## WEBVTT

 $00:00:00.000 \longrightarrow 00:00:03.168$  Funding for Yale Cancer Answers is

NOTE Confidence: 0.788267461454545

 $00:00:03.168 \longrightarrow 00:00:06.170$  provided by Smilow Cancer Hospital.

NOTE Confidence: 0.788267461454545

 $00:00:06.170 \longrightarrow 00:00:08.060$  Welcome to Yale Cancer Answers with

NOTE Confidence: 0.788267461454545

00:00:08.060 --> 00:00:10.022 your host, Doctor Anees Chappar.

NOTE Confidence: 0.788267461454545

00:00:10.022 --> 00:00:12.242 Yale Cancer Answers features the

NOTE Confidence: 0.788267461454545

00:00:12.242 --> 00:00:13.946 latest information on cancer

NOTE Confidence: 0.788267461454545

00:00:13.946 --> 00:00:15.836 care by welcoming oncologists and

NOTE Confidence: 0.788267461454545

 $00{:}00{:}15.836 \to 00{:}00{:}17.969$  specialists who are on the forefront

NOTE Confidence: 0.788267461454545

00:00:17.969 --> 00:00:19.847 of the battle to fight cancer.

NOTE Confidence: 0.788267461454545

 $00:00:19.850 \longrightarrow 00:00:22.082$  This week, it's a conversation about

NOTE Confidence: 0.788267461454545

 $00:00:22.082 \dashrightarrow 00:00:24.270$  prostate cancer with Doctor Joseph Kim.

NOTE Confidence: 0.788267461454545

 $00{:}00{:}24.270 \dashrightarrow 00{:}00{:}26.328$  Doctor Kim is an associate professor

NOTE Confidence: 0.788267461454545

 $00{:}00{:}26.328 \dashrightarrow 00{:}00{:}28.103$  of internal medicine and medical

NOTE Confidence: 0.788267461454545

 $00{:}00{:}28.103 \dashrightarrow 00{:}00{:}30.469$  on cology at the Yale School of Medicine,

NOTE Confidence: 0.788267461454545

 $00:00:30.470 \longrightarrow 00:00:32.600$  where Doctor Chagpar is a professor

 $00:00:32.600 \longrightarrow 00:00:33.665$  of surgical oncology.

NOTE Confidence: 0.90415715375

 $00{:}00{:}35.460 \dashrightarrow 00{:}00{:}37.196$  So Doctor Kim, maybe we can start off

NOTE Confidence: 0.90415715375

 $00:00:37.196 \longrightarrow 00:00:39.228$  by you telling us a little bit more

NOTE Confidence: 0.90415715375

 $00{:}00{:}39.228 \to 00{:}00{:}40.947$  about yourself and what it is you do.

NOTE Confidence: 0.759054215714286

00:00:41.120 --> 00:00:44.480 I'm a medical oncologist.

NOTE Confidence: 0.759054215714286

 $00:00:44.480 \longrightarrow 00:00:46.544$  I specialize in taking care of

NOTE Confidence: 0.759054215714286

 $00:00:46.544 \longrightarrow 00:00:47.920$  patients with prostate cancer

NOTE Confidence: 0.759054215714286

 $00:00:47.983 \longrightarrow 00:00:49.818$  and other urinary tract cancers.

NOTE Confidence: 0.759054215714286

 $00:00:49.820 \longrightarrow 00:00:51.175$  I've been here at Yale for

NOTE Confidence: 0.759054215714286

 $00:00:51.175 \longrightarrow 00:00:52.770$  the last nine years or so.

NOTE Confidence: 0.759054215714286

 $00{:}00{:}52.770 \dashrightarrow 00{:}00{:}55.302$  I received my training at the

NOTE Confidence: 0.759054215714286

00:00:55.302 --> 00:00:57.360 National Cancer Institute of NIH.

NOTE Confidence: 0.759054215714286

00:00:57.360 --> 00:00:59.060 Since I came to Yale,

NOTE Confidence: 0.759054215714286

 $00:00:59.060 \longrightarrow 00:01:00.830$  I have been taking care of

NOTE Confidence: 0.759054215714286

 $00:01:00.830 \longrightarrow 00:01:02.010$  patients with prostate cancer

NOTE Confidence: 0.759054215714286

 $00{:}01{:}02.063 \dashrightarrow 00{:}01{:}03.379$  and other tumor agencies.

 $00{:}01{:}03.380 \dashrightarrow 00{:}01{:}06.300$  I also specialize in clinical trials.

NOTE Confidence: 0.916755877647059 00:01:07.320 --> 00:01:09.648 It's prostate NOTE Confidence: 0.916755877647059

00:01:09.648 --> 00:01:12.100 cancer awareness month and many people

NOTE Confidence: 0.916755877647059

00:01:12.100 --> 00:01:14.180 have heard about prostate cancer,

NOTE Confidence: 0.916755877647059

 $00{:}01{:}14.180 \dashrightarrow 00{:}01{:}15.818$  but there's still a lot of questions.

NOTE Confidence: 0.916755877647059

 $00:01:15.820 \longrightarrow 00:01:17.452$  So I'm hoping that we can

NOTE Confidence: 0.916755877647059

 $00:01:17.452 \longrightarrow 00:01:19.339$  unpack a lot of that today.

NOTE Confidence: 0.916755877647059

 $00:01:19.340 \longrightarrow 00:01:20.550$  So to kick us off,

NOTE Confidence: 0.916755877647059

 $00:01:20.550 \longrightarrow 00:01:23.091$  why don't you tell us about the

NOTE Confidence: 0.916755877647059

 $00:01:23.091 \longrightarrow 00:01:24.700$  epidemiology of prostate cancer?

NOTE Confidence: 0.916755877647059

00:01:24.700 --> 00:01:28.300 How common is it, who gets it and

NOTE Confidence: 0.916755877647059

 $00:01:28.300 \longrightarrow 00:01:31.349$  how lethal or not lethal is it?

NOTE Confidence: 0.859214583333333

 $00{:}01{:}32.130 \dashrightarrow 00{:}01{:}33.528$  So that's a very good question.

NOTE Confidence: 0.859214583333333

 $00{:}01{:}33.530 \dashrightarrow 00{:}01{:}36.770$  So prostate cancer is a very common cancer.

NOTE Confidence: 0.859214583333333

 $00:01:36.770 \longrightarrow 00:01:38.182$  Other than skin cancer,

 $00:01:38.182 \longrightarrow 00:01:39.947$  prostate cancer is the most

NOTE Confidence: 0.859214583333333

00:01:39.947 --> 00:01:41.768 common cancer in American men.

NOTE Confidence: 0.859214583333333

00:01:41.770 --> 00:01:45.088 And according to the epidemiology,

NOTE Confidence: 0.859214583333333

 $00:01:45.090 \longrightarrow 00:01:47.198$  they estimate about

NOTE Confidence: 0.866155209285714

 $00:01:49.390 \longrightarrow 00:01:51.706\ 260,000\ \text{new cases of}$ 

NOTE Confidence: 0.866155209285714

 $00:01:51.706 \longrightarrow 00:01:53.644$  prostate cancer this

NOTE Confidence: 0.866155209285714

 $00:01:53.644 \longrightarrow 00:01:55.915$  year and about 34,000 men will

NOTE Confidence: 0.866155209285714

 $00:01:55.915 \longrightarrow 00:01:58.090$  unfortunately die of prostate cancer.

NOTE Confidence: 0.866155209285714

 $00:01:58.090 \longrightarrow 00:01:59.250$  As you see this number,

NOTE Confidence: 0.866155209285714

 $00:01:59.250 \longrightarrow 00:02:02.238$  not everyone dies of prostate cancer.

NOTE Confidence: 0.866155209285714

 $00{:}02{:}02.240 \dashrightarrow 00{:}02{:}04.586$  Clearly there's a certain phenotype that

NOTE Confidence: 0.866155209285714

 $00:02:04.586 \longrightarrow 00:02:06.724$  is very lethal prostate cancer and this

NOTE Confidence: 0.866155209285714

 $00:02:06.724 \longrightarrow 00:02:08.507$  is very important for us to understand

NOTE Confidence: 0.866155209285714

00:02:08.507 --> 00:02:10.217 who are these group of patients,

NOTE Confidence: 0.866155209285714

 $00:02:10.220 \longrightarrow 00:02:12.140$  how aggressive it could be in

NOTE Confidence: 0.866155209285714

 $00:02:12.140 \longrightarrow 00:02:13.852$  identifying these patients and treating

 $00{:}02{:}13.852 \dashrightarrow 00{:}02{:}16.252$  the patients and improving

NOTE Confidence: 0.866155209285714

 $00:02:16.252 \longrightarrow 00:02:18.317$  the outcomes of these patients.

NOTE Confidence: 0.866155209285714

00:02:18.320 --> 00:02:20.975 So who gets prostate cancer? 00:02:23.100 --> 00:02:24.997 A common risk factor is age.

NOTE Confidence: 0.866155209285714

00:02:25.000 --> 00:02:27.488 The older the man is, the more likely you

NOTE Confidence: 0.866155209285714

 $00:02:27.488 \longrightarrow 00:02:29.799$  will develop prostate cancer and also

NOTE Confidence: 0.866155209285714

 $00:02:29.799 \longrightarrow 00:02:32.235$  it appears that some ethnic backgrounds

NOTE Confidence: 0.866155209285714

 $00:02:32.303 \longrightarrow 00:02:34.775$  play a role for reasons unclear.

NOTE Confidence: 0.866155209285714

00:02:34.780 --> 00:02:36.300 African American men seem

NOTE Confidence: 0.866155209285714

 $00:02:36.300 \longrightarrow 00:02:37.820$  to have prostate cancer

NOTE Confidence: 0.866155209285714

 $00{:}02{:}37.820 \dashrightarrow 00{:}02{:}39.717$  that is somewhat more aggressive.

NOTE Confidence: 0.866155209285714

 $00:02:39.720 \longrightarrow 00:02:41.939$  And also there are other risk factors

NOTE Confidence: 0.866155209285714

 $00:02:41.939 \longrightarrow 00:02:44.669$  too such as we'll describe.

NOTE Confidence: 0.866155209285714

 $00:02:44.669 \longrightarrow 00:02:47.231$  Genetic syndromes such as

NOTE Confidence: 0.866155209285714

 $00:02:47.240 \longrightarrow 00:02:48.020$  Lynch syndrome.

NOTE Confidence: 0.866155209285714

 $00:02:48.020 \longrightarrow 00:02:49.970$  Patients with this genetic syndrome

 $00:02:49.970 \longrightarrow 00:02:51.844$  tend to have prostate cancer

NOTE Confidence: 0.866155209285714

 $00:02:51.844 \longrightarrow 00:02:53.776$  in early age and also have

NOTE Confidence: 0.866155209285714

00:02:53.780 --> 00:02:55.289 somewhat aggressive biology.

NOTE Confidence: 0.902446177692308

 $00:02:57.360 \longrightarrow 00:02:59.664$  So tell us a little bit more about

NOTE Confidence: 0.902446177692308

00:02:59.664 --> 00:03:01.500 the screening for prostate cancer,

NOTE Confidence: 0.902446177692308

 $00{:}03{:}01.500 \dashrightarrow 00{:}03{:}04.524$  because it seems to me that has

NOTE Confidence: 0.902446177692308

 $00:03:04.524 \longrightarrow 00:03:08.156$  had its ebbs and flows over the years

NOTE Confidence: 0.902446177692308

 $00{:}03{:}08.156 \dashrightarrow 00{:}03{:}11.184$  from digital rectal exam to PSA to,

NOTE Confidence: 0.902446177692308

 $00{:}03{:}11.184 \dashrightarrow 00{:}03{:}14.004$ you know, potentially even more

NOTE Confidence: 0.902446177692308

 $00{:}03{:}14.004 \dashrightarrow 00{:}03{:}16.260$  sophisticated forms of screening.

NOTE Confidence: 0.902446177692308

00:03:16.260 --> 00:03:18.575 And yet not everybody requires

NOTE Confidence: 0.902446177692308

 $00:03:18.575 \longrightarrow 00:03:20.427$  screening, there are different ages for

NOTE Confidence: 0.902446177692308

 $00{:}03{:}20.427 \dashrightarrow 00{:}03{:}22.349$  starting screening and stopping

NOTE Confidence: 0.902446177692308

 $00{:}03{:}22.349 \dashrightarrow 00{:}03{:}24.201$  screening at different intervals

NOTE Confidence: 0.902446177692308

 $00:03:24.201 \longrightarrow 00:03:27.088$  at which one should get screening.

 $00:03:27.090 \longrightarrow 00:03:28.962$  What are the latest guidelines in

NOTE Confidence: 0.902446177692308

 $00{:}03{:}28.962 \dashrightarrow 00{:}03{:}31.160$  terms of screening for prostate cancer?

NOTE Confidence: 0.897137445

 $00:03:31.210 \longrightarrow 00:03:32.728$  So that's a very good question.

NOTE Confidence: 0.897137445

 $00:03:32.730 \longrightarrow 00:03:34.956$  I think prostate cancer screening has

NOTE Confidence: 0.897137445

 $00:03:34.956 \longrightarrow 00:03:37.286$  evolved the last couple of decades or so.

NOTE Confidence: 0.897137445

00:03:37.290 --> 00:03:39.550 It's been very confusing because

NOTE Confidence: 0.897137445

00:03:39.550 --> 00:03:41.386 the guidelines change, you know,

NOTE Confidence: 0.897137445

 $00:03:41.386 \longrightarrow 00:03:42.576$  over the last few years.

NOTE Confidence: 0.897137445

 $00:03:42.580 \longrightarrow 00:03:44.596$  So the latest guideline is that you

NOTE Confidence: 0.897137445

 $00:03:44.596 \longrightarrow 00:03:47.000$  have to talk to your doctor and your

NOTE Confidence: 0.897137445

 $00:03:47.000 \longrightarrow 00:03:49.450$  doctor should have a very well involved

NOTE Confidence: 0.897137445

 $00:03:49.450 \longrightarrow 00:03:51.725$  discussion about the prescan screening.

NOTE Confidence: 0.897137445

 $00{:}03{:}51.730 \dashrightarrow 00{:}03{:}53.704$  In other words, if you have a

NOTE Confidence: 0.897137445

 $00{:}03{:}53.710 \dashrightarrow 00{:}03{:}55.290$  strong family history,

NOTE Confidence: 0.897137445

 $00:03:55.290 \longrightarrow 00:03:57.378$  if your father,

00:03:59.312 --> 00:04:01.077 your uncles, had prostate cancer in early age,

 $00:04:01.080 \longrightarrow 00:04:02.838$  you should be concerned about it,

NOTE Confidence: 0.897137445

 $00{:}04{:}02.840 \dashrightarrow 00{:}04{:}04.872$  and you can talk to your doctor about

NOTE Confidence: 0.897137445

 $00:04:04.872 \longrightarrow 00:04:07.031$  this and see what other tests that you

NOTE Confidence: 0.897137445

 $00:04:07.031 \longrightarrow 00:04:09.260$  could do to screen for prostate cancer.

NOTE Confidence: 0.897137445

 $00:04:09.260 \longrightarrow 00:04:11.468$  The most commonly

NOTE Confidence: 0.897137445

 $00{:}04{:}11.468 \dashrightarrow 00{:}04{:}13.695$  used test to screen for prostate

NOTE Confidence: 0.897137445

 $00:04:13.695 \longrightarrow 00:04:16.096$  cancer is a blood test called PSA.

NOTE Confidence: 0.897137445

 $00:04:16.100 \longrightarrow 00:04:18.035$  It's a simple blood draw

NOTE Confidence: 0.897137445

 $00:04:18.035 \longrightarrow 00:04:20.220$  and the normal value is 4.

NOTE Confidence: 0.897137445

00:04:20.220 --> 00:04:22.558 If your PSA is higher than four,

NOTE Confidence: 0.897137445

 $00{:}04{:}22.560 \dashrightarrow 00{:}04{:}24.280$  this may raise some concern.

 $00{:}04{:}26.110 \dashrightarrow 00{:}04{:}27.377$  And you may get referred to a urologist

NOTE Confidence: 0.897137445

 $00:04:27.380 \longrightarrow 00:04:28.784$  for further evaluations

NOTE Confidence: 0.897137445

 $00:04:28.784 \longrightarrow 00:04:31.239$  and the other method you can screen

NOTE Confidence: 0.897137445

 $00:04:31.239 \longrightarrow 00:04:33.269$  for prostate cancer will be doing a

NOTE Confidence: 0.897137445

00:04:33.269 --> 00:04:35.410 digital rectal examination,

 $00:04:35.410 \longrightarrow 00:04:36.994$  which should be done by your

NOTE Confidence: 0.897137445

 $00:04:36.994 \longrightarrow 00:04:37.786$  primary care physician.

00:04:38.181 --> 00:04:41.309 If you have any symptoms in your urination,

NOTE Confidence: 0.897137445

 $00:04:41.310 \longrightarrow 00:04:44.908$  such as weak stream urgency,

NOTE Confidence: 0.897137445

00:04:44.910 --> 00:04:47.976 urinary frequency or urinary tract infection,

NOTE Confidence: 0.897137445

 $00:04:47.980 \longrightarrow 00:04:49.400$  that's not going away

 $00:04:50.110 \longrightarrow 00:04:51.534$  your doctor should evaluate

NOTE Confidence: 0.897137445

 $00:04:51.534 \longrightarrow 00:04:53.314$  this further to evaluate for

NOTE Confidence: 0.897137445

 $00:04:53.314 \longrightarrow 00:04:54.979$  the underlying pathology.

NOTE Confidence: 0.838887868888889

 $00{:}04{:}56.480 \longrightarrow 00{:}04{:}59.994$  And so for patients who are at

NOTE Confidence: 0.838887868888889

 $00:04:59.994 \longrightarrow 00:05:02.134$  average risk, let's suppose that

NOTE Confidence: 0.83888786888889

 $00:05:02.134 \longrightarrow 00:05:04.402$  they don't have a family history,

NOTE Confidence: 0.838887868888889

 $00:05:04.410 \longrightarrow 00:05:06.756$  they don't have a genetic mutation.

NOTE Confidence: 0.838887868888889

 $00:05:06.760 \longrightarrow 00:05:10.712$  When should they start getting PSA testing

NOTE Confidence: 0.838887868888889

 $00:05:10.712 \longrightarrow 00:05:13.449$  and how frequently should that occur?

NOTE Confidence: 0.855369513703704

 $00:05:13.920 \longrightarrow 00:05:15.864$  So there's no general consensus about

NOTE Confidence: 0.855369513703704

 $00:05:15.864 \longrightarrow 00:05:18.596$  what age to start the PSA screening for

 $00:05:18.596 \longrightarrow 00:05:20.648$  general population and that has been

NOTE Confidence: 0.855369513703704

 $00{:}05{:}20.713 \dashrightarrow 00{:}05{:}22.778$  the debate over the last few years.

NOTE Confidence: 0.855369513703704

00:05:22.780 --> 00:05:23.562 Generally speaking,

NOTE Confidence: 0.855369513703704

 $00:05:23.562 \longrightarrow 00:05:26.299$  age 55 is the age that they

NOTE Confidence: 0.855369513703704

 $00{:}05{:}26.300 \dashrightarrow 00{:}05{:}28.352$  begin to talk about prostate cancer

NOTE Confidence: 0.855369513703704

 $00:05:28.352 \longrightarrow 00:05:30.500$  screening in patients with risk factors.

NOTE Confidence: 0.855369513703704

 $00:05:30.500 \longrightarrow 00:05:33.167$  So if you are 55 and older,

NOTE Confidence: 0.855369513703704

 $00:05:33.170 \longrightarrow 00:05:34.825$  if you have any concern

NOTE Confidence: 0.855369513703704

00:05:34.825 --> 00:05:36.149 about the prostate cancer,

NOTE Confidence: 0.855369513703704

 $00:05:36.150 \longrightarrow 00:05:38.052$  you can discuss your concern with

NOTE Confidence: 0.855369513703704

00:05:38.052 --> 00:05:39.431 your doctor, especially if you

NOTE Confidence: 0.855369513703704

 $00:05:39.431 \longrightarrow 00:05:40.666$  have a strong family history.

NOTE Confidence: 0.855369513703704 00:05:40.670 --> 00:05:41.774 If you don't,

NOTE Confidence: 0.855369513703704

 $00:05:41.774 \longrightarrow 00:05:44.350$  then you don't necessarily have to have

NOTE Confidence: 0.855369513703704

 $00:05:44.350 \longrightarrow 00:05:45.670$  pre cancer screening.

00:05:46.660 --> 00:05:49.336 What goes into that decision making?

NOTE Confidence: 0.765960265

 $00:05:49.340 \longrightarrow 00:05:50.402$  Because you know,

NOTE Confidence: 0.765960265

 $00:05:50.402 \longrightarrow 00:05:52.880$  when you start off by saying prostate

NOTE Confidence: 0.765960265

 $00:05:52.954 \longrightarrow 00:05:55.594$  cancer is one of the most common cancers,

NOTE Confidence: 0.765960265

 $00:05:55.600 \longrightarrow 00:05:58.200$  presumably not everybody has symptoms

NOTE Confidence: 0.765960265

 $00:05:58.200 \longrightarrow 00:06:00.800$  when they develop prostate cancer.

NOTE Confidence: 0.765960265

 $00:06:00.800 \longrightarrow 00:06:02.816$  So if you're at average risk

NOTE Confidence: 0.765960265

00:06:02.816 --> 00:06:04.880 and you don't have symptoms,

NOTE Confidence: 0.765960265

 $00{:}06{:}04.880 \dashrightarrow 00{:}06{:}07.508$  what's the likelihood of you being

NOTE Confidence: 0.765960265

 $00:06:07.508 \longrightarrow 00:06:09.600$  diagnosed with prostate cancer and

 $00:06:11.580 \longrightarrow 00:06:13.560$  a relatively frequent event,

NOTE Confidence: 0.765960265

 $00:06:13.560 \longrightarrow 00:06:15.510$  why don't we have screening on

NOTE Confidence: 0.765960265

00:06:15.510 --> 00:06:17.850 a regular basis like we do for

NOTE Confidence: 0.765960265

 $00{:}06{:}17.850 \dashrightarrow 00{:}06{:}19.475$  other kinds of cancers like

NOTE Confidence: 0.765960265

 $00:06:19.475 \longrightarrow 00:06:21.210$  breast cancer or colon cancer?

NOTE Confidence: 0.834880552

 $00:06:21.520 \longrightarrow 00:06:22.720$  That's a very good question.

 $00:06:22.720 \longrightarrow 00:06:24.760$  And that's in part because of

NOTE Confidence: 0.834880552

 $00:06:24.760 \longrightarrow 00:06:26.866$  the long Natural History of the

NOTE Confidence: 0.834880552

 $00:06:26.866 \longrightarrow 00:06:28.566$  prostate cancer and very diverse

NOTE Confidence: 0.834880552

 $00:06:28.566 \longrightarrow 00:06:30.660$  biology of the prostate cancer.

NOTE Confidence: 0.834880552

00:06:30.660 --> 00:06:33.078 And as I mentioned on epidemiology,

NOTE Confidence: 0.834880552

 $00:06:33.080 \longrightarrow 00:06:34.280$  as you see it,

NOTE Confidence: 0.834880552

 $00:06:34.280 \longrightarrow 00:06:36.080$  not every body dies of prostate cancer.

NOTE Confidence: 0.834880552

00:06:36.080 --> 00:06:37.412 I think it's very important to

NOTE Confidence: 0.834880552

00:06:37.412 --> 00:06:38.995 identify this type,

NOTE Confidence: 0.834880552

 $00:06:38.995 \longrightarrow 00:06:41.360$  but the majority of prostate cancer can be

NOTE Confidence: 0.834880552

00:06:41.360 --> 00:06:42.840 very indolent in biology,

NOTE Confidence: 0.834880552

 $00:06:42.840 \longrightarrow 00:06:44.690$  meaning that yes you will

NOTE Confidence: 0.834880552

00:06:44.690 --> 00:06:46.300 have it, you may develop a

NOTE Confidence: 0.834880552

00:06:46.300 --> 00:06:47.690 prostate cancer in your lifetime,

NOTE Confidence: 0.834880552

 $00:06:47.690 \longrightarrow 00:06:50.226$  but you may not die of prostate cancer.

NOTE Confidence: 0.834880552

00:06:50.230 --> 00:06:52.450 So having a diagnosis and

 $00:06:52.450 \longrightarrow 00:06:54.635$  going through a procedures and

NOTE Confidence: 0.834880552

 $00{:}06{:}54.635 \dashrightarrow 00{:}06{:}56.820$  treatments is another and whether

NOTE Confidence: 0.834880552

00:06:56.897 --> 00:06:58.949 you die of prostate cancer

NOTE Confidence: 0.834880552

 $00:06:58.950 \longrightarrow 00:07:00.829$  is what we are really afraid of, right.

NOTE Confidence: 0.834880552

 $00:07:00.829 \longrightarrow 00:07:02.642$  So really a lot of things go

NOTE Confidence: 0.834880552

 $00:07:02.642 \longrightarrow 00:07:04.666$  into making a decision.

NOTE Confidence: 0.834880552

 $00:07:04.670 \longrightarrow 00:07:06.800$  Now you know about the prostate

NOTE Confidence: 0.834880552

 $00:07:06.800 \longrightarrow 00:07:07.510$  cancer screening.

NOTE Confidence: 0.834880552

 $00:07:07.510 \longrightarrow 00:07:09.596$  I think the future of prostate

NOTE Confidence: 0.834880552

 $00{:}07{:}09.596 \dashrightarrow 00{:}07{:}11.600$  cancer screening is really identifying

NOTE Confidence: 0.834880552

 $00:07:11.600 \longrightarrow 00:07:12.812$  those who are at

NOTE Confidence: 0.834880552

 $00:07:12.812 \longrightarrow 00:07:15.080$  risk of developing prostate cancer,

NOTE Confidence: 0.834880552

00:07:15.080 --> 00:07:16.584 not just prostate cancer,

NOTE Confidence: 0.834880552

00:07:16.584 --> 00:07:18.088 but lethal prostate cancer

NOTE Confidence: 0.834880552

 $00:07:18.088 \longrightarrow 00:07:19.880$  and indolent prostate cancer,

00:07:19.880 --> 00:07:22.424 they may not need to be diagnosed because,

NOTE Confidence: 0.834880552

 $00:07:22.430 \longrightarrow 00:07:25.174$  you know, they may live with the disease,

NOTE Confidence: 0.834880552

 $00:07:25.180 \longrightarrow 00:07:28.060$  but they may not die of the disease.

NOTE Confidence: 0.834880552

 $00:07:28.060 \longrightarrow 00:07:29.224$  So that's sort of the things

NOTE Confidence: 0.834880552

 $00:07:29.224 \longrightarrow 00:07:30.409$  that goes on behind the mind.

NOTE Confidence: 0.890432730555556

 $00{:}07{:}31.970 \dashrightarrow 00{:}07{:}34.146$  And so you mentioned a few of the

NOTE Confidence: 0.890432730555556

 $00:07:34.146 \longrightarrow 00:07:36.260$  factors that tend to be associated

NOTE Confidence: 0.890432730555556

 $00:07:36.260 \longrightarrow 00:07:37.768$  with more aggressive disease,

NOTE Confidence: 0.890432730555556

00:07:37.770 --> 00:07:39.734 so being African American,

NOTE Confidence: 0.890432730555556

00:07:39.734 --> 00:07:41.698 having a family history,

NOTE Confidence: 0.890432730555556

 $00:07:41.700 \longrightarrow 00:07:45.165$  particularly a genetic mutation and so on.

NOTE Confidence: 0.890432730555556

 $00:07:45.170 \longrightarrow 00:07:47.110$  And so let's suppose

NOTE Confidence: 0.89043273055556

 $00:07:47.110 \longrightarrow 00:07:49.868$  did fit into that category and

NOTE Confidence: 0.890432730555556

 $00:07:49.868 \longrightarrow 00:07:52.942$  you went and you had a conversation

NOTE Confidence: 0.890432730555556

 $00:07:52.942 \longrightarrow 00:07:56.148$  with your Doctor who decided to screen

NOTE Confidence: 0.890432730555556

 $00:07:56.148 \longrightarrow 00:07:58.962$  you with a PSA and you mentioned

 $00:07:58.962 \longrightarrow 00:08:02.110$  that the normal value is 4.

NOTE Confidence: 0.890432730555556

 $00:08:02.110 \longrightarrow 00:08:03.760$  And let's suppose that your

NOTE Confidence: 0.890432730555556

 $00{:}08{:}03.760 \dashrightarrow 00{:}08{:}05.410$  value was higher than four.

NOTE Confidence: 0.890432730555556

 $00:08:05.410 \longrightarrow 00:08:06.830$  What does that mean?

NOTE Confidence: 0.89043273055556

 $00:08:06.830 \longrightarrow 00:08:08.250$  Does that automatically mean

NOTE Confidence: 0.890432730555556

 $00:08:08.250 \longrightarrow 00:08:10.123$  that you have prostate cancer

NOTE Confidence: 0.890432730555556

 $00:08:10.123 \longrightarrow 00:08:11.958$  or what happens after that?

NOTE Confidence: 0.829301203333333

 $00:08:12.370 \longrightarrow 00:08:13.963$  So this will generate a lot of

NOTE Confidence: 0.829301203333333

 $00:08:13.970 \longrightarrow 00:08:15.686$  questions and

NOTE Confidence: 0.829301203333333

00:08:15.686 --> 00:08:16.830 discussions with your doctor.

NOTE Confidence: 0.829301203333333

 $00:08:16.830 \longrightarrow 00:08:18.906$  The first step is to be

NOTE Confidence: 0.829301203333333

 $00:08:18.906 \longrightarrow 00:08:20.290$  referred to a urologist,

NOTE Confidence: 0.829301203333333

 $00{:}08{:}20.290 \dashrightarrow 00{:}08{:}24.210$  not all elevated PSA means prostate cancer,

NOTE Confidence: 0.829301203333333

 $00:08:24.210 \longrightarrow 00:08:26.073$  sometimes having inflammation in the

NOTE Confidence: 0.829301203333333

00:08:26.073 --> 00:08:29.178 prostate gland or having some,

00:08:29.180 --> 00:08:30.664 you know, some procedures done

NOTE Confidence: 0.829301203333333

00:08:30.664 --> 00:08:32.519 with the prostate gland,

NOTE Confidence: 0.829301203333333

 $00:08:32.520 \longrightarrow 00:08:35.616$  these conditions can raise the PSA value too,

NOTE Confidence: 0.829301203333333

00:08:35.620 --> 00:08:38.960 so you don't have to be too worried about it,

NOTE Confidence: 0.829301203333333

 $00:08:38.960 \longrightarrow 00:08:40.860$  but clearly deserve a conversation

NOTE Confidence: 0.829301203333333

 $00:08:40.860 \longrightarrow 00:08:42.000$  with the urologist.

NOTE Confidence: 0.829301203333333

 $00:08:42.000 \longrightarrow 00:08:43.400$  And he or she will guide you

NOTE Confidence: 0.829301203333333

 $00:08:43.400 \longrightarrow 00:08:45.080$  about the next steps.

NOTE Confidence: 0.829301203333333

 $00:08:45.080 \longrightarrow 00:08:46.320$  Usually what happens as the

NOTE Confidence: 0.829301203333333

 $00:08:46.320 \longrightarrow 00:08:47.870$  next step is that

NOTE Confidence: 0.829301203333333

00:08:47.870 --> 00:08:48.938 depending on the timeline,

NOTE Confidence: 0.829301203333333

 $00:08:48.938 \longrightarrow 00:08:51.213$  he or she may want to repeat the

NOTE Confidence: 0.829301203333333

 $00:08:51.213 \longrightarrow 00:08:53.355$  PSA value to see whether it's real

NOTE Confidence: 0.829301203333333

 $00:08:53.355 \longrightarrow 00:08:54.780$  elevation or false elevation.

NOTE Confidence: 0.829301203333333

00:08:54.780 --> 00:08:57.640 If it's confirmed to be elevated, then,

NOTE Confidence: 0.829301203333333

00:08:57.640 --> 00:08:59.540 depending on your medical conditions,

 $00:08:59.540 \longrightarrow 00:09:01.297$  your doctor will talk to you about

NOTE Confidence: 0.829301203333333

00:09:01.297 --> 00:09:02.810 whether you should get a prostate

NOTE Confidence: 0.829301203333333

 $00:09:02.810 \longrightarrow 00:09:07.169$  biopsy or not to monitor and

NOTE Confidence: 0.829301203333333

 $00:09:07.169 \longrightarrow 00:09:08.414$  those are the conversations you

NOTE Confidence: 0.829301203333333

00:09:08.414 --> 00:09:09.900 would have with your urologist.

NOTE Confidence: 0.8242476515

 $00:09:10.730 \longrightarrow 00:09:13.898$  And ultimately if you do end up

NOTE Confidence: 0.8242476515

00:09:13.898 --> 00:09:17.664 having a prostate biopsy and if that

NOTE Confidence: 0.8242476515

00:09:17.664 --> 00:09:20.549 biopsy indeed confirms prostate cancer,

NOTE Confidence: 0.8242476515

 $00{:}09{:}20.550 \dashrightarrow 00{:}09{:}22.818$  there's a whole system of grading

NOTE Confidence: 0.8242476515

 $00{:}09{:}22.818 \rightarrow 00{:}09{:}24.563$  of prostate cancer that really

NOTE Confidence: 0.8242476515

 $00:09:24.563 \longrightarrow 00:09:26.687$  influences whether we need to be

NOTE Confidence: 0.8242476515

 $00:09:26.687 \longrightarrow 00:09:28.472$  more aggressive or less aggressive

NOTE Confidence: 0.8242476515

 $00{:}09{:}28.472 \dashrightarrow 00{:}09{:}30.167$  in terms of its management.

 $00:09:32.295 \longrightarrow 00:09:34.640$  So we use what we call Gleason

NOTE Confidence: 0.650258003285714

 $00:09:34.707 \longrightarrow 00:09:36.347$  score to create groups.

NOTE Confidence: 0.650258003285714

 $00{:}09{:}36.350 \dashrightarrow 00{:}09{:}38.618$  These are the pathological

 $00:09:38.618 \longrightarrow 00:09:40.886$  terms to describe the

 $00:09:41.636 \longrightarrow 00:09:43.128$  logical assessment of the

NOTE Confidence: 0.650258003285714

00:09:43.128 --> 00:09:44.970 prostate cancer and you know,

NOTE Confidence: 0.650258003285714

 $00:09:44.970 \longrightarrow 00:09:46.842$  the higher the grade is more

NOTE Confidence: 0.650258003285714

 $00:09:46.842 \longrightarrow 00:09:49.590$  ugly looking the prostate cancer cells.

NOTE Confidence: 0.650258003285714

 $00:09:49.590 \longrightarrow 00:09:50.442$  In other words,

NOTE Confidence: 0.650258003285714

 $00:09:50.442 \longrightarrow 00:09:52.146$  this may predict more of aggressive

NOTE Confidence: 0.650258003285714

00:09:52.146 --> 00:09:53.590 biology of the prostate cancer,

NOTE Confidence: 0.650258003285714

 $00{:}09{:}53.590 \dashrightarrow 00{:}09{:}55.354$  but they also are low grade

NOTE Confidence: 0.650258003285714

 $00:09:55.354 \longrightarrow 00:09:56.530$  prostate cancer as well.

NOTE Confidence: 0.650258003285714

 $00:09:56.530 \longrightarrow 00:09:58.615$  So these tumors may have

NOTE Confidence: 0.650258003285714

 $00:09:58.615 \longrightarrow 00:09:59.866$  more indolent biology.

NOTE Confidence: 0.923916936

 $00:10:01.230 \longrightarrow 00:10:03.366$  And so talk to us a little bit

NOTE Confidence: 0.923916936

 $00:10:03.366 \longrightarrow 00:10:05.510$  more about that because one of the

NOTE Confidence: 0.923916936

00:10:05.510 --> 00:10:07.790 things that I think may be confusing

NOTE Confidence: 0.923916936

 $00:10:07.790 \longrightarrow 00:10:10.163$  for people is the fact that some

00:10:10.163 --> 00:10:11.990 people may be diagnosed with a

NOTE Confidence: 0.923916936

 $00:10:11.990 \longrightarrow 00:10:13.990$  more indolent prostate cancer.

NOTE Confidence: 0.923916936

 $00:10:13.990 \longrightarrow 00:10:17.324$  And for them they may have

NOTE Confidence: 0.923916936

 $00:10:17.324 \longrightarrow 00:10:20.084$  watchful waiting or active surveillance,

NOTE Confidence: 0.923916936

 $00:10:20.090 \longrightarrow 00:10:23.366$  whereas others who may have a more

NOTE Confidence: 0.923916936

00:10:23.366 --> 00:10:25.400 aggressive prostate cancer may

NOTE Confidence: 0.923916936

 $00:10:25.400 \longrightarrow 00:10:27.608$  have other treatment modalities.

NOTE Confidence: 0.923916936

00:10:27.610 --> 00:10:31.507 So at what point is that decision made?

NOTE Confidence: 0.923916936

 $00:10:31.510 \longrightarrow 00:10:32.986$  Is there a particular

NOTE Confidence: 0.923916936

 $00{:}10{:}32.986 \dashrightarrow 00{:}10{:}35.200$  Gleason score cutoff that helps us

NOTE Confidence: 0.923916936

 $00{:}10{:}35.265 \dashrightarrow 00{:}10{:}36.980$  to decide which category people

NOTE Confidence: 0.923916936

 $00{:}10{:}36.980 \dashrightarrow 00{:}10{:}39.506$  fall into or what are the factors

NOTE Confidence: 0.923916936

 $00{:}10{:}39.506 \dashrightarrow 00{:}10{:}41.738$  that go into that decision making?

NOTE Confidence: 0.842413044

00:10:42.920 --> 00:10:45.332 When we make a decision on treatment

NOTE Confidence: 0.842413044

 $00:10:45.332 \longrightarrow 00:10:47.396$  there are multiple factors to consider.

00:10:47.400 --> 00:10:48.544 Gleason scores you mentioned

NOTE Confidence: 0.842413044

 $00:10:48.544 \longrightarrow 00:10:50.260$  are one of the critical one,

NOTE Confidence: 0.842413044

 $00:10:50.260 \longrightarrow 00:10:52.820$  but also we look at tumor

NOTE Confidence: 0.842413044

 $00:10:52.820 \longrightarrow 00:10:54.657$  staging, patients

NOTE Confidence: 0.842413044

 $00:10:54.657 \longrightarrow 00:10:56.917$  comorbidities and life expectancy.

NOTE Confidence: 0.842413044

00:10:56.920 --> 00:10:59.104 A lot of things factor into making

NOTE Confidence: 0.842413044

 $00:10:59.104 \longrightarrow 00:11:01.181$  a treatment decision to answer your

NOTE Confidence: 0.842413044

00:11:01.181 --> 00:11:03.016 questions about the Gleason score,

NOTE Confidence: 0.842413044

00:11:03.020 --> 00:11:05.424 generally you will hear

NOTE Confidence: 0.842413044

 $00:11:05.424 \longrightarrow 00:11:07.923$  Gleason score 6,7,8,9 or 10.

NOTE Confidence: 0.842413044

 $00:11:07.923 \longrightarrow 00:11:10.940$  So Gleason six is generally speaking or

NOTE Confidence: 0.842413044

 $00:11:11.023 \longrightarrow 00:11:14.088$  low grade prostate cancer oftentimes.

NOTE Confidence: 0.842413044

 $00:11:14.090 \longrightarrow 00:11:15.830$  A patient is very less likely

NOTE Confidence: 0.842413044

 $00:11:15.830 \longrightarrow 00:11:17.570$  to die of prostate cancer.

NOTE Confidence: 0.842413044

 $00:11:17.570 \longrightarrow 00:11:18.830$  So oftentimes patients

NOTE Confidence: 0.842413044

 $00:11:18.830 \longrightarrow 00:11:20.510$  with increasing 6 disease,

 $00:11:20.510 \longrightarrow 00:11:23.702$  they can be monitored with what we call

NOTE Confidence: 0.842413044

 $00{:}11{:}23.702 \dashrightarrow 00{:}11{:}25.928$  active surveillance or watchful waiting.

NOTE Confidence: 0.842413044

 $00:11:25.930 \longrightarrow 00:11:28.597$  Score 7 is sort of like

NOTE Confidence: 0.842413044

 $00{:}11{:}28.597 \dashrightarrow 00{:}11{:}30.270$  intermediate risk prostate cancer.

NOTE Confidence: 0.842413044

00:11:30.270 --> 00:11:33.330 Again depending on other conditions,

NOTE Confidence: 0.842413044

 $00:11:33.330 \longrightarrow 00:11:35.316$  you could talk to your doctor

NOTE Confidence: 0.842413044

00:11:35.316 --> 00:11:36.309 about being treated,

NOTE Confidence: 0.842413044

 $00{:}11{:}36.310 \dashrightarrow 00{:}11{:}38.498$  whether surgery or radiation,

NOTE Confidence: 0.842413044

00:11:38.498 --> 00:11:42.160 but for Gleason score 8-9 or 10,

NOTE Confidence: 0.842413044

 $00:11:42.160 \longrightarrow 00:11:44.180$  these are rather higher grade

NOTE Confidence: 0.842413044

00:11:44.180 --> 00:11:46.105 prostate cancer and you

NOTE Confidence: 0.842413044

00:11:46.105 --> 00:11:48.030 really want to consider receiving

NOTE Confidence: 0.842413044

 $00{:}11{:}48.094 \dashrightarrow 00{:}11{:}49.399$  more definitive treatments

NOTE Confidence: 0.842413044

 $00:11:49.399 \longrightarrow 00:11:51.574$  with the radiation or surgery.

NOTE Confidence: 0.842413044

 $00:11:51.580 \longrightarrow 00:11:52.102$  So again,

 $00:11:52.102 \longrightarrow 00:11:54.190$  Gleason score is one of the factors

NOTE Confidence: 0.842413044

00:11:54.244 --> 00:11:56.484 going in and making a treatment decision,

NOTE Confidence: 0.842413044

 $00:11:56.490 \longrightarrow 00:11:57.780$  but we should also

NOTE Confidence: 0.842413044

 $00:11:57.780 \longrightarrow 00:11:59.478$  think about other factors as well.

NOTE Confidence: 0.903276839

 $00:12:00.730 \longrightarrow 00:12:03.178$  And so when patients are

NOTE Confidence: 0.903276839

 $00{:}12{:}03.178 \dashrightarrow 00{:}12{:}04.810$  treated with active surveillance,

NOTE Confidence: 0.903276839

 $00:12:04.810 \longrightarrow 00:12:06.422$  what does that mean?

NOTE Confidence: 0.903276839

 $00:12:06.422 \longrightarrow 00:12:09.600$  Does that mean that we just kind of

NOTE Confidence: 0.903276839

 $00{:}12{:}09.600 \dashrightarrow 00{:}12{:}10.977$  close your eyes and say, well,

NOTE Confidence: 0.903276839

00:12:10.977 --> 00:12:12.639 you have indolent disease

NOTE Confidence: 0.903276839

 $00{:}12{:}12.639 \dashrightarrow 00{:}12{:}14.359$  or are these people followed?

NOTE Confidence: 0.903276839

00:12:14.360 --> 00:12:16.048 And if they're followed

NOTE Confidence: 0.903276839

00:12:16.048 --> 00:12:17.314 with imaging modalities,

NOTE Confidence: 0.903276839

 $00:12:17.320 \longrightarrow 00:12:19.707$  what modality is that and how

NOTE Confidence: 0.903276839

00:12:19.707 --> 00:12:21.592 frequently are people monitored

NOTE Confidence: 0.903276839

 $00:12:21.592 \longrightarrow 00:12:23.956$  or are they monitored with PSA?

 $00:12:23.960 \longrightarrow 00:12:25.520$  What does active

NOTE Confidence: 0.903276839

00:12:25.520 --> 00:12:27.080 surveillance really look like? 00:12:27.420 --> 00:12:29.460 It's an active surveillance,

NOTE Confidence: 0.86234476

 $00:12:29.460 \longrightarrow 00:12:30.740$  not passive active surveillance.

NOTE Confidence: 0.86234476

 $00:12:30.740 \longrightarrow 00:12:33.119$  We go in with an active surveillance

NOTE Confidence: 0.86234476

 $00:12:33.119 \longrightarrow 00:12:35.119$  with the goal of intervening.

NOTE Confidence: 0.86234476

00:12:35.120 --> 00:12:37.388 At some point, again, this discussion

NOTE Confidence: 0.86234476

 $00:12:37.388 \longrightarrow 00:12:39.610$  would happen with the urologist.

NOTE Confidence: 0.86234476

 $00{:}12{:}39.610 \dashrightarrow 00{:}12{:}42.640$  Primarily so during the active surveillance

NOTE Confidence: 0.86234476

00:12:42.640 --> 00:12:45.758 patient will follow with the PSA one

NOTE Confidence: 0.86234476

 $00{:}12{:}45.758 \dashrightarrow 00{:}12{:}48.145$  summer once a year or prostate MRI

NOTE Confidence: 0.86234476

00:12:48.226 --> 00:12:50.896 to really understand the morphology,

NOTE Confidence: 0.86234476

 $00:12:50.900 \longrightarrow 00:12:52.660$  the how the prostate tumor

NOTE Confidence: 0.86234476

 $00:12:52.660 \longrightarrow 00:12:54.420$  looks in the prostate gland.

NOTE Confidence: 0.86234476

 $00:12:54.420 \longrightarrow 00:12:56.380$  They also follow with the

NOTE Confidence: 0.86234476

 $00{:}12{:}56.380 \dashrightarrow 00{:}12{:}57.556$  digital rectal examinations.

 $00:12:57.560 \longrightarrow 00:13:00.146$  So they follow these patients very

NOTE Confidence: 0.86234476

 $00{:}13{:}00.146 \dashrightarrow 00{:}13{:}02.259$  carefully and throughout the course

NOTE Confidence: 0.86234476

 $00:13:02.259 \longrightarrow 00:13:04.779$  to really make a decision as to when

NOTE Confidence: 0.86234476

00:13:04.779 --> 00:13:06.695 to intervene the prostate cancer.

NOTE Confidence: 0.86234476

 $00:13:06.695 \longrightarrow 00:13:08.525$  Oftentimes you may end up receiving

NOTE Confidence: 0.86234476

00:13:08.525 --> 00:13:10.408 a surgery or radiation therapy.

NOTE Confidence: 0.86234476

 $00:13:10.410 \longrightarrow 00:13:12.414$  But often other times you may

NOTE Confidence: 0.86234476

 $00:13:12.414 \longrightarrow 00:13:14.849$  not need to be intervened for

NOTE Confidence: 0.86234476

 $00:13:14.849 \longrightarrow 00:13:16.877$  low risk prostate cancer.

NOTE Confidence: 0.874819966153846

 $00:13:17.980 \longrightarrow 00:13:20.024$  Well, we're going to take a

NOTE Confidence: 0.874819966153846

 $00:13:20.024 \longrightarrow 00:13:22.080$  short break for our medical minute.

NOTE Confidence: 0.874819966153846

 $00:13:22.080 \longrightarrow 00:13:23.220$  And when we come back,

NOTE Confidence: 0.874819966153846

 $00{:}13{:}23.220 \dashrightarrow 00{:}13{:}25.369$  we're going to learn more about the

NOTE Confidence: 0.874819966153846

 $00:13:25.369 \longrightarrow 00:13:26.990$  treatment of prostate cancer patients

NOTE Confidence: 0.874819966153846

 $00:13:26.990 \longrightarrow 00:13:29.289$  with my guest, Doctor Joseph Kim.

 $00:13:29.620 \longrightarrow 00:13:31.600$  Funding for Yale Cancer Answers

NOTE Confidence: 0.770307405

 $00:13:31.600 \longrightarrow 00:13:33.580$  comes from Smilow Cancer Hospital,

NOTE Confidence: 0.770307405

 $00:13:33.580 \longrightarrow 00:13:35.505$  where the gynecologic oncology program

NOTE Confidence: 0.770307405

 $00:13:35.505 \longrightarrow 00:13:37.850$  brings together a team of clinicians

NOTE Confidence: 0.770307405

 $00:13:37.850 \longrightarrow 00:13:40.730$  whose focus is to care for women with

NOTE Confidence: 0.770307405

 $00:13:40.730 \longrightarrow 00:13:42.579$  gynecologic cancers. Learn more at

NOTE Confidence: 0.86796355

00:13:46.120 --> 00:13:48.690 yalecancercenter.org.

NOTE Confidence: 0.86796355

00:13:48.690 --> 00:13:50.330 There are many obstacles to

NOTE Confidence: 0.86796355

 $00{:}13{:}50.330 \to 00{:}13{:}51.642$  face when quitting smoking,

NOTE Confidence: 0.86796355

 $00:13:51.650 \longrightarrow 00:13:54.688$  as smoking involves the potent drug nicotine.

NOTE Confidence: 0.86796355

 $00:13:54.690 \longrightarrow 00:13:56.465$  Quitting smoking is a very

NOTE Confidence: 0.86796355

00:13:56.465 --> 00:13:57.530 important lifestyle change,

NOTE Confidence: 0.86796355

 $00:13:57.530 \longrightarrow 00:13:59.009$  especially for patients

NOTE Confidence: 0.86796355

 $00{:}13{:}59.009 \dashrightarrow 00{:}14{:}00.488$  undergoing cancer treatment,

NOTE Confidence: 0.86796355

 $00:14:00.490 \longrightarrow 00:14:02.770$  as it's been shown to positively

NOTE Confidence: 0.86796355

 $00{:}14{:}02.770 \dashrightarrow 00{:}14{:}04.290$  impact response to treatments,

 $00:14:04.290 \longrightarrow 00:14:06.365$  decrease the likelihood that patients

NOTE Confidence: 0.86796355

 $00{:}14{:}06.365 \dashrightarrow 00{:}14{:}08.025$  will develop second malignancies,

NOTE Confidence: 0.86796355

 $00:14:08.030 \longrightarrow 00:14:10.350$  and increase rates of survival.

NOTE Confidence: 0.86796355

 $00:14:10.350 \longrightarrow 00:14:12.550$  Tobacco treatment programs are currently

NOTE Confidence: 0.86796355

 $00:14:12.550 \longrightarrow 00:14:14.750$  being offered at federally designated

NOTE Confidence: 0.86796355

 $00:14:14.812 \longrightarrow 00:14:16.232$  Comprehensive cancer centers such

NOTE Confidence: 0.86796355

00:14:16.232 --> 00:14:18.710 as Yale Cancer Center and Smilow

NOTE Confidence: 0.86796355

 $00{:}14{:}18.710 \dashrightarrow 00{:}14{:}20.542$  Cancer Hospital all treatment

NOTE Confidence: 0.86796355

 $00{:}14{:}20.542 \dashrightarrow 00{:}14{:}22.832$  components are evidence based and

NOTE Confidence: 0.86796355

 $00:14:22.832 \longrightarrow 00:14:25.273$  patients are treated with FDA approved

NOTE Confidence: 0.86796355

 $00:14:25.273 \longrightarrow 00:14:27.760$  first line medications as well as

NOTE Confidence: 0.86796355

 $00:14:27.760 \longrightarrow 00:14:29.796$  smoking cessation counseling that

NOTE Confidence: 0.86796355

 $00{:}14{:}29.796 \dashrightarrow 00{:}14{:}31.832$  stresses appropriate coping skills.

NOTE Confidence: 0.86796355

00:14:31.840 --> 00:14:34.224 More information is available

NOTE Confidence: 0.86796355

 $00:14:34.224 \longrightarrow 00:14:35.250$  at yalecancercenter.org.

00:14:35.250 --> 00:14:37.830 You're listening to Connecticut public radio.

NOTE Confidence: 0.812817651666667

 $00{:}14{:}39.240 \dashrightarrow 00{:}14{:}41.340$  Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.812817651666667

 $00:14:41.340 \longrightarrow 00:14:42.840$  This is doctor Anees Chagpar

NOTE Confidence: 0.812817651666667

00:14:42.840 --> 00:14:44.856 and I'm joined tonight by my guest,

NOTE Confidence: 0.812817651666667

 $00:14:44.860 \longrightarrow 00:14:46.009$  Doctor Joseph Kim.

NOTE Confidence: 0.812817651666667

00:14:46.009 --> 00:14:48.690 We're talking about the care of patients

NOTE Confidence: 0.812817651666667

00:14:48.758 --> 00:14:51.248 with prostate cancer in honor of

NOTE Confidence: 0.812817651666667

00:14:51.248 --> 00:14:53.240 prostate Cancer Awareness Month.

NOTE Confidence: 0.812817651666667

 $00{:}14{:}53.240 \dashrightarrow 00{:}14{:}55.100$  Right before the break, Doctor Kim,

NOTE Confidence: 0.812817651666667

00:14:55.100 --> 00:14:57.980 you were mentioning that many patients

NOTE Confidence: 0.812817651666667

 $00{:}14{:}57.980 \dashrightarrow 00{:}14{:}59.900$  have indolent prostate cancer,

NOTE Confidence: 0.812817651666667

 $00:14:59.900 \longrightarrow 00:15:01.996$  which even if diagnosed,

NOTE Confidence: 0.812817651666667

 $00:15:01.996 \longrightarrow 00:15:05.140$  may be indolent in its course.

NOTE Confidence: 0.812817651666667

 $00:15:05.140 \longrightarrow 00:15:08.044$  And it may be followed with

NOTE Confidence: 0.812817651666667

 $00:15:08.044 \longrightarrow 00:15:09.812$  active surveillance with PSA's.

NOTE Confidence: 0.812817651666667

 $00:15:09.812 \longrightarrow 00:15:11.684$  And so on and so forth.

 $00:15:11.690 \longrightarrow 00:15:13.825$  For the patients who have

NOTE Confidence: 0.812817651666667

00:15:13.825 --> 00:15:15.106 more aggressive disease,

NOTE Confidence: 0.812817651666667

 $00:15:15.110 \longrightarrow 00:15:16.822$  can you talk to us a little bit

NOTE Confidence: 0.812817651666667

 $00:15:16.822 \longrightarrow 00:15:18.169$  more about their management?

NOTE Confidence: 0.812817651666667

00:15:18.170 --> 00:15:19.310 So first of all,

NOTE Confidence: 0.812817651666667

00:15:19.310 --> 00:15:21.020 how do you know if a patient is

NOTE Confidence: 0.812817651666667

00:15:21.087 --> 00:15:23.535 diagnosed and let's say that they

NOTE Confidence: 0.812817651666667

 $00{:}15{:}23.535 \dashrightarrow 00{:}15{:}25.167$  have more aggressive disease?

NOTE Confidence: 0.812817651666667

 $00:15:25.170 \longrightarrow 00:15:28.170$  So we talked a little bit about the

NOTE Confidence: 0.812817651666667

 $00:15:28.170 \longrightarrow 00:15:30.228$  Gleason score and you mentioned that

NOTE Confidence: 0.812817651666667

 $00:15:30.228 \longrightarrow 00:15:33.989$  an 8-9 or a 10 is more aggressive if a

NOTE Confidence: 0.812817651666667

 $00:15:33.989 \longrightarrow 00:15:36.749$  patient is diagnosed with such disease,

NOTE Confidence: 0.812817651666667

 $00{:}15{:}36.750 \dashrightarrow 00{:}15{:}38.829$  how do we know that this cancer

NOTE Confidence: 0.812817651666667

 $00:15:38.829 \longrightarrow 00:15:40.778$  is confined only to the prostate?

NOTE Confidence: 0.812817651666667

 $00:15:40.780 \longrightarrow 00:15:43.160$  And hasn't spread all over their body.

 $00:15:43.160 \longrightarrow 00:15:45.182$  Is there some sort of staging

NOTE Confidence: 0.812817651666667

 $00:15:45.182 \longrightarrow 00:15:47.713$  test that we need to do before

NOTE Confidence: 0.812817651666667

 $00:15:47.713 \longrightarrow 00:15:49.189$  we embark upon therapy?

NOTE Confidence: 0.792139385

 $00:15:50.750 \longrightarrow 00:15:52.430$  A very good question. So yes,

NOTE Confidence: 0.792139385

 $00:15:52.430 \longrightarrow 00:15:54.914$  we do several imaging modalities truly

NOTE Confidence: 0.792139385

 $00:15:54.914 \longrightarrow 00:15:57.950$  understand the extent of the prostate cancer.

NOTE Confidence: 0.792139385

00:15:57.950 --> 00:15:59.575 The most commonly used imaging

NOTE Confidence: 0.792139385

 $00:15:59.575 \longrightarrow 00:16:02.109$  modality we use is a prostate MRI.

NOTE Confidence: 0.792139385

 $00{:}16{:}02.110 \dashrightarrow 00{:}16{:}04.168$  This will really give us a better

NOTE Confidence: 0.792139385

00:16:04.168 --> 00:16:06.192 description of what's going on with the

NOTE Confidence: 0.792139385

 $00:16:06.192 \longrightarrow 00:16:08.616$  prostate gland and the tumors and how the

NOTE Confidence: 0.792139385

00:16:08.616 --> 00:16:10.446 tumors invading around the surroundings,

NOTE Confidence: 0.792139385

 $00:16:10.450 \longrightarrow 00:16:12.326$  around the structures nearby.

NOTE Confidence: 0.792139385

 $00:16:12.326 \longrightarrow 00:16:16.156$  So we use a prostate MRI and if we are

NOTE Confidence: 0.792139385

 $00:16:16.156 \longrightarrow 00:16:18.424$  worried that this is a high risk disease

NOTE Confidence: 0.792139385

 $00:16:18.424 \longrightarrow 00:16:20.790$  then we often get stage and scanned.

 $00:16:20.790 \longrightarrow 00:16:22.524$  Now with a CT scan and

NOTE Confidence: 0.792139385

 $00:16:22.524 \longrightarrow 00:16:24.100$  the whole body bone scan,

NOTE Confidence: 0.792139385

 $00:16:24.100 \longrightarrow 00:16:25.752$  we get a whole body bone scan

NOTE Confidence: 0.792139385

00:16:25.752 --> 00:16:27.666 because bone is a very common site

NOTE Confidence: 0.792139385

 $00{:}16{:}27.666 \dashrightarrow 00{:}16{:}29.394$  that prostate cancer can spread to.

NOTE Confidence: 0.792139385

 $00:16:29.400 \longrightarrow 00:16:31.983$  So we get a CT scan and the

NOTE Confidence: 0.792139385

00:16:31.983 --> 00:16:34.594 bone scan in the prostate MRI to

NOTE Confidence: 0.792139385

 $00:16:34.594 \longrightarrow 00:16:36.980$  understand the extent of the disease.

NOTE Confidence: 0.792139385

 $00:16:36.980 \longrightarrow 00:16:39.962$  In some settings when we

NOTE Confidence: 0.792139385

 $00:16:39.962 \longrightarrow 00:16:42.267$  are making decisions as to what

NOTE Confidence: 0.792139385

 $00:16:42.267 \longrightarrow 00:16:44.792$  kind of a local therapy to do and

NOTE Confidence: 0.792139385

00:16:44.792 --> 00:16:46.976 in a patient we highly suspect

NOTE Confidence: 0.792139385

00:16:46.976 --> 00:16:48.999 to have metastatic disease,

NOTE Confidence: 0.792139385

 $00:16:49.000 \longrightarrow 00:16:50.800$  we now use a new imaging.

NOTE Confidence: 0.792139385

 $00:16:50.800 \longrightarrow 00:16:52.809$  Or PSMA PET CT scan to see

 $00:16:52.809 \longrightarrow 00:16:55.018$  whether a patient in fact has a

NOTE Confidence: 0.792139385

 $00{:}16{:}55.018 \dashrightarrow 00{:}16{:}56.294$  metastatic disease or not.

NOTE Confidence: 0.861265868333334

 $00:16:57.560 \longrightarrow 00:16:59.738$  Tell us more about this PSMA.

NOTE Confidence: 0.861265868333334

00:16:59.740 --> 00:17:03.205 Is that the same as a regular FDG pet

NOTE Confidence: 0.861265868333334

 $00:17:03.205 \longrightarrow 00:17:06.680$  or is it special for the prostate?

NOTE Confidence: 0.861265868333334

 $00:17:06.680 \longrightarrow 00:17:08.801$  Tell us more about that and in

NOTE Confidence: 0.861265868333334

 $00:17:08.801 \longrightarrow 00:17:10.647$  what patients you would use that

NOTE Confidence: 0.861265868333334

 $00:17:10.647 \longrightarrow 00:17:12.677$  as opposed to simply using a CT

NOTE Confidence: 0.861265868333334

 $00{:}17{:}12.747 \dashrightarrow 00{:}17{:}14.770$  scan and a whole body bone scan.

NOTE Confidence: 0.849518728333333

 $00:17:15.520 \longrightarrow 00:17:16.900$  So that's a very good question.

NOTE Confidence: 0.849518728333333

 $00:17:16.900 \longrightarrow 00:17:21.220$  So PSMA stands for prostate specific

NOTE Confidence: 0.849518728333333

 $00{:}17{:}21.220 \to 00{:}17{:}23.804$  membrane antigen as the name implies.

NOTE Confidence: 0.849518728333333

 $00:17:23.804 \longrightarrow 00:17:25.234$  It's supposed to be very

NOTE Confidence: 0.849518728333333

 $00:17:25.234 \longrightarrow 00:17:26.579$  specific to prostate cancer.

NOTE Confidence: 0.849518728333333

00:17:26.580 --> 00:17:27.900 So if you think about this,

NOTE Confidence: 0.849518728333333

 $00:17:27.900 \longrightarrow 00:17:30.602$  this is actually much

 $00:17:30.602 \longrightarrow 00:17:32.956$  more sensitive PET imaging than the

NOTE Confidence: 0.849518728333333

 $00:17:32.956 \longrightarrow 00:17:35.770$  conventional CT scan or the bone scan.

NOTE Confidence: 0.849518728333333

00:17:35.770 --> 00:17:38.003 This is different from FDG PET to

NOTE Confidence: 0.849518728333333

 $00:17:38.003 \longrightarrow 00:17:40.743$  scan after looking

NOTE Confidence: 0.849518728333333

 $00:17:40.743 \longrightarrow 00:17:42.883$  for hypermetabolism of the glucose.

NOTE Confidence: 0.849518728333333

 $00:17:42.890 \longrightarrow 00:17:45.501$  But here we are looking for the

NOTE Confidence: 0.849518728333333

 $00:17:45.501 \longrightarrow 00:17:47.957$  tumor cells that are expressing PSMA and

NOTE Confidence: 0.849518728333333

 $00:17:47.957 \longrightarrow 00:17:50.996$  we are trying to detect, you know,

NOTE Confidence: 0.849518728333333

 $00{:}17{:}50.996 \dashrightarrow 00{:}17{:}54.307$  very low levels of prostate cancers

NOTE Confidence: 0.849518728333333

00:17:54.307 --> 00:17:57.590 by using this trace PSMA tracer,

NOTE Confidence: 0.849518728333333

 $00:17:57.590 \longrightarrow 00:17:59.066$  so this PSMA.

NOTE Confidence: 0.849518728333333

 $00:17:59.066 \longrightarrow 00:18:02.018$  has about 3 indications.

NOTE Confidence: 0.849518728333333

 $00{:}18{:}02.020 \dashrightarrow 00{:}18{:}04.180$  So in a localized setting in patients

NOTE Confidence: 0.849518728333333

 $00{:}18{:}04.180 \dashrightarrow 00{:}18{:}06.107$  who just received the diagnosis

NOTE Confidence: 0.849518728333333

00:18:06.107 --> 00:18:08.645 of high risk prostate cancer and

00:18:08.645 --> 00:18:10.280 your doctor's discussing NOTE Confidence: 0.849518728333333

 $00:18:10.280 \longrightarrow 00:18:12.380$  whether we need to do a surgery,

NOTE Confidence: 0.849518728333333

 $00:18:12.380 \longrightarrow 00:18:15.264$  radiation or whether we should do a

NOTE Confidence: 0.849518728333333

 $00:18:15.264 \longrightarrow 00:18:17.852$  systemic therapy based on

NOTE Confidence: 0.849518728333333

 $00:18:17.852 \longrightarrow 00:18:20.834$  parameters such as PSA level, Gleason score,

NOTE Confidence: 0.849518728333333

 $00:18:20.840 \longrightarrow 00:18:22.175$  which really raised our concern

NOTE Confidence: 0.849518728333333

 $00:18:22.175 \longrightarrow 00:18:23.856$  that this patient may in fact

NOTE Confidence: 0.849518728333333

 $00:18:23.856 \longrightarrow 00:18:25.040$  have a metastatic disease.

NOTE Confidence: 0.849518728333333

 $00:18:25.040 \longrightarrow 00:18:26.600$  Then we may actually get

NOTE Confidence: 0.849518728333333

00:18:26.600 --> 00:18:28.160 a PSMA to scan,

NOTE Confidence: 0.849518728333333

 $00:18:28.160 \longrightarrow 00:18:30.050$  to document and to prove that

NOTE Confidence: 0.849518728333333

 $00:18:30.050 \longrightarrow 00:18:32.500$  patient has a metastatic disease.

NOTE Confidence: 0.849518728333333

 $00:18:32.500 \longrightarrow 00:18:34.884$  So in such a setting we can avoid doing

NOTE Confidence: 0.849518728333333

00:18:34.884 --> 00:18:36.736 surgery or surgery or radiotherapy

NOTE Confidence: 0.849518728333333

 $00:18:36.736 \longrightarrow 00:18:38.716$  for that group of patients.

NOTE Confidence: 0.849518728333333

 $00:18:38.720 \longrightarrow 00:18:41.728$  So we use this scan in making a

00:18:41.728 --> 00:18:43.655 treatment decision for whether

NOTE Confidence: 0.849518728333333

 $00:18:43.655 \longrightarrow 00:18:45.851$  patients receive local

NOTE Confidence: 0.849518728333333

00:18:45.851 --> 00:18:48.047 therapy versus systemic therapy.

NOTE Confidence: 0.849518728333333

 $00:18:48.050 \longrightarrow 00:18:50.283$  And the caveat for this is that

NOTE Confidence: 0.849518728333333

 $00:18:50.283 \longrightarrow 00:18:52.426$  this can detect sometimes a false

NOTE Confidence: 0.849518728333333

 $00:18:52.426 \longrightarrow 00:18:55.037$  signals and false positives as well.

NOTE Confidence: 0.849518728333333

 $00:18:55.040 \longrightarrow 00:18:57.720$  So one has to look at the imaging

NOTE Confidence: 0.849518728333333

 $00{:}18{:}57.720 \dashrightarrow 00{:}19{:}00.189$  data in the clinical context.

00:19:00.760 --> 00:19:03.462 Let's suppose a patient is diagnosed

NOTE Confidence: 0.817127267888889

 $00:19:03.462 \longrightarrow 00:19:06.925$  with a more aggressive prostate cancer

NOTE Confidence: 0.817127267888889

 $00{:}19{:}06.925 \dashrightarrow 00{:}19{:}10.255$  and their doctor decides that they're

NOTE Confidence: 0.817127267888889

 $00{:}19{:}10.340 \dashrightarrow 00{:}19{:}13.637$  going to get treatment and staging scans,

NOTE Confidence: 0.817127267888889

 $00:19:13.640 \dashrightarrow 00:19:16.115$  whether a CT and bone scan or a PSMA and no

 $00{:}19{:}18.374 \dashrightarrow 00{:}19{:}19.840$  metastatic disease is found.

NOTE Confidence: 0.817127267888889

 $00:19:19.840 \longrightarrow 00:19:22.860$  So this is localized to

NOTE Confidence: 0.817127267888889

 $00:19:22.860 \longrightarrow 00:19:25.276$  the prostate itself.

 $00:19:25.280 \longrightarrow 00:19:27.352$  Talk to us a little bit about

NOTE Confidence: 0.817127267888889

 $00:19:27.352 \longrightarrow 00:19:28.240$  how that's treated.

NOTE Confidence: 0.817127267888889

 $00:19:28.240 \longrightarrow 00:19:30.550$  You mentioned surgery, you mentioned

NOTE Confidence: 0.817127267888889

 $00:19:30.550 \longrightarrow 00:19:31.131$  radiotherapy,

NOTE Confidence: 0.817127267888889

00:19:31.131 --> 00:19:34.036 you also mentioned systemic therapy,

NOTE Confidence: 0.817127267888889

 $00{:}19{:}34.040 \dashrightarrow 00{:}19{:}36.959$  how do you decide which modality a

NOTE Confidence: 0.817127267888889

 $00:19:36.959 \longrightarrow 00:19:39.630$  patient will be treated with

NOTE Confidence: 0.817127267888889

 $00:19:39.630 \longrightarrow 00:19:42.300$  or is a combination often used?

NOTE Confidence: 0.817127267888889

 $00{:}19{:}42.300 \dashrightarrow 00{:}19{:}44.034$  Tell us more about how prostate

NOTE Confidence: 0.817127267888889

 $00:19:44.034 \longrightarrow 00:19:45.969$  cancer is treated in that setting.

NOTE Confidence: 0.7867083195

 $00{:}19{:}46.720 \dashrightarrow 00{:}19{:}49.069$  So a lot of factors go into

NOTE Confidence: 0.7867083195

 $00{:}19{:}49.069 \dashrightarrow 00{:}19{:}50.785$  treating patients with a localized

NOTE Confidence: 0.7867083195

 $00:19:50.785 \longrightarrow 00:19:52.873$  prostate cancer that is high risk.

NOTE Confidence: 0.7867083195

 $00:19:52.880 \longrightarrow 00:19:55.688$  The options are several as mentioned,

NOTE Confidence: 0.7867083195

 $00:19:55.688 \longrightarrow 00:19:58.677$  surgery is one, radiation therapy with

NOTE Confidence: 0.7867083195

00:19:58.677 --> 00:20:01.287 hormone therapy is another, sometimes

 $00:20:01.290 \longrightarrow 00:20:03.140$  systemic therapy followed by radiotherapy

NOTE Confidence: 0.7867083195

 $00{:}20{:}03.140 \longrightarrow 00{:}20{:}05.638$  is another approach that we can take

NOTE Confidence: 0.7867083195

 $00{:}20{:}05.638 \dashrightarrow 00{:}20{:}07.408$  in treating this group of patients.

NOTE Confidence: 0.7867083195

00:20:07.410 --> 00:20:10.114 And again you know in making a treatment

NOTE Confidence: 0.7867083195

00:20:10.114 --> 00:20:11.786 decision a lot of factors go into it

NOTE Confidence: 0.7867083195

 $00:20:11.790 \longrightarrow 00:20:13.750$  in terms of patients preference as well.

NOTE Confidence: 0.7867083195

 $00:20:13.750 \longrightarrow 00:20:15.814$  We counsel him about the potential

NOTE Confidence: 0.7867083195

 $00:20:15.814 \longrightarrow 00:20:18.210$  complications of each of these approaches.

NOTE Confidence: 0.7867083195

 $00:20:18.210 \longrightarrow 00:20:20.226$  Again our intent here is a cure,

NOTE Confidence: 0.7867083195

 $00:20:20.230 \longrightarrow 00:20:21.386$  the long term cure.

NOTE Confidence: 0.7867083195

00:20:21.386 --> 00:20:23.719 So whenever we make a decision on a

NOTE Confidence: 0.7867083195

 $00:20:23.719 \longrightarrow 00:20:25.847$  certain treatment we have to keep in mind

NOTE Confidence: 0.7867083195

 $00:20:25.913 \longrightarrow 00:20:28.286$  of their long term complications as well.

NOTE Confidence: 0.7867083195

 $00:20:28.290 \longrightarrow 00:20:32.370$  So generally speaking with the surgery,

NOTE Confidence: 0.7867083195

 $00:20:32.370 \longrightarrow 00:20:35.274$  we can cure some of these patients,

00:20:35.280 --> 00:20:37.660 but some of these patients may end

NOTE Confidence: 0.7867083195

 $00{:}20{:}37.660 \dashrightarrow 00{:}20{:}40.731$  up with the long term urinary issues

NOTE Confidence: 0.7867083195

00:20:40.731 --> 00:20:43.196 or erectile dysfunctions and other,

NOTE Confidence: 0.7867083195

 $00:20:43.200 \longrightarrow 00:20:45.180$  you know, long term complications.

NOTE Confidence: 0.7867083195

 $00:20:45.180 \longrightarrow 00:20:46.800$  The rates are relatively low.

NOTE Confidence: 0.7867083195

00:20:46.800 --> 00:20:48.432 But again, patients would have to

NOTE Confidence: 0.7867083195

 $00:20:48.432 \longrightarrow 00:20:49.520$  be concerned about that.

NOTE Confidence: 0.7867083195

00:20:49.520 --> 00:20:51.820 And with the radiation therapy,

NOTE Confidence: 0.786708319500:20:51.820 --> 00:20:52.209 again,

NOTE Confidence: 0.7867083195

00:20:52.209 --> 00:20:54.154 patients will receive radiation therapy

NOTE Confidence: 0.7867083195

 $00:20:54.154 \longrightarrow 00:20:56.946$  about five to six weeks of radiation

NOTE Confidence: 0.7867083195

 $00:20:56.946 \longrightarrow 00:20:58.901$  therapy along with the hormonal

NOTE Confidence: 0.7867083195

 $00:20:58.901 \longrightarrow 00:21:00.730$  therapy and these patients would have

NOTE Confidence: 0.7867083195

 $00:21:00.730 \longrightarrow 00:21:02.759$  a very nice response in their PSA.

NOTE Confidence: 0.7867083195

00:21:02.760 --> 00:21:04.280 And their clinical improvement,

NOTE Confidence: 0.7867083195

 $00:21:04.280 \longrightarrow 00:21:06.972$  but the long term complication of this

 $00{:}21{:}06.972 \dashrightarrow 00{:}21{:}09.078$  treatment would be sometimes this can

NOTE Confidence: 0.7867083195

 $00:21:09.078 \longrightarrow 00:21:11.370$  cause some issues in

NOTE Confidence: 0.7867083195

 $00:21:11.370 \longrightarrow 00:21:12.210$  bladder area,

NOTE Confidence: 0.7867083195

 $00:21:12.210 \longrightarrow 00:21:14.730$  some abnormal blood vessels and

NOTE Confidence: 0.7867083195

 $00:21:14.730 \longrightarrow 00:21:16.688$  sometimes this can cause second

NOTE Confidence: 0.7867083195

 $00:21:16.688 \longrightarrow 00:21:18.896$  malignancy as well in these organs.

NOTE Confidence: 0.852413608

 $00:21:19.010 \longrightarrow 00:21:20.520$  How often does that occur?

NOTE Confidence: 0.852413608

 $00:21:20.520 \longrightarrow 00:21:22.308$  Because I can imagine that patients

NOTE Confidence: 0.852413608

00:21:22.308 --> 00:21:24.179 who have just been diagnosed with

NOTE Confidence: 0.852413608

 $00:21:24.179 \longrightarrow 00:21:26.342$  prostate cancer may not want to hear

NOTE Confidence: 0.852413608

 $00:21:26.342 \longrightarrow 00:21:28.876$  that one of the potential risks of their

NOTE Confidence: 0.852413608

 $00:21:28.876 \longrightarrow 00:21:31.130$  treatment is getting yet another cancer.

NOTE Confidence: 0.852413608

 $00{:}21{:}31.130 \dashrightarrow 00{:}21{:}33.550$  So is that pretty uncommon.

NOTE Confidence: 0.885917186

 $00:21:33.600 \longrightarrow 00:21:35.040$  That is a good question.

NOTE Confidence: 0.885917186

 $00:21:35.040 \longrightarrow 00:21:36.180$  Again, remember, we are going

 $00:21:36.180 \longrightarrow 00:21:37.999$  in with a curative treatment.

NOTE Confidence: 0.885917186

 $00:21:38.000 \longrightarrow 00:21:39.632$  In other words, we want to

NOTE Confidence: 0.885917186

 $00:21:39.632 \longrightarrow 00:21:41.379$  see our patients 10 years out,

NOTE Confidence: 0.885917186

 $00:21:41.380 \longrightarrow 00:21:43.536$  20 years out and 25 years out.

NOTE Confidence: 0.885917186

 $00:21:43.540 \longrightarrow 00:21:46.466$  So the risk of having these

NOTE Confidence: 0.885917186

00:21:46.466 --> 00:21:48.664 malignancies with the radiotherapy,

NOTE Confidence: 0.885917186

 $00:21:48.664 \longrightarrow 00:21:51.674$  there's a time factor so

NOTE Confidence: 0.885917186

00:21:51.680 --> 00:21:54.694 in patients who live long enough,

NOTE Confidence: 0.885917186

 $00:21:54.694 \longrightarrow 00:21:57.420$  after being treated with NOTE Confidence:

0.885917186

00:21:57.420 --> 00:21:59.500 radiotherapy for prostate cancer,

NOTE Confidence: 0.885917186

00:21:59.500 --> 00:22:01.700 I don't know the exact percentage of this,

NOTE Confidence: 0.885917186

 $00:22:01.700 \longrightarrow 00:22:03.224$  but we do see

NOTE Confidence: 0.885917186

00:22:03.224 --> 00:22:03.986 some malignancies,

NOTE Confidence: 0.885917186

00:22:03.990 --> 00:22:06.170 but relatively this is uncommon,

NOTE Confidence: 0.885917186

 $00:22:06.170 \longrightarrow 00:22:07.976$  I would say less than 5%.

NOTE Confidence: 0.83599357

 $00{:}22{:}08.230 \dashrightarrow 00{:}22{:}12.143$  Now you also mentioned endocrine

 $00:22:12.143 \longrightarrow 00:22:14.308$  therapy or hormone therapy, for

NOTE Confidence: 0.83599357

 $00{:}22{:}14.308 \dashrightarrow 00{:}22{:}16.524$  which patients is that recommended

NOTE Confidence: 0.83599357

 $00:22:16.524 \longrightarrow 00:22:18.996$  and what are the side effects.

NOTE Confidence: 0.764271872307692

 $00:22:19.830 \longrightarrow 00:22:22.854$  So hormone therapy is very commonly used as

NOTE Confidence: 0.764271872307692

 $00:22:22.854 \longrightarrow 00:22:25.809$  systemic therapy to treat prostate cancer.

NOTE Confidence: 0.764271872307692

 $00:22:25.810 \longrightarrow 00:22:28.270$  So when we say hormone therapy,

NOTE Confidence: 0.764271872307692

 $00:22:28.270 \longrightarrow 00:22:29.425$  we have to understand the

NOTE Confidence: 0.764271872307692

 $00{:}22{:}29.425 \dashrightarrow 00{:}22{:}30.580$  biology of the prostate cancer.

NOTE Confidence: 0.764271872307692

 $00:22:30.580 \longrightarrow 00:22:32.470$  So prostate cancer is really

NOTE Confidence: 0.764271872307692

00:22:32.470 --> 00:22:33.982 a testosterone or androgen

NOTE Confidence: 0.764271872307692

 $00:22:33.990 \longrightarrow 00:22:34.748$  driven cancer.

NOTE Confidence: 0.764271872307692

 $00{:}22{:}34.748 \dashrightarrow 00{:}22{:}37.780$  So what we do first to treat prostate

NOTE Confidence: 0.764271872307692

 $00{:}22{:}37.858 \to 00{:}22{:}40.973$  cancer is to lower the test osterone by

NOTE Confidence: 0.764271872307692

 $00:22:40.973 \longrightarrow 00:22:43.404$  giving another hormone therapy called

NOTE Confidence: 0.764271872307692

 $00{:}22{:}43.404 \dashrightarrow 00{:}22{:}45.954$  GNRH agonists or GNRH antagonists.

 $00:22:45.960 \longrightarrow 00:22:48.032$  This is what we call a shot that

NOTE Confidence: 0.764271872307692

 $00{:}22{:}48.032 \dashrightarrow 00{:}22{:}49.788$  we give once every three months

NOTE Confidence: 0.764271872307692

 $00:22:49.788 \longrightarrow 00:22:51.993$  or four months or on a monthly

NOTE Confidence: 0.764271872307692

 $00:22:51.993 \longrightarrow 00:22:53.938$  basis depending on the dose.

NOTE Confidence: 0.764271872307692

 $00:22:53.940 \longrightarrow 00:22:56.685$  So when patients receive this

NOTE Confidence: 0.764271872307692

 $00:22:56.685 \longrightarrow 00:22:58.881$  hormone injection of tentimes patients

NOTE Confidence: 0.764271872307692

 $00:22:58.881 \longrightarrow 00:23:01.509$  will experience hot flashes,

NOTE Confidence: 0.764271872307692

00:23:01.509 --> 00:23:04.009 male menopause like symptoms.

NOTE Confidence: 0.764271872307692

00:23:04.010 --> 00:23:05.126 Some irritability,

NOTE Confidence: 0.764271872307692

 $00:23:05.126 \longrightarrow 00:23:07.916$  they may have some fatigue,

NOTE Confidence: 0.764271872307692

00:23:07.920 --> 00:23:09.606 losing muscle mass,

NOTE Confidence: 0.76427187230769200:23:09.606 --> 00:23:10.730 gaining fat,

NOTE Confidence: 0.764271872307692

 $00{:}23{:}10.730 \dashrightarrow 00{:}23{:}12.458$  and those are common side effects

NOTE Confidence: 0.764271872307692

 $00:23:12.458 \longrightarrow 00:23:14.094$  that we see with endocrine

NOTE Confidence: 0.764271872307692

 $00:23:14.094 \longrightarrow 00:23:15.798$  therapy in prostate cancer.

NOTE Confidence: 0.8430966825

 $00:23:16.510 \longrightarrow 00:23:19.604$  It sounds like many patients may

 $00:23:19.604 \longrightarrow 00:23:22.109$  not particularly love those symptoms,

NOTE Confidence: 0.8430966825

00:23:22.110 --> 00:23:24.810 especially if they're young.

NOTE Confidence: 0.8430966825

 $00:23:24.810 \longrightarrow 00:23:27.860$  Are there other systemic therapy

NOTE Confidence: 0.8430966825

00:23:27.860 --> 00:23:30.300 options for young patients?

NOTE Confidence: 0.746587439230769

 $00:23:33.350 \longrightarrow 00:23:35.672$  So there are other systemic therapy

NOTE Confidence: 0.746587439230769

00:23:35.672 --> 00:23:38.970 that we use to treat prostate cancer,

NOTE Confidence: 0.746587439230769

 $00:23:38.970 \longrightarrow 00:23:41.580$  mostly still hormone therapy,

NOTE Confidence: 0.746587439230769

 $00:23:41.580 \longrightarrow 00:23:43.965$  hormonal therapy and we

NOTE Confidence: 0.746587439230769

 $00{:}23{:}43.965 \dashrightarrow 00{:}23{:}46.350$  have other oral hormonal therapies,

NOTE Confidence: 0.746587439230769

 $00:23:46.350 \longrightarrow 00:23:49.195$  we have immunotherapies and other

NOTE Confidence: 0.746587439230769

 $00:23:49.195 \longrightarrow 00:23:52.530$  chemotherapies and novel therapies as well.

NOTE Confidence: 0.746587439230769

 $00{:}23{:}52.530 \dashrightarrow 00{:}23{:}54.214$  But these systemic therapists

NOTE Confidence: 0.746587439230769

 $00{:}23{:}54.214 \dashrightarrow 00{:}23{:}56.319$  are indicated for patients with

NOTE Confidence: 0.746587439230769

 $00{:}23{:}56.319 \dashrightarrow 00{:}23{:}57.739$  metastatic prostate cancer.

NOTE Confidence: 0.924049077222222

 $00:23:58.900 \longrightarrow 00:24:02.036$  Let's talk a little bit

 $00:24:02.036 \longrightarrow 00:24:05.871$  more about that if a patient is

NOTE Confidence: 0.924049077222222

 $00{:}24{:}05.871 \dashrightarrow 00{:}24{:}08.259$  diagnosed with metastatic cancer.

NOTE Confidence: 0.924049077222222

 $00:24:08.260 \longrightarrow 00:24:10.130$  The systemic therapy really the

NOTE Confidence: 0.924049077222222

 $00:24:10.130 \longrightarrow 00:24:12.772$  mainstay of therapy and what can they

NOTE Confidence: 0.924049077222222

 $00:24:12.772 \longrightarrow 00:24:14.878$  expect in terms of their management.

NOTE Confidence: 0.751096381111111

 $00:24:15.590 \longrightarrow 00:24:18.128$  So when patients hear the word

NOTE Confidence: 0.751096381111111

 $00{:}24{:}18.128 \dashrightarrow 00{:}24{:}20.641$ metastatic disease it can be big

NOTE Confidence: 0.751096381111111

00:24:20.641 --> 00:24:22.867 shocker for many of our patients.

NOTE Confidence: 0.751096381111111

 $00:24:22.870 \longrightarrow 00:24:25.054$  But I would like to reassure our

NOTE Confidence: 0.751096381111111

 $00:24:25.054 \longrightarrow 00:24:26.860$  patients that these systemic therapies

NOTE Confidence: 0.751096381111111

 $00{:}24{:}26.860 \dashrightarrow 00{:}24{:}29.272$  work especially with the hormonal

NOTE Confidence: 0.751096381111111

00:24:29.272 --> 00:24:31.293 therapy the chance of benefiting

NOTE Confidence: 0.751096381111111

 $00:24:31.293 \longrightarrow 00:24:33.208$  these patients is nearly 100%.

NOTE Confidence: 0.751096381111111

 $00:24:33.210 \longrightarrow 00:24:36.120$  So other than hormonal therapy

NOTE Confidence: 0.751096381111111

 $00:24:36.120 \longrightarrow 00:24:38.541$  we use you know other

NOTE Confidence: 0.751096381111111

 $00{:}24{:}38.541 \dashrightarrow 00{:}24{:}40.209$  or al hormonal therapies and

00:24:40.209 --> 00:24:41.847 chemotherapies to maximize the

NOTE Confidence: 0.751096381111111

 $00:24:41.847 \longrightarrow 00:24:43.809$  benefit of the treatment to improve

NOTE Confidence: 0.751096381111111

 $00:24:43.809 \longrightarrow 00:24:45.630$  the outcomes of our patients.

NOTE Confidence: 0.745763100333333

 $00:24:46.750 \longrightarrow 00:24:48.976$  And when we think

NOTE Confidence: 0.745763100333333

 $00:24:48.976 \longrightarrow 00:24:51.229$  about all of these therapies,

NOTE Confidence: 0.745763100333333

 $00:24:51.230 \longrightarrow 00:24:52.835$  the endocrine therapies,

NOTE Confidence: 0.745763100333333

 $00:24:52.835 \longrightarrow 00:24:54.440$  the systemic chemotherapies

NOTE Confidence: 0.745763100333333

 $00{:}24{:}54.440 \dashrightarrow 00{:}24{:}57.345$  immunotherapies and all of the side

NOTE Confidence: 0.745763100333333

00:24:57.345 --> 00:24:59.427 effects that go along with them,

NOTE Confidence: 0.745763100333333

 $00{:}24{:}59.430 \dashrightarrow 00{:}25{:}03.070$  the list that you mentioned was

NOTE Confidence: 0.745763100333333

00:25:03.070 --> 00:25:04.626 not particularly something that

NOTE Confidence: 0.745763100333333

 $00{:}25{:}04.626 \dashrightarrow 00{:}25{:}07.433$  I think a lot of patients would

NOTE Confidence: 0.745763100333333

00:25:07.433 --> 00:25:09.017 be very enthused about.

NOTE Confidence: 0.745763100333333

00:25:09.020 --> 00:25:11.344 Are there ways that you can help

NOTE Confidence: 0.745763100333333

 $00:25:11.344 \longrightarrow 00:25:13.612$  them get through those side effects

 $00:25:13.612 \longrightarrow 00:25:16.012$  or ameliorate those side effects so

NOTE Confidence: 0.745763100333333

 $00{:}25{:}16.012 \dashrightarrow 00{:}25{:}18.376$  that they still can have

NOTE Confidence: 0.745763100333333

00:25:18.376 --> 00:25:20.611 a reasonably good quality of life,

NOTE Confidence: 0.745763100333333

00:25:20.611 --> 00:25:22.597 especially if they're going to live,

NOTE Confidence: 0.745763100333333

 $00:25:22.600 \longrightarrow 00:25:25.349$  as you mentioned 10,20,25 years out?

NOTE Confidence: 0.76906193

00:25:27.060 --> 00:25:29.395 You know, if the patients

NOTE Confidence: 0.76906193

 $00:25:29.395 \longrightarrow 00:25:30.796$  experience really significant

NOTE Confidence: 0.76906193

 $00:25:30.796 \longrightarrow 00:25:33.337$  hot flash or other side effects,

NOTE Confidence: 0.76906193

 $00{:}25{:}33.340 \dashrightarrow 00{:}25{:}36.574$  we sometimes use other supplements

NOTE Confidence: 0.76906193

 $00:25:36.574 \longrightarrow 00:25:39.353$  to help with some of their side effects.

NOTE Confidence: 0.76906193

 $00:25:39.360 \longrightarrow 00:25:41.445$  But actually in patients with

NOTE Confidence: 0.76906193

 $00:25:41.445 \longrightarrow 00:25:43.360$  metastatic disease, these patients have

NOTE Confidence: 0.76906193

 $00:25:43.360 \longrightarrow 00:25:45.880$  symptoms of the cancer such as pain,

NOTE Confidence: 0.76906193

 $00{:}25{:}45.880 \dashrightarrow 00{:}25{:}48.760$  fatigue and other cancer related symptoms.

NOTE Confidence: 0.76906193

 $00:25:48.760 \longrightarrow 00:25:50.365$  So actually when they start

NOTE Confidence: 0.76906193

 $00:25:50.365 \longrightarrow 00:25:51.328$  this hormonal therapy,

 $00:25:51.330 \longrightarrow 00:25:52.760$  they do feel better,

NOTE Confidence: 0.76906193

 $00:25:52.760 \longrightarrow 00:25:54.956$  their pain goes

NOTE Confidence: 0.76906193

00:25:54.956 --> 00:25:57.369 away and they regain their energy.

NOTE Confidence: 0.76906193

 $00:25:57.370 \longrightarrow 00:25:58.720$  Therefore they should feel

NOTE Confidence: 0.76906193

 $00:25:58.720 \longrightarrow 00:26:00.630$  better while they are on treatment.

NOTE Confidence: 0.76906193

 $00:26:00.630 \longrightarrow 00:26:02.838$  But for patients who have no

NOTE Confidence: 0.76906193

00:26:02.838 --> 00:26:04.271 symptoms at baseline, yes,

NOTE Confidence: 0.76906193

 $00{:}26{:}04.271 \dashrightarrow 00{:}26{:}06.197$  these patients will experience some of

NOTE Confidence: 0.76906193

 $00:26:06.197 \longrightarrow 00:26:08.459$  the side effect and there are other

NOTE Confidence: 0.76906193

 $00{:}26{:}08.459 \dashrightarrow 00{:}26{:}10.009$  supplements or medication that

NOTE Confidence: 0.76906193

 $00:26:10.009 \longrightarrow 00:26:12.032$  we can use to treat those endocrine

NOTE Confidence: 0.76906193

 $00:26:12.032 \longrightarrow 00:26:13.596$  therapy related side effects.

NOTE Confidence: 0.840354643913044

 $00:26:14.530 \longrightarrow 00:26:16.866$  So tell us about some of the new

NOTE Confidence: 0.840354643913044

 $00:26:16.866 \longrightarrow 00:26:19.079$  and novel things that are exciting

NOTE Confidence: 0.840354643913044

00:26:19.079 --> 00:26:21.413 in coming down the pipeline for

00:26:21.491 --> 00:26:23.369 prostate cancer management.

NOTE Confidence: 0.840354643913044

 $00:26:23.370 \longrightarrow 00:26:25.503$  You mentioned at the top of the show that

NOTE Confidence: 0.840354643913044

 $00:26:25.503 \longrightarrow 00:26:27.527$  you're very interested in clinical trials.

NOTE Confidence: 0.840354643913044

 $00:26:27.530 \longrightarrow 00:26:29.474$  Clinical trials always make us think

NOTE Confidence: 0.840354643913044

 $00:26:29.474 \longrightarrow 00:26:31.093$  about exciting new developments that

NOTE Confidence: 0.840354643913044

 $00:26:31.093 \longrightarrow 00:26:32.689$  might be helpful for our patients.

NOTE Confidence: 0.840354643913044

 $00:26:32.690 \longrightarrow 00:26:34.868$  So what's new in prostate cancer,

NOTE Confidence: 0.840354643913044

 $00:26:34.870 \longrightarrow 00:26:36.774$  what can we expect in the coming years?

NOTE Confidence: 0.66872695216

 $00:26:37.410 \longrightarrow 00:26:40.332$  So the latest development in prostate

NOTE Confidence: 0.66872695216

 $00{:}26{:}40.332 \dashrightarrow 00{:}26{:}43.686$  cancer is a treatment called PSA

NOTE Confidence: 0.66872695216

 $00:26:43.686 \longrightarrow 00:26:45.666$  targeted radioligand therapy.

NOTE Confidence: 0.66872695216

00:26:45.670 --> 00:26:47.054 As I mentioned earlier,

NOTE Confidence: 0.66872695216

 $00:26:47.054 \longrightarrow 00:26:49.768$  this is in a way a targeted

NOTE Confidence: 0.66872695216

00:26:49.768 --> 00:26:52.533 radiation therapy in patients who

NOTE Confidence: 0.66872695216

00:26:52.533 --> 00:26:54.970 have PSA positive prostate cancer,

NOTE Confidence: 0.66872695216

00:26:54.970 --> 00:26:56.850 which have become refractory

 $00:26:56.850 \longrightarrow 00:26:58.270$  to multiple lines.

NOTE Confidence: 0.66872695216

 $00:26:58.270 \longrightarrow 00:26:59.974$  This treatment can

NOTE Confidence: 0.66872695216

00:26:59.974 --> 00:27:01.998 be used for this group of patients

NOTE Confidence: 0.66872695216

 $00:27:01.998 \longrightarrow 00:27:03.944$  and the studies have shown that you

NOTE Confidence: 0.66872695216

 $00:27:04.005 \longrightarrow 00:27:05.991$  know patients receiving this class of

NOTE Confidence: 0.66872695216

 $00:27:05.991 \longrightarrow 00:27:08.014$  therapy actually did much better in

NOTE Confidence: 0.66872695216

00:27:08.014 --> 00:27:10.443 terms of their symptoms in terms of

NOTE Confidence: 0.66872695216

 $00:27:10.443 \longrightarrow 00:27:13.029$  disease control and the overall survival.

NOTE Confidence: 0.66872695216

 $00:27:13.030 \longrightarrow 00:27:14.787$  So that is one of the newest

NOTE Confidence: 0.66872695216

 $00{:}27{:}14.787 \dashrightarrow 00{:}27{:}16.440$  treatment that we have and there

NOTE Confidence: 0.66872695216

 $00{:}27{:}16.440 \dashrightarrow 00{:}27{:}17.835$  are other ongoing trials going

NOTE Confidence: 0.66872695216

 $00:27:17.835 \longrightarrow 00:27:20.120$  on to really use this therapy in

NOTE Confidence: 0.66872695216

 $00{:}27{:}20.120 \dashrightarrow 00{:}27{:}21.790$  earlier setting and in combination

NOTE Confidence: 0.66872695216

 $00{:}27{:}21.790 \longrightarrow 00{:}27{:}23.210$  with other therapies as well.

NOTE Confidence: 0.66872695216

 $00:27:23.210 \longrightarrow 00:27:24.836$  So we are very excited about

 $00:27:24.836 \longrightarrow 00:27:26.460$  this new class of the rapy.

NOTE Confidence: 0.919998871666667

00:27:27.470 --> 00:27:29.836 Is this widely available or is this

NOTE Confidence: 0.919998871666667

 $00:27:29.836 \longrightarrow 00:27:31.879$  available only on clinical trial?

NOTE Confidence: 0.810078845

 $00:27:32.290 \longrightarrow 00:27:34.522$  So actually this therapy was

NOTE Confidence: 0.810078845

 $00:27:34.522 \longrightarrow 00:27:36.657$  recently approved by the FDA in

NOTE Confidence: 0.810078845

 $00:27:36.657 \longrightarrow 00:27:38.476$  April of this year, but then there

NOTE Confidence: 0.810078845

 $00:27:38.476 \longrightarrow 00:27:39.808$  was some issue with the supply.

NOTE Confidence: 0.810078845

 $00:27:39.810 \longrightarrow 00:27:41.980$  So there is a little bit of

NOTE Confidence: 0.810078845

00:27:41.980 --> 00:27:44.393 delay in using this therapy

NOTE Confidence: 0.810078845

 $00:27:44.393 \longrightarrow 00:27:46.728$  in operation in our clinics.

NOTE Confidence: 0.810078845

00:27:46.730 --> 00:27:48.879 But then there are other trials going

NOTE Confidence: 0.810078845

 $00:27:48.879 \longrightarrow 00:27:50.553$  on to investigate this treatment

NOTE Confidence: 0.810078845

 $00:27:50.553 \longrightarrow 00:27:52.629$  with other therapies to improve the

NOTE Confidence: 0.810078845

 $00:27:52.629 \longrightarrow 00:27:55.740$  outcomes of our patients.

NOTE Confidence: 0.871343783333333

00:27:55.830 --> 00:27:58.075 You also mentioned that immunotherapy

NOTE Confidence: 0.871343783333333

 $00{:}27{:}58.075 \dashrightarrow 00{:}28{:}01.200$  was something that is is being used.

 $00:28:01.200 \longrightarrow 00:28:03.010$  Is that pretty standard now?

NOTE Confidence: 0.773730781818182

 $00:28:03.340 \longrightarrow 00:28:06.196$  Yes, there's two classes of

NOTE Confidence: 0.773730781818182

 $00:28:06.196 \longrightarrow 00:28:08.000$  immunotherapy for prostate cancer.

NOTE Confidence: 0.773730781818182

 $00:28:08.000 \longrightarrow 00:28:10.250$  One is a treatment called sipuleucel-T

NOTE Confidence: 0.773730781818182

 $00:28:10.250 \longrightarrow 00:28:12.728$  and this treatment was

NOTE Confidence: 0.773730781818182

 $00:28:12.728 \longrightarrow 00:28:15.360$  approved in 2010 and we also have

NOTE Confidence: 0.773730781818182

 $00:28:15.360 \longrightarrow 00:28:17.090$  another treatment called

NOTE Confidence: 0.773730781818182

 $00{:}28{:}17.155 \dashrightarrow 00{:}28{:}18.979$  immune checkpoint inhibitors.

NOTE Confidence: 0.773730781818182

 $00:28:18.980 \longrightarrow 00:28:20.975$  This is really for patients

NOTE Confidence: 0.773730781818182

 $00{:}28{:}20.975 \dashrightarrow 00{:}28{:}22.955$  with what we call mismatch repair

NOTE Confidence: 0.773730781818182

00:28:22.955 --> 00:28:25.085 deficiency which is seen in about

NOTE Confidence: 0.773730781818182

 $00{:}28{:}25.090 \dashrightarrow 00{:}28{:}27.302$ 5 to 10% of prostate cancer patients

NOTE Confidence: 0.773730781818182

 $00{:}28{:}27.302 \dashrightarrow 00{:}28{:}29.447$  and these patients may be eligible

NOTE Confidence: 0.773730781818182

 $00:28:29.447 \longrightarrow 00:28:30.959$  to receive this immunotherapy.

NOTE Confidence: 0.939079582631579

00:28:31.960 --> 00:28:34.174 Doctor Joseph Kim is an associate

 $00:28:34.174 \longrightarrow 00:28:36.382$  professor of internal medicine and medical

NOTE Confidence: 0.939079582631579

 $00{:}28{:}36.382 \to 00{:}28{:}38.713$  on cology at the Yale School of Medicine.

NOTE Confidence: 0.939079582631579

00:28:38.720 --> 00:28:40.736 If you have questions,

NOTE Confidence: 0.939079582631579

00:28:40.736 --> 00:28:42.713 the address is canceranswers@yale.edu,

NOTE Confidence: 0.939079582631579

00:28:42.713 --> 00:28:45.491 and past editions of the program

NOTE Confidence: 0.939079582631579

00:28:45.491 --> 00:28:47.903 are available in audio and written

NOTE Confidence: 0.939079582631579

 $00:28:47.903 \longrightarrow 00:28:48.843$  form at yale cancercenter.org.

NOTE Confidence: 0.939079582631579

00:28:48.843 --> 00:28:51.267 We hope you'll join us next week to

NOTE Confidence: 0.939079582631579

 $00{:}28{:}51.267 \dashrightarrow 00{:}28{:}53.115$  learn more about the fight against

NOTE Confidence: 0.939079582631579

 $00{:}28{:}53.115 \dashrightarrow 00{:}28{:}54.950$  cancer here on Connecticut Public Radio.

NOTE Confidence: 0.939079582631579

 $00{:}28{:}54.950 \dashrightarrow 00{:}28{:}57.536$  Funding for Yale Cancer Answers is

NOTE Confidence: 0.939079582631579

00:28:57.536 --> 00:29:00.000 provided by Smilow Cancer Hospital.