

WEBVTT

00:00:00.000 --> 00:00:02.154 Funding for Yale Cancer Answers is

NOTE Confidence: 0.897999566363636

00:00:02.154 --> 00:00:04.190 provided by Smilow Cancer Hospital.

NOTE Confidence: 0.843554823846154

00:00:06.430 --> 00:00:08.572 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.843554823846154

00:00:08.572 --> 00:00:10.850 your host doctor Anees Chagpar.

NOTE Confidence: 0.843554823846154

00:00:10.850 --> 00:00:12.685 Yale Cancer Answers features the

NOTE Confidence: 0.843554823846154

00:00:12.685 --> 00:00:14.942 latest information on cancer care by

NOTE Confidence: 0.843554823846154

00:00:14.942 --> 00:00:16.390 welcoming oncologists and specialists

NOTE Confidence: 0.843554823846154

00:00:16.390 --> 00:00:18.793 who are on the forefront of the

NOTE Confidence: 0.843554823846154

00:00:18.793 --> 00:00:20.570 battle to fight cancer. This week,

NOTE Confidence: 0.843554823846154

00:00:20.570 --> 00:00:22.320 it's a conversation about kidney

NOTE Confidence: 0.843554823846154

00:00:22.320 --> 00:00:24.110 cancer with Doctor David Braun.

NOTE Confidence: 0.843554823846154

00:00:24.110 --> 00:00:26.042 Doctor Braun is an assistant professor

NOTE Confidence: 0.843554823846154

00:00:26.042 --> 00:00:27.678 of medicine and medical oncology

NOTE Confidence: 0.843554823846154

00:00:27.678 --> 00:00:29.454 at the Yale School of Medicine,

NOTE Confidence: 0.843554823846154

00:00:29.460 --> 00:00:31.524 where Doctor Chagpar is a

NOTE Confidence: 0.843554823846154

00:00:31.524 --> 00:00:32.900 professor of surgical oncology.
NOTE Confidence: 0.914816415789474

00:00:34.490 --> 00:00:35.918 David, maybe we can start off
NOTE Confidence: 0.914816415789474

00:00:35.918 --> 00:00:37.671 by you telling us a little bit
NOTE Confidence: 0.914816415789474

00:00:37.671 --> 00:00:39.159 about yourself and what you do.
NOTE Confidence: 0.913082564

00:00:39.370 --> 00:00:40.238 Yeah, absolutely.
NOTE Confidence: 0.913082564

00:00:40.238 --> 00:00:43.710 So I'm actually new to the Connecticut area.
NOTE Confidence: 0.913082564

00:00:43.710 --> 00:00:45.726 I'm a physician, scientist and really
NOTE Confidence: 0.913082564

00:00:45.726 --> 00:00:48.169 my focus has been on kidney cancer.
NOTE Confidence: 0.913082564

00:00:48.170 --> 00:00:49.730 That's both in the clinic where
NOTE Confidence: 0.913082564

00:00:49.730 --> 00:00:51.472 I see patients with variety of
NOTE Confidence: 0.913082564

00:00:51.472 --> 00:00:53.077 different types of kidney cancer,
NOTE Confidence: 0.913082564

00:00:53.080 --> 00:00:54.196 including advanced kidney cancers.
NOTE Confidence: 0.913082564

00:00:54.196 --> 00:00:56.392 And then I spent a large portion of
NOTE Confidence: 0.913082564

00:00:56.392 --> 00:00:58.044 my time in the laboratory as well,
NOTE Confidence: 0.913082564

00:00:58.050 --> 00:00:59.604 really trying to understand this disease
NOTE Confidence: 0.913082564

00:00:59.604 --> 00:01:01.650 and think of are there new approaches,

NOTE Confidence: 0.913082564

00:01:01.650 --> 00:01:04.026 particularly using the immune system itself.

NOTE Confidence: 0.913082564

00:01:04.030 --> 00:01:04.830 Immuno therapies.

NOTE Confidence: 0.913082564

00:01:04.830 --> 00:01:08.030 To try to attack and tackle kidney cancer.

NOTE Confidence: 0.887323643448276

00:01:08.510 --> 00:01:10.239 Wow, there's a. There's a lot to

NOTE Confidence: 0.887323643448276

00:01:10.239 --> 00:01:12.276 unpack in which you just said so maybe

NOTE Confidence: 0.887323643448276

00:01:12.276 --> 00:01:14.498 we'll start off with kind of a bigger

NOTE Confidence: 0.887323643448276

00:01:14.498 --> 00:01:16.352 understanding of kidney cancer in general,

NOTE Confidence: 0.887323643448276

00:01:16.360 --> 00:01:18.285 especially because kidney cancer Awareness

NOTE Confidence: 0.887323643448276

00:01:18.285 --> 00:01:21.342 Month is coming up and a lot of us might

NOTE Confidence: 0.887323643448276

00:01:21.342 --> 00:01:23.560 not be very familiar with kidney cancer.

NOTE Confidence: 0.887323643448276

00:01:23.560 --> 00:01:26.101 We hear a lot about breast cancer

NOTE Confidence: 0.887323643448276

00:01:26.101 --> 00:01:28.428 and colon cancer and lung cancer,

NOTE Confidence: 0.887323643448276

00:01:28.430 --> 00:01:29.720 but we don't really hear a

NOTE Confidence: 0.887323643448276

00:01:29.720 --> 00:01:30.940 whole lot about kidney cancer.

NOTE Confidence: 0.887323643448276

00:01:30.940 --> 00:01:32.875 So tell us a little bit more about it.

NOTE Confidence: 0.887323643448276

00:01:32.880 --> 00:01:34.192 How common is it?
NOTE Confidence: 0.887323643448276

00:01:34.192 --> 00:01:35.832 Who gets affected by it?
NOTE Confidence: 0.887323643448276

00:01:35.840 --> 00:01:36.990 Then why should we care?
NOTE Confidence: 0.901683182222222

00:01:37.400 --> 00:01:38.136 Yeah, absolutely.
NOTE Confidence: 0.901683182222222

00:01:38.136 --> 00:01:40.712 And so I think you're absolutely right.
NOTE Confidence: 0.901683182222222

00:01:40.720 --> 00:01:42.259 I think you know a lot of the time
NOTE Confidence: 0.901683182222222

00:01:42.259 --> 00:01:43.659 when people think about cancers.
NOTE Confidence: 0.901683182222222

00:01:43.660 --> 00:01:45.375 They think about the really common types.
NOTE Confidence: 0.901683182222222

00:01:45.380 --> 00:01:46.748 Unfortunately, breast cancer and
NOTE Confidence: 0.901683182222222

00:01:46.748 --> 00:01:48.458 colon cancer and lung cancer.
NOTE Confidence: 0.901683182222222

00:01:48.460 --> 00:01:50.080 But kidney cancer is still effects
NOTE Confidence: 0.901683182222222

00:01:50.080 --> 00:01:51.720 a very large number of people.
NOTE Confidence: 0.901683182222222

00:01:51.720 --> 00:01:53.120 So just in the US,
NOTE Confidence: 0.901683182222222

00:01:53.120 --> 00:01:55.983 each year there's about 75,000 people that
NOTE Confidence: 0.901683182222222

00:01:55.983 --> 00:01:58.579 will be diagnosed with kidney cancer.
NOTE Confidence: 0.901683182222222

00:01:58.580 --> 00:01:59.226 And unfortunately,

NOTE Confidence: 0.901683182222222

00:01:59.226 --> 00:02:00.841 even with our advancements in

NOTE Confidence: 0.901683182222222

00:02:00.841 --> 00:02:02.798 medicines and new types of therapies,

NOTE Confidence: 0.901683182222222

00:02:02.800 --> 00:02:04.550 still nearly 15,000 people a

NOTE Confidence: 0.901683182222222

00:02:04.550 --> 00:02:06.820 year will die from kidney cancer.

NOTE Confidence: 0.901683182222222

00:02:06.820 --> 00:02:07.990 And so it really is.

NOTE Confidence: 0.901683182222222

00:02:07.990 --> 00:02:09.820 An important and impactful illness

NOTE Confidence: 0.901683182222222

00:02:09.820 --> 00:02:12.083 that that really needs to be

NOTE Confidence: 0.901683182222222

00:02:12.083 --> 00:02:13.986 addressed in terms of who it can

NOTE Confidence: 0.901683182222222

00:02:13.986 --> 00:02:15.630 affect the short answer is anyone.

NOTE Confidence: 0.901683182222222

00:02:15.630 --> 00:02:17.408 It does have a little bit of

NOTE Confidence: 0.901683182222222

00:02:17.408 --> 00:02:18.856 a preference for certain ages

NOTE Confidence: 0.901683182222222

00:02:18.856 --> 00:02:20.426 and these sorts of things,

NOTE Confidence: 0.901683182222222

00:02:20.430 --> 00:02:22.640 but really can affect people

NOTE Confidence: 0.901683182222222

00:02:22.640 --> 00:02:23.966 across the spectrum.

NOTE Confidence: 0.901683182222222

00:02:23.970 --> 00:02:25.896 If we say what is the sort of most

NOTE Confidence: 0.901683182222222

00:02:25.896 --> 00:02:27.427 common person who might get it?

NOTE Confidence: 0.901683182222222

00:02:27.430 --> 00:02:30.391 It does have a a slight increase

NOTE Confidence: 0.901683182222222

00:02:30.391 --> 00:02:32.310 in men versus women,

NOTE Confidence: 0.901683182222222

00:02:32.310 --> 00:02:34.508 so about twice as many men will

NOTE Confidence: 0.901683182222222

00:02:34.508 --> 00:02:36.627 get kidney cancer as as women and

NOTE Confidence: 0.901683182222222

00:02:36.627 --> 00:02:38.800 then it does tend to affect people.

NOTE Confidence: 0.901683182222222

00:02:38.800 --> 00:02:40.717 Who are a little bit on the older side,

NOTE Confidence: 0.901683182222222

00:02:40.720 --> 00:02:43.954 so the median age would be in

NOTE Confidence: 0.901683182222222

00:02:43.954 --> 00:02:46.424 the 60s and it can be anywhere,

NOTE Confidence: 0.901683182222222

00:02:46.424 --> 00:02:48.050 though from you know people that

NOTE Confidence: 0.901683182222222

00:02:48.107 --> 00:02:50.315 are in their 80s and 90s and beyond

NOTE Confidence: 0.901683182222222

00:02:50.315 --> 00:02:51.749 and unfortunately can happen in

NOTE Confidence: 0.901683182222222

00:02:51.749 --> 00:02:53.119 the other direction as well,

NOTE Confidence: 0.901683182222222

00:02:53.120 --> 00:02:54.782 where I've had patients in their

NOTE Confidence: 0.901683182222222

00:02:54.782 --> 00:02:57.130 30s or 40s who have been diagnosed,

NOTE Confidence: 0.901683182222222

00:02:57.130 --> 00:02:59.237 and so it really can affect a

NOTE Confidence: 0.901683182222222

00:02:59.237 --> 00:03:00.866 really wide range of ages,

NOTE Confidence: 0.901683182222222

00:03:00.866 --> 00:03:03.260 but typically in that early 60s range

NOTE Confidence: 0.688794906

00:03:04.180 --> 00:03:07.060 cool and so you know,

NOTE Confidence: 0.688794906

00:03:07.060 --> 00:03:08.690 just while you're talking about

NOTE Confidence: 0.688794906

00:03:08.690 --> 00:03:10.939 kidney cancers and. And age groups.

NOTE Confidence: 0.688794906

00:03:10.939 --> 00:03:13.477 Some people may have heard about

NOTE Confidence: 0.688794906

00:03:13.477 --> 00:03:15.700 kidney cancers occurring in

NOTE Confidence: 0.688794906

00:03:15.700 --> 00:03:17.988 pediatric patients in children.

NOTE Confidence: 0.688794906

00:03:17.990 --> 00:03:21.286 Things like, you know,

NOTE Confidence: 0.688794906

00:03:21.286 --> 00:03:24.113 Wilms tumors and nephroblastoma's

NOTE Confidence: 0.688794906

00:03:24.113 --> 00:03:26.584 talk about how that is different from

NOTE Confidence: 0.688794906

00:03:26.584 --> 00:03:28.972 what I think you're talking about in

NOTE Confidence: 0.688794906

00:03:28.972 --> 00:03:31.060 terms of kidney cancers in adults,

NOTE Confidence: 0.87577095

00:03:31.930 --> 00:03:34.370 absolutely so. By and large,

NOTE Confidence: 0.87577095

00:03:34.370 --> 00:03:36.188 this very rare exception to this,

NOTE Confidence: 0.87577095

00:03:36.190 --> 00:03:38.549 but for the vast majority of cases,
NOTE Confidence: 0.87577095

00:03:38.550 --> 00:03:40.755 the kidney cancers that occur in adults.
NOTE Confidence: 0.87577095

00:03:40.760 --> 00:03:42.548 Are completely different biologically.
NOTE Confidence: 0.87577095

00:03:42.548 --> 00:03:45.560 They they start in a different way.
NOTE Confidence: 0.87577095

00:03:45.560 --> 00:03:46.990 They function in a different
NOTE Confidence: 0.87577095

00:03:46.990 --> 00:03:48.788 way and they're treated in a
NOTE Confidence: 0.87577095

00:03:48.788 --> 00:03:50.348 different way than kidney cancers.
NOTE Confidence: 0.87577095

00:03:50.350 --> 00:03:53.549 Kidney tumors that might occur in kids.
NOTE Confidence: 0.87577095

00:03:53.550 --> 00:03:56.140 Again, this very slight exception to that,
NOTE Confidence: 0.87577095

00:03:56.140 --> 00:03:58.380 but I think as a general rule,
NOTE Confidence: 0.87577095

00:03:58.380 --> 00:04:00.641 the the Group of kidney cancers or
NOTE Confidence: 0.87577095

00:04:00.641 --> 00:04:02.583 kidney tumors that might occur in
NOTE Confidence: 0.87577095

00:04:02.583 --> 00:04:04.164 kids are really almost different.
NOTE Confidence: 0.87577095

00:04:04.164 --> 00:04:05.824 Disease bucket a completely different
NOTE Confidence: 0.87577095

00:04:05.824 --> 00:04:08.087 entity than the ones that occur in adults.
NOTE Confidence: 0.738905235

00:04:09.540 --> 00:04:12.748 They just wanted to gain of get that

NOTE Confidence: 0.738905235

00:04:12.748 --> 00:04:15.916 out at the top simply so that our

NOTE Confidence: 0.738905235

00:04:15.916 --> 00:04:18.340 audience really knows that we're we're

NOTE Confidence: 0.738905235

00:04:18.417 --> 00:04:20.932 talking about what in medical lingo

NOTE Confidence: 0.738905235

00:04:20.932 --> 00:04:24.780 is is known as a renal cell carcinoma.

NOTE Confidence: 0.738905235

00:04:24.780 --> 00:04:26.950 For the most part, is that right?

NOTE Confidence: 0.705397781833333

00:04:27.440 --> 00:04:28.864 Absolutely, that's exactly right.

NOTE Confidence: 0.705397781833333

00:04:28.864 --> 00:04:30.288 The the technical term

NOTE Confidence: 0.705397781833333

00:04:30.288 --> 00:04:31.880 is renal cell carcinoma,

NOTE Confidence: 0.705397781833333

00:04:31.880 --> 00:04:34.316 and that's a group of kidney cancers

NOTE Confidence: 0.705397781833333

00:04:34.316 --> 00:04:36.145 that happen for adult patients.

NOTE Confidence: 0.705397781833333

00:04:36.145 --> 00:04:38.395 And it actually encompasses a whole

NOTE Confidence: 0.705397781833333

00:04:38.395 --> 00:04:40.164 range of diseases, including.

NOTE Confidence: 0.705397781833333

00:04:40.164 --> 00:04:42.500 Significantly more common ones,

NOTE Confidence: 0.705397781833333

00:04:42.500 --> 00:04:44.948 but also rare types of kidney cancer as well,

NOTE Confidence: 0.705397781833333

00:04:44.950 --> 00:04:47.299 but that is the a good general term to

NOTE Confidence: 0.705397781833333

00:04:47.299 --> 00:04:49.239 describe the this bucket of illnesses,
NOTE Confidence: 0.905011746666667

00:04:49.990 --> 00:04:52.153 and so you know when you say
NOTE Confidence: 0.905011746666667

00:04:52.153 --> 00:04:53.740 that everybody can get this.
NOTE Confidence: 0.905011746666667

00:04:53.740 --> 00:04:55.726 I'm sure that people are wondering,
NOTE Confidence: 0.905011746666667

00:04:55.730 --> 00:04:57.245 you know, are there things
NOTE Confidence: 0.905011746666667

00:04:57.245 --> 00:04:59.092 that can increase your risk or
NOTE Confidence: 0.905011746666667

00:04:59.092 --> 00:05:00.724 decrease your risk so you know?
NOTE Confidence: 0.905011746666667

00:05:00.730 --> 00:05:01.726 Oftentimes we're asked?
NOTE Confidence: 0.905011746666667

00:05:01.726 --> 00:05:03.054 While does smoking increase
NOTE Confidence: 0.905011746666667

00:05:03.054 --> 00:05:04.859 my risk of kidney cancer?
NOTE Confidence: 0.905011746666667

00:05:04.860 --> 00:05:07.716 Does alcohol consumption increase my risk?
NOTE Confidence: 0.905011746666667

00:05:07.720 --> 00:05:10.144 What about occupational hazards?
NOTE Confidence: 0.905011746666667

00:05:10.144 --> 00:05:11.356 Environmental risks?
NOTE Confidence: 0.905011746666667

00:05:11.360 --> 00:05:12.480 Tell us more about that.
NOTE Confidence: 0.924444699666667

00:05:13.990 --> 00:05:15.915 Yeah, it's a good question and I
NOTE Confidence: 0.924444699666667

00:05:15.915 --> 00:05:18.152 think the short answer is we don't

NOTE Confidence: 0.924444699666667
00:05:18.152 --> 00:05:19.842 have the same association between
NOTE Confidence: 0.924444699666667
00:05:19.842 --> 00:05:21.871 kidney cancer and certain risk factors
NOTE Confidence: 0.924444699666667
00:05:21.871 --> 00:05:23.843 like lung cancer has with smoking.
NOTE Confidence: 0.924444699666667
00:05:23.843 --> 00:05:25.508 So you know lung cancer.
NOTE Confidence: 0.924444699666667
00:05:25.510 --> 00:05:28.165 There's a really huge increase
NOTE Confidence: 0.924444699666667
00:05:28.165 --> 00:05:29.758 with with smoking.
NOTE Confidence: 0.924444699666667
00:05:29.760 --> 00:05:30.918 For kidney cancer,
NOTE Confidence: 0.924444699666667
00:05:30.918 --> 00:05:33.234 there are things that change the
NOTE Confidence: 0.924444699666667
00:05:33.234 --> 00:05:35.429 likelihood by relatively small amounts,
NOTE Confidence: 0.924444699666667
00:05:35.430 --> 00:05:37.680 so people who have inflammatory conditions
NOTE Confidence: 0.924444699666667
00:05:37.680 --> 00:05:40.426 of the kidney and these sorts of things
NOTE Confidence: 0.924444699666667
00:05:40.426 --> 00:05:43.070 do increase it by a small amount there.
NOTE Confidence: 0.924444699666667
00:05:43.070 --> 00:05:43.710 Similarly,
NOTE Confidence: 0.924444699666667
00:05:43.710 --> 00:05:46.910 these rare cases of exposures,
NOTE Confidence: 0.924444699666667
00:05:46.910 --> 00:05:48.490 military exposures that have sort
NOTE Confidence: 0.924444699666667

00:05:48.490 --> 00:05:50.070 of been associated with these
NOTE Confidence: 0.924444699666667

00:05:50.124 --> 00:05:51.480 clusters of kidney cancers,
NOTE Confidence: 0.924444699666667

00:05:51.480 --> 00:05:54.648 but the transfer is those tend to be the
NOTE Confidence: 0.924444699666667

00:05:54.648 --> 00:05:57.420 exception more so than the rule in general.
NOTE Confidence: 0.924444699666667

00:05:57.420 --> 00:05:58.710 For most patients,
NOTE Confidence: 0.924444699666667

00:05:58.710 --> 00:06:00.936 kidney cancers tend to be sporadic.
NOTE Confidence: 0.924444699666667

00:06:00.940 --> 00:06:02.458 Again, there's always exception to this.
NOTE Confidence: 0.924444699666667

00:06:02.460 --> 00:06:03.720 There's sometimes genetics,
NOTE Confidence: 0.924444699666667

00:06:03.720 --> 00:06:05.400 might play a role.
NOTE Confidence: 0.924444699666667

00:06:05.400 --> 00:06:07.514 Kidney cancers can run in the family.
NOTE Confidence: 0.924444699666667

00:06:07.520 --> 00:06:09.376 This particular types of
NOTE Confidence: 0.924444699666667

00:06:09.376 --> 00:06:10.768 hereditary cancer syndromes.
NOTE Confidence: 0.924444699666667

00:06:10.770 --> 00:06:12.942 There's again these histories of particular
NOTE Confidence: 0.924444699666667

00:06:12.942 --> 00:06:15.530 exposures or things that might make a
NOTE Confidence: 0.924444699666667

00:06:15.530 --> 00:06:17.330 difference truthfully around the margins.
NOTE Confidence: 0.924444699666667

00:06:17.330 --> 00:06:19.386 But by and large,

NOTE Confidence: 0.924444699666667
00:06:19.386 --> 00:06:21.442 these sporadic kidney cancers
NOTE Confidence: 0.924444699666667
00:06:21.442 --> 00:06:23.540 that occur are really.
NOTE Confidence: 0.924444699666667
00:06:23.540 --> 00:06:27.614 There's not a huge association between that
NOTE Confidence: 0.924444699666667
00:06:27.614 --> 00:06:30.970 and particular modifiable lifestyle factors.
NOTE Confidence: 0.924444699666667
00:06:30.970 --> 00:06:32.349 And so I think the general advice
NOTE Confidence: 0.924444699666667
00:06:32.349 --> 00:06:33.943 I would have is you know the things
NOTE Confidence: 0.924444699666667
00:06:33.943 --> 00:06:35.424 that are good for your heart and
NOTE Confidence: 0.924444699666667
00:06:35.424 --> 00:06:36.834 your health overall are are probably
NOTE Confidence: 0.924444699666667
00:06:36.834 --> 00:06:38.354 good for your cancer as well,
NOTE Confidence: 0.924444699666667
00:06:38.354 --> 00:06:39.920 and so I encourage patients you
NOTE Confidence: 0.924444699666667
00:06:39.978 --> 00:06:41.686 know to have a well balanced diet.
NOTE Confidence: 0.924444699666667
00:06:41.690 --> 00:06:45.026 I encourage patients to, you know,
NOTE Confidence: 0.924444699666667
00:06:45.030 --> 00:06:46.290 engage in regular exercise.
NOTE Confidence: 0.924444699666667
00:06:46.290 --> 00:06:48.180 These sorts of things because that's
NOTE Confidence: 0.924444699666667
00:06:48.234 --> 00:06:49.909 good for someone's overall health.
NOTE Confidence: 0.924444699666667

00:06:49.910 --> 00:06:51.926 But in terms of particular risk
NOTE Confidence: 0.924444699666667

00:06:51.926 --> 00:06:53.270 factors for kidney cancers,
NOTE Confidence: 0.924444699666667

00:06:53.270 --> 00:06:55.125 it probably makes less of an impact.
NOTE Confidence: 0.682017206

00:06:55.670 --> 00:06:57.550 So so really, you know,
NOTE Confidence: 0.682017206

00:06:57.550 --> 00:06:59.030 getting kidney cancer is really
NOTE Confidence: 0.682017206

00:06:59.030 --> 00:07:01.090 a matter of just bum bad luck.
NOTE Confidence: 0.682017206

00:07:01.090 --> 00:07:02.158 Somebody's gotta get it.
NOTE Confidence: 0.682017206

00:07:02.158 --> 00:07:03.226 And so you know,
NOTE Confidence: 0.682017206

00:07:03.230 --> 00:07:05.246 people who get it kind of get it is
NOTE Confidence: 0.682017206

00:07:05.246 --> 00:07:06.667 basically what you're telling us.
NOTE Confidence: 0.682017206

00:07:06.670 --> 00:07:08.255 They're the the the risk
NOTE Confidence: 0.682017206

00:07:08.255 --> 00:07:09.840 factors that you can really
NOTE Confidence: 0.682017206

00:07:09.907 --> 00:07:11.797 modify are few and far between.
NOTE Confidence: 0.892048443333333

00:07:12.250 --> 00:07:13.930 I I think that's absolutely right,
NOTE Confidence: 0.892048443333333

00:07:13.930 --> 00:07:15.196 and I think honestly, that's something
NOTE Confidence: 0.892048443333333

00:07:15.196 --> 00:07:16.729 I highlight to my patients as well,

NOTE Confidence: 0.892048443333333
00:07:16.730 --> 00:07:18.422 because sometimes people come in and
NOTE Confidence: 0.892048443333333
00:07:18.422 --> 00:07:20.030 there's almost a sense of guilt.
NOTE Confidence: 0.892048443333333
00:07:20.030 --> 00:07:22.004 What could I have done differently
NOTE Confidence: 0.892048443333333
00:07:22.004 --> 00:07:24.509 to have not gotten this this illness?
NOTE Confidence: 0.892048443333333
00:07:24.510 --> 00:07:25.738 The short answer is,
NOTE Confidence: 0.892048443333333
00:07:25.738 --> 00:07:27.580 this is just terrible luck that
NOTE Confidence: 0.892048443333333
00:07:27.645 --> 00:07:29.420 we don't fully understand yet,
NOTE Confidence: 0.892048443333333
00:07:29.420 --> 00:07:31.949 but that it's not something where there is a.
NOTE Confidence: 0.892048443333333
00:07:31.950 --> 00:07:33.810 A clear modifiable thing that someone
NOTE Confidence: 0.892048443333333
00:07:33.810 --> 00:07:35.720 could have done to prevent it,
NOTE Confidence: 0.927358820333334
00:07:36.370 --> 00:07:38.770 and so David, given the fact that you
NOTE Confidence: 0.927358820333334
00:07:38.770 --> 00:07:40.475 know kidney cancers aren't something
NOTE Confidence: 0.927358820333334
00:07:40.475 --> 00:07:42.911 that we often think about top of
NOTE Confidence: 0.927358820333334
00:07:42.982 --> 00:07:45.326 mind in terms of the the more common
NOTE Confidence: 0.927358820333334
00:07:45.326 --> 00:07:47.090 cancers and the fact that it can
NOTE Confidence: 0.927358820333334

00:07:47.090 --> 00:07:48.730 affect almost anybody who has a kidney,
NOTE Confidence: 0.927358820333334

00:07:48.730 --> 00:07:51.340 which is pretty much everybody.
NOTE Confidence: 0.927358820333334

00:07:51.340 --> 00:07:54.094 Tell us about how you would pick this up.
NOTE Confidence: 0.927358820333334

00:07:54.100 --> 00:07:56.319 I mean there there doesn't seem to
NOTE Confidence: 0.927358820333334

00:07:56.319 --> 00:07:58.544 be any real screening tests for
NOTE Confidence: 0.927358820333334

00:07:58.544 --> 00:08:00.944 kidney cancer like there is for
NOTE Confidence: 0.927358820333334

00:08:00.944 --> 00:08:03.349 breast cancer or colorectal cancer.
NOTE Confidence: 0.927358820333334

00:08:03.350 --> 00:08:05.726 So what signs or symptoms should
NOTE Confidence: 0.927358820333334

00:08:05.726 --> 00:08:08.203 people be looking for and seeking
NOTE Confidence: 0.927358820333334

00:08:08.203 --> 00:08:10.253 attention for that might lead
NOTE Confidence: 0.927358820333334

00:08:10.253 --> 00:08:12.808 to a diagnosis of kidney cancer.
NOTE Confidence: 0.928115875909091

00:08:14.050 --> 00:08:15.905 It's a, it's a wonderful question and
NOTE Confidence: 0.928115875909091

00:08:15.905 --> 00:08:18.332 I think the first thing I'd address is
NOTE Confidence: 0.928115875909091

00:08:18.332 --> 00:08:20.450 maybe the screening aspect that you know.
NOTE Confidence: 0.928115875909091

00:08:20.450 --> 00:08:22.208 I think that's an area of
NOTE Confidence: 0.928115875909091

00:08:22.208 --> 00:08:23.380 active investigation and we

NOTE Confidence: 0.928115875909091
00:08:23.444 --> 00:08:24.828 hopefully will do better.
NOTE Confidence: 0.928115875909091
00:08:24.830 --> 00:08:25.880 We need to do better,
NOTE Confidence: 0.928115875909091
00:08:25.880 --> 00:08:28.127 but we're we're really not there yet
NOTE Confidence: 0.928115875909091
00:08:28.127 --> 00:08:30.129 and there's many research groups.
NOTE Confidence: 0.928115875909091
00:08:30.130 --> 00:08:31.418 Wonderful research groups that
NOTE Confidence: 0.928115875909091
00:08:31.418 --> 00:08:33.350 have are working on this idea.
NOTE Confidence: 0.928115875909091
00:08:33.350 --> 00:08:35.430 Can we have a blood based test or
NOTE Confidence: 0.928115875909091
00:08:35.430 --> 00:08:37.318 something where we be able to pick up
NOTE Confidence: 0.928115875909091
00:08:37.318 --> 00:08:38.989 kidney cancer at an earlier stage,
NOTE Confidence: 0.928115875909091
00:08:38.990 --> 00:08:41.406 but we have to make sure that we
NOTE Confidence: 0.928115875909091
00:08:41.406 --> 00:08:43.906 rigorously test those and and see how
NOTE Confidence: 0.928115875909091
00:08:43.906 --> 00:08:45.731 those performing those coming years.
NOTE Confidence: 0.928115875909091
00:08:45.740 --> 00:08:47.042 'cause that would be a wonderful
NOTE Confidence: 0.928115875909091
00:08:47.042 --> 00:08:47.693 tool to have,
NOTE Confidence: 0.928115875909091
00:08:47.700 --> 00:08:49.596 but you're absolutely right right now.
NOTE Confidence: 0.928115875909091

00:08:49.600 --> 00:08:51.406 What is the way that we would
NOTE Confidence: 0.928115875909091

00:08:51.406 --> 00:08:52.660 pick up kidney cancer?
NOTE Confidence: 0.928115875909091

00:08:52.660 --> 00:08:54.358 It's something I would call clinically.
NOTE Confidence: 0.928115875909091

00:08:54.360 --> 00:08:56.994 Who's a patient comes with particular
NOTE Confidence: 0.928115875909091

00:08:56.994 --> 00:08:59.820 signs or symptoms or incidentally,
NOTE Confidence: 0.928115875909091

00:08:59.820 --> 00:09:01.895 meaning people are having an
NOTE Confidence: 0.928115875909091

00:09:01.895 --> 00:09:03.555 evaluation for another purpose,
NOTE Confidence: 0.928115875909091

00:09:03.560 --> 00:09:05.835 and this happens to just be found.
NOTE Confidence: 0.928115875909091

00:09:05.840 --> 00:09:07.802 So I would say historically there's
NOTE Confidence: 0.928115875909091

00:09:07.802 --> 00:09:10.282 a group of symptoms that a patient
NOTE Confidence: 0.928115875909091

00:09:10.282 --> 00:09:12.127 might experience that have been
NOTE Confidence: 0.928115875909091

00:09:12.127 --> 00:09:13.760 associated with kidney cancer.
NOTE Confidence: 0.928115875909091

00:09:13.760 --> 00:09:15.896 There's a sort of classic symptoms.
NOTE Confidence: 0.928115875909091

00:09:15.900 --> 00:09:19.668 Of blood in the urine of having flank pain.
NOTE Confidence: 0.928115875909091

00:09:19.668 --> 00:09:21.822 Pain towards the side or the
NOTE Confidence: 0.928115875909091

00:09:21.822 --> 00:09:24.027 back where the kidney tumor is.

NOTE Confidence: 0.928115875909091
00:09:24.030 --> 00:09:27.126 These sorts of symptoms actually occurred.
NOTE Confidence: 0.928115875909091
00:09:27.130 --> 00:09:28.660 A really a minority of patients
NOTE Confidence: 0.928115875909091
00:09:28.660 --> 00:09:30.834 that you know the the group of
NOTE Confidence: 0.928115875909091
00:09:30.834 --> 00:09:31.929 patients really experiencing.
NOTE Confidence: 0.928115875909091
00:09:31.930 --> 00:09:33.748 All of these constellation of symptoms
NOTE Confidence: 0.928115875909091
00:09:33.748 --> 00:09:35.717 is probably less than one out of 10,
NOTE Confidence: 0.928115875909091
00:09:35.720 --> 00:09:38.088 and so I would say a few things.
NOTE Confidence: 0.928115875909091
00:09:38.090 --> 00:09:40.538 One is a large proportion are
NOTE Confidence: 0.928115875909091
00:09:40.538 --> 00:09:42.170 actually picked up incidentally,
NOTE Confidence: 0.928115875909091
00:09:42.170 --> 00:09:44.375 so people have back pain or some
NOTE Confidence: 0.928115875909091
00:09:44.375 --> 00:09:45.706 other issues. Stomach pains.
NOTE Confidence: 0.928115875909091
00:09:45.706 --> 00:09:47.794 Totally unrelated to the kidney cancer
NOTE Confidence: 0.928115875909091
00:09:47.794 --> 00:09:50.119 and they have a CAT scan or an MRI
NOTE Confidence: 0.928115875909091
00:09:50.119 --> 00:09:52.260 and the kidney cancer is just picked up.
NOTE Confidence: 0.928115875909091
00:09:52.260 --> 00:09:52.585 Incidentally,
NOTE Confidence: 0.928115875909091

00:09:52.585 --> 00:09:54.860 that's sort of one group of patients.
NOTE Confidence: 0.928115875909091

00:09:54.860 --> 00:09:56.684 The second group of patients are
NOTE Confidence: 0.928115875909091

00:09:56.684 --> 00:09:58.556 ones I would say have something
NOTE Confidence: 0.928115875909091

00:09:58.556 --> 00:10:00.236 I would term local symptoms,
NOTE Confidence: 0.928115875909091

00:10:00.240 --> 00:10:02.285 meaning symptoms that they experience
NOTE Confidence: 0.928115875909091

00:10:02.285 --> 00:10:04.840 because of the kidney tumor itself.
NOTE Confidence: 0.928115875909091

00:10:04.840 --> 00:10:06.340 So there are patients that experience,
NOTE Confidence: 0.928115875909091

00:10:06.340 --> 00:10:06.918 for instance,
NOTE Confidence: 0.928115875909091

00:10:06.918 --> 00:10:08.652 blood in the urine that they
NOTE Confidence: 0.928115875909091

00:10:08.652 --> 00:10:09.500 can actually see.
NOTE Confidence: 0.928115875909091

00:10:09.500 --> 00:10:10.588 If anyone sees that,
NOTE Confidence: 0.928115875909091

00:10:10.588 --> 00:10:11.948 that's something that's a definitely
NOTE Confidence: 0.928115875909091

00:10:11.948 --> 00:10:13.715 a good idea to talk to your doctor
NOTE Confidence: 0.928115875909091

00:10:13.715 --> 00:10:15.363 about and to pursue an evaluation for
NOTE Confidence: 0.928115875909091

00:10:15.363 --> 00:10:17.183 if there's ever blood in the urine.
NOTE Confidence: 0.928115875909091

00:10:17.183 --> 00:10:18.595 Sometimes that's really blood

NOTE Confidence: 0.928115875909091
00:10:18.595 --> 00:10:20.007 that you can see.
NOTE Confidence: 0.928115875909091
00:10:20.010 --> 00:10:21.385 Sometimes people have a urine
NOTE Confidence: 0.928115875909091
00:10:21.385 --> 00:10:22.485 test for another reason,
NOTE Confidence: 0.928115875909091
00:10:22.490 --> 00:10:24.944 and there's microscopic blood that too
NOTE Confidence: 0.928115875909091
00:10:24.944 --> 00:10:27.360 should be evaluated more thoroughly.
NOTE Confidence: 0.928115875909091
00:10:27.360 --> 00:10:29.100 It's can sometimes cause pain
NOTE Confidence: 0.928115875909091
00:10:29.100 --> 00:10:31.308 in the area or discomfort these
NOTE Confidence: 0.928115875909091
00:10:31.308 --> 00:10:32.942 kidney tumors you know,
NOTE Confidence: 0.928115875909091
00:10:32.942 --> 00:10:34.606 for some patients they're
NOTE Confidence: 0.928115875909091
00:10:34.606 --> 00:10:35.854 they're totally asymptomatic,
NOTE Confidence: 0.928115875909091
00:10:35.860 --> 00:10:37.596 but for some they can grow to
NOTE Confidence: 0.928115875909091
00:10:37.596 --> 00:10:39.239 size where they actually cause
NOTE Confidence: 0.928115875909091
00:10:39.239 --> 00:10:40.496 bloating or discomfort,
NOTE Confidence: 0.928115875909091
00:10:40.500 --> 00:10:42.852 and so any of those things that happen
NOTE Confidence: 0.928115875909091
00:10:42.852 --> 00:10:44.721 because they're just where the kidney
NOTE Confidence: 0.928115875909091

00:10:44.721 --> 00:10:46.551 tumor itself itself is either pain
NOTE Confidence: 0.928115875909091

00:10:46.612 --> 00:10:48.740 or bloating or even blood in the urine.
NOTE Confidence: 0.928115875909091

00:10:48.740 --> 00:10:50.636 That's a second group of patients.
NOTE Confidence: 0.928115875909091

00:10:50.640 --> 00:10:52.915 I would call the local
NOTE Confidence: 0.928115875909091

00:10:52.915 --> 00:10:54.518 symptoms and the final group,
NOTE Confidence: 0.928115875909091

00:10:54.518 --> 00:10:56.240 which is less common but can
NOTE Confidence: 0.935033100909091

00:10:56.299 --> 00:10:58.210 occur, are what I would call
NOTE Confidence: 0.935033100909091

00:10:58.210 --> 00:11:00.133 systemic symptoms and what I mean
NOTE Confidence: 0.935033100909091

00:11:00.133 --> 00:11:02.525 by that is it's not related to the
NOTE Confidence: 0.935033100909091

00:11:02.525 --> 00:11:04.579 position of the kidney tumor itself,
NOTE Confidence: 0.935033100909091

00:11:04.580 --> 00:11:07.106 but the kidney cancer can sometimes
NOTE Confidence: 0.935033100909091

00:11:07.106 --> 00:11:09.898 produce factors and things in the body
NOTE Confidence: 0.935033100909091

00:11:09.898 --> 00:11:12.320 that just make people generally feel on
NOTE Confidence: 0.935033100909091

00:11:12.392 --> 00:11:14.834 where well they might experience fevers
NOTE Confidence: 0.935033100909091

00:11:14.834 --> 00:11:17.144 or weight loss sweats during the night.
NOTE Confidence: 0.935033100909091

00:11:17.144 --> 00:11:18.499 Things that are not sort

NOTE Confidence: 0.935033100909091
00:11:18.499 --> 00:11:19.768 of accounted for for.
NOTE Confidence: 0.935033100909091
00:11:19.770 --> 00:11:22.290 Other reasons, again less common,
NOTE Confidence: 0.935033100909091
00:11:22.290 --> 00:11:24.215 but some patients really can't
NOTE Confidence: 0.935033100909091
00:11:24.215 --> 00:11:26.140 present with those systemic symptoms.
NOTE Confidence: 0.935033100909091
00:11:26.140 --> 00:11:29.220 And so that's a that's a a lot of things,
NOTE Confidence: 0.935033100909091
00:11:29.220 --> 00:11:31.659 and so I would say my my sort of
NOTE Confidence: 0.935033100909091
00:11:31.659 --> 00:11:33.699 general approach to these things.
NOTE Confidence: 0.935033100909091
00:11:33.700 --> 00:11:35.040 Are there certain things like
NOTE Confidence: 0.935033100909091
00:11:35.040 --> 00:11:36.112 blood in the urine?
NOTE Confidence: 0.935033100909091
00:11:36.120 --> 00:11:37.860 I really think of getting into
NOTE Confidence: 0.935033100909091
00:11:37.860 --> 00:11:39.020 valuation with your doctor.
NOTE Confidence: 0.935033100909091
00:11:39.020 --> 00:11:40.819 I think that's that's always a good
NOTE Confidence: 0.935033100909091
00:11:40.819 --> 00:11:42.790 idea for things that are, you know,
NOTE Confidence: 0.935033100909091
00:11:42.790 --> 00:11:44.515 more common aches and pains.
NOTE Confidence: 0.935033100909091
00:11:44.520 --> 00:11:46.500 Things that we were all gonna
NOTE Confidence: 0.935033100909091

00:11:46.500 --> 00:11:47.820 experience in our lives,
NOTE Confidence: 0.935033100909091

00:11:47.820 --> 00:11:50.068 the sort of rule I have is everyones
NOTE Confidence: 0.935033100909091

00:11:50.068 --> 00:11:51.979 entitled to those aches and pains.
NOTE Confidence: 0.935033100909091

00:11:51.980 --> 00:11:53.488 But if there's something
NOTE Confidence: 0.935033100909091

00:11:53.488 --> 00:11:54.619 that's unusually severe,
NOTE Confidence: 0.935033100909091

00:11:54.620 --> 00:11:56.209 you know it's not not something that.
NOTE Confidence: 0.935033100909091

00:11:56.210 --> 00:11:57.876 Feels like you've had in the past.
NOTE Confidence: 0.935033100909091

00:11:57.880 --> 00:12:00.895 It really is more severe in terms of its
NOTE Confidence: 0.935033100909091

00:12:00.895 --> 00:12:03.518 intensity or it's lasting longer than that.
NOTE Confidence: 0.935033100909091

00:12:03.520 --> 00:12:04.380 You think it should?
NOTE Confidence: 0.935033100909091

00:12:04.380 --> 00:12:05.905 You know you've had back pain in
NOTE Confidence: 0.935033100909091

00:12:05.905 --> 00:12:07.186 the past and it comes and goes.
NOTE Confidence: 0.935033100909091

00:12:07.190 --> 00:12:08.842 This is kind of there and it's
NOTE Confidence: 0.935033100909091

00:12:08.842 --> 00:12:10.249 really lingering for quite a while.
NOTE Confidence: 0.935033100909091

00:12:10.250 --> 00:12:11.660 Those are are, you know,
NOTE Confidence: 0.935033100909091

00:12:11.660 --> 00:12:13.196 maybe a little bit of a red flag.

NOTE Confidence: 0.935033100909091
00:12:13.200 --> 00:12:14.072 That's time to go.
NOTE Confidence: 0.935033100909091
00:12:14.072 --> 00:12:15.970 See your doctor and get an evaluation.
NOTE Confidence: 0.846408708333333
00:12:17.480 --> 00:12:18.564 Especially because some of
NOTE Confidence: 0.846408708333333
00:12:18.564 --> 00:12:19.734 these things, like you know,
NOTE Confidence: 0.846408708333333
00:12:19.734 --> 00:12:21.442 having a little bit of blood in the
NOTE Confidence: 0.846408708333333
00:12:21.442 --> 00:12:23.090 urine and a little bit of flank pain.
NOTE Confidence: 0.846408708333333
00:12:23.090 --> 00:12:25.400 Most people would think of a kidney
NOTE Confidence: 0.846408708333333
00:12:25.400 --> 00:12:27.519 stone rather than a a kidney tumor,
NOTE Confidence: 0.846408708333333
00:12:27.520 --> 00:12:28.380 and me say, well,
NOTE Confidence: 0.846408708333333
00:12:28.380 --> 00:12:30.239 you know I've had kidney stones in the past,
NOTE Confidence: 0.846408708333333
00:12:30.240 --> 00:12:33.360 and so this is just yet another bout.
NOTE Confidence: 0.846408708333333
00:12:33.360 --> 00:12:34.604 Speaking of which, though,
NOTE Confidence: 0.846408708333333
00:12:34.604 --> 00:12:36.470 does having a history of kidney
NOTE Confidence: 0.846408708333333
00:12:36.529 --> 00:12:38.339 stones increase your risk of
NOTE Confidence: 0.846408708333333
00:12:38.339 --> 00:12:39.425 developing kidney cancer?
NOTE Confidence: 0.920045935333334

00:12:40.930 --> 00:12:41.998 It's a good question.
NOTE Confidence: 0.920045935333334

00:12:41.998 --> 00:12:43.600 I would say anything that can
NOTE Confidence: 0.920045935333334

00:12:43.652 --> 00:12:45.377 cause inflammation in the kidney.
NOTE Confidence: 0.920045935333334

00:12:45.380 --> 00:12:47.580 In theory, can create an
NOTE Confidence: 0.920045935333334

00:12:47.580 --> 00:12:49.280 environment that's more susceptible
NOTE Confidence: 0.920045935333334

00:12:49.280 --> 00:12:50.920 to developing kidney cancer,
NOTE Confidence: 0.920045935333334

00:12:50.920 --> 00:12:53.120 and so you know on a routine basis,
NOTE Confidence: 0.920045935333334

00:12:53.120 --> 00:12:55.514 someone who gets the stone here there,
NOTE Confidence: 0.920045935333334

00:12:55.520 --> 00:12:57.188 you know probably doesn't have that
NOTE Confidence: 0.920045935333334

00:12:57.188 --> 00:12:59.319 much of a different risk unfortunately.
NOTE Confidence: 0.920045935333334

00:12:59.320 --> 00:13:02.120 Some patients who really get a lot
NOTE Confidence: 0.920045935333334

00:13:02.120 --> 00:13:04.290 of effects of that kidney stone.
NOTE Confidence: 0.920045935333334

00:13:04.290 --> 00:13:06.690 Those blockages and infections,
NOTE Confidence: 0.920045935333334

00:13:06.690 --> 00:13:08.490 and recurrent inflammation.
NOTE Confidence: 0.920045935333334

00:13:08.490 --> 00:13:10.284 Those probably do have a slightly
NOTE Confidence: 0.920045935333334

00:13:10.284 --> 00:13:11.949 higher risk just because of that.

NOTE Confidence: 0.920045935333334
00:13:11.950 --> 00:13:12.922 That inflammation within the
NOTE Confidence: 0.920045935333334
00:13:12.922 --> 00:13:14.380 Kitty it sort of creates an
NOTE Confidence: 0.920045935333334
00:13:14.423 --> 00:13:15.655 environment that's more pervasive
NOTE Confidence: 0.920045935333334
00:13:15.655 --> 00:13:17.195 to developing a kidney cancer,
NOTE Confidence: 0.921342554444445
00:13:17.910 --> 00:13:20.907 and so you know, when you think about it,
NOTE Confidence: 0.921342554444445
00:13:20.910 --> 00:13:22.548 you know the the kind of you
NOTE Confidence: 0.921342554444445
00:13:22.548 --> 00:13:24.307 know a little bit of flank pain,
NOTE Confidence: 0.921342554444445
00:13:24.310 --> 00:13:26.291 maybe a little bit of blood in
NOTE Confidence: 0.921342554444445
00:13:26.291 --> 00:13:28.527 the urine in a minority of cases.
NOTE Confidence: 0.921342554444445
00:13:28.530 --> 00:13:31.954 Maybe you know a little bit of aches
NOTE Confidence: 0.921342554444445
00:13:31.954 --> 00:13:34.705 and pains when things that you know
NOTE Confidence: 0.921342554444445
00:13:34.705 --> 00:13:37.220 without something that is rip roaring.
NOTE Confidence: 0.921342554444445
00:13:37.220 --> 00:13:40.770 You know, alarm bell ringing.
NOTE Confidence: 0.921342554444445
00:13:40.770 --> 00:13:42.205 Many of these patients are
NOTE Confidence: 0.921342554444445
00:13:42.205 --> 00:13:43.353 either going to be.
NOTE Confidence: 0.921342554444445

00:13:43.360 --> 00:13:45.845 Picked up incidentally on a CAT scan
NOTE Confidence: 0.921342554444445

00:13:45.845 --> 00:13:48.178 that they're having for another reason.
NOTE Confidence: 0.921342554444445

00:13:48.180 --> 00:13:51.380 Or it may be delayed and so that
NOTE Confidence: 0.921342554444445

00:13:51.380 --> 00:13:53.999 brings us to the question of
NOTE Confidence: 0.921342554444445

00:13:54.000 --> 00:13:56.322 what is the stage distribution of
NOTE Confidence: 0.921342554444445

00:13:56.322 --> 00:13:58.480 kidney cancers when they present.
NOTE Confidence: 0.921342554444445

00:13:58.480 --> 00:13:59.740 So that is to say,
NOTE Confidence: 0.921342554444445

00:13:59.740 --> 00:14:02.435 are most of these cancers picked up
NOTE Confidence: 0.921342554444445

00:14:02.435 --> 00:14:05.260 late simply because there is no alarm
NOTE Confidence: 0.921342554444445

00:14:05.260 --> 00:14:07.255 bell ringing symptoms that cause
NOTE Confidence: 0.921342554444445

00:14:07.255 --> 00:14:09.828 people to seek medical advice sooner?
NOTE Confidence: 0.897774733

00:14:11.370 --> 00:14:13.095 Good question. I think something
NOTE Confidence: 0.897774733

00:14:13.095 --> 00:14:15.229 that's evolving in and really changing
NOTE Confidence: 0.897774733

00:14:15.229 --> 00:14:17.329 overtime because things like CAT scans
NOTE Confidence: 0.897774733

00:14:17.329 --> 00:14:19.643 are more common now either for other
NOTE Confidence: 0.897774733

00:14:19.643 --> 00:14:21.443 reasons that are unrelated to the

NOTE Confidence: 0.897774733

00:14:21.450 --> 00:14:23.445 kidney cancer or because people do have

NOTE Confidence: 0.897774733

00:14:23.445 --> 00:14:25.521 that twinge of pain or have blood in

NOTE Confidence: 0.897774733

00:14:25.521 --> 00:14:27.430 the urine and they see their doctor.

NOTE Confidence: 0.897774733

00:14:27.430 --> 00:14:28.542 And appropriately they say,

NOTE Confidence: 0.897774733

00:14:28.542 --> 00:14:30.890 let's let's get a CAT scan to evaluate.

NOTE Confidence: 0.897774733

00:14:30.890 --> 00:14:32.366 I think things are being picked

NOTE Confidence: 0.897774733

00:14:32.366 --> 00:14:33.892 up earlier and earlier and so

NOTE Confidence: 0.897774733

00:14:33.892 --> 00:14:35.127 the majority of kidney cancers,

NOTE Confidence: 0.897774733

00:14:35.130 --> 00:14:37.418 which is good news are picked up at

NOTE Confidence: 0.897774733

00:14:37.418 --> 00:14:39.722 a localized stage as a stage where

NOTE Confidence: 0.897774733

00:14:39.722 --> 00:14:41.392 they're confined the kidney and.

NOTE Confidence: 0.897774733

00:14:41.400 --> 00:14:43.248 Where surgery can be performed or

NOTE Confidence: 0.897774733

00:14:43.248 --> 00:14:44.939 other there's other methods as well,

NOTE Confidence: 0.897774733

00:14:44.940 --> 00:14:47.170 but basically that single tumor

NOTE Confidence: 0.897774733

00:14:47.170 --> 00:14:49.400 can be can be addressed,

NOTE Confidence: 0.897774733

00:14:49.400 --> 00:14:51.320 and in most cases eliminated,
NOTE Confidence: 0.897774733

00:14:51.320 --> 00:14:53.210 and that's that's wonderful news.
NOTE Confidence: 0.897774733

00:14:53.210 --> 00:14:54.086 That being said,
NOTE Confidence: 0.897774733

00:14:54.086 --> 00:14:55.838 you know there are select group
NOTE Confidence: 0.897774733

00:14:55.838 --> 00:14:57.789 of patients that we don't have
NOTE Confidence: 0.897774733

00:14:57.789 --> 00:14:59.764 great screening for and that don't
NOTE Confidence: 0.897774733

00:14:59.764 --> 00:15:01.630 have any warning signs early on.
NOTE Confidence: 0.897774733

00:15:01.630 --> 00:15:03.219 And by the time that you know
NOTE Confidence: 0.897774733

00:15:03.219 --> 00:15:04.320 the really symptoms develop,
NOTE Confidence: 0.897774733

00:15:04.320 --> 00:15:05.720 it is at a more advanced stage.
NOTE Confidence: 0.897774733

00:15:05.720 --> 00:15:07.165 And while that's the minority
NOTE Confidence: 0.897774733

00:15:07.165 --> 00:15:08.610 of patients at this point,
NOTE Confidence: 0.897774733

00:15:08.610 --> 00:15:11.466 it is still a sizable fraction.
NOTE Confidence: 0.897774733

00:15:11.470 --> 00:15:13.180 And so something that I think
NOTE Confidence: 0.897774733

00:15:13.180 --> 00:15:14.665 motivates our need to really
NOTE Confidence: 0.897774733

00:15:14.665 --> 00:15:16.625 do better in terms of coming up

NOTE Confidence: 0.897774733

00:15:16.625 --> 00:15:18.139 with better screening tests.

NOTE Confidence: 0.890570176666667

00:15:18.470 --> 00:15:20.278 And so we're going to pick up the

NOTE Confidence: 0.890570176666667

00:15:20.278 --> 00:15:21.407 conversation, learning more about

NOTE Confidence: 0.890570176666667

00:15:21.407 --> 00:15:22.902 the research that's evolving in

NOTE Confidence: 0.890570176666667

00:15:22.902 --> 00:15:24.750 terms of screening and treatment,

NOTE Confidence: 0.890570176666667

00:15:24.750 --> 00:15:26.136 right after we take a short break,

NOTE Confidence: 0.890570176666667

00:15:26.140 --> 00:15:27.690 quit for a medical minute.

NOTE Confidence: 0.890570176666667

00:15:27.690 --> 00:15:29.346 Please stay tuned to learn more

NOTE Confidence: 0.890570176666667

00:15:29.346 --> 00:15:30.764 about kidney cancer with my

NOTE Confidence: 0.890570176666667

00:15:30.764 --> 00:15:31.970 guest Doctor, David Braun.

NOTE Confidence: 0.860994556

00:15:32.710 --> 00:15:34.625 Funding for Yale Cancer Answers

NOTE Confidence: 0.860994556

00:15:34.625 --> 00:15:36.540 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.860994556

00:15:36.540 --> 00:15:39.102 where the breast Cancer Prevention Clinic

NOTE Confidence: 0.860994556

00:15:39.102 --> 00:15:40.810 provides comprehensive risk assessment,

NOTE Confidence: 0.860994556

00:15:40.810 --> 00:15:42.880 education and screening for women

NOTE Confidence: 0.860994556

00:15:42.880 --> 00:15:44.910 at increased risk of breast cancer.

NOTE Confidence: 0.860994556

00:15:44.910 --> 00:15:46.340 To learn more, visit

NOTE Confidence: 0.8564051

00:15:48.350 --> 00:15:50.970 yalecancercenter.org/genetics.

NOTE Confidence: 0.8564051

00:15:50.970 --> 00:15:53.130 Over 230,000 Americans will be

NOTE Confidence: 0.8564051

00:15:53.130 --> 00:15:55.290 diagnosed with lung cancer this

NOTE Confidence: 0.8564051

00:15:55.363 --> 00:15:57.218 year and in Connecticut alone

NOTE Confidence: 0.8564051

00:15:57.218 --> 00:16:00.276 there will be over 2700 new cases.

NOTE Confidence: 0.8564051

00:16:00.276 --> 00:16:02.796 More than 85% of lung cancer

NOTE Confidence: 0.8564051

00:16:02.796 --> 00:16:05.010 diagnosis are related to smoking and

NOTE Confidence: 0.8564051

00:16:05.077 --> 00:16:07.651 quitting even after decades of use

NOTE Confidence: 0.8564051

00:16:07.651 --> 00:16:09.839 can significantly reduce your risk

NOTE Confidence: 0.8564051

00:16:09.839 --> 00:16:12.140 of developing lung cancer each day.

NOTE Confidence: 0.8564051

00:16:12.140 --> 00:16:14.210 Patients with lung cancer are surviving

NOTE Confidence: 0.8564051

00:16:14.210 --> 00:16:16.712 thanks to increased access to advanced

NOTE Confidence: 0.8564051

00:16:16.712 --> 00:16:18.464 therapies and specialized care,

NOTE Confidence: 0.8564051

00:16:18.470 --> 00:16:20.280 new treatment options and surgical

NOTE Confidence: 0.8564051

00:16:20.280 --> 00:16:22.452 techniques are giving lung cancer survivors

NOTE Confidence: 0.8564051

00:16:22.452 --> 00:16:24.868 more hope than they have ever had before.

NOTE Confidence: 0.8564051

00:16:24.870 --> 00:16:26.790 Clinical trials are currently

NOTE Confidence: 0.8564051

00:16:26.790 --> 00:16:28.710 underway at federally designated

NOTE Confidence: 0.8564051

00:16:28.710 --> 00:16:30.190 Comprehensive cancer centers,

NOTE Confidence: 0.8564051

00:16:30.190 --> 00:16:32.402 such as the battle two trial at

NOTE Confidence: 0.8564051

00:16:32.402 --> 00:16:34.024 Yale Cancer Center and Smilow

NOTE Confidence: 0.8564051

00:16:34.024 --> 00:16:36.145 Cancer Hospital to learn if a drug

NOTE Confidence: 0.8564051

00:16:36.145 --> 00:16:38.449 or combination of drugs based on

NOTE Confidence: 0.8564051

00:16:38.449 --> 00:16:40.379 personal biomarkers can help to

NOTE Confidence: 0.8564051

00:16:40.380 --> 00:16:43.110 control non small cell lung cancer.

NOTE Confidence: 0.8564051

00:16:43.110 --> 00:16:46.110 More information is available at

NOTE Confidence: 0.8564051

00:16:46.110 --> 00:16:47.376 yalecancercenter.org you're listening

NOTE Confidence: 0.8564051

00:16:47.376 --> 00:16:49.064 to Connecticut Public Radio.

NOTE Confidence: 0.8775817783333333

00:16:50.030 --> 00:16:52.208 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.8775817783333333

00:16:52.210 --> 00:16:54.496 This is doctor Anees Chagpar and I'm joined

NOTE Confidence: 0.8775817783333333

00:16:54.496 --> 00:16:56.482 tonight by my guest Doctor David Braun.

NOTE Confidence: 0.8775817783333333

00:16:56.482 --> 00:16:58.738 We're learning about the care of

NOTE Confidence: 0.8775817783333333

00:16:58.738 --> 00:17:00.717 patients with kidney cancer in

NOTE Confidence: 0.8775817783333333

00:17:00.717 --> 00:17:02.657 advance of kidney cancer awareness

NOTE Confidence: 0.8775817783333333

00:17:02.657 --> 00:17:04.968 Month and right before the break,

NOTE Confidence: 0.8775817783333333

00:17:04.970 --> 00:17:07.455 you know, David, you were telling us

NOTE Confidence: 0.8775817783333333

00:17:07.455 --> 00:17:10.194 a bit about kidney cancers and the

NOTE Confidence: 0.8775817783333333

00:17:10.194 --> 00:17:13.126 fact that almost anybody had is at

NOTE Confidence: 0.8775817783333333

00:17:13.126 --> 00:17:15.406 risk of developing kidney cancers.

NOTE Confidence: 0.8775817783333333

00:17:15.410 --> 00:17:17.909 But you did mention a few things

NOTE Confidence: 0.8775817783333333

00:17:17.909 --> 00:17:19.798 that I think were really.

NOTE Confidence: 0.8775817783333333

00:17:19.798 --> 00:17:22.252 Interesting in terms of where the

NOTE Confidence: 0.8775817783333333

00:17:22.252 --> 00:17:25.192 science is going in terms of picking

NOTE Confidence: 0.8775817783333333

00:17:25.192 --> 00:17:27.237 up cancers earlier and treating

NOTE Confidence: 0.8775817783333333

00:17:27.315 --> 00:17:29.467 them perhaps more effectively.

NOTE Confidence: 0.877581778333333

00:17:29.470 --> 00:17:31.855 So tell us a little bit more about some

NOTE Confidence: 0.877581778333333

00:17:31.855 --> 00:17:34.202 of the research that's ongoing that will

NOTE Confidence: 0.877581778333333

00:17:34.202 --> 00:17:36.940 help us to find kidney cancers early,

NOTE Confidence: 0.73203957

00:17:37.170 --> 00:17:38.950 absolutely, and so there's really,

NOTE Confidence: 0.73203957

00:17:38.950 --> 00:17:40.876 I think, dramatic advances that are

NOTE Confidence: 0.73203957

00:17:40.876 --> 00:17:43.398 being made both in terms of research

NOTE Confidence: 0.73203957

00:17:43.398 --> 00:17:45.363 into screening and then ultimately,

NOTE Confidence: 0.73203957

00:17:45.370 --> 00:17:47.690 which is a huge focus of mine treatment.

NOTE Confidence: 0.73203957

00:17:47.690 --> 00:17:49.398 Unfortunately, for patients who

NOTE Confidence: 0.73203957

00:17:49.398 --> 00:17:51.533 develop more advanced disease where.

NOTE Confidence: 0.73203957

00:17:51.540 --> 00:17:53.764 A surgery is not possible or not effective.

NOTE Confidence: 0.73203957

00:17:53.770 --> 00:17:55.650 What are the treatments

NOTE Confidence: 0.73203957

00:17:55.650 --> 00:17:57.568 available in terms of screening?

NOTE Confidence: 0.73203957

00:17:57.568 --> 00:17:58.654 You know historically,

NOTE Confidence: 0.73203957

00:17:58.660 --> 00:18:00.459 a lot of the screening that's been

NOTE Confidence: 0.73203957

00:18:00.459 --> 00:18:02.133 done for many types of cancer
NOTE Confidence: 0.73203957

00:18:02.133 --> 00:18:03.831 has been imaging based this some
NOTE Confidence: 0.73203957

00:18:03.831 --> 00:18:05.459 sort of picture that's taken,
NOTE Confidence: 0.73203957

00:18:05.460 --> 00:18:07.316 whether that's a form of an X ray,
NOTE Confidence: 0.73203957

00:18:07.320 --> 00:18:08.259 like a mammogram,
NOTE Confidence: 0.73203957

00:18:08.259 --> 00:18:11.253 or whether that's a CT scan at low doses
NOTE Confidence: 0.73203957

00:18:11.253 --> 00:18:13.836 like they have available for lung cancer,
NOTE Confidence: 0.73203957

00:18:13.840 --> 00:18:15.808 and so that's one bucket that people have
NOTE Confidence: 0.73203957

00:18:15.808 --> 00:18:17.797 looked at and are continuing to look at.
NOTE Confidence: 0.73203957

00:18:17.800 --> 00:18:20.010 Even simple tools like ultrasound.
NOTE Confidence: 0.73203957

00:18:20.010 --> 00:18:21.630 Whether that might be helpful.
NOTE Confidence: 0.73203957

00:18:21.630 --> 00:18:24.366 In terms of really picking up kidney cancer,
NOTE Confidence: 0.73203957

00:18:24.370 --> 00:18:26.470 particularly in certain populations.
NOTE Confidence: 0.73203957

00:18:26.470 --> 00:18:28.045 That being said,
NOTE Confidence: 0.73203957

00:18:28.050 --> 00:18:30.042 you know I'm not as optimistic
NOTE Confidence: 0.73203957

00:18:30.042 --> 00:18:32.154 that we're gonna really have a

NOTE Confidence: 0.73203957

00:18:32.154 --> 00:18:33.590 pure imaging based solution,

NOTE Confidence: 0.73203957

00:18:33.590 --> 00:18:35.809 and that's where some of the research

NOTE Confidence: 0.73203957

00:18:35.809 --> 00:18:37.912 into what I would call blood tests

NOTE Confidence: 0.73203957

00:18:37.912 --> 00:18:39.769 as a general bucket is really,

NOTE Confidence: 0.73203957

00:18:39.770 --> 00:18:40.384 really exciting.

NOTE Confidence: 0.73203957

00:18:40.384 --> 00:18:42.226 We know that cancer is even

NOTE Confidence: 0.73203957

00:18:42.226 --> 00:18:43.649 at an early stage,

NOTE Confidence: 0.73203957

00:18:43.650 --> 00:18:45.953 sometimes shed some of their blueprints that

NOTE Confidence: 0.73203957

00:18:45.953 --> 00:18:48.790 shed some of their DNA into the bloodstream.

NOTE Confidence: 0.73203957

00:18:48.790 --> 00:18:49.153 Very,

NOTE Confidence: 0.73203957

00:18:49.153 --> 00:18:50.968 very small amount and kidney

NOTE Confidence: 0.73203957

00:18:50.968 --> 00:18:52.057 cancer in particular.

NOTE Confidence: 0.73203957

00:18:52.060 --> 00:18:53.830 Actually sheds less of this DNA

NOTE Confidence: 0.73203957

00:18:53.830 --> 00:18:56.258 than a lot of other tumor types,

NOTE Confidence: 0.73203957

00:18:56.260 --> 00:18:58.636 but it still does shed some some DNA,

NOTE Confidence: 0.73203957

00:18:58.640 --> 00:19:00.040 and so the question is,
NOTE Confidence: 0.73203957

00:19:00.040 --> 00:19:02.588 can we actually use new and advanced
NOTE Confidence: 0.73203957

00:19:02.588 --> 00:19:04.687 methods of picking up that needle
NOTE Confidence: 0.73203957

00:19:04.687 --> 00:19:06.864 in a haystack that little bit of
NOTE Confidence: 0.73203957

00:19:06.937 --> 00:19:09.163 shed DNA from a tumor and being
NOTE Confidence: 0.73203957

00:19:09.163 --> 00:19:11.212 able to identify it in a patient
NOTE Confidence: 0.73203957

00:19:11.212 --> 00:19:12.850 with an early stage kidney cancer?
NOTE Confidence: 0.73203957

00:19:12.850 --> 00:19:14.355 But they're still at the research phase,
NOTE Confidence: 0.73203957

00:19:14.360 --> 00:19:16.208 so not the phase where they've been
NOTE Confidence: 0.73203957

00:19:16.208 --> 00:19:18.152 proven to really be effective in a
NOTE Confidence: 0.73203957

00:19:18.152 --> 00:19:20.159 large group of patients with picking it up.
NOTE Confidence: 0.73203957

00:19:20.160 --> 00:19:22.434 But I still think there's room
NOTE Confidence: 0.73203957

00:19:22.434 --> 00:19:23.950 there for cautious optimism.
NOTE Confidence: 0.73203957

00:19:23.950 --> 00:19:26.056 The second bucket just mentioned briefly
NOTE Confidence: 0.73203957

00:19:26.056 --> 00:19:28.261 is we know that cancer in general
NOTE Confidence: 0.73203957

00:19:28.261 --> 00:19:29.863 and kidney cancer is no exception,

NOTE Confidence: 0.73203957

00:19:29.870 --> 00:19:31.750 can alter patients metabolism in

NOTE Confidence: 0.73203957

00:19:31.750 --> 00:19:34.099 subtle ways the the make up of,

NOTE Confidence: 0.73203957

00:19:34.100 --> 00:19:35.492 you know, simple things,

NOTE Confidence: 0.73203957

00:19:35.492 --> 00:19:38.457 amino acids and fats in our in our

NOTE Confidence: 0.73203957

00:19:38.457 --> 00:19:40.467 bloodstream and so another area

NOTE Confidence: 0.73203957

00:19:40.467 --> 00:19:42.386 of investigation that a number of

NOTE Confidence: 0.73203957

00:19:42.386 --> 00:19:44.114 groups including our own has been

NOTE Confidence: 0.73203957

00:19:44.114 --> 00:19:46.037 involved in is saying can we actually

NOTE Confidence: 0.73203957

00:19:46.037 --> 00:19:47.672 pick up on those subtle changes

NOTE Confidence: 0.73203957

00:19:47.672 --> 00:19:49.436 and their metabolites that might be

NOTE Confidence: 0.73203957

00:19:49.436 --> 00:19:51.028 present in a patient's blood and

NOTE Confidence: 0.73203957

00:19:51.028 --> 00:19:52.680 see if that can help us actually

NOTE Confidence: 0.73203957

00:19:52.732 --> 00:19:54.232 distinguish patients with even an

NOTE Confidence: 0.73203957

00:19:54.232 --> 00:19:55.732 early stage cancer from patients

NOTE Confidence: 0.73203957

00:19:55.780 --> 00:19:57.100 who don't have cancer and so.

NOTE Confidence: 0.73203957

00:19:57.100 --> 00:19:58.760 Again,
NOTE Confidence: 0.73203957

00:19:58.760 --> 00:20:01.550 exciting sort of areas of investigation,
NOTE Confidence: 0.73203957

00:20:01.550 --> 00:20:03.206 but nothing where we have a test today
NOTE Confidence: 0.73203957

00:20:03.206 --> 00:20:04.610 or tomorrow that I can say this is
NOTE Confidence: 0.73203957

00:20:04.610 --> 00:20:06.447 a good test for screening for kidney cancer.
NOTE Confidence: 0.836404875555556

00:20:07.000 --> 00:20:09.637 You know, the kidney is one of these organs.
NOTE Confidence: 0.836404875555556

00:20:09.640 --> 00:20:12.468 That is one would think would be
NOTE Confidence: 0.836404875555556

00:20:12.468 --> 00:20:14.608 particularly ripe for for screening
NOTE Confidence: 0.836404875555556

00:20:14.608 --> 00:20:17.576 in the sense that it generates urine.
NOTE Confidence: 0.836404875555556

00:20:17.580 --> 00:20:20.652 So are there urine based tests
NOTE Confidence: 0.836404875555556

00:20:20.652 --> 00:20:23.400 that are being looked at for
NOTE Confidence: 0.836404875555556

00:20:23.400 --> 00:20:25.100 screening and early detection?
NOTE Confidence: 0.836404875555556

00:20:25.100 --> 00:20:27.650 Or is it all blood based?
NOTE Confidence: 0.906926001052632

00:20:28.120 --> 00:20:30.780 No, it's it's a wonderful point and
NOTE Confidence: 0.906926001052632

00:20:30.780 --> 00:20:32.927 so essentially everything I said that
NOTE Confidence: 0.906926001052632

00:20:32.927 --> 00:20:34.799 was applied to blood based tests.

NOTE Confidence: 0.906926001052632
00:20:34.800 --> 00:20:36.426 People are looking at within the
NOTE Confidence: 0.906926001052632
00:20:36.426 --> 00:20:38.310 urine as well to see, you know,
NOTE Confidence: 0.906926001052632
00:20:38.310 --> 00:20:39.870 is there DNA that shed that
NOTE Confidence: 0.906926001052632
00:20:39.870 --> 00:20:41.817 can be picked up in the urine?
NOTE Confidence: 0.906926001052632
00:20:41.820 --> 00:20:44.204 It turns out at least our early experiences.
NOTE Confidence: 0.906926001052632
00:20:44.210 --> 00:20:46.334 It seems like it's a little bit more tricky.
NOTE Confidence: 0.906926001052632
00:20:46.340 --> 00:20:47.201 For whatever reason,
NOTE Confidence: 0.906926001052632
00:20:47.201 --> 00:20:49.548 it tends to be shed a little bit
NOTE Confidence: 0.906926001052632
00:20:49.548 --> 00:20:51.445 less in the urine than the blood,
NOTE Confidence: 0.906926001052632
00:20:51.450 --> 00:20:53.316 even though it's not very prevalent
NOTE Confidence: 0.906926001052632
00:20:53.316 --> 00:20:54.560 in the blood either.
NOTE Confidence: 0.906926001052632
00:20:54.560 --> 00:20:55.460 That being said,
NOTE Confidence: 0.906926001052632
00:20:55.460 --> 00:20:57.260 I think that's an area for
NOTE Confidence: 0.906926001052632
00:20:57.260 --> 00:20:58.420 continued investigation.
NOTE Confidence: 0.906926001052632
00:20:58.420 --> 00:20:59.196 The one urine test,
NOTE Confidence: 0.906926001052632

00:20:59.196 --> 00:21:00.797 which is an old one but still a
NOTE Confidence: 0.906926001052632

00:21:00.797 --> 00:21:02.349 tried and true is if there is blood
NOTE Confidence: 0.906926001052632

00:21:02.398 --> 00:21:03.889 that's picked up on a urine test,
NOTE Confidence: 0.906926001052632

00:21:03.890 --> 00:21:05.354 even microscopic blood.
NOTE Confidence: 0.906926001052632

00:21:05.354 --> 00:21:07.306 That's something that's certainly
NOTE Confidence: 0.906926001052632

00:21:07.306 --> 00:21:09.510 worthwhile to evaluate more fully,
NOTE Confidence: 0.906926001052632

00:21:09.510 --> 00:21:11.421 because that can be an early sign
NOTE Confidence: 0.906926001052632

00:21:11.421 --> 00:21:13.154 of of something going on within
NOTE Confidence: 0.906926001052632

00:21:13.154 --> 00:21:15.142 the kidney or or other areas within
NOTE Confidence: 0.906926001052632

00:21:15.206 --> 00:21:17.156 that that track that urinary tract.
NOTE Confidence: 0.8680335132

00:21:18.570 --> 00:21:20.618 You know that I I always like to
NOTE Confidence: 0.8680335132

00:21:20.618 --> 00:21:22.384 think about urine tests just in
NOTE Confidence: 0.8680335132

00:21:22.384 --> 00:21:24.650 case there are people out there who
NOTE Confidence: 0.8680335132

00:21:24.650 --> 00:21:26.330 don't particularly love needles.
NOTE Confidence: 0.8680335132

00:21:26.330 --> 00:21:28.410 Even though the the tests that we get
NOTE Confidence: 0.8680335132

00:21:28.410 --> 00:21:30.378 for blood tests are a small needle.

NOTE Confidence: 0.8680335132

00:21:30.380 --> 00:21:32.378 But some of us are still little gun shy.

NOTE Confidence: 0.883215435

00:21:34.840 --> 00:21:37.460 So so you know we we kind of left off

NOTE Confidence: 0.883215435

00:21:37.535 --> 00:21:40.157 the conversation before the break at.

NOTE Confidence: 0.883215435

00:21:40.160 --> 00:21:42.535 You know, detecting kidney cancers

NOTE Confidence: 0.883215435

00:21:42.535 --> 00:21:46.622 tell us what the state of the art is at

NOTE Confidence: 0.883215435

00:21:46.622 --> 00:21:49.390 the moment in terms of how effective

NOTE Confidence: 0.883215435

00:21:49.390 --> 00:21:52.240 treatments are for kidney cancers.

NOTE Confidence: 0.883215435

00:21:52.240 --> 00:21:54.392 I mean, it's great that most of them

NOTE Confidence: 0.883215435

00:21:54.392 --> 00:21:56.138 are picked up at a local stage,

NOTE Confidence: 0.883215435

00:21:56.140 --> 00:21:57.380 so how are they treated?

NOTE Confidence: 0.883215435

00:21:57.380 --> 00:22:00.372 Is this just a surgery or are do

NOTE Confidence: 0.883215435

00:22:00.372 --> 00:22:03.255 people need radiation and systemic

NOTE Confidence: 0.883215435

00:22:03.255 --> 00:22:05.298 therapy like chemotherapy

NOTE Confidence: 0.819964359444444

00:22:05.310 --> 00:22:07.608 as well? It's it's a great

NOTE Confidence: 0.819964359444444

00:22:07.608 --> 00:22:10.100 question and the the short answer

NOTE Confidence: 0.819964359444444

00:22:10.100 --> 00:22:12.728 really depends on where it is.
NOTE Confidence: 0.8199643594444444

00:22:12.730 --> 00:22:14.634 And so anytime there's a patient that I
NOTE Confidence: 0.8199643594444444

00:22:14.634 --> 00:22:16.466 meet that's diagnosed with a new cancer.
NOTE Confidence: 0.8199643594444444

00:22:16.470 --> 00:22:18.516 I always ask 3 fundamental questions.
NOTE Confidence: 0.8199643594444444

00:22:18.520 --> 00:22:21.664 What is it? Where is it and what
NOTE Confidence: 0.8199643594444444

00:22:21.664 --> 00:22:22.763 are we going to do about it?
NOTE Confidence: 0.8199643594444444

00:22:22.770 --> 00:22:24.110 And that's where the treatment
NOTE Confidence: 0.8199643594444444

00:22:24.110 --> 00:22:26.424 comes in and so the what is it is
NOTE Confidence: 0.8199643594444444

00:22:26.424 --> 00:22:28.130 what type of kidney cancer we have,
NOTE Confidence: 0.8199643594444444

00:22:28.130 --> 00:22:30.622 much more common types like clear cell
NOTE Confidence: 0.8199643594444444

00:22:30.622 --> 00:22:33.127 kidney cancer that account for about 80%,
NOTE Confidence: 0.8199643594444444

00:22:33.130 --> 00:22:35.255 but there's also less common
NOTE Confidence: 0.8199643594444444

00:22:35.255 --> 00:22:36.955 types these variantes allergies.
NOTE Confidence: 0.8199643594444444

00:22:36.960 --> 00:22:39.123 That have unique biologies that we need
NOTE Confidence: 0.8199643594444444

00:22:39.123 --> 00:22:40.853 to understand that sometimes might
NOTE Confidence: 0.8199643594444444

00:22:40.853 --> 00:22:42.718 affect treatment in certain ways.

NOTE Confidence: 0.819964359444444

00:22:42.720 --> 00:22:44.330 The next big question is where is

NOTE Confidence: 0.819964359444444

00:22:44.330 --> 00:22:46.151 it and that that really ties in

NOTE Confidence: 0.819964359444444

00:22:46.151 --> 00:22:47.771 with the stage and the prognosis,

NOTE Confidence: 0.819964359444444

00:22:47.780 --> 00:22:50.108 and that's ultimately what will help

NOTE Confidence: 0.819964359444444

00:22:50.108 --> 00:22:52.376 to determine the treatment and so

NOTE Confidence: 0.819964359444444

00:22:52.376 --> 00:22:54.332 patients who have an early stage

NOTE Confidence: 0.819964359444444

00:22:54.332 --> 00:22:57.400 kidney cancer stage one or stage two.

NOTE Confidence: 0.819964359444444

00:22:57.400 --> 00:22:59.878 Those are ones where treatments that

NOTE Confidence: 0.819964359444444

00:22:59.878 --> 00:23:01.864 that tumor itself, usually surgery,

NOTE Confidence: 0.819964359444444

00:23:01.864 --> 00:23:03.724 though there's emerging roles for

NOTE Confidence: 0.819964359444444

00:23:03.724 --> 00:23:05.193 other techniques like ablation

NOTE Confidence: 0.819964359444444

00:23:05.193 --> 00:23:06.698 or even radiation as well,

NOTE Confidence: 0.819964359444444

00:23:06.700 --> 00:23:08.828 but for the majority of patients surgery.

NOTE Confidence: 0.819964359444444

00:23:08.830 --> 00:23:10.290 To remove that kidney tumors,

NOTE Confidence: 0.819964359444444

00:23:10.290 --> 00:23:10.751 highly,

NOTE Confidence: 0.819964359444444

00:23:10.751 --> 00:23:13.517 highly effective and patients with early
NOTE Confidence: 0.819964359444444

00:23:13.517 --> 00:23:16.120 stage kidney cancer who have surgery.
NOTE Confidence: 0.819964359444444

00:23:16.120 --> 00:23:18.148 The far majority of those patients
NOTE Confidence: 0.819964359444444

00:23:18.148 --> 00:23:19.920 are cured with surgery alone.
NOTE Confidence: 0.819964359444444

00:23:19.920 --> 00:23:22.116 The second bucket are patients that
NOTE Confidence: 0.819964359444444

00:23:22.116 --> 00:23:24.659 have what I would term locally
NOTE Confidence: 0.819964359444444

00:23:24.659 --> 00:23:26.663 advanced or locally aggressive
NOTE Confidence: 0.819964359444444

00:23:26.663 --> 00:23:28.300 disease that's kidney cancer.
NOTE Confidence: 0.819964359444444

00:23:28.300 --> 00:23:30.190 That's still within the kidney itself.
NOTE Confidence: 0.819964359444444

00:23:30.190 --> 00:23:31.270 It hasn't spread far,
NOTE Confidence: 0.819964359444444

00:23:31.270 --> 00:23:33.796 but maybe it started to go into a little
NOTE Confidence: 0.819964359444444

00:23:33.796 --> 00:23:36.110 bit of a blood vessel or surrounding area,
NOTE Confidence: 0.819964359444444

00:23:36.110 --> 00:23:37.868 or it has features under the
NOTE Confidence: 0.819964359444444

00:23:37.868 --> 00:23:39.670 microscope that look really aggressive.
NOTE Confidence: 0.819964359444444

00:23:39.670 --> 00:23:40.057 Still,
NOTE Confidence: 0.819964359444444

00:23:40.057 --> 00:23:41.992 the mainstay of treatment for

NOTE Confidence: 0.819964359444444
00:23:41.992 --> 00:23:43.153 that is surgery,
NOTE Confidence: 0.819964359444444
00:23:43.160 --> 00:23:44.940 and that's that's curative for
NOTE Confidence: 0.819964359444444
00:23:44.940 --> 00:23:46.720 a large number of patients.
NOTE Confidence: 0.819964359444444
00:23:46.720 --> 00:23:48.958 But unfortunately there are still a
NOTE Confidence: 0.819964359444444
00:23:48.958 --> 00:23:51.419 number of patients who after surgery.
NOTE Confidence: 0.819964359444444
00:23:51.420 --> 00:23:53.786 Will have the disease come back and
NOTE Confidence: 0.819964359444444
00:23:53.786 --> 00:23:56.096 so there haven't been great tools in
NOTE Confidence: 0.819964359444444
00:23:56.096 --> 00:23:58.382 terms of being able to help prevent
NOTE Confidence: 0.819964359444444
00:23:58.382 --> 00:24:00.686 it from coming back like radiation
NOTE Confidence: 0.819964359444444
00:24:00.686 --> 00:24:03.250 after surgery or chemotherapy just now.
NOTE Confidence: 0.819964359444444
00:24:03.250 --> 00:24:05.600 In the last really year,
NOTE Confidence: 0.819964359444444
00:24:05.600 --> 00:24:07.688 we're beginning to have some evidence
NOTE Confidence: 0.819964359444444
00:24:07.688 --> 00:24:09.378 that actually immunotherapy might help
NOTE Confidence: 0.819964359444444
00:24:09.378 --> 00:24:11.298 to decrease the risk of it coming back.
NOTE Confidence: 0.819964359444444
00:24:11.300 --> 00:24:12.584 It still needs a little bit
NOTE Confidence: 0.819964359444444

00:24:12.584 --> 00:24:13.440 of longer follow up,
NOTE Confidence: 0.8199643594444444

00:24:13.440 --> 00:24:15.222 but that's that's actually has led
NOTE Confidence: 0.8199643594444444

00:24:15.222 --> 00:24:17.818 to the FDA approval of one of these
NOTE Confidence: 0.8199643594444444

00:24:17.818 --> 00:24:19.834 immunotherapy drugs for exactly this purpose.
NOTE Confidence: 0.8199643594444444

00:24:19.840 --> 00:24:22.168 Those patients with kind of a higher risk.
NOTE Confidence: 0.8199643594444444

00:24:22.170 --> 00:24:24.170 Local kidney cancer that's removed
NOTE Confidence: 0.8199643594444444

00:24:24.170 --> 00:24:24.970 by surgery.
NOTE Confidence: 0.8199643594444444

00:24:24.970 --> 00:24:27.040 Can we get another medicine and
NOTE Confidence: 0.8199643594444444

00:24:27.040 --> 00:24:28.752 immunotherapy to help decrease the
NOTE Confidence: 0.8199643594444444

00:24:28.752 --> 00:24:30.751 chance of it coming back? And the last?
NOTE Confidence: 0.8199643594444444

00:24:30.751 --> 00:24:31.836 The last group of patients?
NOTE Confidence: 0.8199643594444444

00:24:31.840 --> 00:24:33.492 And this is largely the group of
NOTE Confidence: 0.8199643594444444

00:24:33.492 --> 00:24:35.298 patients that I see are unfortunately
NOTE Confidence: 0.8199643594444444

00:24:35.298 --> 00:24:37.392 those with advanced or metastatic disease.
NOTE Confidence: 0.8199643594444444

00:24:37.400 --> 00:24:39.150 Kidney cancer that's either spread
NOTE Confidence: 0.8199643594444444

00:24:39.150 --> 00:24:41.264 to different areas at the beginning

NOTE Confidence: 0.819964359444444

00:24:41.264 --> 00:24:43.385 or start off in the kidney and

NOTE Confidence: 0.819964359444444

00:24:43.385 --> 00:24:45.272 recurred or came back later at

NOTE Confidence: 0.819964359444444

00:24:45.272 --> 00:24:46.792 different parts of the body.

NOTE Confidence: 0.819964359444444

00:24:46.800 --> 00:24:49.128 And so that point in general,

NOTE Confidence: 0.819964359444444

00:24:49.130 --> 00:24:50.214 with with some exceptions.

NOTE Confidence: 0.819964359444444

00:24:50.214 --> 00:24:51.840 But in general those are patients

NOTE Confidence: 0.924768769411765

00:24:51.891 --> 00:24:53.515 that are not cured by surgery alone.

NOTE Confidence: 0.924768769411765

00:24:53.520 --> 00:24:54.955 And that's where we really

NOTE Confidence: 0.924768769411765

00:24:54.955 --> 00:24:55.816 think of medicines.

NOTE Confidence: 0.924768769411765

00:24:55.820 --> 00:24:57.880 Systemic therapy as the the

NOTE Confidence: 0.924768769411765

00:24:57.880 --> 00:24:59.940 really the mainstay of treatment.

NOTE Confidence: 0.924768769411765

00:24:59.940 --> 00:25:02.210 Now, what are those medicines

NOTE Confidence: 0.924768769411765

00:25:02.210 --> 00:25:04.328 kidney cancers really by and large,

NOTE Confidence: 0.924768769411765

00:25:04.330 --> 00:25:06.365 not been historically responsive to

NOTE Confidence: 0.924768769411765

00:25:06.365 --> 00:25:07.993 the conventional chemotherapies we

NOTE Confidence: 0.924768769411765

00:25:07.993 --> 00:25:09.907 think of the stuff that you know,
NOTE Confidence: 0.924768769411765

00:25:09.910 --> 00:25:11.856 come through the Ivy that we think.
NOTE Confidence: 0.924768769411765

00:25:11.860 --> 00:25:13.660 Make people feel really sick.
NOTE Confidence: 0.924768769411765

00:25:13.660 --> 00:25:15.480 Those are things that you know for.
NOTE Confidence: 0.924768769411765

00:25:15.480 --> 00:25:16.920 For the majority of kidney
NOTE Confidence: 0.924768769411765

00:25:16.920 --> 00:25:18.072 cancers are against small,
NOTE Confidence: 0.924768769411765

00:25:18.080 --> 00:25:18.977 rare exceptions here,
NOTE Confidence: 0.924768769411765

00:25:18.977 --> 00:25:20.173 but for the majority
NOTE Confidence: 0.924768769411765

00:25:20.173 --> 00:25:21.630 they're just not effective,
NOTE Confidence: 0.924768769411765

00:25:21.630 --> 00:25:23.737 and so there's been two big waves
NOTE Confidence: 0.924768769411765

00:25:23.737 --> 00:25:25.550 of treatment for kidney cancer.
NOTE Confidence: 0.924768769411765

00:25:25.550 --> 00:25:26.552 The first wave,
NOTE Confidence: 0.924768769411765

00:25:26.552 --> 00:25:28.222 which started around 15 years
NOTE Confidence: 0.924768769411765

00:25:28.222 --> 00:25:30.130 ago were group of medicines,
NOTE Confidence: 0.924768769411765

00:25:30.130 --> 00:25:30.726 mostly pills.
NOTE Confidence: 0.924768769411765

00:25:30.726 --> 00:25:33.110 But there's other Ivy form as well that

NOTE Confidence: 0.924768769411765

00:25:33.175 --> 00:25:35.597 helped to block new blood vessel formation.

NOTE Confidence: 0.924768769411765

00:25:35.600 --> 00:25:36.844 So called anti angiogenic.

NOTE Confidence: 0.924768769411765

00:25:36.844 --> 00:25:39.170 So those were really effective for a while.

NOTE Confidence: 0.924768769411765

00:25:39.170 --> 00:25:40.378 They they truthfully didn't

NOTE Confidence: 0.924768769411765

00:25:40.378 --> 00:25:41.284 really cure patients,

NOTE Confidence: 0.924768769411765

00:25:41.290 --> 00:25:42.365 they the farm majority didn't

NOTE Confidence: 0.924768769411765

00:25:42.365 --> 00:25:43.984 get rid of it but they provided

NOTE Confidence: 0.924768769411765

00:25:43.984 --> 00:25:45.466 a treatment that could at least

NOTE Confidence: 0.924768769411765

00:25:45.466 --> 00:25:47.110 keep the kidney cancer at Bay for

NOTE Confidence: 0.924768769411765

00:25:47.110 --> 00:25:48.820 some amount of time and went from

NOTE Confidence: 0.924768769411765

00:25:48.820 --> 00:25:50.650 having very little in the way

NOTE Confidence: 0.924768769411765

00:25:50.650 --> 00:25:52.201 of treatment to actually being

NOTE Confidence: 0.924768769411765

00:25:52.201 --> 00:25:53.774 able to keep the disease under

NOTE Confidence: 0.924768769411765

00:25:53.774 --> 00:25:55.250 control for some amount of time.

NOTE Confidence: 0.924768769411765

00:25:55.250 --> 00:25:57.050 So that was a really important

NOTE Confidence: 0.924768769411765

00:25:57.050 --> 00:25:57.950 and exciting advance.
NOTE Confidence: 0.924768769411765

00:25:57.950 --> 00:26:00.003 What I think has been transformative, really.
NOTE Confidence: 0.924768769411765

00:26:00.003 --> 00:26:02.347 Over the last five or so years has
NOTE Confidence: 0.924768769411765

00:26:02.347 --> 00:26:04.676 been the the introduction of this
NOTE Confidence: 0.924768769411765

00:26:04.676 --> 00:26:06.641 next generation of immune therapy.
NOTE Confidence: 0.924768769411765

00:26:06.650 --> 00:26:08.435 There's actually an older form of immune
NOTE Confidence: 0.924768769411765

00:26:08.435 --> 00:26:10.327 therapy that was used 20 or 30 years ago,
NOTE Confidence: 0.924768769411765

00:26:10.330 --> 00:26:11.470 which you know,
NOTE Confidence: 0.924768769411765

00:26:11.470 --> 00:26:13.370 actually had some favorable responses
NOTE Confidence: 0.924768769411765

00:26:13.370 --> 00:26:16.070 for a very small group of patients,
NOTE Confidence: 0.924768769411765

00:26:16.070 --> 00:26:17.410 maybe 5 or 7%.
NOTE Confidence: 0.924768769411765

00:26:17.410 --> 00:26:20.769 But with this new wave of immune therapy,
NOTE Confidence: 0.924768769411765

00:26:20.770 --> 00:26:23.570 these so-called immune checkpoint inhibitors,
NOTE Confidence: 0.924768769411765

00:26:23.570 --> 00:26:24.488 it's I think,
NOTE Confidence: 0.924768769411765

00:26:24.488 --> 00:26:26.018 really marked an inflection point
NOTE Confidence: 0.924768769411765

00:26:26.018 --> 00:26:27.545 for kidney cancer where there's

NOTE Confidence: 0.924768769411765
00:26:27.545 --> 00:26:29.267 a group of patients now and.
NOTE Confidence: 0.924768769411765
00:26:29.270 --> 00:26:29.601 Unfortunately,
NOTE Confidence: 0.924768769411765
00:26:29.601 --> 00:26:31.256 it's still not the majority,
NOTE Confidence: 0.924768769411765
00:26:31.260 --> 00:26:33.213 but a growing group of patients who
NOTE Confidence: 0.924768769411765
00:26:33.213 --> 00:26:35.220 really get a tremendous benefit.
NOTE Confidence: 0.924768769411765
00:26:35.220 --> 00:26:36.753 And when I say that it's not
NOTE Confidence: 0.924768769411765
00:26:36.753 --> 00:26:38.206 just that it shrinks the cancer
NOTE Confidence: 0.924768769411765
00:26:38.206 --> 00:26:40.258 by a little bit or or leads to
NOTE Confidence: 0.924768769411765
00:26:40.258 --> 00:26:41.908 survival for some amount of time,
NOTE Confidence: 0.924768769411765
00:26:41.910 --> 00:26:43.870 but there's certain patients again,
NOTE Confidence: 0.924768769411765
00:26:43.870 --> 00:26:44.230 unfortunately,
NOTE Confidence: 0.924768769411765
00:26:44.230 --> 00:26:45.670 still a small fraction,
NOTE Confidence: 0.924768769411765
00:26:45.670 --> 00:26:47.678 but a a notable fraction where this these
NOTE Confidence: 0.924768769411765
00:26:47.678 --> 00:26:49.567 drugs can actually work for a really,
NOTE Confidence: 0.924768769411765
00:26:49.570 --> 00:26:50.389 really long time.
NOTE Confidence: 0.924768769411765

00:26:50.389 --> 00:26:52.300 And so I think we're at this
NOTE Confidence: 0.924768769411765

00:26:52.359 --> 00:26:54.049 important moment in kidney cancer
NOTE Confidence: 0.924768769411765

00:26:54.049 --> 00:26:56.382 where we now have these tools that
NOTE Confidence: 0.924768769411765

00:26:56.382 --> 00:26:58.122 are almost proof of concept that
NOTE Confidence: 0.924768769411765

00:26:58.122 --> 00:27:00.014 for a small group of patients.
NOTE Confidence: 0.924768769411765

00:27:00.014 --> 00:27:01.745 Were able to really, really,
NOTE Confidence: 0.924768769411765

00:27:01.745 --> 00:27:04.720 really good job of controlling their cancer,
NOTE Confidence: 0.924768769411765

00:27:04.720 --> 00:27:06.304 and for some of those actually
NOTE Confidence: 0.924768769411765

00:27:06.304 --> 00:27:07.950 doing so for really long time.
NOTE Confidence: 0.924768769411765

00:27:07.950 --> 00:27:08.332 Yeah,
NOTE Confidence: 0.924768769411765

00:27:08.332 --> 00:27:10.242 really these long term durable
NOTE Confidence: 0.924768769411765

00:27:10.242 --> 00:27:12.380 kind of can't cancer control,
NOTE Confidence: 0.924768769411765

00:27:12.380 --> 00:27:14.340 but there's still a large group of patients,
NOTE Confidence: 0.924768769411765

00:27:14.340 --> 00:27:14.656 unfortunately,
NOTE Confidence: 0.924768769411765

00:27:14.656 --> 00:27:16.236 probably still the majority of
NOTE Confidence: 0.924768769411765

00:27:16.236 --> 00:27:17.500 patients with advanced disease,

NOTE Confidence: 0.924768769411765
00:27:17.500 --> 00:27:19.810 for which these this long term control
NOTE Confidence: 0.924768769411765
00:27:19.810 --> 00:27:22.170 this long term benefit is not there.
NOTE Confidence: 0.924768769411765
00:27:22.170 --> 00:27:23.878 And so it's this proof of concept.
NOTE Confidence: 0.924768769411765
00:27:23.880 --> 00:27:24.588 We can do it,
NOTE Confidence: 0.924768769411765
00:27:24.588 --> 00:27:25.888 but we need to figure out how
NOTE Confidence: 0.924768769411765
00:27:25.888 --> 00:27:27.016 to do it for more people.
NOTE Confidence: 0.920994847
00:27:27.020 --> 00:27:28.166 And that's where I think the
NOTE Confidence: 0.920994847
00:27:28.166 --> 00:27:28.930 research is so important.
NOTE Confidence: 0.802643251818182
00:27:29.680 --> 00:27:31.948 Well, in the. The other question
NOTE Confidence: 0.802643251818182
00:27:31.948 --> 00:27:33.750 that springs to mind is,
NOTE Confidence: 0.802643251818182
00:27:33.750 --> 00:27:35.484 can you identify which patients are
NOTE Confidence: 0.802643251818182
00:27:35.484 --> 00:27:37.430 going to do well with immunotherapy
NOTE Confidence: 0.802643251818182
00:27:37.430 --> 00:27:39.255 and which patients are not?
NOTE Confidence: 0.5951597174
00:27:40.330 --> 00:27:42.370 Absolutely, I think that's a an
NOTE Confidence: 0.5951597174
00:27:42.370 --> 00:27:43.730 A critical critical question.
NOTE Confidence: 0.5951597174

00:27:43.730 --> 00:27:46.170 I think you really hit the nail on the head.
NOTE Confidence: 0.5951597174

00:27:46.170 --> 00:27:48.198 You know, I think for patients
NOTE Confidence: 0.5951597174

00:27:48.198 --> 00:27:49.550 who are getting immunotherapy,
NOTE Confidence: 0.5951597174

00:27:49.550 --> 00:27:51.206 we really need to study this.
NOTE Confidence: 0.5951597174

00:27:51.210 --> 00:27:53.135 We need to understand where the patients
NOTE Confidence: 0.5951597174

00:27:53.135 --> 00:27:55.455 that really do well and wine who are the
NOTE Confidence: 0.5951597174

00:27:55.455 --> 00:27:57.419 patients for which the therapy fails them.
NOTE Confidence: 0.5951597174

00:27:57.420 --> 00:28:00.610 That doesn't have the benefit it should and.
NOTE Confidence: 0.5951597174

00:28:00.610 --> 00:28:02.460 And what's happening biologically then,
NOTE Confidence: 0.5951597174

00:28:02.460 --> 00:28:04.008 and I think that gives us
NOTE Confidence: 0.5951597174

00:28:04.008 --> 00:28:05.040 two pieces of information.
NOTE Confidence: 0.5951597174

00:28:05.040 --> 00:28:07.318 One is exactly what you're talking about,
NOTE Confidence: 0.5951597174

00:28:07.318 --> 00:28:09.201 which is the sort of term biomarker
NOTE Confidence: 0.5951597174

00:28:09.201 --> 00:28:10.985 can we actually help to select
NOTE Confidence: 0.5951597174

00:28:10.985 --> 00:28:12.157 patients and select drugs.
NOTE Confidence: 0.5951597174

00:28:12.160 --> 00:28:13.755 Meaning we match the right

NOTE Confidence: 0.5951597174

00:28:13.755 --> 00:28:15.350 drug with the right patient.

NOTE Confidence: 0.5951597174

00:28:15.350 --> 00:28:16.880 That's a really important sort

NOTE Confidence: 0.5951597174

00:28:16.880 --> 00:28:19.099 of goal of some of this work.

NOTE Confidence: 0.5951597174

00:28:19.100 --> 00:28:20.412 The other bucket is,

NOTE Confidence: 0.5951597174

00:28:20.412 --> 00:28:22.052 can we actually understand why

NOTE Confidence: 0.5951597174

00:28:22.052 --> 00:28:23.608 certain tumors are resistant,

NOTE Confidence: 0.5951597174

00:28:23.610 --> 00:28:24.936 and if we have that understanding,

NOTE Confidence: 0.5951597174

00:28:24.940 --> 00:28:26.543 then in in our laboratory can we

NOTE Confidence: 0.5951597174

00:28:26.543 --> 00:28:27.780 actually think of strategies,

NOTE Confidence: 0.5951597174

00:28:27.780 --> 00:28:29.455 ways to overcome that resistance

NOTE Confidence: 0.5951597174

00:28:29.455 --> 00:28:31.710 and bring benefit to more patients?

NOTE Confidence: 0.91464109

00:28:32.250 --> 00:28:34.332 Doctor David Braun is an assistant

NOTE Confidence: 0.91464109

00:28:34.332 --> 00:28:36.134 professor of medicine and medical

NOTE Confidence: 0.91464109

00:28:36.134 --> 00:28:38.563 oncology at the Yale School of Medicine.

NOTE Confidence: 0.91464109

00:28:38.570 --> 00:28:40.694 If you have questions,

NOTE Confidence: 0.91464109

00:28:40.694 --> 00:28:42.749 the address is canceranswers@yale.edu

NOTE Confidence: 0.91464109

00:28:42.749 --> 00:28:45.503 and past editions of the program

NOTE Confidence: 0.91464109

00:28:45.503 --> 00:28:47.910 are available in audio and written

NOTE Confidence: 0.91464109

00:28:47.910 --> 00:28:48.875 form at yalecancercenter.org.

NOTE Confidence: 0.91464109

00:28:48.875 --> 00:28:51.475 We hope you'll join us next week to

NOTE Confidence: 0.91464109

00:28:51.475 --> 00:28:53.460 learn more about the fight against

NOTE Confidence: 0.91464109

00:28:53.460 --> 00:28:55.060 cancer here on Connecticut Public

NOTE Confidence: 0.91464109

00:28:55.118 --> 00:28:56.948 radio funding for Yale Cancer Answers

NOTE Confidence: 0.91464109

00:28:56.948 --> 00:29:00.000 is provided by Smilow Cancer Hospital.