to that,

NOTE Confidence: 0.928462624549866

00:17:02.450 --> 00:17:05.537 you did mention before

NOTE Confidence: 0.928462624549866

00:17:05.537 --> 00:17:08.676 the break that many of these cancers

NOTE Confidence: 0.928462624549866

00:17:08.676 --> 00:17:12.010 are what you called a favorable subtype,

NOTE Confidence: 0.928462624549866

00:17:12.010 --> 00:17:13.826 and you mention things

NOTE Confidence: 0.928462624549866

00:17:13.826 --> 00:17:15.188 like estrogen receptor.

NOTE Confidence: 0.928462624549866

00:17:15.190 --> 00:17:17.465 Tell us how those things

NOTE Confidence: 0.928462624549866

00:17:17.465 --> 00:17:19.285 impact whether a patient

NOTE Confidence: 0.928462624549866

00:17:19.290 --> 00:17:22.548 will need chemotherapy or not.

NOTE Confidence: 0.928462624549866

00:17:22.548 --> 00:17:25.018 Breast cancer subtypes are

NOTE Confidence: 0.928462624549866

00:17:25.018 --> 00:17:28.334 dependent on the expression of three

NOTE Confidence: 0.928462624549866

00:17:28.334 --> 00:17:31.234 different receptors that were molecules

NOTE Confidence: 0.928462624549866

00:17:31.234 --> 00:17:35.242 that are found on top of the cancer

NOTE Confidence: 0.928462624549866

00:17:35.242 --> 00:17:37.530 cell that includes estrogen receptor,

NOTE Confidence: 0.928462624549866

00:17:37.530 --> 00:17:39.290 progesterone receptor and a 3rd

NOTE Confidence: 0.928462624549866

00:17:39.290 --> 00:17:41.490 receptor called HER-2 Neu.

NOTE Confidence: 0.928462624549866

00:17:41.490 --> 00:17:44.526 So depending on your combination of

NOTE Confidence: 0.928462624549866

00:17:44.526 --> 00:17:46.550 receptor expression that determines

NOTE Confidence: 0.928462624549866

00:17:46.631 --> 00:17:49.179 the blueprint of your

NOTE Confidence: 0.928462624549866

00:17:49.179 --> 00:17:51.199 cancer and there are certain

NOTE Confidence: 0.928462624549866

00:17:51.200 --> 00:17:53.978 combinations where we have specific or

NOTE Confidence: 0.928462624549866

00:17:53.978 --> 00:17:55.830 so-called targeted therapies available.

NOTE Confidence: 0.928462624549866

00:17:55.830 --> 00:17:58.608 So if your estrogen receptor positive,

NOTE Confidence: 0.928462624549866

00:17:58.610 --> 00:18:01.148 you could have treatment that blocks

NOTE Confidence: 0.928462624549866

00:18:01.148 --> 00:18:03.967 estrogen receptor in the form of

NOTE Confidence: 0.928462624549866

00:18:03.967 --> 00:18:05.548 systemic undercurrent therapy.

NOTE Confidence: 0.928462624549866

00:18:05.550 --> 00:18:07.870 If you're HER 2 Neu positive,

NOTE Confidence: 0.928462624549866

00:18:07.870 --> 00:18:10.185 you could have targeted therapy

NOTE Confidence: 0.928462624549866

00:18:10.185 --> 00:18:12.500 in the form of Herceptin.

NOTE Confidence: 0.928462624549866

00:18:12.500 --> 00:18:16.196 And if you were negative for all three,

NOTE Confidence: 0.928462624549866

00:18:16.200 --> 00:18:17.691 generally chemotherapy.

NOTE Confidence: 0.928462624549866

00:18:17.691 --> 00:18:20.176 And some evidence that immune

NOTE Confidence: 0.928462624549866

00:18:20.176 --> 00:18:22.086 based therapies, or therapies

NOTE Confidence: 0.928462624549866

00:18:22.086 --> 00:18:24.196 that target the immune system can

NOTE Confidence: 0.928462624549866

00:18:24.200 --> 00:18:24.892 provide benefit.

00:18:25.930 --> 00:18:28.345 I want to get to the immune therapy,

NOTE Confidence: 0.923807561397552

00:18:28.350 --> 00:18:30.426 because certainly that's a hot topic,

NOTE Confidence: 0.923807561397552

00:18:30.430 --> 00:18:32.758 but just before we go there tell us

NOTE Confidence: 0.923807561397552

00:18:32.758 --> 00:18:35.270 a little bit about endocrine therapy.

NOTE Confidence: 0.923807561397552

00:18:35.270 --> 00:18:36.654 Is this really chemotherapy?

NOTE Confidence: 0.923807561397552

00:18:36.654 --> 00:18:39.150 I mean, should people be afraid that

NOTE Confidence: 0.923807561397552

00:18:39.150 --> 00:18:41.848 they're going to lose their hair or those

NOTE Confidence: 0.923807561397552

00:18:41.850 --> 00:18:43.580 kinds of things?

NOTE Confidence: 0.923807561397552

00:18:43.580 --> 00:18:45.310 It's not the same as chemotherapy,

NOTE Confidence: 0.923807561397552

00:18:45.310 --> 00:18:47.040 but it is systemic therapy,

NOTE Confidence: 0.923807561397552

00:18:47.040 --> 00:18:49.050 meaning that it it will affect

NOTE Confidence: 0.923807561397552

00:18:49.050 --> 00:18:51.529 you from head to toe

NOTE Confidence: 0.923807561397552

00:18:51.530 --> 00:18:53.260 so any cancer cells that

NOTE Confidence: 0.923807561397552

00:18:53.260 --> 00:18:54.990 are floating in your body

NOTE Confidence: 0.923807561397552

00:18:54.990 --> 00:18:57.870 could be

NOTE Confidence: 0.923807561397552

00:18:57.870 --> 00:18:59.790 sufficiently targeted.

NOTE Confidence: 0.923807561397552

00:18:59.790 --> 00:19:02.238 But it definitely will not cause

NOTE Confidence: 0.923807561397552

00:19:02.238 --> 00:19:04.500 hair loss. It mainly blocks

NOTE Confidence: 0.923807561397552

00:19:04.500 --> 00:19:05.784 the estrogen receptor

NOTE Confidence: 0.923807561397552

00:19:05.784 --> 00:19:07.068 through multiple mechanisms.

NOTE Confidence: 0.923807561397552

00:19:07.070 --> 00:19:08.778 Then there's different families

NOTE Confidence: 0.923807561397552

00:19:08.778 --> 00:19:10.486 of estrogen blocking modalities,

NOTE Confidence: 0.923807561397552

00:19:10.490 --> 00:19:13.906 but generally it will not cause hair loss,

NOTE Confidence: 0.923807561397552

00:19:13.910 --> 00:19:16.226 and it's a pill that

NOTE Confidence: 0.923807561397552

00:19:16.226 --> 00:19:18.620 you take like a vitamin,

NOTE Confidence: 0.923807561397552

00:19:18.620 --> 00:19:19.428 for instance,

NOTE Confidence: 0.923807561397552

00:19:19.428 --> 00:19:21.852 and generally it's given from 5

NOTE Confidence: 0.923807561397552

00:19:21.852 --> 00:19:24.723 to 10 years and it could result

NOTE Confidence: 0.923807561397552

00:19:24.723 --> 00:19:27.289 in the risk reduction of cancer

NOTE Confidence: 0.923807561397552

00:19:27.289 --> 00:19:29.799 recurrence or the emergence of

NOTE Confidence: 0.923807561397552

00:19:29.800 --> 00:19:31.528 new estrogen receptor positive

NOTE Confidence: 0.923807561397552

00:19:31.528 --> 00:19:33.256 cancers on either breast.

NOTE Confidence: 0.923807561397552

00:19:33.260 --> 00:19:34.980 It sounds like

NOTE Confidence: 0.937701761722565

00:19:34.980 --> 00:19:38.004 for many people, especially if they have

NOTE Confidence: 0.937701761722565

00:19:38.004 --> 00:19:40.220 an estrogen receptor, positive cancer

NOTE Confidence: 0.937701761722565

00:19:40.220 --> 00:19:43.440 endocrine therapy with a little pill that

NOTE Confidence: 0.937701761722565

00:19:43.440 --> 00:19:46.644 you take once a day might be sufficient,

NOTE Confidence: 0.937701761722565

00:19:46.650 --> 00:19:48.710 but for some patients,

NOTE Confidence: 0.937701761722565

00:19:48.710 --> 00:19:51.285 particularly those who have larger

NOTE Confidence: 0.937701761722565

00:19:51.285 --> 00:19:53.704 cancers or who are lymph node

NOTE Confidence: 0.937701761722565

00:19:53.704 --> 00:19:56.403 positive or who may have a genomic

NOTE Confidence: 0.937701761722565

00:19:56.403 --> 00:19:59.175 profile that is a little bit worse,

NOTE Confidence: 0.937701761722565

00:19:59.180 --> 00:20:00.800 chemotherapy might be

NOTE Confidence: 0.937701761722565

00:20:00.800 --> 00:20:02.420 something that's indicated.

NOTE Confidence: 0.919604063034058

00:20:02.920 --> 00:20:05.377 Yes, it will definitely be indicated in

NOTE Confidence: 0.919604063034058

00:20:05.377 --> 00:20:08.183 those types of patients and then after

NOTE Confidence: 0.919604063034058

00:20:08.183 --> 00:20:10.715 their course of chemotherapy is finished,

NOTE Confidence: 0.919604063034058

00:20:10.720 --> 00:20:13.352 they have the added benefit of having

NOTE Confidence: 0.919604063034058

00:20:13.352 --> 00:20:15.739 this additional treatment of the endocrine

NOTE Confidence: 0.919604063034058

00:20:15.739 --> 00:20:18.127 therapy that could provide further benefit

NOTE Confidence: 0.919604063034058

00:20:18.130 --> 00:20:21.250 in the last five to 10 years,

NOTE Confidence: 0.919604063034058

00:20:21.250 --> 00:20:24.370 as long as they take the pill.

NOTE Confidence: 0.919604063034058

00:20:24.370 --> 00:20:26.200 So something really to think

NOTE Confidence: 0.919604063034058

00:20:26.200 --> 00:20:28.030 about now are the side effects

NOTE Confidence: 0.919604063034058

00:20:28.099 --> 00:20:29.827 of that endocrine therapy.

NOTE Confidence: 0.919604063034058

00:20:29.830 --> 00:20:31.885 You mentioned that it doesn't

NOTE Confidence: 0.919604063034058

00:20:31.885 --> 00:20:33.940 make your hair fall out.

NOTE Confidence: 0.919604063034058

00:20:33.940 --> 00:20:36.898 Does it have other side effects

NOTE Confidence: 0.90581226348877

00:20:36.900 --> 00:20:40.352 that people should be aware of?

NOTE Confidence: 0.90581226348877

00:20:40.352 --> 00:20:43.796 Yes, it could cause some symptoms of menopause,

NOTE Confidence: 0.90581226348877

00:20:43.800 --> 00:20:46.270 including hot flashes and fatigue.

NOTE Confidence: 0.90581226348877

00:20:46.270 --> 00:20:48.234 Other common things include

NOTE Confidence: 0.90581226348877

00:20:48.234 --> 00:20:49.216 musculoskeletal pain,

NOTE Confidence: 0.90581226348877

00:20:49.220 --> 00:20:51.690 joint pain, and muscle aches,

NOTE Confidence: 0.90581226348877

00:20:51.690 --> 00:20:55.246 and then there's very rare side effects

NOTE Confidence: 0.90581226348877

00:20:55.246 --> 00:20:58.243 which include clots in your lower

NOTE Confidence: 0.90581226348877

00:20:58.243 --> 00:21:00.979 extremities or in your lungs, and

NOTE Confidence: 0.90581226348877

00:21:00.979 --> 00:21:03.493 rare cancers, but those are quite

NOTE Confidence: 0.90581226348877

00:21:03.493 --> 00:21:05.992 rare and actually the risk benefit

NOTE Confidence: 0.90581226348877

00:21:05.992 --> 00:21:08.326 ratio for the average patient is

NOTE Confidence: 0.90581226348877

00:21:08.326 --> 00:21:10.960 to the point where we generally,

NOTE Confidence: 0.90581226348877

00:21:10.960 --> 00:21:12.548 if they could take

NOTE Confidence: 0.909212648868561

00:21:12.550 --> 00:21:14.146 the endocrine therapy,

NOTE Confidence: 0.909212648868561

00:21:14.146 --> 00:21:16.540 it's a plus to take it.

NOTE Confidence: 0.909212648868561

00:21:16.540 --> 00:21:19.445 OK now getting into the chemotherapy and

NOTE Confidence: 0.909212648868561

00:21:19.445 --> 00:21:22.528 you mentioned that in some of these cancers,

NOTE Confidence: 0.909212648868561

00:21:22.530 --> 00:21:24.122 particularly those where the

NOTE Confidence: 0.909212648868561

00:21:24.122 --> 00:21:25.714 estrogen receptor is negative,

NOTE Confidence: 0.909212648868561

00:21:25.720 --> 00:21:28.108 so they can't take endocrine therapy,

NOTE Confidence: 0.909212648868561

00:21:28.110 --> 00:21:30.110 they can't take HER 2

NOTE Confidence: 0.909212648868561

00:21:30.110 --> 00:21:31.310 directed therapy because,

NOTE Confidence: 0.909212648868561

00:21:31.310 --> 00:21:34.159 let's say their HER 2 is negative,

NOTE Confidence: 0.909212648868561

00:21:34.160 --> 00:21:36.035 the chemotherapy might be of

NOTE Confidence: 0.909212648868561

00:21:36.035 --> 00:21:38.452 benefit because there is no other

NOTE Confidence: 0.909212648868561

00:21:38.452 --> 00:21:40.797 targeted therapy for these patients,

NOTE Confidence: 0.909212648868561

00:21:40.800 --> 00:21:42.460 and you mentioned specifically

NOTE Confidence: 0.909212648868561

00:21:42.460 --> 00:21:43.290 immunotherapy.

NOTE Confidence: 0.909212648868561

00:21:43.290 --> 00:21:45.906 Now I know that that's something

NOTE Confidence: 0.909212648868561

00:21:45.906 --> 00:21:48.688 that you're working on in your lab.

NOTE Confidence: 0.909212648868561

00:21:48.690 --> 00:21:50.937 Can you tell us a little bit

NOTE Confidence: 0.909212648868561

00:21:50.937 --> 00:21:52.565 more about these so-called

NOTE Confidence: 0.909212648868561

00:21:52.565 --> 00:21:54.909 triple negative breast cancers?

NOTE Confidence: 0.909212648868561

00:21:54.910 --> 00:21:56.990 The implications of that subtype,

NOTE Confidence: 0.940837502479553

00:21:56.990 --> 00:21:58.618 and how they're managed?

NOTE Confidence: 0.940837502479553

00:21:58.618 --> 00:22:01.060 So triple negative breast cancers are

NOTE Confidence: 0.940837502479553

00:22:01.132 --> 00:22:03.628 considered the most poor prognosis.

NOTE Confidence: 0.940837502479553

00:22:03.630 --> 00:22:06.216 An aggressive subtype of cancer.

NOTE Confidence: 0.940837502479553

00:22:06.220 --> 00:22:08.776 It's negative for all three receptors.

NOTE Confidence: 0.940837502479553

00:22:08.780 --> 00:22:10.488 There's a possibility of

NOTE Confidence: 0.940837502479553

00:22:10.488 --> 00:22:12.196 treatment options for them.

NOTE Confidence: 0.940837502479553

00:22:12.200 --> 00:22:14.540 As you know they're not eligible

NOTE Confidence: 0.940837502479553

00:22:14.540 --> 00:22:17.128 for the estrogen or the HER 2

NOTE Confidence: 0.940837502479553

00:22:17.128 --> 00:22:19.028 based targeted treatments,

NOTE Confidence: 0.940837502479553

00:22:19.030 --> 00:22:21.610 since they're not expressing those receptors.

NOTE Confidence: 0.940837502479553

00:22:21.610 --> 00:22:24.070 And the interesting thing, though,

NOTE Confidence: 0.940837502479553

00:22:24.070 --> 00:22:27.514 is that they happen to in

NOTE Confidence: 0.940837502479553

00:22:27.514 --> 00:22:28.990 multiple preclinical studies,

NOTE Confidence: 0.940837502479553

00:22:28.990 --> 00:22:31.450 these tumors have shown to

NOTE Confidence: 0.940837502479553

00:22:31.450 --> 00:22:32.926 generate more mutations.

NOTE Confidence: 0.940837502479553

00:22:32.930 --> 00:22:34.478 They're called somatic

NOTE Confidence: 0.940837502479553

00:22:34.478 --> 00:22:38.090 mutations, the mutations are

NOTE Confidence: 0.940837502479553

00:22:38.175 --> 00:22:41.290 only found in the actual cancer cells.

NOTE Confidence: 0.940837502479553

00:22:41.290 --> 00:22:44.286 So they have a higher level of

NOTE Confidence: 0.940837502479553

00:22:44.286 --> 00:22:47.189 what we call mutational load,

NOTE Confidence: 0.940837502479553

00:22:47.190 --> 00:22:49.800 an generally that's correlated with

NOTE Confidence: 0.940837502479553

00:22:49.800 --> 00:22:52.410 more response to immune therapy.

NOTE Confidence: 0.940837502479553

00:22:52.410 --> 00:22:54.450 The more mutations you have

NOTE Confidence: 0.940837502479553

00:22:54.450 --> 00:22:56.490 on your non normal cells,

NOTE Confidence: 0.940837502479553

00:22:56.490 --> 00:22:59.094 the more likely your immune system

NOTE Confidence: 0.940837502479553

00:22:59.094 --> 00:23:02.073 could detect them or kind of seek

NOTE Confidence: 0.940837502479553

00:23:02.073 --> 00:23:04.395 them out and kill these cancer

NOTE Confidence: 0.940837502479553

00:23:04.395 --> 00:23:06.791 cells that have all these targets

NOTE Confidence: 0.940837502479553

00:23:06.791 --> 00:23:09.546 that are not self and

NOTE Confidence: 0.940837502479553

00:23:09.546 --> 00:23:11.178 portraying themselves to yourself.

NOTE Confidence: 0.940837502479553

00:23:11.180 --> 00:23:13.628 So how come then your normal

NOTE Confidence: 0.906395614147186

00:23:13.630 --> 00:23:15.258 immune system given the

NOTE Confidence: 0.906395614147186

00:23:15.258 --> 00:23:17.293 mutational load of these cancers,

NOTE Confidence: 0.906395614147186

00:23:17.300 --> 00:23:20.000 doesn't

NOTE Confidence: 0.906395614147186

00:23:20.000 --> 00:23:23.420 seek them out and get rid of them by

NOTE Confidence: 0.876390566428502

00:23:23.420 --> 00:23:26.680 itself?

NOTE Confidence: 0.876390566428502

00:23:26.680 --> 00:23:31.327 There are multiple schools of thought for the reasons why

NOTE Confidence: 0.876390566428502

00:23:31.327 --> 00:23:35.155 cancer cells evade the immune system.

NOTE Confidence: 0.876390566428502

00:23:35.160 --> 00:23:38.905 So this includes the cancer

NOTE Confidence: 0.876390566428502

00:23:38.905 --> 00:23:42.650 cells could evolve ways to

NOTE Confidence: 0.876390566428502

00:23:42.650 --> 00:23:46.220 hide themselves from the immune system.

NOTE Confidence: 0.876390566428502

00:23:46.220 --> 00:23:48.780 Overexpressing kind of inhibitory

NOTE Confidence: 0.876390566428502

00:23:48.780 --> 00:23:53.275 markers that blunt the immune

NOTE Confidence: 0.876390566428502

00:23:53.275 --> 00:23:56.575 system or makes the immune system

NOTE Confidence: 0.876390566428502

00:23:56.575 --> 00:24:00.329 weaker in that particular location.

00:24:02.733 --> 00:24:06.738 That's that's the main one.

NOTE Confidence: 0.921292578180631

00:24:06.740 --> 00:24:09.526 Are there therapies

NOTE Confidence: 0.921292578180631

00:24:09.526 --> 00:24:12.516 that have tried to unhide the cancer

NOTE Confidence: 0.921292578180631

00:24:12.516 --> 00:24:15.090 or make the immune system stronger

NOTE Confidence: 0.921292578180631

00:24:15.173 --> 00:24:17.749 against these particular cancers?

NOTE Confidence: 0.921292578180631

00:24:17.750 --> 00:24:19.980 Tell us more about the

NOTE Confidence: 0.924536764621735

00:24:19.980 --> 00:24:21.564 immunotherapy.

NOTE Confidence: 0.924536764621735

00:24:21.564 --> 00:24:24.833 The Nobel Prize for

NOTE Confidence: 0.924536764621735

00:24:24.833 --> 00:24:27.703 cancer has been awarded recently to this

NOTE Confidence: 0.924536764621735

00:24:27.703 --> 00:24:30.240 concept called checkpoint inhibitors,

NOTE Confidence: 0.924536764621735

00:24:30.240 --> 00:24:31.740 so the checkpoint,

NOTE Confidence: 0.924536764621735

00:24:31.740 --> 00:24:34.240 the immune checkpoints are natural

NOTE Confidence: 0.924536764621735

00:24:34.240 --> 00:24:37.582 breaks that people have as well as the

NOTE Confidence: 0.924536764621735

00:24:37.582 --> 00:24:40.629 cancer cells have kind of manipulated to

NOTE Confidence: 0.924536764621735

00:24:40.630 --> 00:24:42.260 make the immune system blunted,

NOTE Confidence: 0.924536764621735

00:24:42.260 --> 00:24:44.540 so normally if one of your

NOTE Confidence: 0.924536764621735

00:24:44.540 --> 00:24:46.136 immune cells recognizes let's say

NOTE Confidence: 0.924536764621735

00:24:46.136 --> 00:24:48.383 a foreign antigen like the flu or

NOTE Confidence: 0.924536764621735

00:24:48.443 --> 00:24:50.579 something and it generates a response

NOTE Confidence: 0.924536764621735

00:24:50.579 --> 00:24:52.985 you want it generate enough of a response

NOTE Confidence: 0.924536764621735

00:24:52.985 --> 00:24:55.260 that it clears that problem,

NOTE Confidence: 0.924536764621735

00:24:55.260 --> 00:24:57.888 but you don't want it to go crazy because

NOTE Confidence: 0.924536764621735

00:24:57.888 --> 00:25:00.774 then it could harm your normal tissues.

NOTE Confidence: 0.924536764621735

00:25:00.780 --> 00:25:02.789 And that's actually the opposite side of

NOTE Confidence: 0.924536764621735

00:25:02.789 --> 00:25:05.009 that spectrum called autoimmune disease,

NOTE Confidence: 0.924536764621735

00:25:05.010 --> 00:25:07.050 so these immune checkpoints occur in

NOTE Confidence: 0.924536764621735

00:25:07.050 --> 00:25:09.425 nature and are also kind of taken

NOTE Confidence: 0.924536764621735

00:25:09.425 --> 00:25:11.327 advantage of by the cancer cells.

NOTE Confidence: 0.924536764621735

00:25:11.330 --> 00:25:15.522 So one way to selectively strengthen

NOTE Confidence: 0.924536764621735

00:25:15.522 --> 00:25:19.059 the immune system or make

NOTE Confidence: 0.924536764621735

00:25:19.060 --> 00:25:21.040 the cancers more visible

NOTE Confidence: 0.924536764621735

00:25:21.040 --> 00:25:22.624 to the immune system

NOTE Confidence: 0.924536764621735

00:25:22.630 --> 00:25:23.824 include something called

NOTE Confidence: 0.924536764621735

00:25:23.824 --> 00:25:24.620 checkpoint inhibitors,

NOTE Confidence: 0.924536764621735

00:25:24.620 --> 00:25:26.575 which basically takes the brakes

NOTE Confidence: 0.924536764621735

00:25:26.575 --> 00:25:29.392 off these immune cells and makes the

NOTE Confidence: 0.924536764621735

00:25:29.392 --> 00:25:31.768 immune cells more prone to detecting

NOTE Confidence: 0.924536764621735

00:25:31.770 --> 00:25:33.560 the cancer cell that's

NOTE Confidence: 0.924536764621735

00:25:33.560 --> 00:25:36.400 non self.

NOTE Confidence: 0.92903345823288

00:25:36.400 --> 00:25:38.494 And have there been studies looking at these immunotherapies

NOTE Confidence: 0.92903345823288

00:25:38.494 --> 00:25:40.310 and triple negative breast cancer?

NOTE Confidence: 0.92903345823288

00:25:40.310 --> 00:25:42.090 Does this concept really work?

NOTE Confidence: 0.92903345823288

00:25:42.090 --> 00:25:44.858 And the second part of that question is

NOTE Confidence: 0.92903345823288

00:25:44.858 --> 00:25:47.923 if you take the brakes off the immune

NOTE Confidence: 0.92903345823288

00:25:47.923 --> 00:25:50.505 system and the brakes were put there

NOTE Confidence: 0.92903345823288

00:25:50.505 --> 00:25:53.482 so that you don't go nuts as you said

NOTE Confidence: 0.92903345823288

00:25:53.482 --> 00:25:55.618 and get kind of autoimmune conditions

NOTE Confidence: 0.92903345823288

00:25:55.620 --> 00:25:57.956 do we find that in patients who are

NOTE Confidence: 0.92903345823288

00:25:57.956 --> 00:26:00.254 taking these immune therapies that they

NOTE Confidence: 0.92903345823288

00:26:00.254 --> 00:26:02.732 get these symptoms of autoimmune disease?

NOTE Confidence: 0.881281018257141

00:26:02.760 --> 00:26:04.023 Certainly.

NOTE Confidence: 0.881281018257141

00:26:04.023 --> 00:26:06.549 In the past one year actually,

NOTE Confidence: 0.881281018257141

00:26:06.550 --> 00:26:09.273 the FDA has approved the first immune

NOTE Confidence: 0.881281018257141

00:26:09.273 --> 00:26:11.859 based therapy for triple negative breast

NOTE Confidence: 0.881281018257141

00:26:11.859 --> 00:26:14.547 cancer in the metastatic setting,

NOTE Confidence: 0.881281018257141

00:26:14.550 --> 00:26:17.142 meaning the patient has widespread disease

NOTE Confidence: 0.881281018257141

00:26:17.142 --> 00:26:20.020 outside of the breast and lymph nodes.

NOTE Confidence: 0.881281018257141

00:26:20.020 --> 00:26:21.704 This drug is called

NOTE Confidence: 0.881281018257141

00:26:21.704 --> 00:26:25.920 Atezolizumab, and it targets PDL1,

NOTE Confidence: 0.881281018257141

00:26:25.920 --> 00:26:29.280 which is one of these checkpoint markers.

NOTE Confidence: 0.881281018257141

00:26:29.280 --> 00:26:32.269 It's shown benefit for overall survival in

NOTE Confidence: 0.881281018257141

00:26:32.270 --> 00:26:34.165 a specific cohort of triple

NOTE Confidence: 0.881281018257141

00:26:34.165 --> 00:26:36.060 negative breast cancer cells that

NOTE Confidence: 0.881281018257141

00:26:36.123 --> 00:26:38.590 express high levels of the PDL1

00:26:38.590 --> 00:26:40.936 so that's been an exciting

00:26:40.936 --> 00:26:43.330 milestone and also as a surgeon

00:26:43.330 --> 00:26:46.490 I've been eagerly following the use of these

00:26:46.490 --> 00:26:47.675 checkpoint inhibitors

00:26:47.675 --> 00:26:49.255 in the neoadjuvant setting,

00:26:49.260 --> 00:26:51.270 meaning we give the therapy

00:26:51.270 --> 00:26:53.280 prior to surgery and hopefully

00:26:53.358 --> 00:26:55.578 that will make the tumor shrink.

00:26:55.580 --> 00:26:58.079 Sometimes it makes it shrink to the

00:26:58.079 --> 00:27:00.319 point where it's completely gone,

00:27:00.320 --> 00:27:03.875 and by the time we take it out

00:27:06.960 --> 00:27:08.960 The tumor has completely disappeared

00:27:08.960 --> 00:27:12.016 and that results are something called a

00:27:12.016 --> 00:27:13.996 pathological complete response.

00:27:14.000 --> 00:27:16.629 So the latest trial

00:27:16.629 --> 00:27:19.632 that's coming to my head is the

NOTE Confidence: 0.881281018257141

00:27:19.632 --> 00:27:21.949 Keynote-522 trial that was

NOTE Confidence: 0.881281018257141

00:27:21.950 --> 00:27:24.351 discuss at ESMO this past year and

NOTE Confidence: 0.881281018257141

00:27:24.351 --> 00:27:27.058 that had shown that when you add one

NOTE Confidence: 0.881281018257141

00:27:27.058 --> 00:27:29.326 of these checkpoint drugs called

NOTE Confidence: 0.881281018257141

00:27:29.326 --> 00:27:31.654 pembrolizumab with the traditional

NOTE Confidence: 0.881281018257141

00:27:31.654 --> 00:27:33.982 neoadjuvant chemotherapy setting,

NOTE Confidence: 0.881281018257141

00:27:33.990 --> 00:27:36.480 that this could increase or improve

NOTE Confidence: 0.881281018257141

00:27:36.480 --> 00:27:38.140 the complete response rate,

NOTE Confidence: 0.881281018257141

00:27:38.140 --> 00:27:40.395 meaning the cancer is completely

NOTE Confidence: 0.881281018257141

00:27:40.395 --> 00:27:43.120 obliterated and there's no evidence of it.

NOTE Confidence: 0.881281018257141

00:27:43.120 --> 00:27:46.018 When we remove it from the patient,

NOTE Confidence: 0.881281018257141

00:27:46.020 --> 00:27:48.588 sometimes up to 70% in certain

NOTE Confidence: 0.881281018257141

00:27:48.588 --> 00:27:50.784 cohorts of patients that have

NOTE Confidence: 0.881281018257141

00:27:50.784 --> 00:27:53.184 expressed high levels of PD L1.

NOTE Confidence: 0.881281018257141

00:27:53.190 --> 00:27:55.548 But in general it improves this

NOTE Confidence: 0.881281018257141

00:27:55.550 --> 00:27:57.126 surrogate of pathological

NOTE Confidence: 0.881281018257141

00:27:57.126 --> 00:27:59.490 complete response by almost 15 points,

NOTE Confidence: 0.881281018257141

00:27:59.490 --> 00:28:01.460 which is definitely very encouraging.

NOTE Confidence: 0.881281018257141

00:28:01.460 --> 00:28:02.250 So that

NOTE Confidence: 0.921380281448364

00:28:02.250 --> 00:28:03.375 sounds really exciting.

NOTE Confidence: 0.921380281448364

00:28:03.375 --> 00:28:05.625 But what about the side effects

NOTE Confidence: 0.921380281448364

00:28:05.625 --> 00:28:07.370 of this immune therapy?

NOTE Confidence: 0.921380281448364

00:28:07.370 --> 00:28:09.340 I mean, do people get

NOTE Confidence: 0.921380281448364

00:28:09.340 --> 00:28:10.128 autoimmune conditions?

NOTE Confidence: 0.921380281448364

00:28:10.130 --> 00:28:11.606 Are those long lasting?

NOTE Confidence: 0.921380281448364

00:28:11.606 --> 00:28:14.332 Is there a way to put on

NOTE Confidence: 0.921380281448364

00:28:14.332 --> 00:28:16.036 the brakes after you've

NOTE Confidence: 0.921380281448364

00:28:16.040 --> 00:28:17.616 taken the brakes off?

NOTE Confidence: 0.921380281448364

00:28:17.616 --> 00:28:20.579 Well, certainly with every new

NOTE Confidence: 0.921380281448364

00:28:20.579 --> 00:28:24.126 tool comes the negatives, so there

NOTE Confidence: 0.921380281448364

00:28:24.126 --> 00:28:26.616 are autoimmune side effect profiles

NOTE Confidence: 0.921380281448364

00:28:26.616 --> 00:28:29.800 seen with the use of these drugs.

NOTE Confidence: 0.921380281448364

00:28:29.800 --> 00:28:32.190 But in breast cancer,

NOTE Confidence: 0.921380281448364

00:28:32.190 --> 00:28:34.782 I think we're fortunate in this

NOTE Confidence: 0.921380281448364

00:28:34.782 --> 00:28:38.054 Keynote-522 trial that the side effect

NOTE Confidence: 0.921380281448364

00:28:38.054 --> 00:28:40.494 profile or the autoimmune profiles

NOTE Confidence: 0.921380281448364

00:28:40.494 --> 00:28:44.110 was rather mild than in other disease processes.

NOTE Confidence: 0.921380281448364

00:28:44.110 --> 00:28:46.014 Other cancers that utilizes

NOTE Confidence: 0.921380281448364

00:28:46.014 --> 00:28:46.966 checkpoint inhibitors

NOTE Confidence: 0.921380281448364

00:28:46.970 --> 00:28:49.832 there could be more

NOTE Confidence: 0.921380281448364

00:28:49.832 --> 00:28:51.263 severe autoimmune effects,

NOTE Confidence: 0.921380281448364

00:28:51.270 --> 00:28:52.222 including pneumonitis.

NOTE Confidence: 0.921380281448364

00:28:52.222 --> 00:28:53.174 For colitis,

NOTE Confidence: 0.921380281448364

00:28:53.174 --> 00:28:55.078 requiring interventions and hospitalizations,

NOTE Confidence: 0.921380281448364

00:28:55.080 --> 00:28:58.896 but in the breast cancer setting,

NOTE Confidence: 0.921380281448364

00:28:58.900 --> 00:29:00.412 the most common

NOTE Confidence: 0.921380281448364

00:29:00.412 --> 00:29:02.932 side affects seen that's autoimmune

NOTE Confidence: 0.921380281448364

00:29:02.932 --> 00:29:06.347 related is an affect on your thyroid gland,

NOTE Confidence: 0.921380281448364

00:29:06.350 --> 00:29:09.556 which can be alleviated in an outpatient

NOTE Confidence: 0.921380281448364

00:29:09.556 --> 00:29:12.319 setting with supplemental thyroid medication.

NOTE Confidence: 0.921380281448364

00:29:12.320 --> 00:29:16.200 But the more severe toxicity

NOTE Confidence: 0.921380281448364

00:29:16.200 --> 00:29:19.277 profile seen in other cancer types,

NOTE Confidence: 0.921380281448364

00:29:19.280 --> 00:29:20.768 including melanoma,

NOTE Confidence: 0.921380281448364

00:29:20.768 --> 00:29:23.248 that's the most famous one,

NOTE Confidence: 0.921380281448364

00:29:23.250 --> 00:29:26.226 actually are not seen as much.

NOTE Confidence: 0.921380281448364

00:29:26.230 --> 00:29:27.631 That being said,

NOTE Confidence: 0.921380281448364

00:29:27.631 --> 00:29:30.433 there are the occasional and quite

NOTE Confidence: 0.921380281448364

00:29:30.433 --> 00:29:33.131 rare severe side effects that

NOTE Confidence: 0.921380281448364

00:29:33.131 --> 00:29:35.816 sometimes could even cause death,

NOTE Confidence: 0.921380281448364

00:29:35.820 --> 00:29:38.838 so we have to be careful,

NOTE Confidence: 0.921380281448364

00:29:38.840 --> 00:29:41.355 cautiously optimistic with the use

NOTE Confidence: 0.921380281448364

00:29:41.355 --> 00:29:43.870 of these these breakthrough drugs.

NOTE Confidence: 0.937942504882813

00:29:44.460 --> 00:29:46.896 Doctor Tristen Park is an assistant

NOTE Confidence: 0.937942504882813

00:29:46.896 --> 00:29:48.520 professor of surgical oncology

NOTE Confidence: 0.937942504882813

00:29:48.591 --> 00:29:50.439 at the Yale School of Medicine.

NOTE Confidence: 0.937942504882813

00:29:50.440 --> 00:29:51.944 If you have questions,

NOTE Confidence: 0.937942504882813

00:29:51.944 --> 00:29:53.448 the address is canceranswers@yale.edu

NOTE Confidence: 0.937942504882813

00:29:53.448 --> 00:29:55.519 and past editions of the program

NOTE Confidence: 0.937942504882813

00:29:55.519 --> 00:29:57.415 are available in audio and written

NOTE Confidence: 0.937942504882813

00:29:57.470 --> 00:29:59.048 form at Yalecancercenter.org.

NOTE Confidence: 0.937942504882813

00:29:59.050 --> 00:30:01.930 We hope you'll join us next week to

NOTE Confidence: 0.937942504882813

00:30:01.930 --> 00:30:04.739 learn more about the fight against

NOTE Confidence: 0.937942504882813

00:30:04.739 --> 00:30:07.745 cancer here on Connecticut public radio.