00:00:00.000 --> 00:00:02.830 Support for Yale Cancer Answers NOTE Confidence: 0.87064 00:00:02.830 --> 00:00:05.094 comes from AstraZeneca, dedicated NOTE Confidence: 0.87064  $00:00:05.094 \rightarrow 00:00:08.475$  to providing innovative treatment NOTE Confidence: 0.87064 00:00:08.475 --> 00:00:13.025 options for people living with NOTE Confidence: 0.87064  $00{:}00{:}13.025 \dashrightarrow 00{:}00{:}13.935$  cancer. Learn more at a strazeneca-us.com. NOTE Confidence: 0.87064  $00:00:13.940 \rightarrow 00:00:16.130$  Welcome to Yale Cancer Answers with NOTE Confidence: 0.87064  $00:00:16.130 \rightarrow 00:00:18.529$  your host doctor Anees Chagpar. NOTE Confidence: 0.87064  $00:00:18.530 \longrightarrow 00:00:20.410$  Yale Cancer Answers features the NOTE Confidence: 0.87064  $00{:}00{:}20{.}410 \dashrightarrow 00{:}00{:}22{.}727$  latest information on cancer care by NOTE Confidence: 0.87064 00:00:22.727 --> 00:00:24.211 welcoming oncologists and specialists NOTE Confidence: 0.87064 00:00:24.211 --> 00:00:26.696 who are on the forefront of the NOTE Confidence: 0.87064  $00:00:26.696 \rightarrow 00:00:28.406$  battle to fight cancer. This week NOTE Confidence: 0.87064  $00:00:28.410 \longrightarrow 00:00:30.175$  it's a conversation about pancreatic NOTE Confidence: 0.87064 00:00:30.175 --> 00:00:31.940 cancer with Doctor Jeremy Kortmansky. NOTE Confidence: 0.87064 00:00:31.940 --> 00:00:33.056 Doctor Kortmansky NOTE Confidence: 0.87064 00:00:33.056 --> 00:00:34.916 is an associate professor

- NOTE Confidence: 0.87064
- $00{:}00{:}34.916 \dashrightarrow 00{:}00{:}36.729$  of clinical medicine in medical

 $00:00:36.729 \longrightarrow 00:00:38.751$  on cology at the Yale School of

NOTE Confidence: 0.87064

 $00{:}00{:}38.751 \dashrightarrow 00{:}00{:}40.838$  Medicine where Doctor Chagpar is

NOTE Confidence: 0.87064

 $00:00:40.838 \rightarrow 00:00:42.523$  a professor of surgical oncology.

NOTE Confidence: 0.8666635

00:00:43.670 --> 00:00:45.138 So Jeremy,

NOTE Confidence: 0.8666635

 $00{:}00{:}45.138 \dashrightarrow 00{:}00{:}48.031$  I think we all hear about pancreatic

NOTE Confidence: 0.8666635

 $00:00:48.031 \rightarrow 00:00:51.490$  cancer when it affects celebrities, right?

NOTE Confidence: 0.8666635

 $00:00:51.490 \longrightarrow 00:00:54.290$  So whether it was Steve Jobs or

NOTE Confidence: 0.8666635

 $00{:}00{:}54.290 \dashrightarrow 00{:}00{:}57.850$  other stars we hear

NOTE Confidence: 0.8666635

00:00:57.850 --> 00:00:59.449 about pancreatic cancer,

NOTE Confidence: 0.8666635

 $00:00:59.450 \longrightarrow 00:01:02.684$  once in a blue moon.

NOTE Confidence: 0.8666635

00:01:02.690 - 00:01:05.938 It doesn't seem to be a terribly

NOTE Confidence: 0.8666635

00:01:05.938 --> 00:01:07.566 common cancer.

NOTE Confidence: 0.8666635

00:01:07.566 --> 00:01:10.002 Can you tell us a little bit

NOTE Confidence: 0.8666635

 $00:01:10.002 \rightarrow 00:01:12.292$  more about how frequently

- 00:01:12.292 --> 00:01:14.760 pancreatic cancer is diagnosed?
- NOTE Confidence: 0.8666635
- 00:01:14.760 --> 00:01:18.230 How many people get it?
- NOTE Confidence: 0.8666635
- $00:01:18.230 \longrightarrow 00:01:20.595$  And who really are the
- NOTE Confidence: 0.8666635
- $00:01:20.595 \longrightarrow 00:01:22.960$  people that it most affects?
- NOTE Confidence: 0.8666635
- $00:01:22.960 \longrightarrow 00:01:24.848$  Yes,
- NOTE Confidence: 0.8666635
- $00:01:24.850 \longrightarrow 00:01:25.800$  pancreatic cancer
- NOTE Confidence: 0.87507707
- $00:01:25.800 \rightarrow 00:01:28.205$  is actually becoming an increasingly
- NOTE Confidence: 0.87507707
- $00:01:28.205 \dashrightarrow 00:01:31.000$  more common cancer that we see.
- NOTE Confidence: 0.87507707
- $00{:}01{:}31{.}000 \dashrightarrow 00{:}01{:}33{.}580$  It's now the 5th leading cause
- NOTE Confidence: 0.87507707
- $00:01:33.580 \longrightarrow 00:01:36.679$  of cancer in the United States,
- NOTE Confidence: 0.87507707
- $00:01:36.680 \longrightarrow 00:01:39.984$  at about 60,000 new cases a year.
- NOTE Confidence: 0.87507707
- $00{:}01{:}39{.}990 \dashrightarrow 00{:}01{:}43{.}294$  So we're not only seeing increasing numbers,
- NOTE Confidence: 0.87507707
- $00:01:43.300 \longrightarrow 00:01:46.510$  but also really moving up the
- NOTE Confidence: 0.87507707
- $00:01:46.510 \longrightarrow 00:01:49.910$  rank of how often we see it.
- NOTE Confidence: 0.87507707
- $00:01:49.910 \longrightarrow 00:01:52.913$  And you know it's interesting you brought
- NOTE Confidence: 0.87507707
- $00:01:52.913 \rightarrow 00:01:56.347$  up Steve Jobs and and other celebrities.

 $00:01:56.350 \rightarrow 00:02:00.030$  Most recently, I think Alex Trebek is one

NOTE Confidence: 0.87507707

 $00{:}02{:}00{.}030 \dashrightarrow 00{:}02{:}02{.}520$  and it's important to make distinctions

NOTE Confidence: 0.87507707

 $00{:}02{:}02{:}02{:}520 \dashrightarrow 00{:}02{:}06{.}009$  when we talk about pancreatic cancer,

NOTE Confidence: 0.87507707

 $00:02:06.010 \rightarrow 00:02:08.310$  there's two main types there

NOTE Confidence: 0.87507707

 $00{:}02{:}08{.}310 \dashrightarrow 00{:}02{:}09{.}690$  is pancreatic adenocarcinoma,

NOTE Confidence: 0.87507707

 $00{:}02{:}09.690 \dashrightarrow 00{:}02{:}14.290$  which is by far the more common one that is

NOTE Confidence: 0.87507707

 $00{:}02{:}14.290 \dashrightarrow 00{:}02{:}18.146$  the disease that we're talking about

NOTE Confidence: 0.87507707

 $00:02:18.146 \rightarrow 00:02:22.356$  when we think about 60,000 cases per year.

NOTE Confidence: 0.87507707

 $00{:}02{:}22{.}360 \dashrightarrow 00{:}02{:}24{.}410$  And then there are pancreatic

NOTE Confidence: 0.87507707

00:02:24.410 --> 00:02:25.230 neuroendocrine tumors,

NOTE Confidence: 0.87507707

 $00:02:25.230 \longrightarrow 00:02:27.690$  which are a lot less common.

NOTE Confidence: 0.87507707

 $00{:}02{:}27.690 \dashrightarrow 00{:}02{:}30.483$  They are only seen in a few

NOTE Confidence: 0.87507707

 $00{:}02{:}30{.}483 \dashrightarrow 00{:}02{:}32{.}200$  thousand patients a year,

NOTE Confidence: 0.87507707

 $00{:}02{:}32{.}200 \dashrightarrow 00{:}02{:}34{.}462$  and it's important

NOTE Confidence: 0.87507707

 $00{:}02{:}34.462 \dashrightarrow 00{:}02{:}36.448$  to make the distinction because

 $00:02:36.448 \rightarrow 00:02:38.488$  they behave very differently and

NOTE Confidence: 0.87507707

 $00{:}02{:}38{.}488 \dashrightarrow 00{:}02{:}40{.}810$  their treatments are very different.

NOTE Confidence: 0.8785013

 $00:02:42.190 \longrightarrow 00:02:44.095$  So, let's start with

NOTE Confidence: 0.8785013

00:02:44.095 --> 00:02:44.857 pancreatic adenocarcinoma,

NOTE Confidence: 0.8785013

00:02:44.860 - 00:02:47.158 because I think that most people,

NOTE Confidence: 0.8785013

 $00{:}02{:}47.160 \dashrightarrow 00{:}02{:}49.566$  when they use the term generically

NOTE Confidence: 0.8785013

 $00{:}02{:}49.566 \dashrightarrow 00{:}02{:}51.572$  pancreatic cancer that tends to

NOTE Confidence: 0.8785013

 $00:02:51.572 \rightarrow 00:02:53.267$  be what they're referring to.

NOTE Confidence: 0.8785013

00:02:53.270 --> 00:02:55.508 Although your point is well taken

NOTE Confidence: 0.8785013

 $00:02:55.508 \rightarrow 00:02:57.470$  with regards to neuroendocrine tumors,

NOTE Confidence: 0.8785013

 $00{:}02{:}57{.}470 \dashrightarrow 00{:}03{:}00{.}182$  but tell us a little bit more

NOTE Confidence: 0.8785013

 $00:03:00.182 \longrightarrow 00:03:02.438$  about who gets these cancers.

NOTE Confidence: 0.8785013

 $00:03:02.440 \rightarrow 00:03:05.107$  I mean, what are the risk factors?

NOTE Confidence: 0.889703

 $00:03:06.080 \longrightarrow 00:03:09.428$  So I think like other cancers,

NOTE Confidence: 0.889703

 $00{:}03{:}09{.}430 \dashrightarrow 00{:}03{:}12{.}790$  smoking is a common risk factor.

NOTE Confidence: 0.889703

 $00:03:12.790 \longrightarrow 00:03:17.334$  It can be related to problems that cause

- NOTE Confidence: 0.889703
- $00:03:17.334 \rightarrow 00:03:20.726$  chronic inflammation of the pancreas so

 $00:03:20.726 \rightarrow 00:03:23.966$  alcoholism can lead to pancreas cancer.

NOTE Confidence: 0.889703

00:03:23.970 --> 00:03:26.570 Chronic gallstone disease can,

NOTE Confidence: 0.889703

 $00:03:26.570 \rightarrow 00:03:29.820$  although that's much less common.

NOTE Confidence: 0.889703

00:03:29.820 --> 00:03:34.148 Obesity can be a risk factor as well.

NOTE Confidence: 0.889703

 $00{:}03{:}34{.}150 \dashrightarrow 00{:}03{:}36{.}754$  And then there is some question

NOTE Confidence: 0.889703

 $00{:}03{:}36{.}754 \dashrightarrow 00{:}03{:}39{.}001$  of the relationship with diabetes

NOTE Confidence: 0.889703

 $00{:}03{:}39{.}001 \dashrightarrow 00{:}03{:}41{.}557$  and whether diabetes could be a

NOTE Confidence: 0.889703

 $00{:}03{:}41{.}557 \dashrightarrow 00{:}03{:}44{.}485$  risk factor or whether the disease

NOTE Confidence: 0.889703

 $00:03:44.485 \longrightarrow 00:03:46.569$  itself causes the diabetes.

NOTE Confidence: 0.889703

 $00{:}03{:}46{.}570 \dashrightarrow 00{:}03{:}48{.}410$  And that's something that's

NOTE Confidence: 0.889703

00:03:48.410 --> 00:03:50.250 still being worked out.

NOTE Confidence: 0.889703

 $00{:}03{:}50{.}250 \dashrightarrow 00{:}03{:}53{.}194$  And then there is a smaller percentage

NOTE Confidence: 0.889703

 $00{:}03{:}53{.}194 \dashrightarrow 00{:}03{:}56{.}229$  of patients where it's hereditary cancer.

NOTE Confidence: 0.889703

 $00{:}03{:}56{.}230 \dashrightarrow 00{:}03{:}58{.}555$  There are some genetic abnormalities

00:03:58.555 --> 00:04:02.053 that we know of that are associated

NOTE Confidence: 0.889703

 $00{:}04{:}02{.}053 \dashrightarrow 00{:}04{:}04{.}229$  with pancreas cancer and

NOTE Confidence: 0.889703

 $00{:}04{:}04{.}230 \dashrightarrow 00{:}04{:}07{.}002$  one that is of recent importance

NOTE Confidence: 0.889703

 $00:04:07.002 \rightarrow 00:04:10.208$  is its relation to the BRCA gene,

NOTE Confidence: 0.889703

 $00:04:10.210 \longrightarrow 00:04:12.898$  which is a gene that we most

NOTE Confidence: 0.889703

00:04:12.898 --> 00:04:15.854 often think about with breast and

NOTE Confidence: 0.889703

00:04:15.854 --> 00:04:17.567 ovarian cancer syndromes,

NOTE Confidence: 0.889703

 $00{:}04{:}17.570 \dashrightarrow 00{:}04{:}20.330$  but is also related to pancreas

NOTE Confidence: 0.889703

 $00{:}04{:}20{.}330 \dashrightarrow 00{:}04{:}21{.}710$  cancer as well,

NOTE Confidence: 0.889703

 $00:04:21.710 \longrightarrow 00:04:24.470$  and that has had some recent

NOTE Confidence: 0.889703

 $00:04:24.470 \longrightarrow 00:04:25.850$  implications on treatment.

NOTE Confidence: 0.8909138

 $00{:}04{:}27{.}580 \dashrightarrow 00{:}04{:}30{.}436$  So when we think

NOTE Confidence: 0.8909138

 $00:04:30.436 \longrightarrow 00:04:32.460$  about these risk factors,

NOTE Confidence: 0.8909138

 $00{:}04{:}32{.}460 \dashrightarrow 00{:}04{:}35{.}428$  I'm thinking about a very good friend

NOTE Confidence: 0.8909138

 $00{:}04{:}35{.}428 \dashrightarrow 00{:}04{:}39{.}141$  of mine who actually was diagnosed with

NOTE Confidence: 0.8909138

00:04:39.141 --> 00:04:42.026 pancreatic cancer just over Thanksgiving.

- NOTE Confidence: 0.8909138
- $00:04:42.030 \rightarrow 00:04:45.350$  And who didn't fit any of those categories.
- NOTE Confidence: 0.8909138
- $00:04:45.350 \longrightarrow 00:04:47.430$  She had no family history.
- NOTE Confidence: 0.8909138
- $00:04:47.430 \longrightarrow 00:04:49.920$  She is skinny, like a rail,
- NOTE Confidence: 0.8909138
- $00:04:49.920 \longrightarrow 00:04:51.580$  she doesn't have diabetes,
- NOTE Confidence: 0.8909138
- $00:04:51.580 \dashrightarrow 00:04:53.652$  doesn't drink, doesn't have gallstones.
- NOTE Confidence: 0.8909138
- $00:04:53.652 \rightarrow 00:04:56.370$  You know, in those people where
- NOTE Confidence: 0.8909138
- $00:04:56.370 \longrightarrow 00:04:59.112$  they don't seem to have any
- NOTE Confidence: 0.8909138
- $00{:}04{:}59{.}112 \dashrightarrow 00{:}05{:}01{.}814$  of the common risk factors that you
- NOTE Confidence: 0.8909138
- $00{:}05{:}01{.}814 \dashrightarrow 00{:}05{:}04{.}438$  think about for pancreatic cancer,
- NOTE Confidence: 0.8909138
- $00:05:04.440 \longrightarrow 00:05:06.780$  does that tell us anything about
- NOTE Confidence: 0.8909138
- $00:05:06.780 \longrightarrow 00:05:09.010$  the biology of their disease?
- NOTE Confidence: 0.8909138
- $00:05:09.010 \longrightarrow 00:05:11.728$  I mean, are there other things
- NOTE Confidence: 0.8909138
- $00{:}05{:}11.728 \dashrightarrow 00{:}05{:}13.920$  that we can think of
- NOTE Confidence: 0.8909138
- $00:05:13.920 \longrightarrow 00:05:16.536$  in terms of their risk factors,
- NOTE Confidence: 0.8909138
- $00{:}05{:}16.540 \dashrightarrow 00{:}05{:}18.108$  and does that
- NOTE Confidence: 0.8909138

 $00:05:18.108 \rightarrow 00:05:20.460$  have anything to

NOTE Confidence: 0.8909138

 $00:05:20.549 \longrightarrow 00:05:22.637$  do with their prognosis?

NOTE Confidence: 0.8620158

 $00{:}05{:}23{.}990 \dashrightarrow 00{:}05{:}26{.}165$  I think that those are

NOTE Confidence: 0.8620158

 $00:05:26.165 \longrightarrow 00:05:27.905$  all very good questions.

NOTE Confidence: 0.8620158

 $00{:}05{:}27{.}910 \dashrightarrow 00{:}05{:}30{.}220$  There are risk

NOTE Confidence: 0.8620158

00:05:30.220 --> 00:05:32.767 factors that we can identify and

NOTE Confidence: 0.8620158

 $00{:}05{:}32{.}767 \dashrightarrow 00{:}05{:}35{.}527$  then there are patients who get

NOTE Confidence: 0.8620158

 $00:05:35.527 \rightarrow 00:05:38.377$  cancer for really no good reason.

NOTE Confidence: 0.8620158

 $00{:}05{:}38{.}380 \dashrightarrow 00{:}05{:}40{.}879$  And those are people that

NOTE Confidence: 0.8620158

 $00{:}05{:}40.879 \dashrightarrow 00{:}05{:}44.006$  we are still trying to may be figure

NOTE Confidence: 0.8620158

 $00{:}05{:}44.006 \dashrightarrow 00{:}05{:}46.476$  out whether there was something

NOTE Confidence: 0.8620158

00:05:46.476 --> 00:05:48.813 hereditary or environmental or some NOTE Confidence: 0.8620158

00:05:48.813 --> 00:05:51.459 other factor that we just haven't

NOTE Confidence: 0.8620158

 $00:05:51.460 \longrightarrow 00:05:54.736$  identified yet that played a role.

NOTE Confidence: 0.8620158

 $00{:}05{:}54{.}740 \dashrightarrow 00{:}05{:}59{.}328$  When it comes to pancreas cancer,

NOTE Confidence: 0.8620158

 $00:05:59.328 \rightarrow 00:06:05.180$  the implications of how you got it,

- NOTE Confidence: 0.8620158
- $00:06:05.180 \rightarrow 00:06:06.960$  except in in certain circumstances,

 $00:06:06.960 \longrightarrow 00:06:08.740$  like the BRCA gene but,

NOTE Confidence: 0.8620158

 $00:06:08.740 \rightarrow 00:06:11.302$  otherwise how you got it doesn't

NOTE Confidence: 0.8620158

 $00{:}06{:}11{.}302 \dashrightarrow 00{:}06{:}14{.}633$  play as much of a role into how we

NOTE Confidence: 0.8620158

 $00{:}06{:}14.633 \dashrightarrow 00{:}06{:}16.791$  might think about treating it or

NOTE Confidence: 0.8620158

 $00:06:16.791 \rightarrow 00:06:19.059$  how we might expect it to behave.

NOTE Confidence: 0.90684855

 $00:06:20.790 \longrightarrow 00:06:24.588$  So the the other question is,

 $00:06:27.860 \longrightarrow 00:06:30.724$  when you talk about it

NOTE Confidence: 0.90684855

 $00{:}06{:}30{.}724$  -->  $00{:}06{:}33{.}262$  being the fifth most common cancer NOTE Confidence: 0.90684855

00:06:33.262 --> 00:06:36.450 and we think about the list right?

NOTE Confidence: 0.90684855

00:06:36.450 --> 00:06:38.086 Breast cancer, prostate cancer,

NOTE Confidence: 0.90684855

00:06:38.086 --> 00:06:40.540 colon cancer for all of these,

NOTE Confidence: 0.90684855

00:06:40.540 --> 00:06:42.636 more commonly diagnosed cancers,

NOTE Confidence: 0.90684855

 $00:06:42.636 \longrightarrow 00:06:45.256$  there's a screening test we

NOTE Confidence: 0.90684855

 $00:06:45.256 \longrightarrow 00:06:47.907$  can find these cancers early.

NOTE Confidence: 0.90684855

 $00:06:47.910 \longrightarrow 00:06:49.420$  Is there a screening test

- NOTE Confidence: 0.90684855
- $00:06:49.420 \longrightarrow 00:06:50.326$  for pancreatic cancer?
- NOTE Confidence: 0.90814656
- $00{:}06{:}51.820 \dashrightarrow 00{:}06{:}54.742$  There isn't a good or routine
- NOTE Confidence: 0.90814656
- $00:06:54.742 \longrightarrow 00:06:57.380$  screening test for pancreas cancer.
- NOTE Confidence: 0.90814656
- $00:06:57.380 \longrightarrow 00:07:00.972$  I think that we know that there are
- NOTE Confidence: 0.90814656
- $00:07:00.972 \dashrightarrow 00:07:04.063$  some patients that have been discovered
- NOTE Confidence: 0.90814656
- 00:07:04.063 > 00:07:07.201 to have either a family history
- NOTE Confidence: 0.90814656
- $00:07:07.296 \longrightarrow 00:07:10.434$  or patients that have been found
- NOTE Confidence: 0.90814656
- $00:07:10.434 \rightarrow 00:07:15.110$  to have pancreatic cysts on their
- NOTE Confidence: 0.90814656
- $00{:}07{:}15{.}110 \dashrightarrow 00{:}07{:}18{.}260$  imaging that may have been obtained
- NOTE Confidence: 0.90814656
- $00{:}07{:}18.260 \dashrightarrow 00{:}07{:}21.578$  for some other reason that we can
- NOTE Confidence: 0.90814656
- 00:07:21.578 --> 00:07:24.386 follow and certainly here at Yale,
- NOTE Confidence: 0.90814656
- $00{:}07{:}24.390 \dashrightarrow 00{:}07{:}26.305$  we have an excellent screening
- NOTE Confidence: 0.90814656
- $00{:}07{:}26.305 \dashrightarrow 00{:}07{:}28.841$  program where we can refer patients
- NOTE Confidence: 0.90814656
- $00{:}07{:}28.841 \dashrightarrow 00{:}07{:}31.025$  to our gastroenterologists who
- NOTE Confidence: 0.90814656
- $00:07:31.025 \rightarrow 00:07:33.209$  can perform screening procedures,
- NOTE Confidence: 0.90814656

 $00:07:33.210 \rightarrow 00:07:35.400$  but that's really identifying those

NOTE Confidence: 0.90814656

 $00{:}07{:}35{.}400 \dashrightarrow 00{:}07{:}38{.}552$  who are already at a height ened risk

NOTE Confidence: 0.90814656

 $00:07:38.552 \dashrightarrow 00:07:41.618$  and not for the whole population like NOTE Confidence: 0.90814656

 $00{:}07{:}41.618 \dashrightarrow 00{:}07{:}44.298$  we think about with colonoscopies

NOTE Confidence: 0.90814656

 $00:07:44.298 \longrightarrow 00:07:46.993$  for colon cancer or mammograms

NOTE Confidence: 0.90814656

 $00:07:47.000 \longrightarrow 00:07:48.503$  for breast cancer,

NOTE Confidence: 0.90814656

 $00:07:48.503 \rightarrow 00:07:51.509$  it's really an already pre determined

NOTE Confidence: 0.90814656

 $00:07:51.509 \rightarrow 00:07:53.665$  population because the screening

NOTE Confidence: 0.90814656

 $00{:}07{:}53.665 \dashrightarrow 00{:}07{:}56.809$  includes much more advanced or invasive

NOTE Confidence: 0.90814656

 $00:07:56.809 \rightarrow 00:08:00.149$  testing like MRI's or endoscopic ultrasound.

NOTE Confidence: 0.90814656

 $00:08:00.150 \longrightarrow 00:08:03.468$  So it's a much more complex

NOTE Confidence: 0.90814656

 $00:08:03.468 \longrightarrow 00:08:06.460$  way to follow patients.

NOTE Confidence: 0.8845792

 $00:08:06.460 \dashrightarrow 00:08:09.090$  And so without a screening test for

NOTE Confidence: 0.8845792

 $00:08:09.090 \rightarrow 00:08:11.194$  asymptomatic people who otherwise,

NOTE Confidence: 0.8845792

00:08:11.200 --> 00:08:13.825 haven't had any

NOTE Confidence: 0.8845792

 $00:08:13.825 \longrightarrow 00:08:15.925$  abnormality that's been found

- NOTE Confidence: 0.8845792
- $00:08:15.930 \longrightarrow 00:08:17.646$  incidentally, what are

 $00:08:17.646 \longrightarrow 00:08:20.765$  the ways in

NOTE Confidence: 0.8845792

 $00:08:20.765 \longrightarrow 00:08:23.135$  which they present?

NOTE Confidence: 0.8845792

 $00:08:23.135 \longrightarrow 00:08:25.480$  How is it that somebody

NOTE Confidence: 0.8845792

 $00:08:25.549 \longrightarrow 00:08:28.198$  cues into the fact that, Oh my gosh,

NOTE Confidence: 0.8845792

 $00:08:28.198 \rightarrow 00:08:30.214$  this could be a pancreatic cancer.

NOTE Confidence: 0.8845792

 $00:08:30.220 \rightarrow 00:08:33.244$  What are the symptoms and signs to look for?

NOTE Confidence: 0.8632866

00:08:34.600 --> 00:08:38.080 I again think this is an area

NOTE Confidence: 0.8632866

 $00{:}08{:}38{.}080 \dashrightarrow 00{:}08{:}40{.}379$  that becomes challenging that

NOTE Confidence: 0.8632866

 $00:08:40.379 \rightarrow 00:08:43.699$  the symptoms that people have,

NOTE Confidence: 0.8632866

 $00{:}08{:}43.700 \dashrightarrow 00{:}08{:}47.438$  at least initially can often be vague.

NOTE Confidence: 0.8632866

 $00{:}08{:}47{.}440 \dashrightarrow 00{:}08{:}50{.}115$  There can be some discomfort

NOTE Confidence: 0.8632866

 $00:08:50.115 \rightarrow 00:08:52.792$  in the abdomen, with eating,

NOTE Confidence: 0.8632866

 $00{:}08{:}52.792 \dashrightarrow 00{:}08{:}54.400$  sometimes increased belching,

NOTE Confidence: 0.8632866

 $00:08:54.400 \dashrightarrow 00:08:58.138$  or increased gas may be a symptom.

 $00:08:58.140 \longrightarrow 00:09:00.755$  Things that are very easily

NOTE Confidence: 0.8632866

00:09:00.755 --> 00:09:03.370 attributable to something else until

NOTE Confidence: 0.8632866

 $00:09:03.461 \rightarrow 00:09:06.486$  the symptoms become more significant.

NOTE Confidence: 0.8632866

 $00:09:06.490 \rightarrow 00:09:08.466$  Sometimes people present without

NOTE Confidence: 0.8632866

00:09:08.466 --> 00:09:10.936 any symptoms but develop jaundice,

NOTE Confidence: 0.8632866

 $00:09:10.936 \longrightarrow 00:09:13.478$  they notice yellowing

NOTE Confidence: 0.8632866

00:09:13.478 --> 00:09:15.880 of their eyes or their skin,

NOTE Confidence: 0.8632866

 $00:09:15.880 \longrightarrow 00:09:18.110$  which certainly tips them off,

NOTE Confidence: 0.8632866

00:09:18.110 $\operatorname{-->}$ 00:09:20.200 their families that there's something

NOTE Confidence: 0.8632866

 $00:09:20.200 \rightarrow 00:09:23.030$  going on that requires further evaluation.

NOTE Confidence: 0.8632866

 $00:09:23.030 \dashrightarrow 00:09:24.818$  But because these symptoms

NOTE Confidence: 0.8632866

 $00:09:24.818 \rightarrow 00:09:26.606$  can sometimes be vague,

NOTE Confidence: 0.8632866

 $00{:}09{:}26.610 \dashrightarrow 00{:}09{:}29.557$  they can also be attributed to the

NOTE Confidence: 0.8632866

 $00:09:29.557 \rightarrow 00:09:32.753$  much more common problems that we see,

NOTE Confidence: 0.8632866

 $00{:}09{:}32.753 \dashrightarrow 00{:}09{:}35.525$  irritable bowel or reflux which can

NOTE Confidence: 0.8632866

 $00:09:35.614 \rightarrow 00:09:38.666$  lead to delays in making a diagnosis.

- NOTE Confidence: 0.885242
- $00:09:40.130 \longrightarrow 00:09:42.517$  And so I mean that really gets

 $00:09:42.517 \longrightarrow 00:09:45.181$  to the crux of the issue, right?

NOTE Confidence: 0.885242

 $00:09:45.181 \longrightarrow 00:09:49.189$  Is that without screening and with

NOTE Confidence: 0.885242

 $00:09:49.190 \rightarrow 00:09:52.347$  the symptoms that are incredibly vague,

NOTE Confidence: 0.885242

 $00{:}09{:}52{.}350 \dashrightarrow 00{:}09{:}54{.}888$  I would surmise that the vast

NOTE Confidence: 0.885242

00:09:54.888 --> 00:09:57.153 majority of patients who present

NOTE Confidence: 0.885242

 $00{:}09{:}57{.}153 \dashrightarrow 00{:}10{:}00{.}105$  with pancreatic cancer present at a

NOTE Confidence: 0.885242

 $00:10:00.110 \longrightarrow 00:10:02.329$  more advanced stage so talk

NOTE Confidence: 0.885242

 $00:10:02.329 \longrightarrow 00:10:04.814$  about the stage

NOTE Confidence: 0.885242

 $00:10:04.814 \longrightarrow 00:10:07.470$  distribution that you see in terms of

NOTE Confidence: 0.885242

 $00{:}10{:}07{.}470 \dashrightarrow 00{:}10{:}09{.}858$  the proportion of patients who present

NOTE Confidence: 0.885242

 $00{:}10{:}09{.}858 \dashrightarrow 00{:}10{:}12{.}584$  with early versus late stage disease and

NOTE Confidence: 0.885242

 $00{:}10{:}12{.}584 \dashrightarrow 00{:}10{:}15{.}080$  what the implications are in terms of

NOTE Confidence: 0.8866992

00:10:15.080 --> 00:10:17.300 prognosis.

NOTE Confidence: 0.8866992

00:10:17.300 --> 00:10:19.561 People often think

 $00:10:19.561 \rightarrow 00:10:21.703$  about staging for cancer with the

NOTE Confidence: 0.8866992

 $00:10:21.703 \longrightarrow 00:10:24.200$  usual stage one, 2, three or four.

NOTE Confidence: 0.8866992

 $00{:}10{:}24.200 \dashrightarrow 00{:}10{:}26.390$  When I think about pancreas cancer,

NOTE Confidence: 0.8866992

 $00:10:26.390 \longrightarrow 00:10:28.700$  I really try to think about

NOTE Confidence: 0.8866992

 $00{:}10{:}28.700 \dashrightarrow 00{:}10{:}30.700$  it in terms of its

NOTE Confidence: 0.8866992

 $00{:}10{:}30{.}700 \dashrightarrow 00{:}10{:}33{.}004$  clinical presentations and so there are

NOTE Confidence: 0.8866992

 $00:10:33.004 \rightarrow 00:10:35.050$  patients that have resectable disease,

NOTE Confidence: 0.8866992

 $00:10:35.050 \rightarrow 00:10:38.938$  meaning that a surgeon could go in there at

NOTE Confidence: 0.8866992

 $00{:}10{:}38{.}938 \dashrightarrow 00{:}10{:}42{.}866$  the time of diagnosis and take it out.

NOTE Confidence: 0.8866992

 $00:10:42.870 \rightarrow 00:10:45.252$  There are patients that have locally

NOTE Confidence: 0.8866992

 $00{:}10{:}45.252 \dashrightarrow 00{:}10{:}46.840$  advanced but unresectable disease,

NOTE Confidence: 0.8866992

 $00{:}10{:}46.840 \dashrightarrow 00{:}10{:}48.795$  meaning that it hasn't spread

NOTE Confidence: 0.8866992

 $00:10:48.795 \longrightarrow 00:10:51.210$  to other parts of the body,

NOTE Confidence: 0.8866992

 $00:10:51.210 \rightarrow 00:10:53.989$  but it's involving the nearby blood vessels,

NOTE Confidence: 0.8866992

 $00{:}10{:}53{.}990 \dashrightarrow 00{:}10{:}57{.}364$  and you can't safely take it out.

NOTE Confidence: 0.8866992

 $00{:}10{:}57{.}370 \dashrightarrow 00{:}10{:}59{.}775$  And then patients with metastatic

- NOTE Confidence: 0.8866992
- $00:10:59.775 \longrightarrow 00:11:02.180$  disease where it's spread to

 $00:11:02.260 \longrightarrow 00:11:04.200$  other places in the body.

NOTE Confidence: 0.8866992

 $00:11:04.200 \longrightarrow 00:11:07.832$  And so the the number or the percentage

NOTE Confidence: 0.8866992

 $00{:}11{:}07.832 \dashrightarrow 00{:}11{:}10.686$  of patients that can have surgery

NOTE Confidence: 0.8866992

 $00:11:10.686 \longrightarrow 00:11:13.464$  at the time of their diagnosis

NOTE Confidence: 0.8866992

 $00:11:13.557 \rightarrow 00:11:16.315$  is really only about 15 to 20%.

NOTE Confidence: 0.8866992

 $00:11:16.320 \longrightarrow 00:11:18.560$  It's a relatively low number

NOTE Confidence: 0.8866992

 $00:11:18.560 \rightarrow 00:11:21.668$  and the other 80% sort of evenly

NOTE Confidence: 0.8866992

 $00{:}11{:}21.668 \dashrightarrow 00{:}11{:}23.412$  distributed are either locally

NOTE Confidence: 0.8866992

 $00{:}11{:}23{.}412 \dashrightarrow 00{:}11{:}25{.}300$  advanced or metastatic disease

NOTE Confidence: 0.8866992

 $00:11:25.300 \longrightarrow 00:11:29.297$  at the time of their diagnosis.

 $00:11:29.890 \longrightarrow 00:11:34.066$  And so it was with my my friend who

NOTE Confidence: 0.87700075

 $00:11:34.066 \rightarrow 00:11:38.708$  was diagnosed with a locally advanced,

NOTE Confidence: 0.87700075

00:11:38.710 --> 00:11:40.052 unresectable pancreatic

NOTE Confidence: 0.87700075

 $00:11:40.052 \rightarrow 00:11:43.407$  cancer that was encasing

NOTE Confidence: 0.87700075

 $00:11:43.410 \longrightarrow 00:11:45.102$  important blood vessels,

- NOTE Confidence: 0.87700075
- $00:11:45.102 \longrightarrow 00:11:47.358$  so she certainly wasn't
- NOTE Confidence: 0.87700075
- $00:11:47.358 \longrightarrow 00:11:50.079$  a candidate for surgery at
- NOTE Confidence: 0.87700075
- $00:11:50.079 \rightarrow 00:11:52.444$  the time of her presentation,
- NOTE Confidence: 0.87700075
- $00:11:52.450 \longrightarrow 00:11:56.530$  so it sounds like if patients are
- NOTE Confidence: 0.87700075
- $00:11:56.530 \longrightarrow 00:11:59.284$  fortunate enough to be resectable
- NOTE Confidence: 0.87700075
- $00:11:59.284 \rightarrow 00:12:02.554$  at the time of their presentation,
- NOTE Confidence: 0.87700075
- $00:12:02.560 \longrightarrow 00:12:04.688$  would surgery be the
- NOTE Confidence: 0.87700075
- 00:12:04.688 --> 00:12:06.284 primary modality upfront?
- NOTE Confidence: 0.90186495
- $00:12:08.410 \longrightarrow 00:12:12.474$  That is a great question, and one that
- NOTE Confidence: 0.90186495
- $00:12:12.474 \rightarrow 00:12:16.030$  we are still trying to figure out.
- NOTE Confidence: 0.90186495
- 00:12:16.030 --> 00:12:18.724 I think that there is clearly
- NOTE Confidence: 0.90186495
- $00{:}12{:}18.724 \dashrightarrow 00{:}12{:}21.225$  a standard paradigm of doing
- NOTE Confidence: 0.90186495
- $00:12:21.225 \rightarrow 00:12:23.677$  surgery followed by chemotherapy
- NOTE Confidence: 0.90186495
- $00{:}12{:}23.677 \dashrightarrow 00{:}12{:}26.742$  for about six months afterwards.
- NOTE Confidence: 0.90186495
- $00:12:26.750 \rightarrow 00:12:30.646$  There is a lot of interest in giving
- NOTE Confidence: 0.90186495

00:12:30.646 --> 00:12:33.240 chemotherapy prior to surgery or

NOTE Confidence: 0.90186495

00:12:33.240 --> 00:12:35.785 giving part of the chemotherapy,

NOTE Confidence: 0.90186495

 $00{:}12{:}35{.}790 \dashrightarrow 00{:}12{:}38{.}796$  then surgery, and then chemother apy after.

NOTE Confidence: 0.90186495

 $00{:}12{:}38.800 \dashrightarrow 00{:}12{:}42.319$  And in fact, here at Smilow we have a

NOTE Confidence: 0.90186495

 $00{:}12{:}42{.}319 \dashrightarrow 00{:}12{:}46{.}005$  clinical trial which is really looking at

NOTE Confidence: 0.90186495

 $00{:}12{:}46.005 \dashrightarrow 00{:}12{:}49.340$  that question of perioperative chemotherapy.

NOTE Confidence: 0.90186495

 $00{:}12{:}49{.}340 \dashrightarrow 00{:}12{:}53{.}164$  How do patients do getting some of the

NOTE Confidence: 0.90186495

 $00:12:53.164 \rightarrow 00:12:55.360$  chemotherapy treatments before surgery,

NOTE Confidence: 0.90186495

 $00:12:55.360 \longrightarrow 00:12:57.048$  and then some after?

NOTE Confidence: 0.90186495

 $00{:}12{:}57.048 \dashrightarrow 00{:}13{:}01.194$  And how that might compare to those who get

NOTE Confidence: 0.90186495

 $00:13:01.194 \rightarrow 00:13:04.236$  surgery 1st and then chemotherapy later?

NOTE Confidence: 0.8909148

 $00:13:05.330 \longrightarrow 00:13:07.556$  And so this kind of brings

NOTE Confidence: 0.8909148

 $00:13:07.556 \rightarrow 00:13:09.748$  us to the question of, well,

NOTE Confidence: 0.8909148

 $00:13:09.748 \rightarrow 00:13:11.588$  how effective is the chemotherapy?

NOTE Confidence: 0.8909148

00:13:11.590 --> 00:13:12.607 Because,

NOTE Confidence: 0.8909148

 $00:13:12.607 \rightarrow 00:13:14.980$  I can imagine that many of the

- NOTE Confidence: 0.8909148
- $00:13:15.050 \rightarrow 00:13:17.402$  people who are listening to this

 $00:13:17.402 \longrightarrow 00:13:19.292$  show are thinking,

NOTE Confidence: 0.8909148

 $00:13:19.292 \rightarrow 00:13:22.979$  if I have a cancer and you can take this

NOTE Confidence: 0.8909148

00:13:22.979 --> 00:13:27.038 cancer out and you can get it out of my body,

NOTE Confidence: 0.8909148

 $00:13:27.040 \longrightarrow 00:13:29.378$  for many people the simple

NOTE Confidence: 0.8909148

 $00:13:29.378 \longrightarrow 00:13:32.059$  logic is that might be better

NOTE Confidence: 0.8909148

 $00:13:32.059 \rightarrow 00:13:33.663$  than having a chemotherapy,

NOTE Confidence: 0.8909148

 $00:13:33.670 \longrightarrow 00:13:35.610$  which may or may not

NOTE Confidence: 0.8909148

00:13:35.610 -> 00:13:38.928 work and they often have some

NOTE Confidence: 0.8909148

 $00{:}13{:}38{.}928 \dashrightarrow 00{:}13{:}41{.}140$  trepidation about cancer spreading

NOTE Confidence: 0.8909148

 $00:13:41.234 \rightarrow 00:13:44.089$  and then making it unresectable.

NOTE Confidence: 0.8909148

00:13:44.090 --> 00:13:46.975 So how effective is chemotherapy

NOTE Confidence: 0.8909148

00:13:46.975 --> 00:13:51.037 that we could potentially use it in

NOTE Confidence: 0.8909148

00:13:51.037 --> 00:13:53.737 a neoadjuvant fashion to potentially

NOTE Confidence: 0.8909148

 $00{:}13{:}53{.}737$  -->  $00{:}13{:}57{.}684$  even shrink the cancer and get some NOTE Confidence: 0.8909148

 $00:13:57.684 \rightarrow 00:14:01.032$  systemic control prior to resecting it?

NOTE Confidence: 0.81341493

 $00:14:02.790 \longrightarrow 00:14:09.480$  So our newer chemotherapy regiments are

NOTE Confidence: 0.81341493

 $00:14:09.480 \longrightarrow 00:14:11.800$  good, they're not great,

NOTE Confidence: 0.81341493

 $00{:}14{:}11{.}800 \dashrightarrow 00{:}14{:}15{.}008$  but they are good and they can shrink

NOTE Confidence: 0.81341493

 $00{:}14{:}15{.}008 \dashrightarrow 00{:}14{:}17{.}796$  the disease for some and control

NOTE Confidence: 0.81341493

 $00{:}14{:}17.796 \dashrightarrow 00{:}14{:}20.171$  the microscopic disease that might

NOTE Confidence: 0.81341493

 $00:14:20.171 \longrightarrow 00:14:22.940$  be floating around for others.

NOTE Confidence: 0.81341493

 $00:14:22.940 \longrightarrow 00:14:25.880$  I think that the challenge ultimately

NOTE Confidence: 0.81341493

 $00{:}14{:}25.880 \dashrightarrow 00{:}14{:}28.650$  is that even with surgery,

NOTE Confidence: 0.81341493

 $00{:}14{:}28.650 \dashrightarrow 00{:}14{:}31.092$  the risk of pancreatic cancer coming

NOTE Confidence: 0.81341493

00:14:31.092 --> 00:14:33.710 back because it has already shed

NOTE Confidence: 0.81341493

 $00:14:33.710 \rightarrow 00:14:36.440$  these microscopic cells is very high,

NOTE Confidence: 0.81341493

 $00{:}14{:}36{.}440 \dashrightarrow 00{:}14{:}39{.}359$  and so by giving chemotherapy we are

NOTE Confidence: 0.81341493

 $00:14:39.359 \rightarrow 00:14:41.570$  hopefully attacking some of those

NOTE Confidence: 0.81341493

 $00:14:41.570 \rightarrow 00:14:44.234$  microscopic cells that are floating around,

NOTE Confidence: 0.81341493

 $00:14:44.240 \rightarrow 00:14:47.234$  but also making sure that putting

- NOTE Confidence: 0.81341493
- $00:14:47.234 \rightarrow 00:14:50.220$  somebody through what would be a

 $00:14:50.220 \rightarrow 00:14:52.470$  very major operation is ultimately

NOTE Confidence: 0.81341493

 $00:14:52.470 \longrightarrow 00:14:54.400$  the right thing to do.

 $00{:}14{:}54{.}830 \dashrightarrow 00{:}14{:}57{.}518$  So many complicating moving parts

NOTE Confidence: 0.87324756

 $00{:}14{:}57{.}518$  -->  $00{:}15{:}00{.}307$  in the management of pancreatic cancer

NOTE Confidence: 0.87324756

 $00{:}15{:}00{.}307 \dashrightarrow 00{:}15{:}03{.}499$  and we're going to learn much more NOTE Confidence: 0.87324756

 $00{:}15{:}03{.}499 \dashrightarrow 00{:}15{:}06{.}516$  about all of that right after we take

NOTE Confidence: 0.87324756

 $00{:}15{:}06{.}516 \dashrightarrow 00{:}15{:}09{.}116$  a short break for a medical minute.

NOTE Confidence: 0.87324756

00:15:09.116 --> 00:15:11.420 Please stay tuned to learn more

NOTE Confidence: 0.87324756

 $00{:}15{:}11.498 \dashrightarrow 00{:}15{:}13.530$  about pancreatic cancer with

NOTE Confidence: 0.87324756

00:15:13.530 --> 00:15:14.700 my guest Doctor Jeremy Kortmansky.

NOTE Confidence: 0.87324756

 $00:15:14.700 \rightarrow 00:15:17.040$  Support for Yale

NOTE Confidence: 0.87324756

 $00{:}15{:}17.040 \dashrightarrow 00{:}15{:}19.865$  Cancer Answers comes from AstraZeneca

NOTE Confidence: 0.87324756

 $00{:}15{:}19.865 \dashrightarrow 00{:}15{:}21.761$  providing important treatment options

NOTE Confidence: 0.87324756

 $00:15:21.761 \rightarrow 00:15:24.579$  for various types and stages of cancer.

NOTE Confidence: 0.87324756

 $00:15:24.580 \longrightarrow 00:15:27.740$  More information at astrazeneca-us.com.

- NOTE Confidence: 0.87324756
- $00:15:27.740 \longrightarrow 00:15:29.540$  This is a medical minute
- NOTE Confidence: 0.87324756
- 00:15:29.540 --> 00:15:31.340 about head and neck cancers,
- NOTE Confidence: 0.87324756
- $00:15:31.340 \longrightarrow 00:15:33.195$  although the percentage of oral
- NOTE Confidence: 0.87324756
- $00:15:33.195 \rightarrow 00:15:35.464$  and head and neck cancer patients
- NOTE Confidence: 0.87324756
- $00:15:35.464 \rightarrow 00:15:37.498$  in the United States is only
- NOTE Confidence: 0.87324756
- $00:15:37.498 \longrightarrow 00:15:39.724$  about 5% of all diagnosed cancers,
- NOTE Confidence: 0.87324756
- $00:15:39.724 \rightarrow 00:15:41.654$  there are challenging side effects
- NOTE Confidence: 0.87324756
- $00{:}15{:}41.654 \dashrightarrow 00{:}15{:}43.377$  associated with these types of
- NOTE Confidence: 0.87324756
- $00{:}15{:}43.377 \dashrightarrow 00{:}15{:}44.653$  cancer and their treatment.
- NOTE Confidence: 0.87324756
- $00:15:44.660 \rightarrow 00:15:46.228$  Clinical trials are currently
- NOTE Confidence: 0.87324756
- 00:15:46.228 --> 00:15:48.188 underway to test innovative new
- NOTE Confidence: 0.87324756
- $00:15:48.188 \rightarrow 00:15:50.057$  treatments for head and neck cancers,
- NOTE Confidence: 0.87324756
- $00:15:50.060 \longrightarrow 00:15:52.010$  and in many cases less radical
- NOTE Confidence: 0.87324756
- $00:15:52.010 \rightarrow 00:15:54.380$  surgeries are able to preserve nerves,
- NOTE Confidence: 0.87324756
- $00:15:54.380 \longrightarrow 00:15:56.666$  arteries and muscles in the neck.
- NOTE Confidence: 0.87324756

00:15:56.670 --> 00:15:59.190 Enabling patients to move speak,

NOTE Confidence: 0.87324756

 $00:15:59.190 \longrightarrow 00:15:59.693$  breathe,

NOTE Confidence: 0.87324756

 $00{:}15{:}59{.}693 \dashrightarrow 00{:}16{:}02{.}208$  and eat normally after surgery.

NOTE Confidence: 0.87324756

 $00{:}16{:}02{.}210 \dashrightarrow 00{:}16{:}04{.}735$  More information is available at

NOTE Confidence: 0.87324756

 $00:16:04.735 \longrightarrow 00:16:05.240$  yale cancercenter.org.

NOTE Confidence: 0.87324756

 $00{:}16{:}05{.}240 \dashrightarrow 00{:}16{:}08{.}258$  You're listening to Connecticut Public Radio.

NOTE Confidence: 0.8473462

 $00{:}16{:}09{.}410 \dashrightarrow 00{:}16{:}11{.}768$  Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.8473462

 $00:16:11.770 \longrightarrow 00:16:14.003$  This is doctor Anees Chagpar

NOTE Confidence: 0.8473462

00:16:14.003 $\operatorname{-->}$ 00:16:16.902 and I am joined to night by my

NOTE Confidence: 0.8473462

00:16:16.902 --> 00:16:19.232 guest doctor Jeremy Kortmansky.

NOTE Confidence: 0.8473462

 $00{:}16{:}19{.}240 \dashrightarrow 00{:}16{:}21{.}190$  We're talking about pancreatic cancer

NOTE Confidence: 0.8473462

00:16:21.190 --> 00:16:23.560 and Jeremy right before the break,

NOTE Confidence: 0.8473462

 $00:16:23.560 \longrightarrow 00:16:26.764$  you had indicated to us that you really think

NOTE Confidence: 0.8473462

 $00{:}16{:}26.764 \dashrightarrow 00{:}16{:}29.846$  about pancreatic cancer in terms of staging,

NOTE Confidence: 0.8473462

 $00:16:29.850 \longrightarrow 00:16:32.419$  as whether things are resectable at the

NOTE Confidence: 0.8473462

 $00:16:32.419 \rightarrow 00:16:34.559$  time of presentation or unresectable,

- NOTE Confidence: 0.8473462
- $00{:}16{:}34{.}560 \dashrightarrow 00{:}16{:}36{.}918$  but not metastatic or metastatic

00:16:36.920 --> 00:16:38.496 and sadly,

NOTE Confidence: 0.8473462

 $00:16:38.496 \longrightarrow 00:16:42.112 \ 80\%$  of patients or so fall into

NOTE Confidence: 0.8473462

 $00{:}16{:}42.112 \dashrightarrow 00{:}16{:}44.260$  the last two buckets.

NOTE Confidence: 0.8473462

00:16:44.260 --> 00:16:45.760 And you know,

NOTE Confidence: 0.8473462

 $00:16:45.760 \longrightarrow 00:16:47.760$  that's really unfortunate,

NOTE Confidence: 0.8473462

 $00{:}16{:}47.760 \dashrightarrow 00{:}16{:}50.238$  because what is the prognosis for

NOTE Confidence: 0.8473462

 $00:16:50.238 \rightarrow 00:16:52.624$  patients who have locally advanced

NOTE Confidence: 0.8473462

 $00:16:52.624 \rightarrow 00:16:55.256$  unresectable disease at presentation?

NOTE Confidence: 0.8473462

 $00{:}16{:}55{.}260 \dashrightarrow 00{:}16{:}58{.}340$  And what is the prognosis for patients

NOTE Confidence: 0.8473462

 $00:16:58.340 \longrightarrow 00:17:01.260$  who present with metastatic disease?

NOTE Confidence: 0.9038378

00:17:03.290 --> 00:17:06.517 For those patients who have advanced disease,

NOTE Confidence: 0.9038378

 $00:17:06.520 \longrightarrow 00:17:08.360$  unfortunately we view those

NOTE Confidence: 0.9038378

 $00{:}17{:}08.360 \dashrightarrow 00{:}17{:}09.740$  as incurable cancers.

NOTE Confidence: 0.9038378

 $00:17:09.740 \rightarrow 00:17:15.510$  We can't make it go away and never come back.

 $00:17:15.510 \longrightarrow 00:17:18.030$  For patients that have locally

NOTE Confidence: 0.9038378

 $00{:}17{:}18.030 \dashrightarrow 00{:}17{:}20.550$  advanced disease on occasion and

NOTE Confidence: 0.9038378

 $00:17:20.637 \longrightarrow 00:17:22.637$  it's not the expectation,

NOTE Confidence: 0.9038378

 $00{:}17{:}22.640 \dashrightarrow 00{:}17{:}25.895$  but on occasion they have a

NOTE Confidence: 0.9038378

 $00{:}17{:}25.895 \dashrightarrow 00{:}17{:}28.501$  great response to the chemotherapy

NOTE Confidence: 0.9038378

 $00{:}17{:}28.501 \dashrightarrow 00{:}17{:}31.849$  and we can revisit that question

NOTE Confidence: 0.9038378

00:17:31.849 --> 00:17:34.919 of surgery but without surgery,

NOTE Confidence: 0.9038378

 $00:17:34.920 \rightarrow 00:17:37.400$  ultimately, patients succumb to their

NOTE Confidence: 0.9038378

00:17:37.400 --> 00:17:41.090 disease and the goals of our treatment

NOTE Confidence: 0.9038378

 $00{:}17{:}41.090 \dashrightarrow 00{:}17{:}43.215$  are to control the disease

NOTE Confidence: 0.9038378

 $00:17:43.215 \longrightarrow 00:17:45.340$  for as long as possible.

NOTE Confidence: 0.9038378

00:17:45.340 --> 00:17:48.380 Help people live as long as possible and

NOTE Confidence: 0.9038378

 $00:17:48.380 \longrightarrow 00:17:51.598$  feel as well as possible knowing that

NOTE Confidence: 0.9038378

 $00:17:51.598 \rightarrow 00:17:54.690$  the disease can be symptomatic as well.

NOTE Confidence: 0.92167467

 $00{:}17{:}55{.}830 \dashrightarrow 00{:}18{:}00{.}648$  For people who are

NOTE Confidence: 0.92167467

 $00:18:00.648 \rightarrow 00:18:03.688$  listening to this and who may have had

 $00:18:03.688 \rightarrow 00:18:06.142$  friends or even seen celebrities

NOTE Confidence: 0.92167467

 $00{:}18{:}06{.}142 \dashrightarrow 00{:}18{:}08{.}604$  go through their own journeys

NOTE Confidence: 0.92167467

 $00:18:08.604 \longrightarrow 00:18:12.600$  with pancreatic cancer,

NOTE Confidence: 0.92167467

 $00:18:12.600 \longrightarrow 00:18:15.192$  when we say the goal is really

NOTE Confidence: 0.92167467

 $00:18:15.192 \longrightarrow 00:18:18.243$  to try to control the cancer for as

NOTE Confidence: 0.92167467

 $00:18:18.243 \rightarrow 00:18:21.012$  long as possible and the quality

NOTE Confidence: 0.92167467

 $00:18:21.012 \rightarrow 00:18:23.665$  of life for as long as possible,

NOTE Confidence: 0.92167467

 $00{:}18{:}23.670 \dashrightarrow 00{:}18{:}24.750$  in some cancers

NOTE Confidence: 0.92167467

 $00:18:24.750 \longrightarrow 00:18:26.550$  we've discussed on this

NOTE Confidence: 0.92167467

00:18:26.550 --> 00:18:28.839 show,

NOTE Confidence: 0.92167467

 $00:18:28.840 \rightarrow 00:18:31.353$  medical management has come a really long

NOTE Confidence: 0.92167467

 $00:18:31.353 \rightarrow 00:18:33.998$  way such that even in those settings,

 $00:18:34.696 \rightarrow 00:18:37.480$  people live for a long time and

NOTE Confidence: 0.92167467

 $00{:}18{:}37{.}558 \dashrightarrow 00{:}18{:}40{.}420$  they talk about this being incurable,

NOTE Confidence: 0.92167467

 $00:18:40.420 \longrightarrow 00:18:42.891$  but really making it more of a

NOTE Confidence: 0.92167467

 $00:18:42.891 \rightarrow 00:18:44.509$  chronic disease then something

- NOTE Confidence: 0.92167467
- $00:18:44.509 \rightarrow 00:18:46.449$  that is imminently fatal.
- NOTE Confidence: 0.92167467
- $00:18:46.450 \longrightarrow 00:18:49.236$  Where are we in the spectrum of
- NOTE Confidence: 0.92167467
- $00:18:49.236 \longrightarrow 00:18:51.270$  pancreatic cancer towards getting to
- NOTE Confidence: 0.92167467
- $00{:}18{:}52{.}134 \dashrightarrow 00{:}18{:}55{.}158$  oK, so I've got pancreatic cancer and
- NOTE Confidence: 0.92167467
- 00:18:55.158 --> 00:18:58.509 I know that I can't get rid of it,
- NOTE Confidence: 0.92167467
- $00{:}18{:}58{.}510 \dashrightarrow 00{:}19{:}00{.}006$  but
- NOTE Confidence: 0.92167467
- $00:19:00.006 \longrightarrow 00:19:02.807$  I can live with it versus this
- NOTE Confidence: 0.92167467
- $00:19:02.807 \longrightarrow 00:19:05.127$  is something that
- NOTE Confidence: 0.92167467
- $00{:}19{:}05{.}130 \dashrightarrow 00{:}19{:}08{.}980$  is more of an imminent concern.
- NOTE Confidence: 0.86067766
- $00:19:10.680 \rightarrow 00:19:14.852$  It's still a very challenging disease and
- NOTE Confidence: 0.86067766
- $00:19:14.852 \rightarrow 00:19:19.250$  there are for a lot of other cancers,
- NOTE Confidence: 0.86067766
- $00{:}19{:}19{.}250 \dashrightarrow 00{:}19{:}23{.}126$  a lot of exciting new the rapies and
- NOTE Confidence: 0.86067766
- $00:19:23.126 \rightarrow 00:19:25.710$  targeted therapies and immunotherapy's
- NOTE Confidence: 0.86067766
- $00{:}19{:}25{.}800 \dashrightarrow 00{:}19{:}28{.}188$  that have become available.
- NOTE Confidence: 0.86067766
- $00:19:28.190 \longrightarrow 00:19:29.986$  But for pancreas cancer,
- NOTE Confidence: 0.86067766

 $00:19:29.986 \rightarrow 00:19:33.305$  the majority of patients are still treated

NOTE Confidence: 0.86067766

 $00{:}19{:}33{.}305 \dashrightarrow 00{:}19{:}36{.}593$  with versions of chemotherapy and

NOTE Confidence: 0.86067766

 $00:19:36.593 \rightarrow 00:19:39.149$  those chemotherapy drugs are modest.

NOTE Confidence: 0.86067766

 $00{:}19{:}39{.}150 \dashrightarrow 00{:}19{:}41{.}635$  There are some who are

NOTE Confidence: 0.86067766

 $00:19:41.635 \longrightarrow 00:19:42.629$  exceptional responders.

NOTE Confidence: 0.86067766

 $00:19:42.630 \rightarrow 00:19:47.103$  People who do really well for a long time,

NOTE Confidence: 0.86067766

 $00:19:47.110 \longrightarrow 00:19:50.098$  but for the majority of patients,

NOTE Confidence: 0.86067766

 $00:19:50.100 \longrightarrow 00:19:53.060$  the survival is still only

NOTE Confidence: 0.86067766

 $00{:}19{:}53.060 \dashrightarrow 00{:}19{:}56.840$  measured in in months or years.

NOTE Confidence: 0.86067766

 $00:19:56.840 \rightarrow 00:20:00.176$  And doing better and finding better

NOTE Confidence: 0.86067766

 $00:20:00.180 \longrightarrow 00:20:02.445$  therapies is of such great

NOTE Confidence: 0.86067766

 $00:20:02.445 \longrightarrow 00:20:04.257$  importance for this disease.

NOTE Confidence: 0.86067766

 $00:20:04.260 \longrightarrow 00:20:06.834$  I think we are really hoping

NOTE Confidence: 0.86067766

 $00{:}20{:}06{.}834 \dashrightarrow 00{:}20{:}09{.}584$  and trying every day to find

NOTE Confidence: 0.86067766

 $00{:}20{:}09{.}584 \dashrightarrow 00{:}20{:}12{.}410$  the rapies that are better than what

NOTE Confidence: 0.90957826

 $00:20:12.410 \longrightarrow 00:20:13.628$  we have currently.

- NOTE Confidence: 0.90957826
- $00:20:13.628 \longrightarrow 00:20:16.470$  Do we have any factors that can

 $00{:}20{:}16.555 \dashrightarrow 00{:}20{:}19.525$  predict who is going to respond

NOTE Confidence: 0.90957826

 $00:20:19.525 \rightarrow 00:20:21.920$  better to chemotherapy versus not?

NOTE Confidence: 0.8260118

 $00:20:24.760 \rightarrow 00:20:29.602$  So we are still trying to figure that out.

NOTE Confidence: 0.8260118

00:20:29.610 --> 00:20:33.922 I had mentioned

NOTE Confidence: 0.8260118

 $00{:}20{:}33{.}922 \dashrightarrow 00{:}20{:}37{.}958$  this earlier, patients that have a BRCA

NOTE Confidence: 0.8260118

00:20:37.958 - 00:20:41.470 mutation or a similar type mutation,

NOTE Confidence: 0.8260118

 $00:20:41.470 \longrightarrow 00:20:44.760$  we find that they are more sensitive

NOTE Confidence: 0.8260118

 $00:20:44.760 \longrightarrow 00:20:47.400$  to platinum based chemotherapy.

NOTE Confidence: 0.8260118

 $00:20:47.400 \longrightarrow 00:20:51.796$  So a drug like oxaliplatin or cisplatin.

NOTE Confidence: 0.8260118

 $00{:}20{:}51.800 \dashrightarrow 00{:}20{:}54.670$  And that we can see better responses

NOTE Confidence: 0.8260118

 $00{:}20{:}54.670 \dashrightarrow 00{:}20{:}57.286$  there that can sometimes last longer

NOTE Confidence: 0.8260118

 $00{:}20{:}57{.}286 \dashrightarrow 00{:}21{:}00{.}915$  than we might see with a patient who

NOTE Confidence: 0.8260118

 $00{:}21{:}00{.}915 \dashrightarrow 00{:}21{:}03{.}945$  doesn't have one of those abnormalities.

NOTE Confidence: 0.8260118

 $00{:}21{:}03{.}950 \dashrightarrow 00{:}21{:}07{.}134$  We know that there is a class of

00:21:07.134 --> 00:21:09.800 drugs called PARP inhibitors,

NOTE Confidence: 0.8260118

 $00{:}21{:}09{.}800 \dashrightarrow 00{:}21{:}12{.}290$  which for this mutated population

NOTE Confidence: 0.8260118

 $00{:}21{:}12{.}290 \dashrightarrow 00{:}21{:}15{.}199$  can be nefit from this targeted therapy.

NOTE Confidence: 0.8260118

 $00{:}21{:}15{.}200 \dashrightarrow 00{:}21{:}19{.}250$  At the end of the day, that only makes

NOTE Confidence: 0.8260118

 $00{:}21{:}19{.}250 \dashrightarrow 00{:}21{:}23{.}810$  up about 7% of the patients that we see.

NOTE Confidence: 0.8260118

 $00{:}21{:}23.810 \dashrightarrow 00{:}21{:}28.570$  So it's still not a not a big number and

NOTE Confidence: 0.8260118

 $00:21:28.694 \rightarrow 00:21:32.055$  we know about 1% have another abnormality,

NOTE Confidence: 0.8260118

 $00:21:32.055 \rightarrow 00:21:33.510$  called microsatellite instability,

NOTE Confidence: 0.8260118

 $00{:}21{:}33{.}510 \dashrightarrow 00{:}21{:}34{.}965$  for which immuno therapy

NOTE Confidence: 0.8260118

 $00:21:34.965 \longrightarrow 00:21:36.905$  drugs have been helpful.

NOTE Confidence: 0.8260118

 $00:21:36.910 \longrightarrow 00:21:40.298$  And so we always test for that.

NOTE Confidence: 0.8260118

 $00:21:40.300 \rightarrow 00:21:45.150$  But again, it's one out of 100 that we see.

NOTE Confidence: 0.8260118

 $00{:}21{:}45{.}150 \dashrightarrow 00{:}21{:}48{.}181$  So the majority of the patients that

NOTE Confidence: 0.8260118

 $00{:}21{:}48.181 \dashrightarrow 00{:}21{:}51.729$  we take care of are still treated

NOTE Confidence: 0.8260118

 $00{:}21{:}51{.}729 \dashrightarrow 00{:}21{:}54{.}429$  similarly with these more generic

NOTE Confidence: 0.8260118

 $00:21:54.430 \longrightarrow 00:21:57.010$  chemotherapy programs with a strong

- NOTE Confidence: 0.8260118
- $00:21:57.010 \rightarrow 00:22:00.131$  emphasis in trying to encourage patients

 $00{:}22{:}00{.}131 \dashrightarrow 00{:}22{:}02{.}406$  to participate in clinical trials

NOTE Confidence: 0.8260118

 $00:22:02.406 \longrightarrow 00:22:05.539$  that can help us move the field.

NOTE Confidence: 0.85180885

 $00:22:06.890 \longrightarrow 00:22:10.234$  And I want to get into

NOTE Confidence: 0.85180885

 $00{:}22{:}10{.}234 \dashrightarrow 00{:}22{:}13{.}019$  the clinical trials in a minute.

NOTE Confidence: 0.85180885

 $00:22:13.020 \longrightarrow 00:22:15.210$  But before we get there,

NOTE Confidence: 0.85180885

 $00:22:15.210 \longrightarrow 00:22:17.475$  if you're treated with standard

NOTE Confidence: 0.85180885

00:22:17.475 - 00:22:20.224 chemotherapy and all of the side

NOTE Confidence: 0.85180885

 $00:22:20.224 \longrightarrow 00:22:22.660$  effects that go along with that,

NOTE Confidence: 0.85180885

 $00:22:22.660 \rightarrow 00:22:24.850$  knowing that you're

NOTE Confidence: 0.85180885

 $00{:}22{:}24.850 \dashrightarrow 00{:}22{:}27.040$  presented with a locally advanced,

NOTE Confidence: 0.85180885

00:22:27.040 --> 00:22:28.608 unresectable or metastatic cancer,

NOTE Confidence: 0.85180885

 $00:22:28.608 \longrightarrow 00:22:30.568$  what is really the efficacy

NOTE Confidence: 0.85180885

 $00:22:30.568 \longrightarrow 00:22:32.289$  of these chemotherapies?

NOTE Confidence: 0.85180885

 $00{:}22{:}32{.}290 \dashrightarrow 00{:}22{:}35{.}562$  I mean, how do patients balance the risk

 $00:22:35.562 \longrightarrow 00:22:39.416$  and the benefit of the therapy?

NOTE Confidence: 0.85180885

 $00{:}22{:}39{.}416 \dashrightarrow 00{:}22{:}41{.}881$  Is this something that for

NOTE Confidence: 0.85180885

 $00:22:41.881 \longrightarrow 00:22:45.028$  some patients the therapy is

NOTE Confidence: 0.85180885

 $00:22:45.028 \rightarrow 00:22:47.638$  worse than the disease itself?

NOTE Confidence: 0.85180885

00:22:47.640 --> 00:22:50.760 Or are these actually things that

NOTE Confidence: 0.85180885

 $00{:}22{:}50.760$  -->  $00{:}22{:}53.490$  are tolerable with more modern NOTE Confidence: 0.85180885

 $00{:}22{:}53{.}490 \dashrightarrow 00{:}22{:}56{.}270$  day treatments and additional

NOTE Confidence: 0.85180885

 $00:22:56.270 \rightarrow 00:22:59.870$  factors that you can give patients?

NOTE Confidence: 0.85180885

 $00{:}22{:}59{.}870 \dashrightarrow 00{:}23{:}01{.}622$  And that has really been shown

NOTE Confidence: 0.85180885

 $00{:}23{:}01{.}622 \dashrightarrow 00{:}23{:}03{.}731$  to make a difference in terms of

NOTE Confidence: 0.85180885

 $00{:}23{:}03{.}731 \dashrightarrow 00{:}23{:}05{.}489$  both survival and quality of life.

NOTE Confidence: 0.89348453

 $00:23:07.230 \longrightarrow 00:23:10.723$  My job is to make

NOTE Confidence: 0.89348453

 $00:23:10.723 \longrightarrow 00:23:12.220$  the treatments tolerable.

NOTE Confidence: 0.89348453

 $00{:}23{:}12{.}220 \dashrightarrow 00{:}23{:}14{.}650$  When we we pick a regimen,

NOTE Confidence: 0.89348453

00:23:14.650 --> 00:23:17.080 there are two common

NOTE Confidence: 0.89348453

 $00:23:17.080 \longrightarrow 00:23:18.700$  regiments that we use.

00:23:18.700 - 00:23:20.725 We are already thinking about

NOTE Confidence: 0.89348453

 $00{:}23{:}20.725 \dashrightarrow 00{:}23{:}23.750$  what are the side effects that are

NOTE Confidence: 0.89348453

00:23:23.750 --> 00:23:26.065 associated with those regimens and

NOTE Confidence: 0.89348453

 $00{:}23{:}26.065 \dashrightarrow 00{:}23{:}28.198$  whether the patient who's about

NOTE Confidence: 0.89348453

 $00{:}23{:}28{.}198 \dashrightarrow 00{:}23{:}30{.}846$  to receive it is going to be able

NOTE Confidence: 0.89348453

 $00{:}23{:}30{.}850 \dashrightarrow 00{:}23{:}33{.}685$  to tolerate it based on their age and

NOTE Confidence: 0.89348453

 $00{:}23{:}33{.}690 \dashrightarrow 00{:}23{:}35{.}934$  other medical problems that they may

NOTE Confidence: 0.89348453

 $00:23:35.934 \rightarrow 00:23:38.949$  have and when we give the treatments,

NOTE Confidence: 0.89348453

00:23:38.950 - 00:23:42.278 we do so very carefully and we pay

NOTE Confidence: 0.89348453

 $00{:}23{:}42{.}278 \dashrightarrow 00{:}23{:}45{.}487$  attention to those side effects to make

NOTE Confidence: 0.89348453

 $00{:}23{:}45{.}490 \dashrightarrow 00{:}23{:}49{.}081$  adjustments in the dosing or give

NOTE Confidence: 0.89348453

 $00:23:49.081 \longrightarrow 00:23:51.103$  supportive medications to really

NOTE Confidence: 0.89348453

 $00{:}23{:}51{.}103 \dashrightarrow 00{:}23{:}53{.}896$  make it as tolerable as we can.

NOTE Confidence: 0.89348453

 $00{:}23{:}53{.}900 \dashrightarrow 00{:}23{:}57{.}953$  It's never a desired situation that the

NOTE Confidence: 0.89348453

 $00{:}23{:}57{.}953 \dashrightarrow 00{:}24{:}01{.}490$  treatment is worse than the disease.

- $00:24:01.490 \longrightarrow 00:24:02.862$  And the reality is,
- NOTE Confidence: 0.89348453
- $00{:}24{:}02{.}862 \dashrightarrow 00{:}24{:}05{.}398$  that for the vast majority of
- NOTE Confidence: 0.89348453
- $00:24:05.398 \rightarrow 00:24:08.219$  patients when they do start feeling poorly,
- NOTE Confidence: 0.89348453
- $00:24:08.220 \longrightarrow 00:24:10.090$  it's more often the disease
- NOTE Confidence: 0.89348453
- $00:24:10.090 \longrightarrow 00:24:11.960$  than it is the treatments.
- NOTE Confidence: 0.89348453
- 00:24:11.960 --> 00:24:14.228 But we make sure we see patients
- NOTE Confidence: 0.89348453
- $00:24:14.228 \rightarrow 00:24:16.357$  every time before they get their
- NOTE Confidence: 0.89348453
- $00{:}24{:}16.357 \dashrightarrow 00{:}24{:}18.535$  treatments to review the side effects
- NOTE Confidence: 0.89348453
- 00:24:18.535 --> 00:24:21.069 and give the right medications and
- NOTE Confidence: 0.89348453
- $00{:}24{:}21.069 \dashrightarrow 00{:}24{:}23.174$  give the supportive medications or
- NOTE Confidence: 0.89348453
- $00{:}24{:}23.180 \dashrightarrow 00{:}24{:}25.798$  dose adjustments that we need to do.
- NOTE Confidence: 0.8305674
- $00:24:26.890 \longrightarrow 00:24:29.398$  And how do we know
- NOTE Confidence: 0.8305674
- $00:24:29.400 \rightarrow 00:24:31.268$  that the chemotherapies are working?
- NOTE Confidence: 0.8305674
- 00:24:31.268 --> 00:24:34.070 Many patients ask about well are
- NOTE Confidence: 0.8305674
- $00:24:34.153 \rightarrow 00:24:36.526$  you going to do more blood work?
- NOTE Confidence: 0.8305674
- $00:24:36.530 \rightarrow 00:24:39.038$  Are there tumor markers?

- NOTE Confidence: 0.8305674
- $00:24:39.040 \longrightarrow 00:24:40.524$  How do you know?

 $00{:}24{:}40{.}524 \dashrightarrow 00{:}24{:}42{.}750$  Because you had mentioned that for

NOTE Confidence: 0.8305674

 $00:24:42.829 \longrightarrow 00:24:45.583$  some patients who present

NOTE Confidence: 0.8305674

 $00:24:45.583 \longrightarrow 00:24:47.419$  without metastatic disease,

NOTE Confidence: 0.8305674

 $00:24:47.420 \longrightarrow 00:24:49.385$  that is unresectable that

NOTE Confidence: 0.8305674

 $00{:}24{:}49{.}385 \dashrightarrow 00{:}24{:}52{.}030$  potentially in some of those patients,

NOTE Confidence: 0.8305674

 $00{:}24{:}52{.}030 \dashrightarrow 00{:}24{:}54{.}125$  you can reassess whether they

NOTE Confidence: 0.8305674

 $00:24:54.125 \rightarrow 00:24:56.220$  may be candidates for resection.

NOTE Confidence: 0.87449

 $00:24:57.630 \rightarrow 00:25:01.697$  The best way to follow the disease is

NOTE Confidence: 0.87449

 $00{:}25{:}01{.}697 \dashrightarrow 00{:}25{:}05{.}730$  with imaging so usually a CAT scan.

NOTE Confidence: 0.87449

 $00{:}25{:}05{.}730 \dashrightarrow 00{:}25{:}08{.}369$  Sometimes an MRI or a PET scan,

NOTE Confidence: 0.87449

00:25:08.370 --> 00:25:10.869 but usually a CAT scan gives us

NOTE Confidence: 0.87449

 $00:25:10.869 \longrightarrow 00:25:13.649$  the level of detail that we need,

NOTE Confidence: 0.87449

 $00{:}25{:}13.650 \dashrightarrow 00{:}25{:}15.158$  including the relationship of

NOTE Confidence: 0.87449

 $00{:}25{:}15{.}158 \dashrightarrow 00{:}25{:}17{.}420$  the tumor to the vessels nearby.

 $00:25:17.420 \longrightarrow 00:25:19.922$  For those who have locally advanced

NOTE Confidence: 0.87449

 $00{:}25{:}19{.}922 \dashrightarrow 00{:}25{:}22{.}317$  disease and there is a tumor

NOTE Confidence: 0.87449

 $00:25:22.317 \longrightarrow 00:25:24.578$  marker that we can use as well,

 $00:25:27.380 \longrightarrow 00:25:29.200$  that can be helpful,

NOTE Confidence: 0.87449

 $00{:}25{:}29{.}200 \dashrightarrow 00{:}25{:}31{.}475$  although sometimes it is not as

NOTE Confidence: 0.87449

 $00{:}25{:}31{.}475 \dashrightarrow 00{:}25{:}34{.}362$  reliable as the scans and then also

NOTE Confidence: 0.87449

 $00{:}25{:}34{.}362 \dashrightarrow 00{:}25{:}36{.}640$  really listening to the patient.

NOTE Confidence: 0.87449

 $00{:}25{:}36{.}640 \dashrightarrow 00{:}25{:}39{.}808$  Patients can have symptoms that can be a

NOTE Confidence: 0.87449

 $00:25:39.808 \rightarrow 00:25:42.820$  tipoff that something is getting better

NOTE Confidence: 0.87449

 $00{:}25{:}42.820 \dashrightarrow 00{:}25{:}45.520$  or getting worse even before CAT

NOTE Confidence: 0.87449

 $00:25:45.520 \longrightarrow 00:25:48.109$  Scan tell you what's going on.

NOTE Confidence: 0.8510374

 $00{:}25{:}49{.}550 \dashrightarrow 00{:}25{:}52{.}292$  And back to

NOTE Confidence: 0.8510374

 $00:25:52.292 \longrightarrow 00:25:55.090$  the story of my friend.

NOTE Confidence: 0.8510374

 $00{:}25{:}55{.}090 \dashrightarrow 00{:}25{:}58{.}120$  She had chemotherapy as you suggested,

NOTE Confidence: 0.8510374

 $00{:}25{:}58{.}120 \dashrightarrow 00{:}26{:}01{.}138$  and her tumor markers went down,

NOTE Confidence: 0.8510374

 $00:26:01.140 \longrightarrow 00:26:02.472$  which was great,

 $00:26:02.472 \longrightarrow 00:26:05.580$  but the imaging still showed that

NOTE Confidence: 0.8510374

 $00{:}26{:}05{.}672 \dashrightarrow 00{:}26{:}08{.}200$  she had unresectable disease.

 $00:26:09.754 \longrightarrow 00:26:14.093$  She was quite happy to be done with

NOTE Confidence: 0.8510374

00:26:14.093 --> 00:26:18.223 chemo and really didn't want to

NOTE Confidence: 0.8510374

00:26:18.230 --> 00:26:20.995 do much more, but was certainly

NOTE Confidence: 0.8510374

00:26:20.995 --> 00:26:22.740 interested in clinical trials.

NOTE Confidence: 0.8510374

00:26:22.740 --> 00:26:25.610 So let's talk about clinical trials,

NOTE Confidence: 0.8510374

 $00:26:25.610 \longrightarrow 00:26:27.086$  both in that setting,

NOTE Confidence: 0.8510374

 $00:26:27.086 \longrightarrow 00:26:29.300$  after you don't respond

NOTE Confidence: 0.8510374

 $00:26:29.368 \longrightarrow 00:26:31.483$  to standard chemotherapy as well

NOTE Confidence: 0.8510374

 $00:26:31.483 \longrightarrow 00:26:33.598$  as clinical trials that might

NOTE Confidence: 0.8510374

00:26:33.673 --> 00:26:35.788 be offered to patients upfront

NOTE Confidence: 0.8510374

 $00{:}26{:}35.788 \dashrightarrow 00{:}26{:}37.903$  as new the rapies are developed.

NOTE Confidence: 0.8510374

 $00:26:37.910 \longrightarrow 00:26:40.780$  So what are you most excited about?

NOTE Confidence: 0.8796587

 $00{:}26{:}43.050 \dashrightarrow 00{:}26{:}45.288$  I think it's interesting that you

NOTE Confidence: 0.8796587

 $00{:}26{:}45{.}288 \dashrightarrow 00{:}26{:}48{.}159$  say that, I find that when I talk

- $00:26:48.160 \longrightarrow 00:26:49.985$  to a patient
- NOTE Confidence: 0.8796587
- 00:26:49.985 --> 00:26:51.445 about a clinical trial
- NOTE Confidence: 0.8796587
- $00:26:51.450 \rightarrow 00:26:54.365$  sometimes they say to me, do you think
- NOTE Confidence: 0.8796587
- 00:26:54.365 --> 00:26:56.920 I'm ready for a clinical trial?
- NOTE Confidence: 0.8796587
- $00{:}26{:}56{.}920 \dashrightarrow 00{:}26{:}59{.}265$  As if it's something that we wait
- NOTE Confidence: 0.8796587
- $00{:}26{:}59{.}265 \dashrightarrow 00{:}27{:}01{.}669$  until we don't have other options,
- NOTE Confidence: 0.8796587
- $00{:}27{:}01.670 \dashrightarrow 00{:}27{:}03.764$  and clinical trials are important at
- NOTE Confidence: 0.8796587
- 00:27:03.764 --> 00:27:05.680 every phase of someone's disease,
- NOTE Confidence: 0.8796587
- $00{:}27{:}05{.}680 \dashrightarrow 00{:}27{:}07{.}685$  whether they are initially diagnosed
- NOTE Confidence: 0.8796587
- $00{:}27{:}07{.}685 \dashrightarrow 00{:}27{:}09{.}690$  or whether they have progressed
- NOTE Confidence: 0.8796587
- $00:27:09.750 \longrightarrow 00:27:11.520$  on one or two prior therapies.
- NOTE Confidence: 0.8796587
- $00:27:11.520 \longrightarrow 00:27:14.154$  We are always trying to figure
- NOTE Confidence: 0.8796587
- $00{:}27{:}14.154 \dashrightarrow 00{:}27{:}17.058$  out what's the best thing to do.
- NOTE Confidence: 0.8796587
- $00{:}27{:}17.060 \dashrightarrow 00{:}27{:}20.148$  And so the clinical trials that we are
- NOTE Confidence: 0.8796587
- $00:27:20.148 \longrightarrow 00:27:22.979$  working on that we're excited about,
- NOTE Confidence: 0.8796587
- $00:27:22.980 \longrightarrow 00:27:25.977$  I think we are still trying to find a

- NOTE Confidence: 0.8796587
- $00:27:25.977 \rightarrow 00:27:29.328$  role for immunotherapy in pancreas cancer,

 $00{:}27{:}29{.}330 \dashrightarrow 00{:}27{:}31.646$  the same as in other diseases

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 $00:27:31.646 \longrightarrow 00:27:33.980$  like lung cancer or Melanoma.

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 $00:27:33.980 \longrightarrow 00:27:36.100$  But it's been a challenge,

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 $00{:}27{:}36{.}100 \dashrightarrow 00{:}27{:}39{.}019$  and so we are doing clinical trials

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 $00:27:39.019 \longrightarrow 00:27:41.349$  that are looking at immunotherapy

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 $00{:}27{:}41{.}349 \dashrightarrow 00{:}27{:}44{.}331$  combinations as opposed to just a

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 $00:27:44.331 \longrightarrow 00:27:47.178$  single drug to see if it might be

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 $00:27:48.629 \rightarrow 00:27:52.010$  better and we're looking at clinical trials that are

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00:27:52.097 --> 00:27:55.673 trying to attack not just the tumor itself,

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 $00:27:55.680 \longrightarrow 00:27:58.278$  but the scar tissue in the

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 $00{:}27{:}58.278$  -->  $00{:}28{:}00.560$  environment around the cancer cells.

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 $00:28:00.560 \longrightarrow 00:28:03.146$  One of the challenging things about

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 $00{:}28{:}03.146 \dashrightarrow 00{:}28{:}06.289$  pancreas cancer is that it almost builds

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 $00:28:06.289 \rightarrow 00:28:08.519$  this protective shell around itself

 $00{:}28{:}08{.}519 \dashrightarrow 00{:}28{:}11{.}245$  that can potentially make it more

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 $00{:}28{:}11{.}245 \dashrightarrow 00{:}28{:}14{.}340$  difficult for our treatments to get in,

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 $00:28:14.340 \longrightarrow 00:28:18.020$  and so looking at drugs that can potentially

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 $00:28:18.020 \longrightarrow 00:28:21.049$  eat away at that might help our

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 $00{:}28{:}21.050 \dashrightarrow 00{:}28{:}23.420$  more standard the rapies be more

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 $00{:}28{:}23{.}420 \dashrightarrow 00{:}28{:}25{.}076$  effective.

NOTE Confidence: 0.876941414285714

 $00{:}28{:}25.076 \dashrightarrow 00{:}28{:}27.560$  Doctor Jeremy Kortmansky is an associate professor of

NOTE Confidence: 0.876941414285714

 $00:28:27.622 \rightarrow 00:28:29.472$  clinical medicine in medical oncology

NOTE Confidence: 0.876941414285714

 $00{:}28{:}29{.}472 \dashrightarrow 00{:}28{:}31{.}950$  at the Yale School of Medicine.

NOTE Confidence: 0.876941414285714

00:28:31.950 - 00:28:33.438 If you have questions,

NOTE Confidence: 0.876941414285714

00:28:33.438 --> 00:28:34.926 the address is canceranswers@yale.edu

NOTE Confidence: 0.876941414285714

 $00:28:34.926 \longrightarrow 00:28:36.981$  and past editions of the program

NOTE Confidence: 0.876941414285714

 $00{:}28{:}36{.}981 \dashrightarrow 00{:}28{:}38{.}859$  are available in audio and written

NOTE Confidence: 0.876941414285714

 $00:28:38.914 \rightarrow 00:28:40.480$  form at yalecancercenter.org.

NOTE Confidence: 0.876941414285714

00:28:40.480 --> 00:28:43.152 We hope you'll join us next week to

 $00{:}28{:}43.152 \dashrightarrow 00{:}28{:}45.758$  learn more about the fight against

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00:28:45.758 --> 00:28:48.548 cancer here on Connecticut Public Radio.