00:00:00.000 --> 00:00:02.750 Support for Yale Cancer Answers

NOTE Confidence: 0.8692404

00:00:02.750 --> 00:00:05.500 comes from AstraZeneca, dedicated

NOTE Confidence: 0.8692404

00:00:05.594 --> 00:00:08.982 to providing innovative treatment

NOTE Confidence: 0.8692404

00:00:08.982 --> 00:00:13.217 options for people living with

NOTE Confidence: 0.8692404

00:00:13.217 --> 00:00:14.064 cancer. Learn more at astrazeneca-us.com.

NOTE Confidence: 0.8692404

00:00:14.070 --> 00:00:15.502 Welcome to Yale Cancer Answers.

NOTE Confidence: 0.8692404

00:00:15.502 --> 00:00:16.934 with your host Dr. Anees Chagpar.

NOTE Confidence: 0.8692404

00:00:18.740 --> 00:00:20.655 Yale Cancer Answers features the

NOTE Confidence: 0.8692404

00:00:20.655 --> 00:00:23.009 latest information on cancer care by

NOTE Confidence: 0.8692404

00:00:23.009 --> 00:00:24.517 welcoming oncologists and specialists

NOTE Confidence: 0.8692404

00:00:24.517 --> 00:00:27.046 who are on the forefront of the

NOTE Confidence: 0.8692404

00:00:27.046 --> 00:00:28.786 battle to fight cancer. This week,

NOTE Confidence: 0.8692404

00:00:28.790 --> 00:00:30.465 it's a conversation about focal

NOTE Confidence: 0.8692404

00:00:30.465 --> 00:00:31.805 therapy for prostate cancer

NOTE Confidence: 0.8692404

00:00:31.805 --> 00:00:33.458 with Doctor Preston Sprenkle.

NOTE Confidence: 0.8692404

00:00:33.460 --> 00:00:35.585 Doctor Sprenkle is an associate

NOTE Confidence: 0.8692404

00:00:35.585 --> 00:00:38.526 professor of urology at the Yale School

NOTE Confidence: 0.8692404

00:00:38.526 --> 00:00:40.734 of Medicine where Doctor Chagpar

NOTE Confidence: 0.8692404

00:00:40.734 --> 00:00:43.779 is a professor of surgical oncology.

00:00:44.230 --> 00:00:46.470 September is

NOTE Confidence: 0.88048846

00:00:46.470 --> 00:00:48.262 Prostate Cancer Awareness Month.

NOTE Confidence: 0.88048846

00:00:48.270 --> 00:00:50.510 Tell us what's new and

NOTE Confidence: 0.88048846

00:00:50.510 --> 00:00:52.302 interesting in the world

NOTE Confidence: 0.88048846

00:00:52.310 --> 00:00:53.609 of prostate cancer.

NOTE Confidence: 0.88048846

00:00:53.609 --> 00:00:56.207 Well, we're making a lot of

NOTE Confidence: 0.88048846

00:00:56.207 --> 00:00:58.773 advances in the treatment of

NOTE Confidence: 0.88048846

00:00:58.773 --> 00:01:01.390 high risk advanced disease with

NOTE Confidence: 0.88048846

00:01:01.390 --> 00:01:03.825 many new medications that have

NOTE Confidence: 0.88048846

00:01:03.825 --> 00:01:06.230 been released in treatments

NOTE Confidence: 0.88048846

00:01:06.230 --> 00:01:08.030 on the diagnostic side,

NOTE Confidence: 0.88048846

00:01:08.030 --> 00:01:09.942 we've continued to pioneer

NOTE Confidence: 0.88048846

00:01:09.942 --> 00:01:11.376 improvements in noninvasive

NOTE Confidence: 0.88048846

00:01:11.376 --> 00:01:13.719 diagnostics such as prostate MRI.

NOTE Confidence: 0.88048846

00:01:13.720 --> 00:01:15.844 And we're very excited to continue

NOTE Confidence: 0.88048846

00:01:15.844 --> 00:01:17.687 to identify patients who may

NOTE Confidence: 0.88048846

00:01:17.687 --> 00:01:18.767 not need evaluation.

NOTE Confidence: 0.88048846

00:01:18.770 --> 00:01:21.658 Or maybe we can avoid a prostate biopsy.

NOTE Confidence: 0.88048846

00:01:21.660 --> 00:01:23.108 Wow, that all sounds

NOTE Confidence: 0.88313323

00:01:23.110 --> 00:01:23.830 really interesting.

NOTE Confidence: 0.88313323

00:01:23.830 --> 00:01:26.354 Those are two very

NOTE Confidence: 0.88313323

00:01:26.354 --> 00:01:28.159 different ends of the spectrum,

NOTE Confidence: 0.88313323

00:01:28.160 --> 00:01:31.094 so maybe we will take each of them in turn

NOTE Confidence: 0.88313323

00:01:31.094 --> 00:01:34.047 and work our way from prevention

NOTE Confidence: 0.88313323

00:01:34.047 --> 00:01:37.187 all the way up to metastatic disease.

NOTE Confidence: 0.88313323

00:01:37.190 --> 00:01:39.710 In terms of prevention and detection,

NOTE Confidence: 0.88313323

00:01:39.710 --> 00:01:42.188 you mentioned that you have been doing

NOTE Confidence: 0.88313323

00:01:42.188 --> 00:01:44.768 some great work in terms of detection.

NOTE Confidence: 0.88313323

00:01:44.770 --> 00:01:47.026 Tell us more about that and

NOTE Confidence: 0.88313323

00:01:47.030 --> 00:01:49.837 what are the current guidelines in terms

NOTE Confidence: 0.88313323

00:01:49.837 --> 00:01:53.237 of what people should be doing in order

NOTE Confidence: 0.88313323

00:01:53.237 --> 00:01:55.580 to either prevent prostate cancer or

NOTE Confidence: 0.89631885

00:01:55.580 --> 00:01:58.429 find it early.

NOTE Confidence: 0.89631885

00:01:58.430 --> 00:02:00.460 Prostate cancer screening, which is evaluation of risk

NOTE Confidence: 0.89631885

00:02:00.460 --> 00:02:02.084 factors for prostate cancer,

NOTE Confidence: 0.89631885

00:02:02.090 --> 00:02:03.718 has been somewhat controversial

NOTE Confidence: 0.89631885

00:02:03.718 --> 00:02:05.756 over the last decade. Fortunately,

NOTE Confidence: 0.89631885

00:02:05.756 --> 00:02:08.598 within the past five or six years,

NOTE Confidence: 0.89631885

00:02:08.600 --> 00:02:11.596 it has become pretty clear that screening

NOTE Confidence: 0.89631885

00:02:11.596 --> 00:02:14.634 for prostate cancer remains a very important

NOTE Confidence: 0.89631885

00:02:14.634 --> 00:02:17.160 part of menn's general health.

NOTE Confidence: 0.89631885

00:02:17.160 --> 00:02:19.644 So we screen for prostate cancer

NOTE Confidence: 0.89631885

00:02:19.644 --> 00:02:23.089 starting in men at around the age of 50.

NOTE Confidence: 0.89631885

00:02:23.090 --> 00:02:26.204 If a man has a higher risk feature for

NOTE Confidence: 0.89631885

00:02:26.204 --> 00:02:28.219 potentially having prostate cancer,

NOTE Confidence: 0.89631885

00:02:28.220 --> 00:02:30.632 which currently is a first degree

NOTE Confidence: 0.89631885

00:02:30.632 --> 00:02:32.678 relative with prostate cancer or

NOTE Confidence: 0.89631885

00:02:32.678 --> 00:02:34.538 being of Afro Caribbean descent,

NOTE Confidence: 0.89631885

00:02:34.540 --> 00:02:37.126 those men can be screened even

NOTE Confidence: 0.89631885

00:02:37.126 --> 00:02:39.678 earlier at around age 40 to 45.

NOTE Confidence: 0.89631885

00:02:39.680 --> 00:02:40.862 And by screening.

NOTE Confidence: 0.89631885

00:02:40.862 --> 00:02:43.226 this entails a PSA blood test.

NOTE Confidence: 0.89631885

00:02:43.230 --> 00:02:45.234 So it's a simple blood test

NOTE Confidence: 0.89631885

00:02:45.234 --> 00:02:47.630 as well as a

NOTE Confidence: 0.89631885

00:02:47.630 --> 00:02:49.325 physical examination of the prostate

NOTE Confidence: 0.89631885

00:02:49.325 --> 00:02:51.618 with a digital rectal exam.

NOTE Confidence: 0.89539075

00:02:51.620 --> 00:02:54.052 Are those recommendations in terms of if you

NOTE Confidence: 0.89539075

00:02:54.052 --> 00:02:56.530 don't have one of those high risk features,

NOTE Confidence: 0.89539075

00:02:56.530 --> 00:02:59.068 every man at the age of 50 should have

NOTE Confidence: 0.89539075

00:02:59.068 --> 00:03:01.595 a PSA and a digital rectal exam?

NOTE Confidence: 0.89539075

00:03:01.595 --> 00:03:04.448 As you say,

NOTE Confidence: 0.89539075

00:03:04.448 --> 00:03:06.450 it's been so controversial and it seems

NOTE Confidence: 0.89539075

00:03:06.513 --> 00:03:08.507 like it gets really confusing.

NOTE Confidence: 0.89539075

00:03:08.507 --> 00:03:10.349 They say everybody should do this,

NOTE Confidence: 0.89539075

00:03:10.350 --> 00:03:12.186 sometimes they say, well,

NOTE Confidence: 0.89539075

00:03:12.190 --> 00:03:14.008 you should really talk to your

NOTE Confidence: 0.89539075

00:03:14.008 --> 00:03:15.570 doctor about pros and cons.

NOTE Confidence: 0.89539075

00:03:15.570 --> 00:03:17.719 So where are we at right now?

NOTE Confidence: 0.90739983

00:03:17.800 --> 00:03:20.957 I think the large part

NOTE Confidence: 0.90739983

00:03:20.957 --> 00:03:23.689 depends on who you talk to.

NOTE Confidence: 0.90739983

00:03:23.690 --> 00:03:26.290 Unfortunately, the US Preventive Services

NOTE Confidence: 0.90739983

00:03:26.290 --> 00:03:29.853 Task Force which is given the power

NOTE Confidence: 0.90739983

00:03:29.853 --> 00:03:32.505 to review and make recommendations on

NOTE Confidence: 0.90739983

00:03:32.505 --> 00:03:35.488 what kind of screening is necessary,

NOTE Confidence: 0.90739983

00:03:35.490 --> 00:03:38.339 in 2016, finally gave prostate cancer a

NOTE Confidence: 0.90739983

00:03:38.339 --> 00:03:41.673 more likely to be beneficial than not

NOTE Confidence: 0.90739983

00:03:41.673 --> 00:03:44.540 in terms of prostate cancer screening,

NOTE Confidence: 0.90739983

00:03:44.540 --> 00:03:46.700 so it is still, however,

NOTE Confidence: 0.90739983

00:03:46.700 --> 00:03:49.280 something that not everyone does routinely.

NOTE Confidence: 0.90739983

00:03:49.280 --> 00:03:52.288 I think for a man who is concerned

NOTE Confidence: 0.90739983

00:03:52.288 --> 00:03:54.889 about possibly having prostate cancer,

NOTE Confidence: 0.90739983

00:03:54.890 --> 00:03:57.040 they definitely should be screened.

NOTE Confidence: 0.90739983

00:03:57.040 --> 00:04:00.057 There are men who preferred not to,

NOTE Confidence: 0.90739983

00:04:00.060 --> 00:04:01.353 and the language,

NOTE Confidence: 0.90739983

00:04:01.353 --> 00:04:04.370 as used in many of the guidelines,

NOTE Confidence: 0.90739983

00:04:04.370 --> 00:04:05.690 is informed decision-making.

NOTE Confidence: 0.90739983

00:04:05.690 --> 00:04:07.890 And informed decision making is

NOTE Confidence: 0.90739983

00:04:07.890 --> 00:04:09.900 a challenging term because who

NOTE Confidence: 0.90739983

00:04:09.900 --> 00:04:11.324 is informing the patient?

NOTE Confidence: 0.90739983

00:04:11.330 --> 00:04:13.085 Very often primary care physicians

NOTE Confidence: 0.90739983

00:04:13.085 --> 00:04:16.126 do not have time to have a full

NOTE Confidence: 0.90739983

00:04:16.126 --> 00:04:17.742 informed discussion with their

NOTE Confidence: 0.90739983

00:04:17.742 --> 00:04:20.640 patients about what are the risks and

NOTE Confidence: 0.90739983

00:04:20.640 --> 00:04:22.665 benefits of prostate cancer screening.

NOTE Confidence: 0.90739983

00:04:22.670 --> 00:04:25.942 And so it is kind of challenging for

NOTE Confidence: 0.90739983

00:04:25.942 --> 00:04:30.052 them to be able to figure out when they

NOTE Confidence: 0.90739983

00:04:30.052 --> 00:04:33.467 should screen and when they should not.

NOTE Confidence: 0.90739983

00:04:33.470 --> 00:04:35.355 As urologists we are very comfortable

NOTE Confidence: 0.90739983

00:04:35.355 --> 00:04:36.863 having those discussions,

NOTE Confidence: 0.90739983

00:04:36.870 --> 00:04:39.894 but it's hard to say that across the

NOTE Confidence: 0.90739983

00:04:39.894 --> 00:04:42.096 board everyone should be screened.

00:04:48.370 --> 00:04:51.090 I think I'm still a little confused because,

NOTE Confidence: 0.8970561

00:04:51.090 --> 00:04:52.790 you know, at least coming

NOTE Confidence: 0.8970561

00:04:52.790 --> 00:04:54.490 from the breast cancer world,

NOTE Confidence: 0.8970561

00:04:54.490 --> 00:04:57.550 which is kind of my neck of the woods,

NOTE Confidence: 0.8970561

00:04:57.550 --> 00:05:00.086 it seems to me that screening

NOTE Confidence: 0.8970561

00:05:00.086 --> 00:05:02.308 allows people to detect cancer earlier,

NOTE Confidence: 0.8970561

00:05:02.310 --> 00:05:05.710 so if you told a woman

NOTE Confidence: 0.8970561

00:05:05.710 --> 00:05:07.410 you can get a mammogram,

NOTE Confidence: 0.8970561

00:05:07.410 --> 00:05:10.130 but it's really up to you,

NOTE Confidence: 0.8970561

00:05:10.130 --> 00:05:11.830 most women would say, well,

NOTE Confidence: 0.8970561

00:05:11.830 --> 00:05:14.557 I want to detect cancer early so that it

NOTE Confidence: 0.8970561

00:05:14.557 --> 00:05:17.239 can be treated more effectively and it

NOTE Confidence: 0.8970561

00:05:17.239 --> 00:05:20.298 reduces my chances of dying of the disease.

NOTE Confidence: 0.8970561

00:05:20.300 --> 00:05:22.304 So what does that conversation really

NOTE Confidence: 0.8970561

00:05:22.304 --> 00:05:24.839 look like in terms of prostate cancer?

NOTE Confidence: 0.8970561

00:05:24.840 --> 00:05:27.972 When you're talking to a man about,

NOTE Confidence: 0.8970561

00:05:27.980 --> 00:05:29.720 should you get prostate cancer

NOTE Confidence: 0.8970561

00:05:29.720 --> 00:05:30.764 screening or not?

NOTE Confidence: 0.8970561

00:05:30.770 --> 00:05:32.720 Let's suppose that they don't have

NOTE Confidence: 0.8970561

00:05:32.720 --> 00:05:34.960 one of those high risk features.

NOTE Confidence: 0.8970561

00:05:34.960 --> 00:05:37.172 They haven't had a family history and

NOTE Confidence: 0.8970561

00:05:37.172 --> 00:05:39.840 they are not of Afro Caribbean descent,

NOTE Confidence: 0.8970561

00:05:39.840 --> 00:05:42.283 but they are your regular 60

NOTE Confidence: 0.8970561

00:05:42.283 --> 00:05:44.212 year old Caucasian gentleman who

NOTE Confidence: 0.8970561

00:05:44.212 --> 00:05:46.252 really doesn't have family history

NOTE Confidence: 0.8970561

00:05:46.252 --> 00:05:48.648 of cancer but doesn't want to be

NOTE Confidence: 0.8970561

00:05:48.648 --> 00:05:50.776 the first one to get it either.

NOTE Confidence: 0.8970561

00:05:50.776 --> 00:05:54.038 And doesn't want to find it late.

NOTE Confidence: 0.8970561

00:05:54.040 --> 00:05:56.260 What does that conversation look like?

00:05:57.370 --> 00:05:59.590 How do men make that decision?

NOTE Confidence: 0.8970561

00:05:59.590 --> 00:06:01.921 because it seems to me that a

NOTE Confidence: 0.8970561

00:06:01.921 --> 00:06:03.818 lot of gentlemen are going

NOTE Confidence: 0.8970561

00:06:03.818 --> 00:06:05.878 to do whatever you recommend.

NOTE Confidence: 0.91886014

00:06:07.080 --> 00:06:09.924 I think you hit it on the head

NOTE Confidence: 0.91886014

00:06:09.924 --> 00:06:12.966 when you said men don't want to be the

NOTE Confidence: 0.91886014

00:06:12.966 --> 00:06:16.098 first one to be diagnosed with it either.

NOTE Confidence: 0.91886014

00:06:16.100 --> 00:06:18.800 I think there is a large

NOTE Confidence: 0.91886014

00:06:18.800 --> 00:06:22.388 component of fear.

NOTE Confidence: 0.91886014

00:06:22.390 --> 00:06:24.750 And as we discussed mens health,

NOTE Confidence: 0.91886014

00:06:24.750 --> 00:06:28.558 many men do not necessarily take care of

NOTE Confidence: 0.91886014

00:06:28.558 --> 00:06:31.809 themselves to the extent that women do,

NOTE Confidence: 0.91886014

00:06:31.810 --> 00:06:34.626 and so in a sense, we,

NOTE Confidence: 0.91886014

00:06:34.626 --> 00:06:37.362 as urologists and as physicians that

NOTE Confidence: 0.91886014

00:06:37.362 --> 00:06:39.820 are concerned with men's health,

NOTE Confidence: 0.91886014

00:06:39.820 --> 00:06:43.246 a large part of it is

NOTE Confidence: 0.91886014

00:06:43.250 --> 00:06:44.902 an information campaign to

NOTE Confidence: 0.91886014

00:06:44.902 --> 00:06:47.931 reassure men that we do have ways

NOTE Confidence: 0.91886014

00:06:47.931 --> 00:06:50.306 of managing these scary diseases,

NOTE Confidence: 0.91886014

00:06:50.310 --> 00:06:53.574 so the conversations are a large part

NOTE Confidence: 0.91886014

00:06:53.574 --> 00:06:56.039 about information,

NOTE Confidence: 0.91886014

00:06:56.040 --> 00:06:58.749 and helping men assess what is their

NOTE Confidence: 0.91886014

00:06:58.749 --> 00:07:01.768 actual risk of having prostate cancer.

NOTE Confidence: 0.91886014

00:07:01.770 --> 00:07:04.416 What is the drawback to screening?

NOTE Confidence: 0.91886014

00:07:04.420 --> 00:07:07.066 What is a drawback to having

NOTE Confidence: 0.91886014

00:07:07.066 --> 00:07:08.830 a simple blood test,

NOTE Confidence: 0.91886014

00:07:08.830 --> 00:07:11.082 which can be exceptionally

NOTE Confidence: 0.91886014

00:07:11.082 --> 00:07:13.334 reassuring if it's normal

NOTE Confidence: 0.91886014

00:07:13.340 --> 00:07:15.180 and a little bit anxiety provoking

NOTE Confidence: 0.91886014

00:07:15.180 --> 00:07:16.227 if it's not.

NOTE Confidence: 0.91886014

00:07:16.227 --> 00:07:19.580 But then what are the benefits of doing that?

NOTE Confidence: 0.91886014

00:07:19.580 --> 00:07:21.960 So there are more extended risk benefit

NOTE Confidence: 0.91886014

00:07:21.960 --> 00:07:24.348 discussions on a pretty routine basis.

NOTE Confidence: 0.91886014

00:07:25.096 --> 00:07:26.961 Overall the important thing to

NOTE Confidence: 0.91886014

00:07:26.961 --> 00:07:28.833 understand is that

NOTE Confidence: 0.91886014

00:07:28.833 --> 00:07:30.217 prostate cancer is common,

NOTE Confidence: 0.91886014

00:07:30.220 --> 00:07:33.523 but it's not so common that everyone gets it.

NOTE Confidence: 0.91886014

00:07:33.530 --> 00:07:35.034 It's common enough though,

NOTE Confidence: 0.91886014

00:07:35.034 --> 00:07:37.731 that most men as they get older

NOTE Confidence: 0.91886014

00:07:37.731 --> 00:07:40.265 are at risk and it's worth having

NOTE Confidence: 0.91886014

00:07:40.265 --> 00:07:42.451 some simple tests to evaluate if

NOTE Confidence: 0.91886014

00:07:42.451 --> 00:07:44.988 you are at higher risk than others.

NOTE Confidence: 0.91886014

00:07:44.988 --> 00:07:47.676 Because cancer can definitely be

NOTE Confidence: 0.91886014

00:07:47.676 --> 00:07:50.450 treated and stopped in his tracks, right?

NOTE Confidence: 0.8847773

00:07:50.450 --> 00:07:53.040 So it sounds like the general recommendation,

NOTE Confidence: 0.8847773

00:07:53.040 --> 00:07:55.260 and I know that

NOTE Confidence: 0.8847773

00:07:55.260 --> 00:07:57.480 we don't always want to give

NOTE Confidence: 0.8847773

00:07:57.480 --> 00:07:58.220 general recommendations,

NOTE Confidence: 0.8847773

00:07:58.220 --> 00:08:00.794 but it seems to me that in general this

NOTE Confidence: 0.8847773

00:08:00.794 --> 00:08:03.191 is something that people really should

NOTE Confidence: 0.8847773

00:08:03.191 --> 00:08:06.126 consider andvtalk to their doctor

NOTE Confidence: 0.8847773

00:08:06.126 --> 00:08:08.580 about in terms of getting screened.

NOTE Confidence: 0.8847773

00:08:08.580 --> 00:08:11.163 So let's move on to the next kind

NOTE Confidence: 0.8847773

00:08:11.163 --> 00:08:14.126 of phase after screening comes detection,

NOTE Confidence: 0.8847773

00:08:14.130 --> 00:08:16.890 and you alluded to some of the really

NOTE Confidence: 0.8847773

00:08:16.890 --> 00:08:19.058 interesting work that's been happening

NOTE Confidence: 0.8847773

00:08:19.060 --> 00:08:21.196 and pioneered really here at Yale.

NOTE Confidence: 0.8847773

00:08:21.200 --> 00:08:23.784 Tell us more about that work and

NOTE Confidence: 0.8847773

00:08:23.784 --> 00:08:26.814 where we are in terms of state of the

NOTE Confidence: 0.8847773

00:08:26.814 --> 00:08:29.029 art detection for prostate cancer.

NOTE Confidence: 0.8447579

00:08:30.500 --> 00:08:32.957 The first step as you

NOTE Confidence: 0.8447579

00:08:32.957 --> 00:08:34.933 mentioned is screening so that the

NOTE Confidence: 0.8447579

00:08:34.933 --> 00:08:37.364 first test with a PSA blood test and a

NOTE Confidence: 0.8447579

00:08:37.364 --> 00:08:39.548 prostate exam are the initial ways

NOTE Confidence: 0.8447579

00:08:39.548 --> 00:08:42.332 that we evaluate if a man may be at

NOTE Confidence: 0.8447579

00:08:42.332 --> 00:08:44.700 risk for harboring a prostate cancer.

00:08:46.720 --> 00:08:49.720 As you mentioned, Yale was one of the

NOTE Confidence: 0.8447579

00:08:49.720 --> 00:08:52.320 first sites around the country to

NOTE Confidence: 0.8447579

00:08:52.320 --> 00:08:55.452 be interested in use an MRI or a non

NOTE Confidence: 0.8447579

00:08:55.452 --> 00:08:58.666 invasive imaging test to evaluate a prostate

NOTE Confidence: 0.8447579

00:08:58.670 --> 00:09:01.052 and look at a prostate for

NOTE Confidence: 0.8447579

00:09:01.052 --> 00:09:02.640 possible cancers within it.

NOTE Confidence: 0.8447579

00:09:02.640 --> 00:09:04.585 It's really interesting as the

NOTE Confidence: 0.8447579

00:09:04.585 --> 00:09:07.010 prostate is the only solid organ

NOTE Confidence: 0.8447579

00:09:07.010 --> 00:09:09.386 until we started doing these mris,

NOTE Confidence: 0.8447579

00:09:09.390 --> 00:09:12.326 for which we did not have cross sectional

NOTE Confidence: 0.8447579

00:09:12.326 --> 00:09:15.191 imaging that could look inside the

NOTE Confidence: 0.8447579

00:09:15.191 --> 00:09:18.130 inside that organ to evaluate for tumors.

NOTE Confidence: 0.8447579

00:09:18.130 --> 00:09:20.846 So this has been a real boon

NOTE Confidence: 0.8447579

00:09:20.846 --> 00:09:23.568 in terms of our ability to

NOTE Confidence: 0.8447579

00:09:23.570 --> 00:09:24.207 diagnose prostate cancer in

NOTE Confidence: 0.8447579

00:09:24.207 --> 00:09:28.666 a non invasive manner.

NOTE Confidence: 0.8592296

00:09:30.220 --> 00:09:32.488 And so if somebody's

NOTE Confidence: 0.8592296

00:09:32.488 --> 00:09:34.887 PSA comes back high or

NOTE Confidence: 0.8592296

00:09:34.887 --> 00:09:36.915 somebody finds a lump in their

NOTE Confidence: 0.8592296

00:09:36.994 --> 00:09:39.299 prostate on digital rectal exam,

NOTE Confidence: 0.8592296

00:09:39.300 --> 00:09:41.470 is that the next step?

NOTE Confidence: 0.8592296

00:09:41.470 --> 00:09:43.648 It is at our institution.

NOTE Confidence: 0.8592296

00:09:43.650 --> 00:09:46.184 It is not the next step everywhere,

NOTE Confidence: 0.8592296

00:09:46.190 --> 00:09:47.875 because the reading and performance

NOTE Confidence: 0.8592296

00:09:47.875 --> 00:09:50.405 of the mris is an acquired skill

NOTE Confidence: 0.8592296

00:09:50.405 --> 00:09:52.355 and it does take experience.

NOTE Confidence: 0.8592296

00:09:52.360 --> 00:09:54.810 It is becoming more widespread to use

NOTE Confidence: 0.8592296

00:09:54.810 --> 00:09:58.167 an MRI of the prostate as the next step,

NOTE Confidence: 0.8592296

00:09:58.170 --> 00:10:00.120 and there recently have been

NOTE Confidence: 0.8592296

00:10:00.120 --> 00:10:02.676 some publications in major medical journals,

NOTE Confidence: 0.8592296

00:10:02.680 --> 00:10:04.380 including the New England

NOTE Confidence: 0.8592296

00:10:04.380 --> 00:10:05.655 Journal of Medicine,

NOTE Confidence: 0.8592296

00:10:05.660 --> 00:10:08.210 looking at MRI of the prostate,

NOTE Confidence: 0.8592296

00:10:08.210 --> 00:10:10.220 and really the important thing

NOTE Confidence: 0.8592296

00:10:10.220 --> 00:10:12.761 about MRI is combining it with

NOTE Confidence: 0.8592296

00:10:12.761 --> 00:10:14.597 a targeted prostate biopsy.

NOTE Confidence: 0.8592296

00:10:14.600 --> 00:10:16.628 So then using that information from

NOTE Confidence: 0.8592296

00:10:16.628 --> 00:10:19.412 the MRI and if suspicious areas are

NOTE Confidence: 0.8592296

00:10:19.412 --> 00:10:21.224 identified using that information

NOTE Confidence: 0.8592296

00:10:21.224 --> 00:10:23.643 to target or direct prostate

NOTE Confidence: 0.8592296

00:10:23.643 --> 00:10:26.108 biopsies to detect prostate cancer,

NOTE Confidence: 0.8592296

00:10:26.110 --> 00:10:28.660 the MRI alone is very useful,

NOTE Confidence: 0.8592296

00:10:28.660 --> 00:10:30.840 but it's really in combination

NOTE Confidence: 0.8592296

00:10:30.840 --> 00:10:32.148 with the biopsy.

NOTE Confidence: 0.8592296

00:10:32.150 --> 00:10:35.286 And is MRI

NOTE Confidence: 0.8603246

00:10:35.290 --> 00:10:37.250 covered by insurance

NOTE Confidence: 0.8603246

00:10:37.250 --> 00:10:39.632 for people who are at risk

NOTE Confidence: 0.8603246

00:10:39.632 --> 00:10:41.560 of prostate cancer or

NOTE Confidence: 0.8603246

00:10:41.560 --> 00:10:43.145 people who have an elevated

NOTE Confidence: 0.8603246

00:10:43.145 --> 00:10:45.809 PSA and so on, are most

NOTE Confidence: 0.8603246

00:10:45.809 --> 00:10:47.825 insurance companies covering this?

NOTE Confidence: 0.8603246

00:10:47.830 --> 00:10:49.398 I would say most

NOTE Confidence: 0.8603246

00:10:49.400 --> 00:10:51.360 are and especially now after

NOTE Confidence: 0.8603246

00:10:51.360 --> 00:10:53.320 some of those recent articles,

NOTE Confidence: 0.8603246

00:10:53.320 --> 00:10:56.448 including the one in the New England Journal,

NOTE Confidence: 0.8603246

00:10:56.450 --> 00:10:58.808 there is more support of that,

NOTE Confidence: 0.8603246

00:10:58.810 --> 00:11:01.624 but there still are some insurance

NOTE Confidence: 0.8603246

00:11:01.624 --> 00:11:04.798 companies that will not pay for an MRI

NOTE Confidence: 0.8603246

00:11:04.800 --> 00:11:07.030 as an initial diagnostic biopsy,

NOTE Confidence: 0.8603246

00:11:07.030 --> 00:11:09.706 they still require an initial transrectal

NOTE Confidence: 0.8603246

00:11:09.706 --> 00:11:11.490 ultrasound guided prostate biopsy,

NOTE Confidence: 0.8603246

00:11:11.490 --> 00:11:14.563 which is the goal which has been

NOTE Confidence: 0.8603246

00:11:14.563 --> 00:11:17.289 the gold standard for 30-40 years.

NOTE Confidence: 0.85390764

00:11:19.320 --> 00:11:20.880 They will require that first,

NOTE Confidence: 0.85390764

00:11:20.880 --> 00:11:23.312 and only if that does not detect cancer

NOTE Confidence: 0.85390764

00:11:23.312 --> 00:11:25.868 would they pay for an MRI targeted biopsy.

NOTE Confidence: 0.85390764

00:11:25.870 --> 00:11:27.118 I believe we're continuing

NOTE Confidence: 0.85390764

00:11:27.118 --> 00:11:28.994 to see a shift, though toward

NOTE Confidence: 0.85390764

00:11:28.994 --> 00:11:31.490 use of MRI as an initial diagnostic tool.

NOTE Confidence: 0.85390764

00:11:31.490 --> 00:11:34.298 In the United Kingdom

NOTE Confidence: 0.85390764

00:11:34.300 --> 00:11:35.672 it actually is mandatory.

NOTE Confidence: 0.85390764

00:11:35.672 --> 00:11:37.387 Anyone with an abnormal PSA

NOTE Confidence: 0.85390764

00:11:37.387 --> 00:11:38.980 that next step is an MRI,

NOTE Confidence: 0.85390764

00:11:38.980 --> 00:11:41.779 and they use it as a screening tool.

NOTE Confidence: 0.85390764

00:11:41.780 --> 00:11:43.652 We're not quite to that point

NOTE Confidence: 0.85390764

00:11:43.652 --> 00:11:44.900 yet in the United

NOTE Confidence: 0.85390764

00:11:44.900 --> 00:11:46.778 States.

NOTE Confidence: 0.85390764

00:11:46.780 --> 00:11:48.064 That's so interesting because we always think

NOTE Confidence: 0.85390764

00:11:48.064 --> 00:11:49.669 about the UK as being

NOTE Confidence: 0.85390764

00:11:49.670 --> 00:11:51.818 a country that really does put

NOTE Confidence: 0.85390764

00:11:51.818 --> 00:11:54.375 a premium on value in terms of

NOTE Confidence: 0.85390764

00:11:54.375 --> 00:11:56.825 healthcare costs and so on

NOTE Confidence: 0.85390764

00:11:56.907 --> 00:11:59.317 and their National Health System.

NOTE Confidence: 0.85390764

00:11:59.320 --> 00:12:01.636 It seems if they're adopting it,

NOTE Confidence: 0.85390764

00:12:01.640 --> 00:12:04.480 they have such a rigorous process to

NOTE Confidence: 0.85390764

00:12:04.480 --> 00:12:07.427 make sure that things are cost effective,

NOTE Confidence: 0.85390764

00:12:07.430 --> 00:12:10.125 that that would be reasonable to adopt.

00:12:11.290 --> 00:12:13.796 I think we're starting to get into

NOTE Confidence: 0.87191916

00:12:13.796 --> 00:12:16.907 some of the nuances of

NOTE Confidence: 0.87191916

00:12:16.907 --> 00:12:19.371 the health care systems and some

NOTE Confidence: 0.87191916

00:12:19.371 --> 00:12:21.975 of the cost and price disparities

NOTE Confidence: 0.87191916

00:12:21.980 --> 00:12:24.140 across providers that we see in

NOTE Confidence: 0.87191916

00:12:24.140 --> 00:12:26.739 the United States,

NOTE Confidence: 0.87191916

00:12:26.740 --> 00:12:29.122 which is a much bigger and

NOTE Confidence: 0.87191916

00:12:29.122 --> 00:12:30.313 more complicated discussion.

NOTE Confidence: 0.87191916

00:12:30.320 --> 00:12:32.906 But in general MRI is significantly

NOTE Confidence: 0.87191916

00:12:32.906 --> 00:12:35.877 cheaper across the pond than it is here.

NOTE Confidence: 0.87789434

00:12:36.990 --> 00:12:39.150 Interesting, so the next step,

NOTE Confidence: 0.87789434

00:12:39.150 --> 00:12:42.590 as you mentioned that goes hand in hand

NOTE Confidence: 0.87789434

00:12:42.590 --> 00:12:46.055 with the MRI of course is the biopsy.

NOTE Confidence: 0.87789434

00:12:46.060 --> 00:12:48.988 So tell me a little bit more

NOTE Confidence: 0.87789434

00:12:48.988 --> 00:12:52.253 about some of the work that's been

NOTE Confidence: 0.87789434

00:12:52.253 --> 00:12:54.693 going on with prostate biopsies.

NOTE Confidence: 0.87789434

00:12:54.700 --> 00:12:57.340 I understand that people are now

NOTE Confidence: 0.87789434

00:12:57.340 --> 00:12:59.100 looking at artificial intelligence

NOTE Confidence: 0.87789434

00:12:59.166 --> 00:13:01.246 and machine learning to improve

NOTE Confidence: 0.87789434

00:13:01.246 --> 00:13:02.910 biopsies of the prostate.

NOTE Confidence: 0.87789434

00:13:02.910 --> 00:13:05.070 That just sounds so Avantgarde.

NOTE Confidence: 0.82170516

00:13:07.410 --> 00:13:10.418 Well it is. It is one of the

NOTE Confidence: 0.82170516

00:13:10.418 --> 00:13:12.460 directions that

NOTE Confidence: 0.82170516

00:13:12.460 --> 00:13:14.888 we are embracing technology

NOTE Confidence: 0.82170516

00:13:14.888 --> 00:13:17.923 to improve what we do

NOTE Confidence: 0.82170516

00:13:17.930 --> 00:13:19.630 using that same MRI image

NOTE Confidence: 0.82170516

00:13:19.630 --> 00:13:22.140 in an MRI of the prostate,

NOTE Confidence: 0.82170516

00:13:22.140 --> 00:13:24.620 we are able to make a 3D model

NOTE Confidence: 0.82170516

00:13:24.620 --> 00:13:27.036 of the prostate gland and we

NOTE Confidence: 0.82170516

00:13:27.036 --> 00:13:29.598 combine that with a real time

NOTE Confidence: 0.82170516

00:13:29.690 --> 00:13:32.708 ultrasound 3D model of the prostate

NOTE Confidence: 0.82170516

00:13:32.710 --> 00:13:34.936 to guide our needle biopsy in

NOTE Confidence: 0.82170516

00:13:34.936 --> 00:13:37.275 the office so it's different than

NOTE Confidence: 0.82170516

00:13:37.275 --> 00:13:39.977 doing it in the MRI scanner where

NOTE Confidence: 0.82170516

00:13:39.977 --> 00:13:42.227 you do have an image and you

NOTE Confidence: 0.82170516

00:13:42.227 --> 00:13:44.864 have a 2D image and you can place

NOTE Confidence: 0.82170516

00:13:44.864 --> 00:13:47.350 the needle by using 3D imaging

NOTE Confidence: 0.82170516

00:13:47.350 --> 00:13:49.590 which allows us to perform the procedure

NOTE Confidence: 0.82170516

00:13:49.590 --> 00:13:51.633 in the office in the outpatient

NOTE Confidence: 0.82170516

00:13:51.633 --> 00:13:54.006 setting in a more convenient and for

NOTE Confidence: 0.82170516

00:13:54.071 --> 00:13:56.266 many patients more comfortable way.

NOTE Confidence: 0.82170516

00:13:56.270 --> 00:13:58.556 The machine learning is

NOTE Confidence: 0.82170516

00:13:58.556 --> 00:14:00.792 enhancing our modeling so it is

NOTE Confidence: 0.82170516

00:14:00.792 --> 00:14:02.700 making the way that we target

NOTE Confidence: 0.82170516

00:14:02.700 --> 00:14:04.836 the biopsy is much more accurate.

NOTE Confidence: 0.86124295

00:14:05.520 --> 00:14:08.896 We need to do delve more into that,

NOTE Confidence: 0.86124295

00:14:08.900 --> 00:14:11.860 but first we need to take short break

NOTE Confidence: 0.86124295

00:14:11.860 --> 00:14:14.824 for a medical minute. Please stay

NOTE Confidence: 0.86124295

00:14:14.824 --> 00:14:17.360 tuned to learn more about prostate

NOTE Confidence: 0.86124295

00:14:17.360 --> 00:14:19.480 cancer with my guest doctor

NOTE Confidence: 0.86124295

00:14:19.480 --> 00:14:21.550 Preston Spenkle.

NOTE Confidence: 0.86124295

00:14:21.550 --> 00:14:24.130 Support for Yale Cancer Answers comes from Astra Zeneca.

NOTE Confidence: 0.86124295

00:14:24.130 --> 00:14:25.786 Proud partner and personalized

NOTE Confidence: 0.86124295

00:14:25.786 --> 00:14:27.028 medicine developing tailored

NOTE Confidence: 0.86124295

00:14:27.028 --> 00:14:28.790 treatments for cancer patients.

NOTE Confidence: 0.86124295

00:14:28.790 --> 00:14:32.130 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.86124295

00:14:32.130 --> 00:14:34.916 This is a medical minute about Melanoma.

NOTE Confidence: 0.86124295

00:14:34.920 --> 00:14:36.920 While Melanoma accounts for only

NOTE Confidence: 0.86124295

00:14:36.920 --> 00:14:39.168 about 4% of skin cancer cases,

NOTE Confidence: 0.86124295

00:14:39.168 --> 00:14:41.340 it causes the most skin cancer

NOTE Confidence: 0.86124295

00:14:41.417 --> 00:14:43.297 deaths. When detected early,

NOTE Confidence: 0.86124295

00:14:43.300 --> 00:14:45.290 however, Melanoma is easily treated

NOTE Confidence: 0.86124295

00:14:45.290 --> 00:14:46.882 and highly curable. Clinical

NOTE Confidence: 0.86124295

00:14:46.890 --> 00:14:49.182 trials are currently underway to test

NOTE Confidence: 0.86124295

00:14:49.182 --> 00:14:51.280 innovative new treatments for Melanoma.

NOTE Confidence: 0.86124295

00:14:51.280 --> 00:14:53.806 The goal of the specialized programs

NOTE Confidence: 0.86124295

00:14:53.806 --> 00:14:56.299 of research excellence in skin cancer

NOTE Confidence: 0.86124295

00:14:56.299 --> 00:14:58.868 or spore grant is to better understand

NOTE Confidence: 0.86124295

00:14:58.868 --> 00:15:02.063 the biology of skin cancer with a focus

NOTE Confidence: 0.86124295

00:15:02.063 --> 00:15:04.585 on discovering targets that will lead

NOTE Confidence: 0.86124295

00:15:04.585 --> 00:15:06.810 to improved diagnosis and treatment.

NOTE Confidence: 0.86124295

00:15:06.810 --> 00:15:08.914 More information is available

NOTE Confidence: 0.86124295

00:15:08.914 --> 00:15:09.966 at yalecancercenter.org.

NOTE Confidence: 0.86124295

00:15:09.970 --> 00:15:15.130 You're listening to Connecticut public radio.

NOTE Confidence: 0.86124295

00:15:15.130 --> 00:15:15.550 Welcome

NOTE Confidence: 0.8515469

00:15:15.550 --> 00:15:17.640 back to Yale Cancer Answers.

NOTE Confidence: 0.8515469

00:15:17.640 --> 00:15:19.901 This is doctor Anees Chagpar

NOTE Confidence: 0.8515469

00:15:19.901 --> 00:15:23.055 and I am joined tonight by my

NOTE Confidence: 0.8515469

00:15:23.055 --> 00:15:25.155 guest doctor Preston Sprenkle.

NOTE Confidence: 0.8515469

00:15:25.160 --> 00:15:27.360 We're talking about diagnosis and

NOTE Confidence: 0.8515469

00:15:27.360 --> 00:15:29.560 treatment of prostate cancer and

NOTE Confidence: 0.8515469

00:15:29.629 --> 00:15:31.945 right before the break Preston you

NOTE Confidence: 0.8515469

00:15:31.945 --> 00:15:34.390 were talking about this really cool

NOTE Confidence: 0.8515469

00:15:34.390 --> 00:15:36.868 technique of using MRI to diagnose

NOTE Confidence: 0.8515469

00:15:36.868 --> 00:15:39.340 prostate cancer and what was interesting

NOTE Confidence: 0.8515469

00:15:39.340 --> 00:15:42.296 was that you were talking about how

NOTE Confidence: 0.8515469

00:15:42.296 --> 00:15:44.804 that really gets paired with biopsy,

NOTE Confidence: 0.8515469

00:15:44.810 --> 00:15:47.000 but you're not doing biopsies

NOTE Confidence: 0.8515469

00:15:47.000 --> 00:15:48.312 in the MRI suite,

NOTE Confidence: 0.8515469

00:15:48.312 --> 00:15:50.986 which I can imagine is just

NOTE Confidence: 0.8515469

00:15:50.986 --> 00:15:52.751 claustrophobic and not the most

NOTE Confidence: 0.8515469

00:15:52.751 --> 00:15:54.867 comfortable setting in the world for men.

NOTE Confidence: 0.8515469

00:15:54.870 --> 00:15:58.047 But tell me a little bit more about how

NOTE Confidence: 0.8515469

00:15:58.047 --> 00:16:01.355 you take that MRI guided image

NOTE Confidence: 0.8515469

00:16:01.360 --> 00:16:04.860 to actually guide a biopsy that you're

NOTE Confidence: 0.8515469

00:16:04.860 --> 00:16:07.700 doing with ultrasound in your office.

NOTE Confidence: 0.8760629

00:16:08.560 --> 00:16:10.912 Yeah, so there are a few different

NOTE Confidence: 0.8760629

00:16:10.912 --> 00:16:12.590 technologies that are available.

NOTE Confidence: 0.8760629

00:16:12.590 --> 00:16:15.875 We talk about this as sort of a fusion.

NOTE Confidence: 0.8760629

00:16:15.880 --> 00:16:18.448 How do we fuse these two images

NOTE Confidence: 0.8760629

00:16:18.448 --> 00:16:21.329 and we can use cognitive fusion which

NOTE Confidence: 0.8760629

00:16:21.329 --> 00:16:24.553 is using the human brain to look at

NOTE Confidence: 0.8760629

00:16:24.553 --> 00:16:27.226 2 pictures side by side and say OK

NOTE Confidence: 0.8760629

00:16:27.226 --> 00:16:29.788 this looks like where they line up.

NOTE Confidence: 0.8760629

00:16:29.790 --> 00:16:32.558 We then use computer fusion which is what

NOTE Confidence: 0.8760629

00:16:32.558 --> 00:16:35.639 we use at Yale with our Artemis Device.

NOTE Confidence: 0.8760629

00:16:35.640 --> 00:16:38.132 And then there are quite a few

NOTE Confidence: 0.8760629

00:16:38.132 --> 00:16:40.190 of these computer fusion devices

NOTE Confidence: 0.8760629

00:16:40.190 --> 00:16:42.470 that exist around the world.

00:16:45.508 --> 00:16:48.180 And we like using this Artemis device because it has,

NOTE Confidence: 0.8760629

00:16:48.180 --> 00:16:49.912 like I mentioned earlier,

NOTE Confidence: 0.8760629

00:16:49.912 --> 00:16:53.037 the ability to take a 3D model

NOTE Confidence: 0.8760629

00:16:53.037 --> 00:16:55.635 of the prostate from the MRI.

NOTE Confidence: 0.8760629

00:16:55.640 --> 00:16:59.582 We use Artemis Device to create a 3D model of

NOTE Confidence: 0.8760629

00:16:59.590 --> 00:17:01.710 the prostate with the ultrasound

NOTE Confidence: 0.8760629

00:17:01.710 --> 00:17:04.339 and then we overlap those and

NOTE Confidence: 0.8760629

00:17:04.339 --> 00:17:06.494 we're moving towards the computer

NOTE Confidence: 0.8760629

00:17:06.494 --> 00:17:09.249 having the ability to overlap them.

NOTE Confidence: 0.8760629

00:17:09.250 --> 00:17:12.414 Right now the urologist and surgeon are

NOTE Confidence: 0.8760629

00:17:12.420 --> 00:17:14.460 very involved in making sure

NOTE Confidence: 0.8760629

00:17:14.460 --> 00:17:15.684 the pictures lineup,

NOTE Confidence: 0.8760629

00:17:15.690 --> 00:17:17.800 but then the artificial intelligence

NOTE Confidence: 0.8760629

00:17:17.800 --> 00:17:20.721 side is learning what are the shapes

NOTE Confidence: 0.8760629

00:17:20.721 --> 00:17:22.929 of these prostates and can we predict

NOTE Confidence: 0.8760629

00:17:22.929 --> 00:17:25.422 how these prostates are going to

NOTE Confidence: 0.8760629

00:17:25.422 --> 00:17:27.954 deform and change and really matching

NOTE Confidence: 0.8760629

00:17:27.960 --> 00:17:30.872 up that fusion product or that model

NOTE Confidence: 0.8760629

00:17:30.872 --> 00:17:33.760 of the prostate so that it's much

NOTE Confidence: 0.8760629

00:17:33.760 --> 00:17:35.730 more precise and this translates

NOTE Confidence: 0.8760629

00:17:35.730 --> 00:17:38.190 to more accurate biopsies.

NOTE Confidence: 0.83939284

00:17:38.190 --> 00:17:40.890 The Artemis Device, just so that

NOTE Confidence: 0.83939284

00:17:40.890 --> 00:17:43.190 I've got this straight,

NOTE Confidence: 0.83939284

00:17:43.190 --> 00:17:46.650 I kind of get the idea that the

NOTE Confidence: 0.83939284

00:17:46.740 --> 00:17:50.550 man goes in and gets an MRI of the prostate,

NOTE Confidence: 0.83939284

00:17:50.550 --> 00:17:53.840 just like you get an MRI of your

NOTE Confidence: 0.83939284

00:17:53.921 --> 00:17:56.805 knee or your brain or whatever else.

NOTE Confidence: 0.83939284

00:17:56.810 --> 00:17:59.379 They get an MRI of the prostate.

NOTE Confidence: 0.83939284

00:17:59.380 --> 00:18:02.180 This Artemis device kind of takes that

NOTE Confidence: 0.83939284

00:18:02.180 --> 00:18:04.612 image and transforms it into an image

NOTE Confidence: 0.83939284

00:18:04.612 --> 00:18:07.110 that you could get with an ultrasound

NOTE Confidence: 0.88867766

00:18:07.110 --> 00:18:09.686 so that it can overlay it well.

NOTE Confidence: 0.88867766

00:18:09.690 --> 00:18:10.719 Interestingly,

NOTE Confidence: 0.88867766

00:18:10.719 --> 00:18:12.777 we still rely very much on

NOTE Confidence: 0.88867766

00:18:12.777 --> 00:18:14.599 non human interpretation so

NOTE Confidence: 0.88867766

00:18:14.600 --> 00:18:16.290 the radiologist takes the MRI,

NOTE Confidence: 0.88867766

00:18:16.290 --> 00:18:19.660 so a man will have an MRI of his prostate,

NOTE Confidence: 0.88867766

00:18:19.660 --> 00:18:21.694 the radiologist will read that and will

NOTE Confidence: 0.88867766

00:18:21.694 --> 00:18:24.089 evaluate and look at the MRI for

NOTE Confidence: 0.88867766

00:18:24.089 --> 00:18:25.714 any areas that look suspicious,

NOTE Confidence: 0.88867766

00:18:25.720 --> 00:18:27.796 they grade it on a standardized grading

NOTE Confidence: 0.88867766

00:18:27.796 --> 00:18:29.881 scale that was helped developed by

NOTE Confidence: 0.88867766

00:18:29.881 --> 00:18:32.114 one of our radiologist here at Yale,

NOTE Confidence: 0.88867766

00:18:32.120 --> 00:18:32.794 Jeff Weinreb.

NOTE Confidence: 0.88867766

00:18:32.794 --> 00:18:34.479 So it's an international scale and is

NOTE Confidence: 0.88867766

00:18:34.480 --> 00:18:36.170 now the gold standard,

NOTE Confidence: 0.88867766

00:18:36.170 --> 00:18:38.529 and that was partly designed at Yale,

NOTE Confidence: 0.88867766

00:18:38.530 --> 00:18:40.763 so they'll get a score of any

NOTE Confidence: 0.88867766

00:18:40.763 --> 00:18:42.908 lesions that are in the prostate.

NOTE Confidence: 0.88867766

00:18:42.910 --> 00:18:44.700 The radiologist then

NOTE Confidence: 0.88867766

00:18:44.700 --> 00:18:47.376 outlines the prostate and those images

NOTE Confidence: 0.88867766

00:18:47.376 --> 00:18:50.359 are imported into our Artemis device.

NOTE Confidence: 0.842574

00:18:52.640 --> 00:18:55.160 I, or one of our other urologists,

NOTE Confidence: 0.842574

00:18:55.160 --> 00:18:56.664 are doing the biopsies.

NOTE Confidence: 0.842574

00:18:56.664 --> 00:18:58.920 We similarly use an ultrasound to

NOTE Confidence: 0.842574

00:18:58.993 --> 00:19:01.275 make a model of the prostate and,

NOTE Confidence: 0.842574

00:19:01.280 --> 00:19:03.720 then the job of the computer and what

NOTE Confidence: 0.842574

00:19:03.720 --> 00:19:06.211 we're trying to improve with some of

NOTE Confidence: 0.842574

00:19:06.211 --> 00:19:08.484 our mathematical models and

NOTE Confidence: 0.842574

00:19:08.484 --> 00:19:10.479 artificial intelligence has now improved how

NOTE Confidence: 0.842574

00:19:10.479 --> 00:19:12.986 those two pictures of the prostate,

NOTE Confidence: 0.842574

00:19:12.986 --> 00:19:15.704 look or

NOTE Confidence: 0.842574

00:19:15.710 --> 00:19:16.630 if they look different,

NOTE Confidence: 0.842574

00:19:16.630 --> 00:19:18.293 why are they different and how do

NOTE Confidence: 0.842574

00:19:18.293 --> 00:19:19.498 we correct for that difference?

NOTE Confidence: 0.87529445

00:19:21.040 --> 00:19:23.595 So this is interesting

NOTE Confidence: 0.87529445

00:19:23.595 --> 00:19:25.478 because you're taking two different

NOTE Confidence: 0.87529445

00:19:25.478 --> 00:19:27.991 pictures of the same organ done by

NOTE Confidence: 0.87529445

00:19:27.991 --> 00:19:30.255 different modalities, and

NOTE Confidence: 0.87529445

00:19:30.255 --> 00:19:32.180 if I understand this correctly,

NOTE Confidence: 0.87529445

00:19:32.180 --> 00:19:34.095 you're putting both of them

NOTE Confidence: 0.87529445

00:19:34.095 --> 00:19:35.627 into this Artemis system,

NOTE Confidence: 0.87529445

00:19:35.630 --> 00:19:38.606 which kind of lines them up and says

NOTE Confidence: 0.87529445

00:19:38.606 --> 00:19:41.759 what you saw here on the MRI is what

NOTE Confidence: 0.87529445

00:19:41.759 --> 00:19:44.564 you see here on the ultrasound and

NOTE Confidence: 0.87529445

00:19:44.564 --> 00:19:47.938 kind of making this image that

NOTE Confidence: 0.87529445

00:19:47.938 --> 00:19:50.696 when you see that on the ultrasound,

NOTE Confidence: 0.87529445

00:19:50.700 --> 00:19:52.499 that really is that area that was

NOTE Confidence: 0.87529445

00:19:52.499 --> 00:19:54.412 on the MRI and that's what you

NOTE Confidence: 0.87529445

00:19:54.412 --> 00:19:56.500 need to go after with your biopsy.

NOTE Confidence: 0.87529445

00:19:56.500 --> 00:19:57.880 Do I have that right?

NOTE Confidence: 0.8684337

00:19:57.880 --> 00:19:59.028 Yep, you're absolutely correct,

NOTE Confidence: 0.8684337

00:19:59.028 --> 00:20:00.176 so it's taking

NOTE Confidence: 0.8684337

00:20:00.180 --> 00:20:02.226 two things side by side.

NOTE Confidence: 0.8684337

00:20:02.230 --> 00:20:04.258 You can imagine these

NOTE Confidence: 0.8684337

00:20:04.258 --> 00:20:06.000 two pictures just merging into

NOTE Confidence: 0.8684337

00:20:06.000 --> 00:20:07.920 one and overlapping and we make

NOTE Confidence: 0.8684337

00:20:07.920 --> 00:20:09.664 sure that where those overlap

NOTE Confidence: 0.8684337

00:20:09.664 --> 00:20:11.464 appears correct and so then

NOTE Confidence: 0.8755718

00:20:11.470 --> 00:20:13.998 that that is a real boon because then

NOTE Confidence: 0.8755718

00:20:13.998 --> 00:20:16.936 you can use something that is

NOTE Confidence: 0.8755718

00:20:16.936 --> 00:20:18.651 patient friendly like an ultrasound

NOTE Confidence: 0.8755718

00:20:18.651 --> 00:20:21.038 and do the biopsy in the office.

NOTE Confidence: 0.8755718

00:20:21.040 --> 00:20:23.776 I mean that is just such cool technology.

NOTE Confidence: 0.8755718

00:20:23.780 --> 00:20:25.831 I wonder if the same thing can

NOTE Confidence: 0.8755718

00:20:25.831 --> 00:20:28.219 be done in other organ systems.

NOTE Confidence: 0.8755718

00:20:28.220 --> 00:20:30.542 Do you know if this Artemis

NOTE Confidence: 0.8755718

00:20:30.542 --> 00:20:32.650 devices is being used in other

NOTE Confidence: 0.8755718

00:20:32.650 --> 00:20:34.728 diseases?

NOTE Confidence: 0.89466214

00:20:34.730 --> 00:20:36.710 It isn't really

NOTE Confidence: 0.89466214

00:20:36.710 --> 00:20:39.185 because

NOTE Confidence: 0.89466214

00:20:39.190 --> 00:20:41.482 if you think about many other

NOTE Confidence: 0.89466214

00:20:41.482 --> 00:20:43.010 lesions, in liver lesions,

NOTE Confidence: 0.89466214

00:20:43.010 --> 00:20:45.302 many of those are very well

NOTE Confidence: 0.89466214

00:20:45.302 --> 00:20:46.448 visualized with ultrasound,

NOTE Confidence: 0.89466214

00:20:46.450 --> 00:20:50.026 and so the real time ultrasound is actually

NOTE Confidence: 0.89466214

00:20:50.026 --> 00:20:52.981 as good or better at characterizing

NOTE Confidence: 0.89466214

00:20:52.981 --> 00:20:56.549 where the lesion is than MRI or CT.

NOTE Confidence: 0.89466214

00:20:56.550 --> 00:20:58.958 That kind of fusion that we need

NOTE Confidence: 0.89466214

00:20:58.958 --> 00:21:02.285 to do for the prostate is kind of

NOTE Confidence: 0.89466214

00:21:02.285 --> 00:21:04.336 unique compared to, for example,

NOTE Confidence: 0.89466214

00:21:04.336 --> 00:21:06.877 the brain where you have a solid

NOTE Confidence: 0.89466214

00:21:06.877 --> 00:21:08.630 calvarium around the brain and

NOTE Confidence: 0.89466214

00:21:08.630 --> 00:21:11.148 so the ability to predict and do

NOTE Confidence: 0.89466214

00:21:11.148 --> 00:21:12.555 stereotactic localization within

NOTE Confidence: 0.89466214

00:21:12.555 --> 00:21:14.900 this solid structure is much

NOTE Confidence: 0.89466214

00:21:14.900 --> 00:21:16.874 easier than with a soft,

NOTE Confidence: 0.89466214

00:21:16.874 --> 00:21:19.130 malleable organ that is very able

NOTE Confidence: 0.89466214

00:21:19.206 --> 00:21:21.636 to move around within the pelvis.

NOTE Confidence: 0.89466214

00:21:21.640 --> 00:21:24.307 So the process is really kind of a

NOTE Confidence: 0.89466214

00:21:24.307 --> 00:21:26.729 unique location and a unique target

NOTE Confidence: 0.89466214

00:21:26.730 --> 00:21:29.474 given all these sort of anatomic limitations.

NOTE Confidence: 0.8814459

00:21:34.671 --> 00:21:38.370 Moving on from once you get the biopsy,

NOTE Confidence: 0.8814459

00:21:38.370 --> 00:21:40.960 let's talk a little

NOTE Confidence: 0.8814459

00:21:40.960 --> 00:21:43.063 bit about getting screening or a

NOTE Confidence: 0.8814459

00:21:43.063 --> 00:21:45.358 gentleman went and got screening,

NOTE Confidence: 0.8814459

00:21:45.360 --> 00:21:46.816 he got his MRI,

NOTE Confidence: 0.8814459

00:21:46.816 --> 00:21:49.000 he had this really cool artificial

NOTE Confidence: 0.8814459

00:21:49.081 --> 00:21:50.801 intelligence thing happening so

NOTE Confidence: 0.8814459

00:21:50.801 --> 00:21:53.881 he could have his biopsy in the

NOTE Confidence: 0.8814459

00:21:53.881 --> 00:21:55.996 office and he gets diagnosed

NOTE Confidence: 0.8814459

00:21:55.996 --> 00:21:58.235 with early stage prostate cancer

NOTE Confidence: 0.8814459

00:21:58.235 --> 00:22:01.505 because he found it really early.

NOTE Confidence: 0.8814459

00:22:01.510 --> 00:22:03.846 Tell us a little bit more about what's

NOTE Confidence: 0.8814459

00:22:03.846 --> 00:22:06.534 new and interesting in terms of the

NOTE Confidence: 0.8814459

00:22:06.534 --> 00:22:08.569 management of early prostate cancer.

NOTE Confidence: 0.88097554

00:22:10.030 --> 00:22:12.446 In the field of

NOTE Confidence: 0.88097554

00:22:12.446 --> 00:22:15.040 urology we are becoming much

NOTE Confidence: 0.88097554

00:22:15.040 --> 00:22:17.430 more comfortable with active

NOTE Confidence: 0.88097554

00:22:17.430 --> 00:22:19.674 surveillance or really a deferred

NOTE Confidence: 0.88097554

00:22:19.674 --> 00:22:22.206 treatment for men with prostate cancer.

NOTE Confidence: 0.88097554

00:22:22.210 --> 00:22:25.045 And that's based on many large studies.

NOTE Confidence: 0.88097554

00:22:25.050 --> 00:22:27.482 Now with long term follow up as well

NOTE Confidence: 0.88097554

00:22:27.482 --> 00:22:30.212 as a better understanding of the

NOTE Confidence: 0.88097554

00:22:30.212 --> 00:22:32.767 genomic nature of prostate cancer.

NOTE Confidence: 0.88097554

00:22:32.770 --> 00:22:35.706 So not only are we typically talking

NOTE Confidence: 0.88097554

00:22:35.706 --> 00:22:38.346 about things like the Gleason score

NOTE Confidence: 0.88097554

00:22:38.346 --> 00:22:41.088 when we are diagnosed with prostate cancer

NOTE Confidence: 0.88097554

00:22:41.166 --> 00:22:43.638 and the higher the Gleason score,

NOTE Confidence: 0.88097554

00:22:43.640 --> 00:22:45.350 the sort of worse the prognosis,

NOTE Confidence: 0.88097554

00:22:45.350 --> 00:22:47.378 or the more aggressive prostate cancer

NOTE Confidence: 0.88097554

00:22:47.378 --> 00:22:49.799 we are now able to sub stratify

NOTE Confidence: 0.88097554

00:22:49.800 --> 00:22:51.924 many of these patients using

NOTE Confidence: 0.88097554

00:22:51.924 --> 00:22:53.784 genomic testing which is specialized

NOTE Confidence: 0.88097554

00:22:53.784 --> 00:22:56.088 testing of the cancer cells themselves

NOTE Confidence: 0.88097554

00:22:56.088 --> 00:22:59.232 that tells us if it is at a lower risk

NOTE Confidence: 0.88097554

00:22:59.232 --> 00:23:01.424 and intermediate risk or higher risk of

NOTE Confidence: 0.88097554

00:23:01.424 --> 00:23:02.788 progression and developing metastasis.

NOTE Confidence: 0.88097554

00:23:02.790 --> 00:23:05.409 So I think one of the many

NOTE Confidence: 0.88097554

00:23:05.409 --> 00:23:07.676 exciting things is we feel more

NOTE Confidence: 0.88097554

00:23:07.676 --> 00:23:09.581 comfortable knowing who does not

NOTE Confidence: 0.88097554

00:23:09.653 --> 00:23:11.687 need treatment and really can avoid

NOTE Confidence: 0.88097554

00:23:11.687 --> 00:23:14.076 many of the side effects that

NOTE Confidence: 0.88097554

00:23:14.076 --> 00:23:15.444 we associate with treatment.

NOTE Confidence: 0.856714

00:23:16.630 --> 00:23:19.526 And part and parcel of that is,

NOTE Confidence: 0.856714

00:23:19.526 --> 00:23:21.612 I know that many gentlemen who

NOTE Confidence: 0.856714

00:23:21.612 --> 00:23:23.869 get their prostate biopsy,

NOTE Confidence: 0.856714

00:23:23.870 --> 00:23:26.222 they've got a low Gleason score and

NOTE Confidence: 0.856714

00:23:26.222 --> 00:23:28.149 they're put on this watchful

NOTE Confidence: 0.856714

00:23:28.150 --> 00:23:29.134 waiting regimen.

NOTE Confidence: 0.856714

00:23:29.134 --> 00:23:30.774 But for some of them,

NOTE Confidence: 0.856714

00:23:30.780 --> 00:23:32.420 that's really anxiety provoking, right?

NOTE Confidence: 0.856714

00:23:32.420 --> 00:23:34.190 Because they're sitting there

NOTE Confidence: 0.856714

00:23:34.190 --> 00:23:36.557 and we already talked before the break

NOTE Confidence: 0.856714

00:23:36.557 --> 00:23:38.165 about how fearful some people are

NOTE Confidence: 0.856714

00:23:38.165 --> 00:23:40.317 with a diagnosis of prostate cancer.

NOTE Confidence: 0.856714

00:23:40.320 --> 00:23:41.965 Here you are telling people

NOTE Confidence: 0.856714

00:23:41.965 --> 00:23:43.610 you've got a prostate cancer,

NOTE Confidence: 0.856714

00:23:43.610 --> 00:23:45.906 but it's really

NOTE Confidence: 0.856714

00:23:45.910 --> 00:23:47.980 pretty indolent, we think,

NOTE Confidence: 0.856714

00:23:47.980 --> 00:23:50.136 so you don't need to be treated,

NOTE Confidence: 0.856714

00:23:50.140 --> 00:23:51.808 but it sounds like with genomics

NOTE Confidence: 0.856714

00:23:51.808 --> 00:23:54.017 you can get a little bit more

NOTE Confidence: 0.856714

00:23:54.017 --> 00:23:55.397 personalized and say no,

NOTE Confidence: 0.856714

00:23:55.400 --> 00:23:57.248 we've looked at your tumor,

NOTE Confidence: 0.856714

00:23:57.250 --> 00:23:59.406 this is a very low score,

NOTE Confidence: 0.856714

00:23:59.410 --> 00:24:01.586 but are there some people who would normally

NOTE Confidence: 0.856714

00:24:01.586 --> 00:24:04.049 be in the watchful waiting category who,

NOTE Confidence: 0.856714

00:24:04.050 --> 00:24:05.282 based on genomic analysis,

NOTE Confidence: 0.856714

00:24:05.282 --> 00:24:06.209 you think, geez,

NOTE Confidence: 0.856714

00:24:06.209 --> 00:24:08.990 I need to be a little bit more aggressive?

00:24:10.230 --> 00:24:12.084 I just want to

NOTE Confidence: 0.8520703

00:24:12.084 --> 00:24:13.320 caution and correct

NOTE Confidence: 0.8520703

00:24:13.320 --> 00:24:15.168 the terminology just for a second.

NOTE Confidence: 0.8520703

00:24:15.170 --> 00:24:16.685 So active surveillance is what

NOTE Confidence: 0.8520703

00:24:16.685 --> 00:24:18.880 we do for men with low grade,

NOTE Confidence: 0.8520703

00:24:18.880 --> 00:24:20.520 and low risk prostate cancer.

NOTE Confidence: 0.8520703

00:24:20.520 --> 00:24:22.501 Watchful waiting is what we

NOTE Confidence: 0.8520703

00:24:22.501 --> 00:24:23.659 characterize men with prostate

NOTE Confidence: 0.8520703

00:24:23.659 --> 00:24:25.707 cancer who do not want to treat it,

NOTE Confidence: 0.8520703

00:24:25.710 --> 00:24:28.710 nor do they want to do any follow up of it.

NOTE Confidence: 0.8520703

00:24:28.710 --> 00:24:29.798 Because prostate cancer

NOTE Confidence: 0.8520703

00:24:29.798 --> 00:24:30.886 is so slow growing,

NOTE Confidence: 0.8520703

00:24:30.890 --> 00:24:32.773 there are some men who are diagnosed

NOTE Confidence: 0.8520703

00:24:32.773 --> 00:24:34.733 who are elderly or have other health

NOTE Confidence: 0.8520703

00:24:34.733 --> 00:24:36.377 problems that decide they do not

NOTE Confidence: 0.8520703

00:24:36.436 --> 00:24:38.020 want to treat it because prostate

NOTE Confidence: 0.8520703

00:24:38.020 --> 00:24:39.899 cancer is so slow growing it will

NOTE Confidence: 0.8520703

00:24:39.899 --> 00:24:41.537 not cause them a problem ever.

NOTE Confidence: 0.8520703

00:24:41.540 --> 00:24:43.457 Those are sort of who we say are on

NOTE Confidence: 0.8520703

00:24:43.457 --> 00:24:45.131 watchful waiting because we're waiting

NOTE Confidence: 0.8520703

00:24:45.131 --> 00:24:47.238 for them to have any symptoms of

NOTE Confidence: 0.8520703

00:24:47.238 --> 00:24:49.188 their prostate cancer before we treat.

NOTE Confidence: 0.8520703

00:24:49.190 --> 00:24:50.732 Active surveillance is kind of the

NOTE Confidence: 0.8520703

00:24:50.732 --> 00:24:52.569 other end of the spectrum where

NOTE Confidence: 0.8520703

00:24:52.570 --> 00:24:54.658 men have a very low grade,

NOTE Confidence: 0.8520703

00:24:54.660 --> 00:24:57.006 low risk prostate cancer and we

NOTE Confidence: 0.8520703

00:24:57.006 --> 00:24:58.570 are actively surveilling their

NOTE Confidence: 0.8520703

00:24:58.634 --> 00:25:00.972 cancer for any signs that it has

NOTE Confidence: 0.8520703

00:25:00.972 --> 00:25:02.966 progressed or gotten to the point

NOTE Confidence: 0.8520703

00:25:02.966 --> 00:25:04.511 where it may require treatment

NOTE Confidence: 0.8520703

00:25:04.511 --> 00:25:06.258 or we may advise treatment,

NOTE Confidence: 0.8520703

00:25:06.258 --> 00:25:08.138 but you're absolutely right with

NOTE Confidence: 0.8520703

00:25:08.138 --> 00:25:10.508 a genomic testing we can now have

NOTE Confidence: 0.8520703

00:25:10.508 --> 00:25:12.063 much more confidence and much

NOTE Confidence: 0.8520703

00:25:12.130 --> 00:25:13.865 more security and telling some

NOTE Confidence: 0.8520703

00:25:13.865 --> 00:25:15.950 men that it's appropriate to watch

NOTE Confidence: 0.8520703

00:25:15.950 --> 00:25:18.050 their cancer and not treat it.

NOTE Confidence: 0.8520703

00:25:18.050 --> 00:25:19.094 And you're right,

NOTE Confidence: 0.8520703

00:25:19.094 --> 00:25:20.834 anxiety is a major component.

NOTE Confidence: 0.8520703

00:25:20.840 --> 00:25:22.840 Very understandably, I think we

NOTE Confidence: 0.8520703

00:25:22.840 --> 00:25:24.450 gain confidence with

NOTE Confidence: 0.8520703

00:25:24.450 --> 00:25:26.060 data in the genomic testing,

NOTE Confidence: 0.8520703

00:25:26.060 --> 00:25:28.508 we can more strongly tell our patients with

NOTE Confidence: 0.8520703

00:25:28.508 --> 00:25:30.570 security that they don't need treatment.

NOTE Confidence: 0.8520703

00:25:30.570 --> 00:25:34.626 They are not in danger from this cancer.

00:25:38.322 --> 00:25:41.410 Let's say there are some men though that

NOTE Confidence: 0.8520703

00:25:41.488 --> 00:25:44.015 do really want to have treatment.

NOTE Confidence: 0.8520703

00:25:44.020 --> 00:25:45.420 As a general rule,

NOTE Confidence: 0.8520703

00:25:45.420 --> 00:25:48.021 if they have very low risk

NOTE Confidence: 0.8520703

00:25:48.021 --> 00:25:50.096 and low risk prostate cancer,

NOTE Confidence: 0.8520703

00:25:50.100 --> 00:25:52.380 we do not treat them. Getting

NOTE Confidence: 0.8520703

00:25:52.380 --> 00:25:53.900 into an intermediate risk,

NOTE Confidence: 0.8520703

00:25:53.900 --> 00:25:55.800 some of those men actually

NOTE Confidence: 0.8520703

00:25:55.800 --> 00:25:57.320 don't need treatment either.

NOTE Confidence: 0.8520703

00:25:57.320 --> 00:25:58.840 Some intermediate risk men

NOTE Confidence: 0.8520703

00:25:58.840 --> 00:26:00.360 may benefit from treatment,

NOTE Confidence: 0.8520703

00:26:00.360 --> 00:26:02.260 and again we're using genomic

NOTE Confidence: 0.8520703

00:26:02.260 --> 00:26:03.780 testing to stratify that.

NOTE Confidence: 0.8520703

00:26:03.780 --> 00:26:06.335 An one of the main reasons that

NOTE Confidence: 0.8520703

00:26:06.335 --> 00:26:09.525 we are concerned and we try not to

NOTE Confidence: 0.8520703

00:26:09.525 --> 00:26:11.540 treat everyone with prostate cancer

NOTE Confidence: 0.8520703

00:26:11.622 --> 00:26:14.205 is that there are side effects so

NOTE Confidence: 0.8520703

00:26:14.210 --> 00:26:17.106 there can be an impact on urinary function.

NOTE Confidence: 0.8520703

00:26:17.110 --> 00:26:19.606 There can be an impact on sexual function

NOTE Confidence: 0.8520703

00:26:19.606 --> 00:26:22.168 with any treatment for prostate cancer,

NOTE Confidence: 0.8520703

00:26:22.170 --> 00:26:23.618 whether surgery or radiation

NOTE Confidence: 0.8520703

00:26:23.618 --> 00:26:24.704 or even ablation.

NOTE Confidence: 0.8520703

00:26:24.710 --> 00:26:27.188 So we're going to talk a little

NOTE Confidence: 0.8520703

00:26:27.188 --> 00:26:29.408 bit about that unless you had

NOTE Confidence: 0.86417973

00:26:29.410 --> 00:26:30.758 another question.

NOTE Confidence: 0.86417973

00:26:30.758 --> 00:26:33.400 I'd love to learn more about ablation,

NOTE Confidence: 0.86417973

00:26:33.400 --> 00:26:35.566 because it sounds like

NOTE Confidence: 0.86417973

00:26:35.570 --> 00:26:37.768 that might be a minimally invasive

NOTE Confidence: 0.86417973

00:26:37.768 --> 00:26:39.987 way to treat prostate cancer without

NOTE Confidence: 0.86417973

00:26:39.987 --> 00:26:42.801 having major surgery that can cause more

NOTE Confidence: 0.86417973

00:26:42.810 --> 00:26:44.620 side effects, so

NOTE Confidence: 0.86417973

00:26:48.410 --> 00:26:50.546 much of the discussion that we

NOTE Confidence: 0.86417973

00:26:50.546 --> 00:26:52.970 have in the urology community is,

NOTE Confidence: 0.86417973

00:26:52.970 --> 00:26:54.490 will ablation replace surgery,

NOTE Confidence: 0.86417973

00:26:54.490 --> 00:26:56.470 or radiation?

NOTE Confidence: 0.86417973

00:26:56.470 --> 00:26:58.300 I would say no, it is not a replacement for

NOTE Confidence: 0.86417973

00:26:58.371 --> 00:27:00.567 these gold standard treatments,

NOTE Confidence: 0.86417973

00:27:00.570 --> 00:27:03.666 but it is an alternative for the appropriate

NOTE Confidence: 0.86417973

00:27:03.666 --> 00:27:06.266 person and it is a good alternative.

NOTE Confidence: 0.86417973

00:27:06.270 --> 00:27:08.448 So ablation is typically using

NOTE Confidence: 0.86417973

00:27:08.448 --> 00:27:11.210 some form of energy beacon.

NOTE Confidence: 0.86417973

00:27:11.210 --> 00:27:14.426 Heat, or we can use cold, we can use other

NOTE Confidence: 0.86417973

00:27:14.426 --> 00:27:16.546 things like light or ultrasound

NOTE Confidence: 0.86417973

00:27:16.546 --> 00:27:19.428 or electricity to generate heat,

NOTE Confidence: 0.86417973

00:27:19.430 --> 00:27:22.422 but we're trying to destroy just the part

NOTE Confidence: 0.86417973

00:27:22.422 --> 00:27:25.900 of the prostate that has prostate cancer.

NOTE Confidence: 0.86417973

00:27:25.900 --> 00:27:27.019 By doing this,

NOTE Confidence: 0.86417973

00:27:27.019 --> 00:27:29.257 we can often avoid the structures

NOTE Confidence: 0.86417973

00:27:29.257 --> 00:27:32.001 and areas near the prostate that

NOTE Confidence: 0.86417973

00:27:32.001 --> 00:27:33.837 are associated with urinary

NOTE Confidence: 0.86417973

00:27:33.837 --> 00:27:35.808 control and sexual function,

NOTE Confidence: 0.86417973

00:27:35.810 --> 00:27:38.978 so we can have much less impact on

NOTE Confidence: 0.86417973

00:27:38.978 --> 00:27:41.681 someone's quality of life while having

NOTE Confidence: 0.86417973

00:27:41.681 --> 00:27:44.423 a successful treatment of their cancer.

NOTE Confidence: 0.8667462

00:27:45.530 --> 00:27:46.850 So do we know what

NOTE Confidence: 0.8667462

00:27:46.850 --> 00:27:48.946 the long term results of that are?

NOTE Confidence: 0.8667462

00:27:48.950 --> 00:27:50.595 I mean, do you get recurrence rates

NOTE Confidence: 0.8667462

00:27:50.595 --> 00:27:52.919 that are as low as you would get with

NOTE Confidence: 0.8667462

00:27:52.919 --> 00:27:54.470 surgery and radiation with ablation?

NOTE Confidence: 0.89189684

00:27:56.170 --> 00:27:58.150 It's interesting, there have

NOTE Confidence: 0.89189684

00:27:58.150 --> 00:27:59.734 been no randomized trials

NOTE Confidence: 0.89189684

00:27:59.734 --> 00:28:01.450 comparing surgery or radiation

NOTE Confidence: 0.89189684

00:28:01.450 --> 00:28:03.880 to an ablation, so

NOTE Confidence: 0.89189684

00:28:03.880 --> 00:28:07.392 all we can do is compare the sort

NOTE Confidence: 0.89189684

00:28:07.392 --> 00:28:11.280 of data from the different studies.

NOTE Confidence: 0.89189684

00:28:11.280 --> 00:28:12.800 The combination of treatment with

NOTE Confidence: 0.89189684

00:28:12.800 --> 00:28:14.930 ablation tends to be quite successful,

NOTE Confidence: 0.89189684

00:28:14.930 --> 00:28:16.425 though because

NOTE Confidence: 0.89189684

00:28:16.425 --> 00:28:18.580 we're held to a high standard,

NOTE Confidence: 0.89189684

00:28:18.580 --> 00:28:21.252 we are doing repeat biopsy's and many of

NOTE Confidence: 0.89189684

00:28:21.252 --> 00:28:23.556 these patients who are having an

NOTE Confidence: 0.89189684

00:28:23.560 --> 00:28:24.888 ablation or treatment of

NOTE Confidence: 0.89189684

00:28:24.888 --> 00:28:26.548 this part of their prostate,

NOTE Confidence: 0.89189684

00:28:26.550 --> 00:28:28.874 and we find very greater than

NOTE Confidence: 0.89189684

00:28:28.874 --> 00:28:31.198 80 or 90% success rate when we

NOTE Confidence: 0.89189684

00:28:31.198 --> 00:28:32.858 biopsy areas that were treated.

NOTE Confidence: 0.89189684

00:28:32.860 --> 00:28:35.149 The trick is that if we're treating

NOTE Confidence: 0.89189684

00:28:35.149 --> 00:28:37.204 only part of the prostate and

NOTE Confidence: 0.89189684

00:28:37.204 --> 00:28:39.542 this is why it's hard to compare

NOTE Confidence: 0.89189684

00:28:39.613 --> 00:28:41.249 to surgery or radiation.

NOTE Confidence: 0.89189684

00:28:41.250 --> 00:28:42.810 When we are treating just

NOTE Confidence: 0.89189684

00:28:42.810 --> 00:28:44.058 part of the prostate,

NOTE Confidence: 0.89189684

00:28:44.060 --> 00:28:46.034 there still is the other side of

NOTE Confidence: 0.89189684

00:28:46.034 --> 00:28:48.285 prostate or the rest of prostate that

NOTE Confidence: 0.89189684

00:28:48.285 --> 00:28:50.295 could develop cancer in the future.

NOTE Confidence: 0.89189684

00:28:50.300 --> 00:28:51.203 So you know,

NOTE Confidence: 0.89189684

00:28:51.203 --> 00:28:54.350 if we look at the areas that are ablated

NOTE Confidence: 0.89189684

00:28:54.350 --> 00:28:56.228 then yes, things like Cryo Ablation,

NOTE Confidence: 0.89189684

00:28:56.230 --> 00:28:56.852 irreversible electroporation,

NOTE Confidence: 0.89189684

00:28:56.852 --> 00:28:58.718 HIFU or high intensity focused ultrasound,

NOTE Confidence: 0.89189684

00:28:58.720 --> 00:29:00.480 those are very good techniques

NOTE Confidence: 0.89189684

00:29:00.480 --> 00:29:02.240 to destroy the cancer tissue

NOTE Confidence: 0.89189684

00:29:02.300 --> 00:29:04.029 in the area that is ablated

NOTE Confidence: 0.89189684

00:29:04.030 --> 00:29:05.925 but inherently it's not treating

NOTE Confidence: 0.89189684

00:29:05.925 --> 00:29:08.366 the other side of prostate so it

NOTE Confidence: 0.89189684

00:29:08.366 --> 00:29:10.270 is a little bit of a trade off.

NOTE Confidence: 0.89189684

00:29:10.270 --> 00:29:12.388 It's a little bit less treatment.

NOTE Confidence: 0.89189684

00:29:12.390 --> 00:29:14.610 Meaning we're not treating the

NOTE Confidence: 0.89189684

00:29:14.610 --> 00:29:15.498 whole prostate,

NOTE Confidence: 0.89189684

00:29:15.500 --> 00:29:16.832 but definitely associated

NOTE Confidence: 0.89189684

00:29:16.832 --> 00:29:18.608 with fewer side effects.

NOTE Confidence: 0.8425057

00:29:18.610 --> 00:29:22.102 So in terms of picking patients

NOTE Confidence: 0.8425057

00:29:22.102 --> 00:29:25.709 in whom this technique might be optimal,

NOTE Confidence: 0.8425057

00:29:25.710 --> 00:29:28.653 it seems to me that if you've

NOTE Confidence: 0.8425057

00:29:28.653 --> 00:29:31.508 got somebody who's really worried about

NOTE Confidence: 0.8425057

00:29:31.508 --> 00:29:34.563 the side effects of radical surgery,

NOTE Confidence: 0.8425057

00:29:34.563 --> 00:29:37.695 has a relatively small prostate cancer,

NOTE Confidence: 0.8425057

00:29:37.700 --> 00:29:40.105 and wants a less invasive

NOTE Confidence: 0.8425057

00:29:40.105 --> 00:29:42.510 technique and may not have

NOTE Confidence: 0.8425057

00:29:42.510 --> 00:29:44.960 long to really wait and get

NOTE Confidence: 0.8425057

00:29:44.960 --> 00:29:47.370 a new prostate cancer in another

NOTE Confidence: 0.8425057

00:29:47.370 --> 00:29:49.070 part of the prostate,

NOTE Confidence: 0.8425057

00:29:49.070 --> 00:29:50.618 that might be a

NOTE Confidence: 0.8433173

00:29:50.620 --> 00:29:52.160 good candidate.

NOTE Confidence: 0.8433173

00:29:52.160 --> 00:29:53.315 Yes, definitely.

NOTE Confidence: 0.8433173

00:29:53.315 --> 00:29:56.018 And this moves towards focal

NOTE Confidence: 0.8433173

00:29:56.020 --> 00:29:58.715 ablation so it is becoming more popular,

NOTE Confidence: 0.8433173

00:29:58.720 --> 00:29:59.866 especially in academic centers,

NOTE Confidence: 0.8433173

00:29:59.866 --> 00:30:02.158 and this has really grown out of

NOTE Confidence: 0.8433173

00:30:02.160 --> 00:30:04.330 the interest in it and the increased

NOTE Confidence: 0.8433173

00:30:04.330 --> 00:30:06.437 usage of these techniques has really grown

NOTE Confidence: 0.8433173

00:30:06.437 --> 00:30:09.149 out of the MRI in a targeted biopsy,

NOTE Confidence: 0.8433173

00:30:09.150 --> 00:30:11.058 because we now can localize prostate

NOTE Confidence: 0.8433173

00:30:11.058 --> 00:30:13.284 cancer within the prostate, which is new.

NOTE Confidence: 0.8433173

00:30:13.284 --> 00:30:14.874 It's new since MRI.

NOTE Confidence: 0.8433173

00:30:16.152 --> 00:30:18.060 We can know where to treat.

NOTE Confidence: 0.8433173

00:30:18.060 --> 00:30:20.062 So one of the reasons we don't

NOTE Confidence: 0.8433173

00:30:20.062 --> 00:30:22.636 have long term data is this is all

NOTE Confidence: 0.8433173

00:30:22.636 --> 00:30:24.286 relatively new technology that

NOTE Confidence: 0.8433173

00:30:24.356 --> 00:30:26.624 has really been born out of our

NOTE Confidence: 0.8433173

00:30:26.624 --> 00:30:28.234 ability to identify and localized

NOTE Confidence: 0.8433173

00:30:28.234 --> 00:30:29.819 prostate cancer with much more

NOTE Confidence: 0.87077275

00:30:29.820 --> 00:30:31.472 accuracy.

NOTE Confidence: 0.87077275

00:30:31.472 --> 00:30:33.950 Doctor Preston Sprenkle is an associate professor of urology

NOTE Confidence: 0.87077275

00:30:34.014 --> 00:30:35.820 at the Yale School of Medicine.

NOTE Confidence: 0.87077275

00:30:35.820 --> 00:30:37.324 If you have questions,

NOTE Confidence: 0.87077275

00:30:37.324 --> 00:30:38.828 the address is canceranswers@yale.edu

NOTE Confidence: 0.87077275

00:30:38.828 --> 00:30:40.907 and past editions of the program

NOTE Confidence: 0.87077275

00:30:40.907 --> 00:30:42.803 are available in audio and written

NOTE Confidence: 0.87077275

00:30:42.866 --> 00:30:44.450 form at Yalecancercenter.org.

NOTE Confidence: 0.87077275

00:30:44.450 --> 00:30:47.218 We hope you'll join us next week to

NOTE Confidence: 0.87077275

00:30:47.218 --> 00:30:49.910 learn more about the fight against

NOTE Confidence: 0.87077275

00:30:49.910 --> 00:30:52.796 cancer here on Connecticut public radio.