

0:00:00 -> 0:00:02.83 Support for Yale Cancer Answers  
0:00:02.83 -> 0:00:05.094 comes from AstraZeneca, dedicated  
0:00:05.094 -> 0:00:08.475 to providing innovative treatment  
0:00:08.475 -> 0:00:13.025 options for people living with  
0:00:13.025 -> 0:00:13.935 cancer. Learn more at [astrazeneca-us.com](http://astrazeneca-us.com).  
0:00:13.94 -> 0:00:16.13 Welcome to Yale Cancer Answers with  
0:00:16.13 -> 0:00:18.529 your host doctor Anees Chagpar.  
0:00:18.53 -> 0:00:20.41 Yale Cancer Answers features the  
0:00:20.41 -> 0:00:22.727 latest information on cancer care by  
0:00:22.727 -> 0:00:24.211 welcoming oncologists and specialists  
0:00:24.211 -> 0:00:26.696 who are on the forefront of the  
0:00:26.696 -> 0:00:28.406 battle to fight cancer. This week  
0:00:28.41 -> 0:00:30.175 it's a conversation about pancreatic  
0:00:30.175 -> 0:00:31.94 cancer with Doctor Jeremy Kortmansky.  
0:00:31.94 -> 0:00:33.056 Doctor Kortmansky  
0:00:33.056 -> 0:00:34.916 is an associate professor  
0:00:34.916 -> 0:00:36.729 of clinical medicine in medical  
0:00:36.729 -> 0:00:38.751 oncology at the Yale School of  
0:00:38.751 -> 0:00:40.838 Medicine where Doctor Chagpar is  
0:00:40.838 -> 0:00:42.523 a professor of surgical oncology.  
0:00:43.67 -> 0:00:45.138 So Jeremy,  
0:00:45.138 -> 0:00:48.031 I think we all hear about pancreatic  
0:00:48.031 -> 0:00:51.49 cancer when it affects celebrities, right?  
0:00:51.49 -> 0:00:54.29 So whether it was Steve Jobs or  
0:00:54.29 -> 0:00:57.85 other stars we hear  
0:00:57.85 -> 0:00:59.449 about pancreatic cancer,  
0:00:59.45 -> 0:01:02.684 once in a blue moon.  
0:01:02.69 -> 0:01:05.938 It doesn't seem to be a terribly  
0:01:05.938 -> 0:01:07.566 common cancer.  
0:01:07.566 -> 0:01:10.002 Can you tell us a little bit  
0:01:10.002 -> 0:01:12.292 more about how frequently

0:01:12.292 -> 0:01:14.76 pancreatic cancer is diagnosed?  
0:01:14.76 -> 0:01:18.23 How many people get it?  
0:01:18.23 -> 0:01:20.595 And who really are the  
0:01:20.595 -> 0:01:22.96 people that it most affects?  
0:01:22.96 -> 0:01:24.848 Yes,  
0:01:24.85 -> 0:01:25.8 pancreatic cancer  
0:01:25.8 -> 0:01:28.205 is actually becoming an increasingly  
0:01:28.205 -> 0:01:31 more common cancer that we see.  
0:01:31 -> 0:01:33.58 It's now the 5th leading cause  
0:01:33.58 -> 0:01:36.679 of cancer in the United States,  
0:01:36.68 -> 0:01:39.984 at about 60,000 new cases a year.  
0:01:39.99 -> 0:01:43.294 So we're not only seeing increasing numbers,  
0:01:43.3 -> 0:01:46.51 but also really moving up the  
0:01:46.51 -> 0:01:49.91 rank of how often we see it.  
0:01:49.91 -> 0:01:52.913 And you know it's interesting you brought  
0:01:52.913 -> 0:01:56.347 up Steve Jobs and and other celebrities.  
0:01:56.35 -> 0:02:00.03 Most recently, I think Alex Trebek is one  
0:02:00.03 -> 0:02:02.52 and it's important to make distinctions  
0:02:02.52 -> 0:02:06.009 when we talk about pancreatic cancer,  
0:02:06.01 -> 0:02:08.31 there's two main types there  
0:02:08.31 -> 0:02:09.69 is pancreatic adenocarcinoma,  
0:02:09.69 -> 0:02:14.29 which is by far the more common one that is  
0:02:14.29 -> 0:02:18.146 the disease that we're talking about  
0:02:18.146 -> 0:02:22.356 when we think about 60,000 cases per year.  
0:02:22.36 -> 0:02:24.41 And then there are pancreatic  
0:02:24.41 -> 0:02:25.23 neuroendocrine tumors,  
0:02:25.23 -> 0:02:27.69 which are a lot less common.  
0:02:27.69 -> 0:02:30.483 They are only seen in a few  
0:02:30.483 -> 0:02:32.2 thousand patients a year,  
0:02:32.2 -> 0:02:34.462 and it's important  
0:02:34.462 -> 0:02:36.448 to make the distinction because

0:02:36.448 -> 0:02:38.488 they behave very differently and  
0:02:38.488 -> 0:02:40.81 their treatments are very different.  
0:02:42.19 -> 0:02:44.095 So, let's start with  
0:02:44.095 -> 0:02:44.857 pancreatic adenocarcinoma,  
0:02:44.86 -> 0:02:47.158 because I think that most people,  
0:02:47.16 -> 0:02:49.566 when they use the term generically  
0:02:49.566 -> 0:02:51.572 pancreatic cancer that tends to  
0:02:51.572 -> 0:02:53.267 be what they're referring to.  
0:02:53.27 -> 0:02:55.508 Although your point is well taken  
0:02:55.508 -> 0:02:57.47 with regards to neuroendocrine tumors,  
0:02:57.47 -> 0:03:00.182 but tell us a little bit more  
0:03:00.182 -> 0:03:02.438 about who gets these cancers.  
0:03:02.44 -> 0:03:05.107 I mean, what are the risk factors?  
0:03:06.08 -> 0:03:09.428 So I think like other cancers,  
0:03:09.43 -> 0:03:12.79 smoking is a common risk factor.  
0:03:12.79 -> 0:03:17.334 It can be related to problems that cause  
0:03:17.334 -> 0:03:20.726 chronic inflammation of the pancreas so  
0:03:20.726 -> 0:03:23.966 alcoholism can lead to pancreas cancer.  
0:03:23.97 -> 0:03:26.57 Chronic gallstone disease can,  
0:03:26.57 -> 0:03:29.82 although that's much less common.  
0:03:29.82 -> 0:03:34.148 Obesity can be a risk factor as well.  
0:03:34.15 -> 0:03:36.754 And then there is some question  
0:03:36.754 -> 0:03:39.001 of the relationship with diabetes  
0:03:39.001 -> 0:03:41.557 and whether diabetes could be a  
0:03:41.557 -> 0:03:44.485 risk factor or whether the disease  
0:03:44.485 -> 0:03:46.569 itself causes the diabetes.  
0:03:46.57 -> 0:03:48.41 And that's something that's  
0:03:48.41 -> 0:03:50.25 still being worked out.  
0:03:50.25 -> 0:03:53.194 And then there is a smaller percentage  
0:03:53.194 -> 0:03:56.229 of patients where it's hereditary cancer.  
0:03:56.23 -> 0:03:58.555 There are some genetic abnormalities

0:03:58.555 -> 0:04:02.053 that we know of that are associated  
0:04:02.053 -> 0:04:04.229 with pancreas cancer and  
0:04:04.23 -> 0:04:07.002 one that is of recent importance  
0:04:07.002 -> 0:04:10.208 is its relation to the BRCA gene,  
0:04:10.21 -> 0:04:12.898 which is a gene that we most  
0:04:12.898 -> 0:04:15.854 often think about with breast and  
0:04:15.854 -> 0:04:17.567 ovarian cancer syndromes,  
0:04:17.57 -> 0:04:20.33 but is also related to pancreas  
0:04:20.33 -> 0:04:21.71 cancer as well,  
0:04:21.71 -> 0:04:24.47 and that has had some recent  
0:04:24.47 -> 0:04:25.85 implications on treatment.  
0:04:27.58 -> 0:04:30.436 So when we think  
0:04:30.436 -> 0:04:32.46 about these risk factors,  
0:04:32.46 -> 0:04:35.428 I'm thinking about a very good friend  
0:04:35.428 -> 0:04:39.141 of mine who actually was diagnosed with  
0:04:39.141 -> 0:04:42.026 pancreatic cancer just over Thanksgiving.  
0:04:42.03 -> 0:04:45.35 And who didn't fit any of those categories.  
0:04:45.35 -> 0:04:47.43 She had no family history.  
0:04:47.43 -> 0:04:49.92 She is skinny, like a rail,  
0:04:49.92 -> 0:04:51.58 she doesn't have diabetes,  
0:04:51.58 -> 0:04:53.652 doesn't drink, doesn't have gallstones.  
0:04:53.652 -> 0:04:56.37 You know, in those people where  
0:04:56.37 -> 0:04:59.112 they don't seem to have any  
0:04:59.112 -> 0:05:01.814 of the common risk factors that you  
0:05:01.814 -> 0:05:04.438 think about for pancreatic cancer,  
0:05:04.44 -> 0:05:06.78 does that tell us anything about  
0:05:06.78 -> 0:05:09.01 the biology of their disease?  
0:05:09.01 -> 0:05:11.728 I mean, are there other things  
0:05:11.728 -> 0:05:13.92 that we can think of  
0:05:13.92 -> 0:05:16.536 in terms of their risk factors,  
0:05:16.54 -> 0:05:18.108 and does that

0:05:18.108 -> 0:05:20.46 have anything to  
0:05:20.549 -> 0:05:22.637 do with their prognosis?  
0:05:23.99 -> 0:05:26.165 I think that those are  
0:05:26.165 -> 0:05:27.905 all very good questions.  
0:05:27.91 -> 0:05:30.22 There are risk  
0:05:30.22 -> 0:05:32.767 factors that we can identify and  
0:05:32.767 -> 0:05:35.527 then there are patients who get  
0:05:35.527 -> 0:05:38.377 cancer for really no good reason.  
0:05:38.38 -> 0:05:40.879 And those are people that  
0:05:40.879 -> 0:05:44.006 we are still trying to maybe figure  
0:05:44.006 -> 0:05:46.476 out whether there was something  
0:05:46.476 -> 0:05:48.813 hereditary or environmental or some  
0:05:48.813 -> 0:05:51.459 other factor that we just haven't  
0:05:51.46 -> 0:05:54.736 identified yet that played a role.  
0:05:54.74 -> 0:05:59.328 When it comes to pancreas cancer,  
0:05:59.328 -> 0:06:05.18 the implications of how you got it,  
0:06:05.18 -> 0:06:06.96 except in in certain circumstances,  
0:06:06.96 -> 0:06:08.74 like the BRCA gene but,  
0:06:08.74 -> 0:06:11.302 otherwise how you got it doesn't  
0:06:11.302 -> 0:06:14.633 play as much of a role into how we  
0:06:14.633 -> 0:06:16.791 might think about treating it or  
0:06:16.791 -> 0:06:19.059 how we might expect it to behave.  
0:06:20.79 -> 0:06:24.588 So the the other question is,  
0:06:27.86 -> 0:06:30.724 when you talk about it  
0:06:30.724 -> 0:06:33.262 being the fifth most common cancer  
0:06:33.262 -> 0:06:36.45 and we think about the list right?  
0:06:36.45 -> 0:06:38.086 Breast cancer, prostate cancer,  
0:06:38.086 -> 0:06:40.54 colon cancer for all of these,  
0:06:40.54 -> 0:06:42.636 more commonly diagnosed cancers,  
0:06:42.636 -> 0:06:45.256 there's a screening test we  
0:06:45.256 -> 0:06:47.907 can find these cancers early.

0:06:47.91 -> 0:06:49.42 Is there a screening test  
0:06:49.42 -> 0:06:50.326 for pancreatic cancer?  
0:06:51.82 -> 0:06:54.742 There isn't a good or routine  
0:06:54.742 -> 0:06:57.38 screening test for pancreas cancer.  
0:06:57.38 -> 0:07:00.972 I think that we know that there are  
0:07:00.972 -> 0:07:04.063 some patients that have been discovered  
0:07:04.063 -> 0:07:07.201 to have either a family history  
0:07:07.296 -> 0:07:10.434 or patients that have been found  
0:07:10.434 -> 0:07:15.11 to have pancreatic cysts on their  
0:07:15.11 -> 0:07:18.26 imaging that may have been obtained  
0:07:18.26 -> 0:07:21.578 for some other reason that we can  
0:07:21.578 -> 0:07:24.386 follow and certainly here at Yale,  
0:07:24.39 -> 0:07:26.305 we have an excellent screening  
0:07:26.305 -> 0:07:28.841 program where we can refer patients  
0:07:28.841 -> 0:07:31.025 to our gastroenterologists who  
0:07:31.025 -> 0:07:33.209 can perform screening procedures,  
0:07:33.21 -> 0:07:35.4 but that's really identifying those  
0:07:35.4 -> 0:07:38.552 who are already at a heightened risk  
0:07:38.552 -> 0:07:41.618 and not for the whole population like  
0:07:41.618 -> 0:07:44.298 we think about with colonoscopies  
0:07:44.298 -> 0:07:46.993 for colon cancer or mammograms  
0:07:47 -> 0:07:48.503 for breast cancer,  
0:07:48.503 -> 0:07:51.509 it's really an already pre determined  
0:07:51.509 -> 0:07:53.665 population because the screening  
0:07:53.665 -> 0:07:56.809 includes much more advanced or invasive  
0:07:56.809 -> 0:08:00.149 testing like MRI's or endoscopic ultrasound.  
0:08:00.15 -> 0:08:03.468 So it's a much more complex  
0:08:03.468 -> 0:08:06.46 way to follow patients.  
0:08:06.46 -> 0:08:09.09 And so without a screening test for  
0:08:09.09 -> 0:08:11.194 asymptomatic people who otherwise,  
0:08:11.2 -> 0:08:13.825 haven't had any

0:08:13.825 -> 0:08:15.925 abnormality that's been found  
0:08:15.93 -> 0:08:17.646 incidentally, what are  
0:08:17.646 -> 0:08:20.765 the ways in  
0:08:20.765 -> 0:08:23.135 which they present?  
0:08:23.135 -> 0:08:25.48 How is it that somebody  
0:08:25.549 -> 0:08:28.198 cues into the fact that, Oh my gosh,  
0:08:28.198 -> 0:08:30.214 this could be a pancreatic cancer.  
0:08:30.22 -> 0:08:33.244 What are the symptoms and signs to look for?  
0:08:34.6 -> 0:08:38.08 I again think this is an area  
0:08:38.08 -> 0:08:40.379 that becomes challenging that  
0:08:40.379 -> 0:08:43.699 the symptoms that people have,  
0:08:43.7 -> 0:08:47.438 at least initially can often be vague.  
0:08:47.44 -> 0:08:50.115 There can be some discomfort  
0:08:50.115 -> 0:08:52.792 in the abdomen, with eating,  
0:08:52.792 -> 0:08:54.4 sometimes increased belching,  
0:08:54.4 -> 0:08:58.138 or increased gas may be a symptom.  
0:08:58.14 -> 0:09:00.755 Things that are very easily  
0:09:00.755 -> 0:09:03.37 attributable to something else until  
0:09:03.461 -> 0:09:06.486 the symptoms become more significant.  
0:09:06.49 -> 0:09:08.466 Sometimes people present without  
0:09:08.466 -> 0:09:10.936 any symptoms but develop jaundice,  
0:09:10.936 -> 0:09:13.478 they notice yellowing  
0:09:13.478 -> 0:09:15.88 of their eyes or their skin,  
0:09:15.88 -> 0:09:18.11 which certainly tips them off,  
0:09:18.11 -> 0:09:20.2 their families that there's something  
0:09:20.2 -> 0:09:23.03 going on that requires further evaluation.  
0:09:23.03 -> 0:09:24.818 But because these symptoms  
0:09:24.818 -> 0:09:26.606 can sometimes be vague,  
0:09:26.61 -> 0:09:29.557 they can also be attributed to the  
0:09:29.557 -> 0:09:32.753 much more common problems that we see,  
0:09:32.753 -> 0:09:35.525 irritable bowel or reflux which can

0:09:35.614 -> 0:09:38.666 lead to delays in making a diagnosis.  
0:09:40.13 -> 0:09:42.517 And so I mean that really gets  
0:09:42.517 -> 0:09:45.181 to the crux of the issue, right?  
0:09:45.181 -> 0:09:49.189 Is that without screening and with  
0:09:49.19 -> 0:09:52.347 the symptoms that are incredibly vague,  
0:09:52.35 -> 0:09:54.888 I would surmise that the vast  
0:09:54.888 -> 0:09:57.153 majority of patients who present  
0:09:57.153 -> 0:10:00.105 with pancreatic cancer present at a  
0:10:00.11 -> 0:10:02.329 more advanced stage so talk  
0:10:02.329 -> 0:10:04.814 about the stage  
0:10:04.814 -> 0:10:07.47 distribution that you see in terms of  
0:10:07.47 -> 0:10:09.858 the proportion of patients who present  
0:10:09.858 -> 0:10:12.584 with early versus late stage disease and  
0:10:12.584 -> 0:10:15.08 what the implications are in terms of  
0:10:15.08 -> 0:10:17.3 prognosis.  
0:10:17.3 -> 0:10:19.561 People often think  
0:10:19.561 -> 0:10:21.703 about staging for cancer with the  
0:10:21.703 -> 0:10:24.2 usual stage one, 2, three or four.  
0:10:24.2 -> 0:10:26.39 When I think about pancreas cancer,  
0:10:26.39 -> 0:10:28.7 I really try to think about  
0:10:28.7 -> 0:10:30.7 it in terms of its  
0:10:30.7 -> 0:10:33.004 clinical presentations and so there are  
0:10:33.004 -> 0:10:35.05 patients that have resectable disease,  
0:10:35.05 -> 0:10:38.938 meaning that a surgeon could go in there at  
0:10:38.938 -> 0:10:42.866 the time of diagnosis and take it out.  
0:10:42.87 -> 0:10:45.252 There are patients that have locally  
0:10:45.252 -> 0:10:46.84 advanced but unresectable disease,  
0:10:46.84 -> 0:10:48.795 meaning that it hasn't spread  
0:10:48.795 -> 0:10:51.21 to other parts of the body,  
0:10:51.21 -> 0:10:53.989 but it's involving the nearby blood vessels,  
0:10:53.99 -> 0:10:57.364 and you can't safely take it out.



0:10:57.37 -> 0:10:59.775 And then patients with metastatic  
0:10:59.775 -> 0:11:02.18 disease where it's spread to  
0:11:02.26 -> 0:11:04.2 other places in the body.  
0:11:04.2 -> 0:11:07.832 And so the the number or the percentage  
0:11:07.832 -> 0:11:10.686 of patients that can have surgery  
0:11:10.686 -> 0:11:13.464 at the time of their diagnosis  
0:11:13.557 -> 0:11:16.315 is really only about 15 to 20%.  
0:11:16.32 -> 0:11:18.56 It's a relatively low number  
0:11:18.56 -> 0:11:21.668 and the other 80% sort of evenly  
0:11:21.668 -> 0:11:23.412 distributed are either locally  
0:11:23.412 -> 0:11:25.3 advanced or metastatic disease  
0:11:25.3 -> 0:11:29.297 at the time of their diagnosis.  
0:11:29.89 -> 0:11:34.066 And so it was with my my friend who  
0:11:34.066 -> 0:11:38.708 was diagnosed with a locally advanced,  
0:11:38.71 -> 0:11:40.052 unresectable pancreatic  
0:11:40.052 -> 0:11:43.407 cancer that was encasing  
0:11:43.41 -> 0:11:45.102 important blood vessels,  
0:11:45.102 -> 0:11:47.358 so she certainly wasn't  
0:11:47.358 -> 0:11:50.079 a candidate for surgery at  
0:11:50.079 -> 0:11:52.444 the time of her presentation,  
0:11:52.45 -> 0:11:56.53 so it sounds like if patients are  
0:11:56.53 -> 0:11:59.284 fortunate enough to be resectable  
0:11:59.284 -> 0:12:02.554 at the time of their presentation,  
0:12:02.56 -> 0:12:04.688 would surgery be the  
0:12:04.688 -> 0:12:06.284 primary modality upfront?  
0:12:08.41 -> 0:12:12.474 That is a great question, and one that  
0:12:12.474 -> 0:12:16.03 we are still trying to figure out.  
0:12:16.03 -> 0:12:18.724 I think that there is clearly  
0:12:18.724 -> 0:12:21.225 a standard paradigm of doing  
0:12:21.225 -> 0:12:23.677 surgery followed by chemotherapy  
0:12:23.677 -> 0:12:26.742 for about six months afterwards.

0:12:26.75 -> 0:12:30.646 There is a lot of interest in giving  
0:12:30.646 -> 0:12:33.24 chemotherapy prior to surgery or  
0:12:33.24 -> 0:12:35.785 giving part of the chemotherapy,  
0:12:35.79 -> 0:12:38.796 then surgery, and then chemotherapy after.  
0:12:38.8 -> 0:12:42.319 And in fact, here at Smilow we have a  
0:12:42.319 -> 0:12:46.005 clinical trial which is really looking at  
0:12:46.005 -> 0:12:49.34 that question of perioperative chemotherapy.  
0:12:49.34 -> 0:12:53.164 How do patients do getting some of the  
0:12:53.164 -> 0:12:55.36 chemotherapy treatments before surgery,  
0:12:55.36 -> 0:12:57.048 and then some after?  
0:12:57.048 -> 0:13:01.194 And how that might compare to those who get  
0:13:01.194 -> 0:13:04.236 surgery 1st and then chemotherapy later?  
0:13:05.33 -> 0:13:07.556 And so this kind of brings  
0:13:07.556 -> 0:13:09.748 us to the question of, well,  
0:13:09.748 -> 0:13:11.588 how effective is the chemotherapy?  
0:13:11.59 -> 0:13:12.607 Because,  
0:13:12.607 -> 0:13:14.98 I can imagine that many of the  
0:13:15.05 -> 0:13:17.402 people who are listening to this  
0:13:17.402 -> 0:13:19.292 show are thinking,  
0:13:19.292 -> 0:13:22.979 if I have a cancer and you can take this  
0:13:22.979 -> 0:13:27.038 cancer out and you can get it out of my body,  
0:13:27.04 -> 0:13:29.378 for many people the simple  
0:13:29.378 -> 0:13:32.059 logic is that might be better  
0:13:32.059 -> 0:13:33.663 than having a chemotherapy,  
0:13:33.67 -> 0:13:35.61 which may or may not  
0:13:35.61 -> 0:13:38.928 work and they often have some  
0:13:38.928 -> 0:13:41.14 trepidation about cancer spreading  
0:13:41.234 -> 0:13:44.089 and then making it unresectable.  
0:13:44.09 -> 0:13:46.975 So how effective is chemotherapy  
0:13:46.975 -> 0:13:51.037 that we could potentially use it in  
0:13:51.037 -> 0:13:53.737 a neoadjuvant fashion to potentially

0:13:53.737 -> 0:13:57.684 even shrink the cancer and get some  
0:13:57.684 -> 0:14:01.032 systemic control prior to resecting it?  
0:14:02.79 -> 0:14:09.48 So our newer chemotherapy regimens are  
0:14:09.48 -> 0:14:11.8 good, they're not great,  
0:14:11.8 -> 0:14:15.008 but they are good and they can shrink  
0:14:15.008 -> 0:14:17.796 the disease for some and control  
0:14:17.796 -> 0:14:20.171 the microscopic disease that might  
0:14:20.171 -> 0:14:22.94 be floating around for others.  
0:14:22.94 -> 0:14:25.88 I think that the challenge ultimately  
0:14:25.88 -> 0:14:28.65 is that even with surgery,  
0:14:28.65 -> 0:14:31.092 the risk of pancreatic cancer coming  
0:14:31.092 -> 0:14:33.71 back because it has already shed  
0:14:33.71 -> 0:14:36.44 these microscopic cells is very high,  
0:14:36.44 -> 0:14:39.359 and so by giving chemotherapy we are  
0:14:39.359 -> 0:14:41.57 hopefully attacking some of those  
0:14:41.57 -> 0:14:44.234 microscopic cells that are floating around,  
0:14:44.24 -> 0:14:47.234 but also making sure that putting  
0:14:47.234 -> 0:14:50.22 somebody through what would be a  
0:14:50.22 -> 0:14:52.47 very major operation is ultimately  
0:14:52.47 -> 0:14:54.4 the right thing to do.  
0:14:54.83 -> 0:14:57.518 So many complicating moving parts  
0:14:57.518 -> 0:15:00.307 in the management of pancreatic cancer  
0:15:00.307 -> 0:15:03.499 and we're going to learn much more  
0:15:03.499 -> 0:15:06.516 about all of that right after we take  
0:15:06.516 -> 0:15:09.116 a short break for a medical minute.  
0:15:09.116 -> 0:15:11.42 Please stay tuned to learn more  
0:15:11.498 -> 0:15:13.53 about pancreatic cancer with  
0:15:13.53 -> 0:15:14.7 my guest Doctor Jeremy Kortmansky.  
0:15:14.7 -> 0:15:17.04 Support for Yale  
0:15:17.04 -> 0:15:19.865 Cancer Answers comes from AstraZeneca  
0:15:19.865 -> 0:15:21.761 providing important treatment options

0:15:21.761 -> 0:15:24.579 for various types and stages of cancer.  
0:15:24.58 -> 0:15:27.74 More information at [astrazeneca-us.com](http://astrazeneca-us.com).  
0:15:27.74 -> 0:15:29.54 This is a medical minute  
0:15:29.54 -> 0:15:31.34 about head and neck cancers,  
0:15:31.34 -> 0:15:33.195 although the percentage of oral  
0:15:33.195 -> 0:15:35.464 and head and neck cancer patients  
0:15:35.464 -> 0:15:37.498 in the United States is only  
0:15:37.498 -> 0:15:39.724 about 5% of all diagnosed cancers,  
0:15:39.724 -> 0:15:41.654 there are challenging side effects  
0:15:41.654 -> 0:15:43.377 associated with these types of  
0:15:43.377 -> 0:15:44.653 cancer and their treatment.  
0:15:44.66 -> 0:15:46.228 Clinical trials are currently  
0:15:46.228 -> 0:15:48.188 underway to test innovative new  
0:15:48.188 -> 0:15:50.057 treatments for head and neck cancers,  
0:15:50.06 -> 0:15:52.01 and in many cases less radical  
0:15:52.01 -> 0:15:54.38 surgeries are able to preserve nerves,  
0:15:54.38 -> 0:15:56.666 arteries and muscles in the neck.  
0:15:56.67 -> 0:15:59.19 Enabling patients to move speak,  
0:15:59.19 -> 0:15:59.693 breathe,  
0:15:59.693 -> 0:16:02.208 and eat normally after surgery.  
0:16:02.21 -> 0:16:04.735 More information is available at  
0:16:04.735 -> 0:16:05.24 [yalecancercenter.org](http://yalecancercenter.org).  
0:16:05.24 -> 0:16:08.258 You're listening to Connecticut Public Radio.  
0:16:09.41 -> 0:16:11.768 Welcome back to Yale Cancer Answers.  
0:16:11.77 -> 0:16:14.003 This is doctor Anees Chagpar  
0:16:14.003 -> 0:16:16.902 and I am joined tonight by my  
0:16:16.902 -> 0:16:19.232 guest doctor Jeremy Kortmansky.  
0:16:19.24 -> 0:16:21.19 We're talking about pancreatic cancer  
0:16:21.19 -> 0:16:23.56 and Jeremy right before the break,  
0:16:23.56 -> 0:16:26.764 you had indicated to us that you really think  
0:16:26.764 -> 0:16:29.846 about pancreatic cancer in terms of staging,

0:16:29.85 -> 0:16:32.419 as whether things are resectable at the  
0:16:32.419 -> 0:16:34.559 time of presentation or unresectable,  
0:16:34.56 -> 0:16:36.918 but not metastatic or metastatic  
0:16:36.92 -> 0:16:38.496 and sadly,  
0:16:38.496 -> 0:16:42.112 80% of patients or so fall into  
0:16:42.112 -> 0:16:44.26 the last two buckets.  
0:16:44.26 -> 0:16:45.76 And you know,  
0:16:45.76 -> 0:16:47.76 that's really unfortunate,  
0:16:47.76 -> 0:16:50.238 because what is the prognosis for  
0:16:50.238 -> 0:16:52.624 patients who have locally advanced  
0:16:52.624 -> 0:16:55.256 unresectable disease at presentation?  
0:16:55.26 -> 0:16:58.34 And what is the prognosis for patients  
0:16:58.34 -> 0:17:01.26 who present with metastatic disease?  
0:17:03.29 -> 0:17:06.517 For those patients who have advanced disease,  
0:17:06.52 -> 0:17:08.36 unfortunately we view those  
0:17:08.36 -> 0:17:09.74 as incurable cancers.  
0:17:09.74 -> 0:17:15.51 We can't make it go away and never come back.  
0:17:15.51 -> 0:17:18.03 For patients that have locally  
0:17:18.03 -> 0:17:20.55 advanced disease on occasion and  
0:17:20.637 -> 0:17:22.637 it's not the expectation,  
0:17:22.64 -> 0:17:25.895 but on occasion they have a  
0:17:25.895 -> 0:17:28.501 great response to the chemotherapy  
0:17:28.501 -> 0:17:31.849 and we can revisit that question  
0:17:31.849 -> 0:17:34.919 of surgery but without surgery,  
0:17:34.92 -> 0:17:37.4 ultimately, patients succumb to their  
0:17:37.4 -> 0:17:41.09 disease and the goals of our treatment  
0:17:41.09 -> 0:17:43.215 are to control the disease  
0:17:43.215 -> 0:17:45.34 for as long as possible.  
0:17:45.34 -> 0:17:48.38 Help people live as long as possible and  
0:17:48.38 -> 0:17:51.598 feel as well as possible knowing that  
0:17:51.598 -> 0:17:54.69 the disease can be symptomatic as well.

0:17:55.83 -> 0:18:00.648 For people who are  
0:18:00.648 -> 0:18:03.688 listening to this and who may have had  
0:18:03.688 -> 0:18:06.142 friends or even seen celebrities  
0:18:06.142 -> 0:18:08.604 go through their own journeys  
0:18:08.604 -> 0:18:12.6 with pancreatic cancer,  
0:18:12.6 -> 0:18:15.192 when we say the goal is really  
0:18:15.192 -> 0:18:18.243 to try to control the cancer for as  
0:18:18.243 -> 0:18:21.012 long as possible and the quality  
0:18:21.012 -> 0:18:23.665 of life for as long as possible,  
0:18:23.67 -> 0:18:24.75 in some cancers  
0:18:24.75 -> 0:18:26.55 we've discussed on this  
0:18:26.55 -> 0:18:28.839 show,  
0:18:28.84 -> 0:18:31.353 medical management has come a really long  
0:18:31.353 -> 0:18:33.998 way such that even in those settings,  
0:18:34.696 -> 0:18:37.48 people live for a long time and  
0:18:37.558 -> 0:18:40.42 they talk about this being incurable,  
0:18:40.42 -> 0:18:42.891 but really making it more of a  
0:18:42.891 -> 0:18:44.509 chronic disease then something  
0:18:44.509 -> 0:18:46.449 that is imminently fatal.  
0:18:46.45 -> 0:18:49.236 Where are we in the spectrum of  
0:18:49.236 -> 0:18:51.27 pancreatic cancer towards getting to  
0:18:52.134 -> 0:18:55.158 oK, so I've got pancreatic cancer and  
0:18:55.158 -> 0:18:58.509 I know that I can't get rid of it,  
0:18:58.51 -> 0:19:00.006 but  
0:19:00.006 -> 0:19:02.807 I can live with it versus this  
0:19:02.807 -> 0:19:05.127 is something that  
0:19:05.13 -> 0:19:08.98 is more of an imminent concern.  
0:19:10.68 -> 0:19:14.852 It's still a very challenging disease and  
0:19:14.852 -> 0:19:19.25 there are for a lot of other cancers,  
0:19:19.25 -> 0:19:23.126 a lot of exciting new therapies and  
0:19:23.126 -> 0:19:25.71 targeted therapies and immunotherapy's

0:19:25.8 -> 0:19:28.188 that have become available.  
0:19:28.19 -> 0:19:29.986 But for pancreas cancer,  
0:19:29.986 -> 0:19:33.305 the majority of patients are still treated  
0:19:33.305 -> 0:19:36.593 with versions of chemotherapy and  
0:19:36.593 -> 0:19:39.149 those chemotherapy drugs are modest.  
0:19:39.15 -> 0:19:41.635 There are some who are  
0:19:41.635 -> 0:19:42.629 exceptional responders.  
0:19:42.63 -> 0:19:47.103 People who do really well for a long time,  
0:19:47.11 -> 0:19:50.098 but for the majority of patients,  
0:19:50.1 -> 0:19:53.06 the survival is still only  
0:19:53.06 -> 0:19:56.84 measured in in months or years.  
0:19:56.84 -> 0:20:00.176 And doing better and finding better  
0:20:00.18 -> 0:20:02.445 therapies is of such great  
0:20:02.445 -> 0:20:04.257 importance for this disease.  
0:20:04.26 -> 0:20:06.834 I think we are really hoping  
0:20:06.834 -> 0:20:09.584 and trying every day to find  
0:20:09.584 -> 0:20:12.41 therapies that are better than what  
0:20:12.41 -> 0:20:13.628 we have currently.  
0:20:13.628 -> 0:20:16.47 Do we have any factors that can  
0:20:16.555 -> 0:20:19.525 predict who is going to respond  
0:20:19.525 -> 0:20:21.92 better to chemotherapy versus not?  
0:20:24.76 -> 0:20:29.602 So we are still trying to figure that out.  
0:20:29.61 -> 0:20:33.922 I had mentioned  
0:20:33.922 -> 0:20:37.958 this earlier, patients that have a BRCA  
0:20:37.958 -> 0:20:41.47 mutation or a similar type mutation,  
0:20:41.47 -> 0:20:44.76 we find that they are more sensitive  
0:20:44.76 -> 0:20:47.4 to platinum based chemotherapy.  
0:20:47.4 -> 0:20:51.796 So a drug like oxaliplatin or cisplatin.  
0:20:51.8 -> 0:20:54.67 And that we can see better responses  
0:20:54.67 -> 0:20:57.286 there that can sometimes last longer  
0:20:57.286 -> 0:21:00.915 than we might see with a patient who

0:21:00.915 -> 0:21:03.945 doesn't have one of those abnormalities.  
0:21:03.95 -> 0:21:07.134 We know that there is a class of  
0:21:07.134 -> 0:21:09.8 drugs called PARP inhibitors,  
0:21:09.8 -> 0:21:12.29 which for this mutated population  
0:21:12.29 -> 0:21:15.199 can benefit from this targeted therapy.  
0:21:15.2 -> 0:21:19.25 At the end of the day, that only makes  
0:21:19.25 -> 0:21:23.81 up about 7% of the patients that we see.  
0:21:23.81 -> 0:21:28.57 So it's still not a not a big number and  
0:21:28.694 -> 0:21:32.055 we know about 1% have another abnormality,  
0:21:32.055 -> 0:21:33.51 called microsatellite instability,  
0:21:33.51 -> 0:21:34.965 for which immunotherapy  
0:21:34.965 -> 0:21:36.905 drugs have been helpful.  
0:21:36.91 -> 0:21:40.298 And so we always test for that.  
0:21:40.3 -> 0:21:45.15 But again, it's one out of 100 that we see.  
0:21:45.15 -> 0:21:48.181 So the majority of the patients that  
0:21:48.181 -> 0:21:51.729 we take care of are still treated  
0:21:51.729 -> 0:21:54.429 similarly with these more generic  
0:21:54.43 -> 0:21:57.01 chemotherapy programs with a strong  
0:21:57.01 -> 0:22:00.131 emphasis in trying to encourage patients  
0:22:00.131 -> 0:22:02.406 to participate in clinical trials  
0:22:02.406 -> 0:22:05.539 that can help us move the field.  
0:22:06.89 -> 0:22:10.234 And I want to get into  
0:22:10.234 -> 0:22:13.019 the clinical trials in a minute.  
0:22:13.02 -> 0:22:15.21 But before we get there,  
0:22:15.21 -> 0:22:17.475 if you're treated with standard  
0:22:17.475 -> 0:22:20.224 chemotherapy and all of the side  
0:22:20.224 -> 0:22:22.66 effects that go along with that,  
0:22:22.66 -> 0:22:24.85 knowing that you're  
0:22:24.85 -> 0:22:27.04 presented with a locally advanced,  
0:22:27.04 -> 0:22:28.608 unresectable or metastatic cancer,  
0:22:28.608 -> 0:22:30.568 what is really the efficacy



0:22:30.568 -> 0:22:32.289 of these chemotherapies?  
0:22:32.29 -> 0:22:35.562 I mean, how do patients balance the risk  
0:22:35.562 -> 0:22:39.416 and the benefit of the therapy?  
0:22:39.416 -> 0:22:41.881 Is this something that for  
0:22:41.881 -> 0:22:45.028 some patients the therapy is  
0:22:45.028 -> 0:22:47.638 worse than the disease itself?  
0:22:47.64 -> 0:22:50.76 Or are these actually things that  
0:22:50.76 -> 0:22:53.49 are tolerable with more modern  
0:22:53.49 -> 0:22:56.27 day treatments and additional  
0:22:56.27 -> 0:22:59.87 factors that you can give patients?  
0:22:59.87 -> 0:23:01.622 And that has really been shown  
0:23:01.622 -> 0:23:03.731 to make a difference in terms of  
0:23:03.731 -> 0:23:05.489 both survival and quality of life.  
0:23:07.23 -> 0:23:10.723 My job is to make  
0:23:10.723 -> 0:23:12.22 the treatments tolerable.  
0:23:12.22 -> 0:23:14.65 When we we pick a regimen,  
0:23:14.65 -> 0:23:17.08 there are two common  
0:23:17.08 -> 0:23:18.7 regimens that we use.  
0:23:18.7 -> 0:23:20.725 We are already thinking about  
0:23:20.725 -> 0:23:23.75 what are the side effects that are  
0:23:23.75 -> 0:23:26.065 associated with those regimens and  
0:23:26.065 -> 0:23:28.198 whether the patient who's about  
0:23:28.198 -> 0:23:30.846 to receive it is going to be able  
0:23:30.85 -> 0:23:33.685 to tolerate it based on their age and  
0:23:33.69 -> 0:23:35.934 other medical problems that they may  
0:23:35.934 -> 0:23:38.949 have and when we give the treatments,  
0:23:38.95 -> 0:23:42.278 we do so very carefully and we pay  
0:23:42.278 -> 0:23:45.487 attention to those side effects to make  
0:23:45.49 -> 0:23:49.081 adjustments in the dosing or give  
0:23:49.081 -> 0:23:51.103 supportive medications to really  
0:23:51.103 -> 0:23:53.896 make it as tolerable as we can.

0:23:53.9 -> 0:23:57.953 It's never a desired situation that the  
0:23:57.953 -> 0:24:01.49 treatment is worse than the disease.  
0:24:01.49 -> 0:24:02.862 And the reality is,  
0:24:02.862 -> 0:24:05.398 that for the vast majority of  
0:24:05.398 -> 0:24:08.219 patients when they do start feeling poorly,  
0:24:08.22 -> 0:24:10.09 it's more often the disease  
0:24:10.09 -> 0:24:11.96 than it is the treatments.  
0:24:11.96 -> 0:24:14.228 But we make sure we see patients  
0:24:14.228 -> 0:24:16.357 every time before they get their  
0:24:16.357 -> 0:24:18.535 treatments to review the side effects  
0:24:18.535 -> 0:24:21.069 and give the right medications and  
0:24:21.069 -> 0:24:23.174 give the supportive medications or  
0:24:23.18 -> 0:24:25.798 dose adjustments that we need to do.  
0:24:26.89 -> 0:24:29.398 And how do we know  
0:24:29.4 -> 0:24:31.268 that the chemotherapies are working?  
0:24:31.268 -> 0:24:34.07 Many patients ask about well are  
0:24:34.153 -> 0:24:36.526 you going to do more blood work?  
0:24:36.53 -> 0:24:39.038 Are there tumor markers?  
0:24:39.04 -> 0:24:40.524 How do you know?  
0:24:40.524 -> 0:24:42.75 Because you had mentioned that for  
0:24:42.829 -> 0:24:45.583 some patients who present  
0:24:45.583 -> 0:24:47.419 without metastatic disease,  
0:24:47.42 -> 0:24:49.385 that is unresectable that  
0:24:49.385 -> 0:24:52.03 potentially in some of those patients,  
0:24:52.03 -> 0:24:54.125 you can reassess whether they  
0:24:54.125 -> 0:24:56.22 may be candidates for resection.  
0:24:57.63 -> 0:25:01.697 The best way to follow the disease is  
0:25:01.697 -> 0:25:05.73 with imaging so usually a CAT scan.  
0:25:05.73 -> 0:25:08.369 Sometimes an MRI or a PET scan,  
0:25:08.37 -> 0:25:10.869 but usually a CAT scan gives us  
0:25:10.869 -> 0:25:13.649 the level of detail that we need,

0:25:13.65 -> 0:25:15.158 including the relationship of  
0:25:15.158 -> 0:25:17.42 the tumor to the vessels nearby.  
0:25:17.42 -> 0:25:19.922 For those who have locally advanced  
0:25:19.922 -> 0:25:22.317 disease and there is a tumor  
0:25:22.317 -> 0:25:24.578 marker that we can use as well,  
0:25:27.38 -> 0:25:29.2 that can be helpful,  
0:25:29.2 -> 0:25:31.475 although sometimes it is not as  
0:25:31.475 -> 0:25:34.362 reliable as the scans and then also  
0:25:34.362 -> 0:25:36.64 really listening to the patient.  
0:25:36.64 -> 0:25:39.808 Patients can have symptoms that can be a  
0:25:39.808 -> 0:25:42.82 tipoff that something is getting better  
0:25:42.82 -> 0:25:45.52 or getting worse even before CAT  
0:25:45.52 -> 0:25:48.109 Scan tell you what's going on.  
0:25:49.55 -> 0:25:52.292 And back to  
0:25:52.292 -> 0:25:55.09 the story of my friend.  
0:25:55.09 -> 0:25:58.12 She had chemotherapy as you suggested,  
0:25:58.12 -> 0:26:01.138 and her tumor markers went down,  
0:26:01.14 -> 0:26:02.472 which was great,  
0:26:02.472 -> 0:26:05.58 but the imaging still showed that  
0:26:05.672 -> 0:26:08.2 she had unresectable disease.  
0:26:09.754 -> 0:26:14.093 She was quite happy to be done with  
0:26:14.093 -> 0:26:18.223 chemo and really didn't want to  
0:26:18.23 -> 0:26:20.995 do much more, but was certainly  
0:26:20.995 -> 0:26:22.74 interested in clinical trials.  
0:26:22.74 -> 0:26:25.61 So let's talk about clinical trials,  
0:26:25.61 -> 0:26:27.086 both in that setting,  
0:26:27.086 -> 0:26:29.3 after you don't respond  
0:26:29.368 -> 0:26:31.483 to standard chemotherapy as well  
0:26:31.483 -> 0:26:33.598 as clinical trials that might  
0:26:33.673 -> 0:26:35.788 be offered to patients upfront  
0:26:35.788 -> 0:26:37.903 as new therapies are developed.

0:26:37.91 -> 0:26:40.78 So what are you most excited about?  
0:26:43.05 -> 0:26:45.288 I think it's interesting that you  
0:26:45.288 -> 0:26:48.159 say that, I find that when I talk  
0:26:48.16 -> 0:26:49.985 to a patient  
0:26:49.985 -> 0:26:51.445 about a clinical trial  
0:26:51.45 -> 0:26:54.365 sometimes they say to me, do you think  
0:26:54.365 -> 0:26:56.92 I'm ready for a clinical trial?  
0:26:56.92 -> 0:26:59.265 As if it's something that we wait  
0:26:59.265 -> 0:27:01.669 until we don't have other options,  
0:27:01.67 -> 0:27:03.764 and clinical trials are important at  
0:27:03.764 -> 0:27:05.68 every phase of someone's disease,  
0:27:05.68 -> 0:27:07.685 whether they are initially diagnosed  
0:27:07.685 -> 0:27:09.69 or whether they have progressed  
0:27:09.75 -> 0:27:11.52 on one or two prior therapies.  
0:27:11.52 -> 0:27:14.154 We are always trying to figure  
0:27:14.154 -> 0:27:17.058 out what's the best thing to do.  
0:27:17.06 -> 0:27:20.148 And so the clinical trials that we are  
0:27:20.148 -> 0:27:22.979 working on that we're excited about,  
0:27:22.98 -> 0:27:25.977 I think we are still trying to find a  
0:27:25.977 -> 0:27:29.328 role for immunotherapy in pancreas cancer,  
0:27:29.33 -> 0:27:31.646 the same as in other diseases  
0:27:31.646 -> 0:27:33.98 like lung cancer or Melanoma.  
0:27:33.98 -> 0:27:36.1 But it's been a challenge,  
0:27:36.1 -> 0:27:39.019 and so we are doing clinical trials  
0:27:39.019 -> 0:27:41.349 that are looking at immunotherapy  
0:27:41.349 -> 0:27:44.331 combinations as opposed to just a  
0:27:44.331 -> 0:27:47.178 single drug to see if it might be  
0:27:48.629 -> 0:27:52.01 better and we're looking at clinical trials that are  
0:27:52.097 -> 0:27:55.673 trying to attack not just the tumor itself,  
0:27:55.68 -> 0:27:58.278 but the scar tissue in the  
0:27:58.278 -> 0:28:00.56 environment around the cancer cells.

0:28:00.56 -> 0:28:03.146 One of the challenging things about  
0:28:03.146 -> 0:28:06.289 pancreas cancer is that it almost builds  
0:28:06.289 -> 0:28:08.519 this protective shell around itself  
0:28:08.519 -> 0:28:11.245 that can potentially make it more  
0:28:11.245 -> 0:28:14.34 difficult for our treatments to get in,  
0:28:14.34 -> 0:28:18.02 and so looking at drugs that can potentially  
0:28:18.02 -> 0:28:21.049 eat away at that might help our  
0:28:21.05 -> 0:28:23.42 more standard therapies be more  
0:28:23.42 -> 0:28:25.076 effective.  
0:28:25.076 -> 0:28:27.56 Doctor Jeremy Kortmansky is an associate professor  
of  
0:28:27.622 -> 0:28:29.472 clinical medicine in medical oncology  
0:28:29.472 -> 0:28:31.95 at the Yale School of Medicine.  
0:28:31.95 -> 0:28:33.438 If you have questions,  
0:28:33.438 -> 0:28:34.926 the address is canceranswers@yale.edu  
0:28:34.926 -> 0:28:36.981 and past editions of the program  
0:28:36.981 -> 0:28:38.859 are available in audio and written  
0:28:38.914 -> 0:28:40.48 form at yalecancercenter.org.  
0:28:40.48 -> 0:28:43.152 We hope you'll join us next week to  
0:28:43.152 -> 0:28:45.758 learn more about the fight against  
0:28:45.758 -> 0:28:48.548 cancer here on Connecticut Public Radio.