

WEBVTT

NOTE duration:"01:01:02"

NOTE recognizability:0.921

NOTE language:en-us

NOTE Confidence: 0.953192257142857

00:00:00.000 --> 00:00:03.038 Welcome to Yale Cancer Center Ground Rounds.

NOTE Confidence: 0.953192257142857

00:00:03.040 --> 00:00:04.394 I'm Doctor Miriam Lustberg

NOTE Confidence: 0.953192257142857

00:00:04.394 --> 00:00:07.136 and I have the privilege of

NOTE Confidence: 0.953192257142857

00:00:07.136 --> 00:00:09.598 introducing our two speakers today.

NOTE Confidence: 0.953192257142857

00:00:09.600 --> 00:00:12.834 Doctor Elena Ratner is a professor

NOTE Confidence: 0.953192257142857

00:00:12.834 --> 00:00:15.668 of obstetrics and gynecology and

NOTE Confidence: 0.953192257142857

00:00:15.668 --> 00:00:18.618 reproductive sciences and cochief of

NOTE Confidence: 0.953192257142857

00:00:18.618 --> 00:00:21.840 the section of Gynecological Oncology.

NOTE Confidence: 0.953192257142857

00:00:21.840 --> 00:00:24.510 She's a board certified gynecologist.

NOTE Confidence: 0.953192257142857

00:00:24.510 --> 00:00:26.640 Oncologist with special interest

NOTE Confidence: 0.953192257142857

00:00:26.640 --> 00:00:27.770 in chemotherapy,

NOTE Confidence: 0.953192257142857

00:00:27.770 --> 00:00:29.465 Targeted drug development,

NOTE Confidence: 0.953192257142857

00:00:29.470 --> 00:00:31.520 patient quality of life programs

NOTE Confidence: 0.953192257142857

00:00:31.520 --> 00:00:34.630 and early cancer detection.  
NOTE Confidence: 0.953192257142857

00:00:34.630 --> 00:00:36.256 She's the current codirector  
NOTE Confidence: 0.953192257142857

00:00:36.256 --> 00:00:38.868 of Discovery to Cure,  
NOTE Confidence: 0.953192257142857

00:00:38.870 --> 00:00:42.176 Director of discovery to Cure Early  
NOTE Confidence: 0.953192257142857

00:00:42.176 --> 00:00:45.132 ovarian cancer detection program and a  
NOTE Confidence: 0.953192257142857

00:00:45.132 --> 00:00:47.664 founder and director of the Sexuality,  
NOTE Confidence: 0.953192257142857

00:00:47.670 --> 00:00:50.734 intimacy and Menopause program.  
NOTE Confidence: 0.953192257142857

00:00:50.734 --> 00:00:52.266 Her expertise?  
NOTE Confidence: 0.953192257142857

00:00:52.270 --> 00:00:54.880 Is cytoreductive surgery for patients  
NOTE Confidence: 0.953192257142857

00:00:54.880 --> 00:00:57.490 with advanced ovarian cancer minimally  
NOTE Confidence: 0.953192257142857

00:00:57.566 --> 00:01:00.611 invasive procedures for patients with  
NOTE Confidence: 0.953192257142857

00:01:00.611 --> 00:01:03.128 gynecologic malignancies or complex  
NOTE Confidence: 0.953192257142857

00:01:03.128 --> 00:01:05.724 benign gynecologic conditions and  
NOTE Confidence: 0.953192257142857

00:01:05.724 --> 00:01:08.320 robotic fertility sparing surgery  
NOTE Confidence: 0.953192257142857

00:01:08.409 --> 00:01:10.989 for young patients with cancer?  
NOTE Confidence: 0.953192257142857

00:01:10.990 --> 00:01:13.365 Doctor Ratner's laboratory is working

NOTE Confidence: 0.953192257142857

00:01:13.365 --> 00:01:16.325 on new targeted drugs for ovarian

NOTE Confidence: 0.953192257142857

00:01:16.325 --> 00:01:19.355 cancer in order to provide patients

NOTE Confidence: 0.953192257142857

00:01:19.355 --> 00:01:21.330 with truly personalized care.

NOTE Confidence: 0.953192257142857

00:01:21.330 --> 00:01:23.490 Her work additionally focuses on

NOTE Confidence: 0.953192257142857

00:01:23.490 --> 00:01:25.350 reversing chemotherapy resistance

NOTE Confidence: 0.953192257142857

00:01:25.350 --> 00:01:28.414 in ovarian and uterine cancers.

NOTE Confidence: 0.953192257142857

00:01:28.414 --> 00:01:31.469 Our second speaker is Doctor

NOTE Confidence: 0.953192257142857

00:01:31.469 --> 00:01:32.890 Alessandro Santine.

NOTE Confidence: 0.953192257142857

00:01:32.890 --> 00:01:33.310 Dr.

NOTE Confidence: 0.953192257142857

00:01:33.310 --> 00:01:36.395 Santine is a professor of obstetrics

NOTE Confidence: 0.953192257142857

00:01:36.395 --> 00:01:38.527 and gynecology and reproductive

NOTE Confidence: 0.953192257142857

00:01:38.527 --> 00:01:41.075 sciences and cochief of the

NOTE Confidence: 0.953192257142857

00:01:41.075 --> 00:01:43.007 section of Gynecology oncology.

NOTE Confidence: 0.953192257142857

00:01:43.010 --> 00:01:44.630 His clinical interests include

NOTE Confidence: 0.953192257142857

00:01:44.630 --> 00:01:46.903 cancer of the ovary, uterus,

NOTE Confidence: 0.953192257142857

00:01:46.903 --> 00:01:50.168 vagina, cervix, and the vova.  
NOTE Confidence: 0.953192257142857

00:01:50.170 --> 00:01:51.850 Interperitoneal chemotherapy,  
NOTE Confidence: 0.953192257142857

00:01:51.850 --> 00:01:56.050 tumor genetics, immunology and immunotherapy,  
NOTE Confidence: 0.953192257142857

00:01:56.050 --> 00:01:57.294 tumor angiogenesis,  
NOTE Confidence: 0.953192257142857

00:01:57.294 --> 00:01:59.782 radiation biology and experimental  
NOTE Confidence: 0.953192257142857

00:01:59.782 --> 00:02:03.170 therapeutics, and gynecologic oncology.  
NOTE Confidence: 0.953192257142857

00:02:03.170 --> 00:02:03.634 Dr.  
NOTE Confidence: 0.953192257142857

00:02:03.634 --> 00:02:05.490 Santine's current research interests  
NOTE Confidence: 0.953192257142857

00:02:05.490 --> 00:02:08.570 include immunotherapy for ovarian,  
NOTE Confidence: 0.953192257142857

00:02:08.570 --> 00:02:10.970 cervical and endometrial carcinomas,  
NOTE Confidence: 0.953192257142857

00:02:10.970 --> 00:02:13.882 refractory to standard treatment modalities,  
NOTE Confidence: 0.953192257142857

00:02:13.882 --> 00:02:16.622 and development of therapeutic vaccines.  
NOTE Confidence: 0.953192257142857

00:02:16.630 --> 00:02:18.510 Against the human papilloma virus,  
NOTE Confidence: 0.953192257142857

00:02:18.510 --> 00:02:20.845 infected genital tumors and the  
NOTE Confidence: 0.953192257142857

00:02:20.845 --> 00:02:22.713 use of monoclonal antibodies  
NOTE Confidence: 0.953192257142857

00:02:22.713 --> 00:02:24.900 against chemotherapy resistant

NOTE Confidence: 0.953192257142857  
00:02:24.900 --> 00:02:26.548 gynecologic malignancies.  
NOTE Confidence: 0.953192257142857  
00:02:26.550 --> 00:02:26.906 Dr.  
NOTE Confidence: 0.953192257142857  
00:02:26.906 --> 00:02:29.042 Santine has more than 300 original  
NOTE Confidence: 0.953192257142857  
00:02:29.042 --> 00:02:31.509 research and peer reviewed publications  
NOTE Confidence: 0.953192257142857  
00:02:31.510 --> 00:02:33.502 and has written extensively on  
NOTE Confidence: 0.953192257142857  
00:02:33.502 --> 00:02:35.692 various topics including cancer of  
NOTE Confidence: 0.953192257142857  
00:02:35.692 --> 00:02:38.195 the ovary Endometrium cervix as well  
NOTE Confidence: 0.953192257142857  
00:02:38.195 --> 00:02:41.200 as on tumor immunology and immunotherapy.  
NOTE Confidence: 0.953192257142857  
00:02:41.200 --> 00:02:43.433 I thank both speakers for sharing their  
NOTE Confidence: 0.953192257142857  
00:02:43.433 --> 00:02:45.400 expertise with us and I welcome Dr.  
NOTE Confidence: 0.953192257142857  
00:02:45.400 --> 00:02:46.280 Ratner to the podium.  
NOTE Confidence: 0.953192257142857  
00:02:46.280 --> 00:02:46.720 Thank you.  
NOTE Confidence: 0.950317  
00:02:51.920 --> 00:02:54.240 Thank you so much that Collinsburg.  
NOTE Confidence: 0.936479825  
00:02:54.240 --> 00:02:56.120 Let me bring us to the beginning the  
NOTE Confidence: 0.86821436  
00:03:00.520 --> 00:03:02.080 oldfashioned way. I'm just going to bring it,  
NOTE Confidence: 0.8682695

00:03:04.240 --> 00:03:05.560 we're sure this more sophisticated way.

NOTE Confidence: 0.8682695

00:03:05.560 --> 00:03:08.976 Here we go. So we are so excited

NOTE Confidence: 0.8682695

00:03:08.976 --> 00:03:10.730 to speak with you today.

NOTE Confidence: 0.8682695

00:03:10.730 --> 00:03:12.710 Thank you for giving us opportunity

NOTE Confidence: 0.8682695

00:03:12.769 --> 00:03:14.897 to present to you the work of our

NOTE Confidence: 0.8682695

00:03:14.897 --> 00:03:17.166 division and to discuss the state of

NOTE Confidence: 0.8682695

00:03:17.166 --> 00:03:18.841 the union of gynecological cancers

NOTE Confidence: 0.8682695

00:03:18.850 --> 00:03:21.010 especially in the State of Connecticut.

NOTE Confidence: 0.8682695

00:03:21.010 --> 00:03:22.098 Just like everything else

NOTE Confidence: 0.8682695

00:03:22.098 --> 00:03:23.730 in the Centina and I do,

NOTE Confidence: 0.8682695

00:03:23.730 --> 00:03:25.004 we are going to double team this.

NOTE Confidence: 0.8682695

00:03:25.010 --> 00:03:27.584 I will start with clinical presentation

NOTE Confidence: 0.8682695

00:03:27.584 --> 00:03:29.874 and Doctor Centine will discuss

NOTE Confidence: 0.8682695

00:03:29.874 --> 00:03:31.890 his very impressive research,

NOTE Confidence: 0.8682695

00:03:31.890 --> 00:03:34.599 so ovarian cancer.

NOTE Confidence: 0.8682695

00:03:34.599 --> 00:03:39.114 Continues to be unacceptably deadly.

NOTE Confidence: 0.8682695

00:03:39.120 --> 00:03:42.678 It's the survival of ovarian cancer.

NOTE Confidence: 0.8682695

00:03:42.680 --> 00:03:43.250 Interestingly,

NOTE Confidence: 0.8682695

00:03:43.250 --> 00:03:44.960 shockingly and unacceptably

NOTE Confidence: 0.8682695

00:03:44.960 --> 00:03:47.810 has really changed very little

NOTE Confidence: 0.8682695

00:03:47.810 --> 00:03:50.056 over the past 20-30 years.

NOTE Confidence: 0.8682695

00:03:50.056 --> 00:03:53.612 The reason for this is multiple call

NOTE Confidence: 0.8682695

00:03:53.612 --> 00:03:57.375 there is there continues to be a

NOTE Confidence: 0.8682695

00:03:57.375 --> 00:04:00.350 profoundly late detection ovarian cancers.

NOTE Confidence: 0.8682695

00:04:00.350 --> 00:04:03.870 There is a lot of research that says

NOTE Confidence: 0.8682695

00:04:03.870 --> 00:04:06.621 that ovarian cancers by the time that

NOTE Confidence: 0.8682695

00:04:06.621 --> 00:04:08.689 diagnosed usually have been there for

NOTE Confidence: 0.8682695

00:04:08.689 --> 00:04:11.350 as long as 24 months and frequently

NOTE Confidence: 0.8682695

00:04:11.350 --> 00:04:14.110 women has seen six other physicians,

NOTE Confidence: 0.8682695

00:04:14.110 --> 00:04:17.220 six other providers prior to

NOTE Confidence: 0.8682695

00:04:17.220 --> 00:04:19.708 actually finally being diagnosed.

NOTE Confidence: 0.8682695

00:04:19.710 --> 00:04:21.990 And that is why advocacy is so important,  
NOTE Confidence: 0.8682695

00:04:21.990 --> 00:04:25.204 that's why education is so important and  
NOTE Confidence: 0.8682695

00:04:25.204 --> 00:04:29.476 that is why we so profoundly and strongly.  
NOTE Confidence: 0.8682695

00:04:29.480 --> 00:04:33.340 Support encourage personalized care,  
NOTE Confidence: 0.8682695

00:04:33.340 --> 00:04:35.690 personalized care to patients in  
NOTE Confidence: 0.8682695

00:04:35.690 --> 00:04:38.319 the setting of early detection,  
NOTE Confidence: 0.8682695

00:04:38.320 --> 00:04:40.320 in the setting of prevention,  
NOTE Confidence: 0.8682695

00:04:40.320 --> 00:04:42.608 which as I mentioned to you is so  
NOTE Confidence: 0.8682695

00:04:42.608 --> 00:04:44.422 important in the disease because  
NOTE Confidence: 0.8682695

00:04:44.422 --> 00:04:46.382 early detection is so difficult  
NOTE Confidence: 0.8682695

00:04:46.382 --> 00:04:48.598 because the symptoms are so vague.  
NOTE Confidence: 0.8682695

00:04:48.600 --> 00:04:51.276 Personalized care in terms of surgery,  
NOTE Confidence: 0.8682695

00:04:51.280 --> 00:04:53.506 surgery in this disease and it's  
NOTE Confidence: 0.8682695

00:04:53.506 --> 00:04:55.937 incredibly important and we will talk  
NOTE Confidence: 0.8682695

00:04:55.937 --> 00:04:57.709 today about stratifying patients.  
NOTE Confidence: 0.8682695

00:04:57.710 --> 00:04:59.943 To who is able to have this

NOTE Confidence: 0.8682695

00:04:59.943 --> 00:05:01.305 surgery minimally invasive and

NOTE Confidence: 0.8682695

00:05:01.305 --> 00:05:03.025 we'll talk briefly about hypec,

NOTE Confidence: 0.8682695

00:05:03.030 --> 00:05:05.914 something that one of our colleagues Bargain

NOTE Confidence: 0.8682695

00:05:05.914 --> 00:05:08.789 and Dekean is very passionate about.

NOTE Confidence: 0.8682695

00:05:08.790 --> 00:05:10.475 And then the Constantine will

NOTE Confidence: 0.8682695

00:05:10.475 --> 00:05:12.160 talk about the importance of

NOTE Confidence: 0.8682695

00:05:12.218 --> 00:05:14.308 personalized care and the treatment,

NOTE Confidence: 0.8682695

00:05:14.310 --> 00:05:15.334 the management,

NOTE Confidence: 0.8682695

00:05:15.334 --> 00:05:17.894 the maintenance of these women.

NOTE Confidence: 0.8682695

00:05:17.900 --> 00:05:21.100 We are incredibly blessed to be in

NOTE Confidence: 0.8682695

00:05:21.100 --> 00:05:23.100 a wonderful supportive environment.

NOTE Confidence: 0.8682695

00:05:23.100 --> 00:05:25.164 We are so happy that some of our

NOTE Confidence: 0.8682695

00:05:25.164 --> 00:05:26.459 team is here today.

NOTE Confidence: 0.8682695

00:05:26.460 --> 00:05:28.530 We have the most incredible research

NOTE Confidence: 0.8682695

00:05:28.530 --> 00:05:30.731 team and the most incredible clinical

NOTE Confidence: 0.8682695

00:05:30.731 --> 00:05:33.370 team and none of this would be  
NOTE Confidence: 0.8682695

00:05:33.370 --> 00:05:35.217 possible for sure without them.  
NOTE Confidence: 0.8682695

00:05:35.220 --> 00:05:37.380 So very briefly, we don't have much time.  
NOTE Confidence: 0.8682695

00:05:37.380 --> 00:05:38.394 So I'm going to be skipping  
NOTE Confidence: 0.8682695

00:05:38.394 --> 00:05:39.380 through a lot of things,  
NOTE Confidence: 0.8682695

00:05:39.380 --> 00:05:41.414 but just kind of to set the stage today,  
NOTE Confidence: 0.8682695

00:05:41.420 --> 00:05:42.645 we're going to be talking  
NOTE Confidence: 0.8682695

00:05:42.645 --> 00:05:43.380 about epithelial cancers,  
NOTE Confidence: 0.8682695

00:05:43.380 --> 00:05:44.094 you know,  
NOTE Confidence: 0.8682695

00:05:44.094 --> 00:05:44.808 ovarian cancers.  
NOTE Confidence: 0.8682695

00:05:44.808 --> 00:05:46.593 Ovarian cells in general have  
NOTE Confidence: 0.8682695

00:05:46.593 --> 00:05:47.818 different kinds of cells,  
NOTE Confidence: 0.8682695

00:05:47.820 --> 00:05:49.098 and epithelial cancers are the ones  
NOTE Confidence: 0.8682695

00:05:49.098 --> 00:05:50.460 we're going to talk about today.  
NOTE Confidence: 0.8682695

00:05:50.460 --> 00:05:51.576 Those are the most common ones.  
NOTE Confidence: 0.8682695

00:05:51.580 --> 00:05:53.140 And when you hear about people

NOTE Confidence: 0.8682695

00:05:53.140 --> 00:05:54.180 talking about ovarian cancer,

NOTE Confidence: 0.8682695

00:05:54.180 --> 00:05:56.260 usually it's about epithelial,

NOTE Confidence: 0.8682695

00:05:56.260 --> 00:05:59.380 which is serious serous endometrioid clear

NOTE Confidence: 0.8682695

00:05:59.453 --> 00:06:02.155 cell we use in this or carcinosarcoma.

NOTE Confidence: 0.8682695

00:06:02.160 --> 00:06:02.624 Nowadays,

NOTE Confidence: 0.8682695

00:06:02.624 --> 00:06:05.408 things like genomics and things like

NOTE Confidence: 0.8682695

00:06:05.408 --> 00:06:07.631 mutations that drive the cancers

NOTE Confidence: 0.8682695

00:06:07.631 --> 00:06:09.917 is so much more important actually

NOTE Confidence: 0.8682695

00:06:09.917 --> 00:06:12.513 that the kind of Histology that the

NOTE Confidence: 0.8682695

00:06:12.513 --> 00:06:14.685 cancer has and again the Constantine

NOTE Confidence: 0.8682695

00:06:14.685 --> 00:06:17.115 will share all that with us.

NOTE Confidence: 0.8682695

00:06:17.120 --> 00:06:18.920 But in terms of prevention,

NOTE Confidence: 0.8682695

00:06:18.920 --> 00:06:20.320 in terms of early detection,

NOTE Confidence: 0.949198844444445

00:06:20.320 --> 00:06:21.848 in terms of treatment,

NOTE Confidence: 0.949198844444445

00:06:21.848 --> 00:06:23.758 in terms of clinical presentation,

NOTE Confidence: 0.949198844444445

00:06:23.760 --> 00:06:26.096 so much time and effort now is being  
NOTE Confidence: 0.949198844444445

00:06:26.096 --> 00:06:28.639 spent on understanding predisposition.  
NOTE Confidence: 0.949198844444445

00:06:28.640 --> 00:06:30.344 You know, we have not succeeded  
NOTE Confidence: 0.949198844444445

00:06:30.344 --> 00:06:31.480 in curing these cancers.  
NOTE Confidence: 0.949198844444445

00:06:31.480 --> 00:06:33.692 We have not succeeded not because of  
NOTE Confidence: 0.949198844444445

00:06:33.692 --> 00:06:35.879 lack of trying in early detection.  
NOTE Confidence: 0.949198844444445

00:06:35.880 --> 00:06:38.120 So the next best thing,  
NOTE Confidence: 0.949198844444445

00:06:38.120 --> 00:06:41.040 and really just the best thing is prevention.  
NOTE Confidence: 0.949198844444445

00:06:41.040 --> 00:06:42.605 We know that there's certain  
NOTE Confidence: 0.949198844444445

00:06:42.605 --> 00:06:43.857 genetic mutations that increase  
NOTE Confidence: 0.949198844444445

00:06:43.857 --> 00:06:45.400 the risk of bearing cancers.  
NOTE Confidence: 0.949198844444445

00:06:45.400 --> 00:06:48.585 BEAR, C1, BEAR, C2 and Lynch all  
NOTE Confidence: 0.949198844444445

00:06:48.585 --> 00:06:50.440 profoundly increase the risk.  
NOTE Confidence: 0.949198844444445

00:06:50.440 --> 00:06:52.960 And that is why it is so important  
NOTE Confidence: 0.949198844444445

00:06:52.960 --> 00:06:55.478 that women know their predisposition.  
NOTE Confidence: 0.949198844444445

00:06:55.480 --> 00:06:57.877 We do a lot of advocacy and a lot of talks

NOTE Confidence: 0.949198844444445  
00:06:57.877 --> 00:07:00.157 to talk to women about know your genes,  
NOTE Confidence: 0.949198844444445  
00:07:00.160 --> 00:07:01.180 know your predisposition,  
NOTE Confidence: 0.949198844444445  
00:07:01.180 --> 00:07:02.880 know what kind of genetic  
NOTE Confidence: 0.949198844444445  
00:07:02.880 --> 00:07:04.240 mutations you might carry,  
NOTE Confidence: 0.949198844444445  
00:07:04.240 --> 00:07:06.088 because a lot of these women  
NOTE Confidence: 0.949198844444445  
00:07:06.088 --> 00:07:07.920 could be saved not by cure,  
NOTE Confidence: 0.949198844444445  
00:07:07.920 --> 00:07:10.128 not by early detection,  
NOTE Confidence: 0.949198844444445  
00:07:10.128 --> 00:07:12.336 but actually by prevention.  
NOTE Confidence: 0.949198844444445  
00:07:12.340 --> 00:07:14.578 And so much now in treatment  
NOTE Confidence: 0.949198844444445  
00:07:14.578 --> 00:07:16.520 depends on the pathophysiology of  
NOTE Confidence: 0.949198844444445  
00:07:16.520 --> 00:07:18.420 these high grade serious cancers.  
NOTE Confidence: 0.949198844444445  
00:07:18.420 --> 00:07:21.500 And we know so much now about different  
NOTE Confidence: 0.949198844444445  
00:07:21.500 --> 00:07:23.660 DNA mechanisms that drive these cancers.  
NOTE Confidence: 0.949198844444445  
00:07:23.660 --> 00:07:26.060 One of the biggest one is  
NOTE Confidence: 0.949198844444445  
00:07:26.060 --> 00:07:26.860 homogeneous recombination.  
NOTE Confidence: 0.949198844444445

00:07:26.860 --> 00:07:29.037 That is something that we have really  
NOTE Confidence: 0.949198844444445

00:07:29.037 --> 00:07:30.778 explored widely over the past five,  
NOTE Confidence: 0.949198844444445

00:07:30.780 --> 00:07:32.859 seven years and where a lot of  
NOTE Confidence: 0.949198844444445

00:07:32.859 --> 00:07:34.538 the targeted drugs play a role.  
NOTE Confidence: 0.949598185714286

00:07:36.600 --> 00:07:38.348 So briefly, ovarian cancer,  
NOTE Confidence: 0.949598185714286

00:07:38.348 --> 00:07:40.096 second most common malignancy  
NOTE Confidence: 0.949598185714286

00:07:40.096 --> 00:07:42.480 of the of the general tract,  
NOTE Confidence: 0.949598185714286

00:07:42.480 --> 00:07:44.228 by far the deadliest.  
NOTE Confidence: 0.949598185714286

00:07:44.228 --> 00:07:47.960 The incidence is actually not that high 1.3%,  
NOTE Confidence: 0.949598185714286

00:07:47.960 --> 00:07:52.232 but as you see 21,000 women get  
NOTE Confidence: 0.949598185714286

00:07:52.232 --> 00:07:55.611 diagnosed and 13,000 women die.  
NOTE Confidence: 0.949598185714286

00:07:55.611 --> 00:07:58.879 So incredibly deadly cancer.  
NOTE Confidence: 0.949598185714286

00:07:58.880 --> 00:08:00.800 It is very interesting,  
NOTE Confidence: 0.949598185714286

00:08:00.800 --> 00:08:03.200 there's for sure geographic distribution,  
NOTE Confidence: 0.949598185714286

00:08:03.200 --> 00:08:06.470 there's for sure high risk populations.  
NOTE Confidence: 0.949598185714286

00:08:06.470 --> 00:08:08.322 Women with Caucasian populations,

NOTE Confidence: 0.949598185714286  
00:08:08.322 --> 00:08:11.510 women that come from smaller family size,  
NOTE Confidence: 0.949598185714286  
00:08:11.510 --> 00:08:12.938 higher socioeconomic status and  
NOTE Confidence: 0.949598185714286  
00:08:12.938 --> 00:08:15.470 high fat diet all play a role.  
NOTE Confidence: 0.949598185714286  
00:08:15.470 --> 00:08:18.137 And what's interesting is that when women  
NOTE Confidence: 0.949598185714286  
00:08:18.137 --> 00:08:20.854 move from the region that's of lower  
NOTE Confidence: 0.949598185714286  
00:08:20.854 --> 00:08:23.870 incidence to a region of higher incidence,  
NOTE Confidence: 0.949598185714286  
00:08:23.870 --> 00:08:28.070 most sadly they acquire the higher risk of.  
NOTE Confidence: 0.949598185714286  
00:08:28.070 --> 00:08:29.546 So it's now where you're born,  
NOTE Confidence: 0.949598185714286  
00:08:29.550 --> 00:08:30.710 it's where you grow up,  
NOTE Confidence: 0.949598185714286  
00:08:30.710 --> 00:08:32.070 where you where you live,  
NOTE Confidence: 0.949598185714286  
00:08:32.070 --> 00:08:35.338 which is very interesting.  
NOTE Confidence: 0.949598185714286  
00:08:35.340 --> 00:08:37.140 So there's many different studies,  
NOTE Confidence: 0.949598185714286  
00:08:37.140 --> 00:08:39.576 of course, that talk about predisposition.  
NOTE Confidence: 0.949598185714286  
00:08:39.580 --> 00:08:40.396 And you know,  
NOTE Confidence: 0.949598185714286  
00:08:40.396 --> 00:08:42.300 we know that obesity plays a role.  
NOTE Confidence: 0.949598185714286

00:08:42.300 --> 00:08:45.660 We know that women who have  
NOTE Confidence: 0.949598185714286

00:08:45.660 --> 00:08:47.440 their periods start early,  
NOTE Confidence: 0.949598185714286

00:08:47.440 --> 00:08:49.220 their menopause come late,  
NOTE Confidence: 0.949598185714286

00:08:49.220 --> 00:08:50.816 women who do not have kids,  
NOTE Confidence: 0.949598185714286

00:08:50.820 --> 00:08:52.220 women who have endometriosis.  
NOTE Confidence: 0.949598185714286

00:08:52.220 --> 00:08:55.330 We know these women have a predisposition,  
NOTE Confidence: 0.949598185714286

00:08:55.330 --> 00:08:57.339 and the reason for that is because  
NOTE Confidence: 0.949598185714286

00:08:57.339 --> 00:08:58.584 there's two different theories  
NOTE Confidence: 0.949598185714286

00:08:58.584 --> 00:09:00.249 of how ovarian cancers happen.  
NOTE Confidence: 0.949598185714286

00:09:00.250 --> 00:09:03.210 One is that every time a woman ovulates,  
NOTE Confidence: 0.949598185714286

00:09:03.210 --> 00:09:05.250 some sort of a process happens.  
NOTE Confidence: 0.949598185714286

00:09:05.250 --> 00:09:06.606 And the more time she ovulates,  
NOTE Confidence: 0.949598185714286

00:09:06.610 --> 00:09:08.662 the higher is her risk of  
NOTE Confidence: 0.949598185714286

00:09:08.662 --> 00:09:09.688 developing ovarian cancer.  
NOTE Confidence: 0.949598185714286

00:09:09.690 --> 00:09:12.406 That's why certain things are so protective.  
NOTE Confidence: 0.949598185714286

00:09:12.410 --> 00:09:13.718 So, for example,

NOTE Confidence: 0.949598185714286

00:09:13.718 --> 00:09:16.334 women who have had five pregnancies

NOTE Confidence: 0.949598185714286

00:09:16.334 --> 00:09:19.080 and breastfeed each every child for

NOTE Confidence: 0.949598185714286

00:09:19.080 --> 00:09:21.986 one year have a 50% reduction rate.

NOTE Confidence: 0.949598185714286

00:09:21.986 --> 00:09:25.820 I've worked on the plan very, very different.

NOTE Confidence: 0.949598185714286

00:09:25.820 --> 00:09:27.788 The most same option is the

NOTE Confidence: 0.949598185714286

00:09:27.788 --> 00:09:28.772 birth control pills.

NOTE Confidence: 0.949598185714286

00:09:28.780 --> 00:09:29.628 So similar,

NOTE Confidence: 0.949598185714286

00:09:29.628 --> 00:09:32.596 any woman who uses birth control pills

NOTE Confidence: 0.949598185714286

00:09:32.596 --> 00:09:35.908 for five years has a reduction of 50%.

NOTE Confidence: 0.949598185714286

00:09:35.908 --> 00:09:38.020 So very, very impressive.

NOTE Confidence: 0.949598185714286

00:09:38.020 --> 00:09:41.028 Women who have used OCP's birth control pills

NOTE Confidence: 0.949598185714286

00:09:41.028 --> 00:09:45.530 for 10 years have reduction as high as 80%.

NOTE Confidence: 0.949598185714286

00:09:45.530 --> 00:09:48.498 And that is all cumulative and that's all

NOTE Confidence: 0.949598185714286

00:09:48.498 --> 00:09:51.209 respective to the woman personalized risk.

NOTE Confidence: 0.949598185714286

00:09:51.210 --> 00:09:53.240 So even somebody who has a BRC

NOTE Confidence: 0.949598185714286

00:09:53.240 --> 00:09:54.798 mutation and has a 40% risk,  
NOTE Confidence: 0.949598185714286

00:09:54.798 --> 00:09:56.646 if they have used OC PS:,  
NOTE Confidence: 0.949598185714286

00:09:56.650 --> 00:09:57.343 for five years,  
NOTE Confidence: 0.949598185714286

00:09:57.343 --> 00:09:58.729 the risk goes down to 20%.  
NOTE Confidence: 0.949598185714286

00:09:58.730 --> 00:10:00.250 They've used it for 10:15,  
NOTE Confidence: 0.949598185714286

00:10:00.250 --> 00:10:01.528 it goes to 10:00 and 8:00.  
NOTE Confidence: 0.949598185714286

00:10:01.530 --> 00:10:03.398 So with different modifications,  
NOTE Confidence: 0.949598185714286

00:10:03.398 --> 00:10:05.733 we actually can do risk  
NOTE Confidence: 0.949598185714286

00:10:05.733 --> 00:10:07.807 adjustment and decrease the risk.  
NOTE Confidence: 0.949598185714286

00:10:07.810 --> 00:10:10.048 And then we know there's also  
NOTE Confidence: 0.949598185714286

00:10:10.048 --> 00:10:11.540 inflammatory factors such as  
NOTE Confidence: 0.949598185714286

00:10:11.609 --> 00:10:13.281 pelvic inflammatory disease and  
NOTE Confidence: 0.949598185714286

00:10:13.281 --> 00:10:16.180 endometriosis that play a role as well.  
NOTE Confidence: 0.949598185714286

00:10:16.180 --> 00:10:18.178 The second theory of ovarian cancer  
NOTE Confidence: 0.949598185714286

00:10:18.178 --> 00:10:19.920 is actually that these cancers  
NOTE Confidence: 0.949598185714286

00:10:19.920 --> 00:10:21.670 are not potentially not even

NOTE Confidence: 0.949598185714286  
00:10:21.670 --> 00:10:23.420 ovarian cancers to begin with.  
NOTE Confidence: 0.949598185714286  
00:10:23.420 --> 00:10:25.980 They're actually fallopian tube cancers,  
NOTE Confidence: 0.949598185714286  
00:10:25.980 --> 00:10:28.218 especially in women with genetic mutations.  
NOTE Confidence: 0.949598185714286  
00:10:28.220 --> 00:10:29.914 And these cancers start in the Philippine  
NOTE Confidence: 0.949598185714286  
00:10:29.914 --> 00:10:31.860 tubes and only then spread to the ovaries.  
NOTE Confidence: 0.949598185714286  
00:10:31.860 --> 00:10:34.068 And that is why nowadays there's such a  
NOTE Confidence: 0.949598185714286  
00:10:34.068 --> 00:10:36.129 culture of actually removing fallopian  
NOTE Confidence: 0.949598185714286  
00:10:36.129 --> 00:10:38.057 tubes at different opportunities,  
NOTE Confidence: 0.949598185714286  
00:10:38.060 --> 00:10:40.215 because that creates a risk  
NOTE Confidence: 0.949598185714286  
00:10:40.215 --> 00:10:43.050 reduction as high as 50 to 70%.  
NOTE Confidence: 0.949598185714286  
00:10:43.050 --> 00:10:45.048 So here within our our institution,  
NOTE Confidence: 0.949598185714286  
00:10:45.050 --> 00:10:46.625 we actually have been able  
NOTE Confidence: 0.949598185714286  
00:10:46.625 --> 00:10:47.885 to influence the culture.  
NOTE Confidence: 0.949598185714286  
00:10:47.890 --> 00:10:49.890 And in the older days,  
NOTE Confidence: 0.949598185714286  
00:10:49.890 --> 00:10:50.679 10 years ago,  
NOTE Confidence: 0.949598185714286

00:10:50.679 --> 00:10:52.520 when people when women used to have  
NOTE Confidence: 0.941801712307693

00:10:52.577 --> 00:10:53.489 their tubes tied,  
NOTE Confidence: 0.941801712307693

00:10:53.490 --> 00:10:55.128 they literally have their tubes tied.  
NOTE Confidence: 0.941801712307693

00:10:55.130 --> 00:10:57.125 Now we actually remove the fallopian tubes,  
NOTE Confidence: 0.941801712307693

00:10:57.130 --> 00:10:59.380 especially in women with higher  
NOTE Confidence: 0.941801712307693

00:10:59.380 --> 00:11:00.730 predisposition to cancers.  
NOTE Confidence: 0.941801712307693

00:11:00.730 --> 00:11:03.075 We are able to to provide a  
NOTE Confidence: 0.941801712307693

00:11:03.075 --> 00:11:04.608 very substantial risk reduction  
NOTE Confidence: 0.941801712307693

00:11:04.608 --> 00:11:06.888 just by that simple technique.  
NOTE Confidence: 0.941801712307693

00:11:06.890 --> 00:11:07.794 In the older days,  
NOTE Confidence: 0.941801712307693

00:11:07.794 --> 00:11:09.150 we used to leave fallopian tubes  
NOTE Confidence: 0.941801712307693

00:11:09.203 --> 00:11:10.623 anytime we left ovaries when  
NOTE Confidence: 0.941801712307693

00:11:10.623 --> 00:11:12.043 somebody would have a hysterectomy.  
NOTE Confidence: 0.941801712307693

00:11:12.050 --> 00:11:13.885 Nowadays, for sure fallopian tubes  
NOTE Confidence: 0.941801712307693

00:11:13.885 --> 00:11:16.114 would be removed because we know  
NOTE Confidence: 0.941801712307693

00:11:16.114 --> 00:11:18.396 that there's a huge component of risk

NOTE Confidence: 0.941801712307693

00:11:18.396 --> 00:11:20.178 reduction by removing the fallopian

NOTE Confidence: 0.941801712307693

00:11:20.178 --> 00:11:22.670 tube and it's a very easy adjustment.

NOTE Confidence: 0.941801712307693

00:11:22.670 --> 00:11:24.190 But of course, out of all those things,

NOTE Confidence: 0.941801712307693

00:11:24.190 --> 00:11:28.310 the most highest risk is the family history.

NOTE Confidence: 0.941801712307693

00:11:28.310 --> 00:11:31.572 Anybody who has a family first degree

NOTE Confidence: 0.941801712307693

00:11:31.572 --> 00:11:34.374 family member who has ovarian cancer,

NOTE Confidence: 0.941801712307693

00:11:34.374 --> 00:11:36.238 that increases that woman's

NOTE Confidence: 0.941801712307693

00:11:36.238 --> 00:11:38.029 lifetime risk to 4 to 5%.

NOTE Confidence: 0.941801712307693

00:11:38.030 --> 00:11:39.548 And as I showed you before,

NOTE Confidence: 0.941801712307693

00:11:39.550 --> 00:11:42.310 this hereditary breast and ovarian syndromes,

NOTE Confidence: 0.941801712307693

00:11:42.310 --> 00:11:44.907 which account for 20% of ovarian cancers,

NOTE Confidence: 0.941801712307693

00:11:44.910 --> 00:11:45.970 but we really think,

NOTE Confidence: 0.941801712307693

00:11:45.970 --> 00:11:47.030 account for much more.

NOTE Confidence: 0.941801712307693

00:11:47.030 --> 00:11:49.990 We just don't yet know exactly which ones.

NOTE Confidence: 0.941801712307693

00:11:49.990 --> 00:11:51.748 They of course carry the the

NOTE Confidence: 0.941801712307693

00:11:51.748 --> 00:11:52.627 most highest risk.  
NOTE Confidence: 0.9553487

00:11:54.710 --> 00:11:55.624 Very briefly.  
NOTE Confidence: 0.9553487

00:11:55.624 --> 00:11:58.366 There's a very profound and very  
NOTE Confidence: 0.9553487

00:11:58.366 --> 00:12:01.022 meaningful and very important racial  
NOTE Confidence: 0.9553487

00:12:01.022 --> 00:12:03.787 health disparities in ovarian cancer.  
NOTE Confidence: 0.9553487

00:12:03.790 --> 00:12:04.830 We have known this forever.  
NOTE Confidence: 0.9553487

00:12:04.830 --> 00:12:07.310 We have known forever that  
NOTE Confidence: 0.9553487

00:12:07.310 --> 00:12:09.550 women of color do worse.  
NOTE Confidence: 0.9553487

00:12:09.550 --> 00:12:11.854 And we used to think that it's just  
NOTE Confidence: 0.9553487

00:12:11.854 --> 00:12:13.748 because of the Histology of the  
NOTE Confidence: 0.9553487

00:12:13.748 --> 00:12:15.985 cancer that the women who are non  
NOTE Confidence: 0.9553487

00:12:15.985 --> 00:12:17.760 Caucasian get Histology that are  
NOTE Confidence: 0.9553487

00:12:17.760 --> 00:12:19.829 more aggressive and that is indeed.  
NOTE Confidence: 0.9553487

00:12:19.830 --> 00:12:22.370 Case, but unquestionably and deniably  
NOTE Confidence: 0.9553487

00:12:22.370 --> 00:12:24.910 confirmed by many different studies,  
NOTE Confidence: 0.9553487

00:12:24.910 --> 00:12:25.732 especially recently.

NOTE Confidence: 0.9553487

00:12:25.732 --> 00:12:28.198 We also know the women of

NOTE Confidence: 0.9553487

00:12:28.198 --> 00:12:29.909 color get worse care.

NOTE Confidence: 0.9553487

00:12:29.910 --> 00:12:33.210 They have more profound delays

NOTE Confidence: 0.9553487

00:12:33.210 --> 00:12:35.256 in diagnosis and chemotherapy.

NOTE Confidence: 0.9553487

00:12:35.256 --> 00:12:38.028 They don't get necessarily this term

NOTE Confidence: 0.9553487

00:12:38.028 --> 00:12:41.052 of care surgery now with the joint

NOTE Confidence: 0.9553487

00:12:41.052 --> 00:12:43.298 oncologist and another very important

NOTE Confidence: 0.9553487

00:12:43.298 --> 00:12:46.614 component is that women of color are

NOTE Confidence: 0.9553487

00:12:46.614 --> 00:12:49.069 under enrolled in clinical trials.

NOTE Confidence: 0.9553487

00:12:49.070 --> 00:12:52.670 Only 17% of clinical trial participants

NOTE Confidence: 0.9553487

00:12:52.670 --> 00:12:56.070 represent racial or ethnic minorities

NOTE Confidence: 0.9553487

00:12:56.070 --> 00:12:58.230 and African American women's

NOTE Confidence: 0.9553487

00:12:58.230 --> 00:13:00.390 participation only reached 9/11,

NOTE Confidence: 0.9553487

00:13:00.390 --> 00:13:01.350 10%, nine percent.

NOTE Confidence: 0.9553487

00:13:01.350 --> 00:13:03.955 So we believe that all of that plays

NOTE Confidence: 0.9553487

00:13:03.955 --> 00:13:06.055 a very important role and that is  
NOTE Confidence: 0.9553487

00:13:06.055 --> 00:13:08.681 why so much effort is being is being  
NOTE Confidence: 0.9553487

00:13:08.681 --> 00:13:10.790 made to improve this cruel into  
NOTE Confidence: 0.9553487

00:13:10.790 --> 00:13:13.990 trials and open it to women of color.  
NOTE Confidence: 0.9553487

00:13:13.990 --> 00:13:16.924 So very briefly just the state of our union.  
NOTE Confidence: 0.9553487

00:13:16.930 --> 00:13:18.970 You an ecology here at Yale is very,  
NOTE Confidence: 0.9553487

00:13:18.970 --> 00:13:19.674 very busy.  
NOTE Confidence: 0.9553487

00:13:19.674 --> 00:13:22.490 We have a great number of surgical cases,  
NOTE Confidence: 0.9553487

00:13:22.490 --> 00:13:25.575 new patients and it continues  
NOTE Confidence: 0.9553487

00:13:25.575 --> 00:13:28.450 to increase every year.  
NOTE Confidence: 0.9553487

00:13:28.450 --> 00:13:30.106 Our biggest we cover the entire  
NOTE Confidence: 0.9553487

00:13:30.106 --> 00:13:31.733 state of Connecticut all the way  
NOTE Confidence: 0.9553487

00:13:31.733 --> 00:13:33.385 from Greenwich all the way to New  
NOTE Confidence: 0.9553487

00:13:33.385 --> 00:13:34.982 London with the great majority of  
NOTE Confidence: 0.9553487

00:13:34.982 --> 00:13:37.226 our care that happens here in New  
NOTE Confidence: 0.9553487

00:13:37.226 --> 00:13:39.566 Haven and then Bridgeport Hospital.

NOTE Confidence: 0.9553487

00:13:39.570 --> 00:13:42.846 And as you see the number of our new

NOTE Confidence: 0.9553487

00:13:42.846 --> 00:13:45.537 patient visits and surgeries grows.

NOTE Confidence: 0.9553487

00:13:45.540 --> 00:13:46.968 Each and every year,

NOTE Confidence: 0.9553487

00:13:46.968 --> 00:13:49.110 and this is the territory that

NOTE Confidence: 0.9553487

00:13:49.180 --> 00:13:49.966 we cover again,

NOTE Confidence: 0.9553487

00:13:49.966 --> 00:13:51.548 all the way from New York all

NOTE Confidence: 0.9553487

00:13:51.548 --> 00:13:52.779 the way to New London,

NOTE Confidence: 0.9553487

00:13:52.780 --> 00:13:56.612 so very profoundly so there.

NOTE Confidence: 0.9553487

00:13:56.612 --> 00:13:58.004 One of the things that have

NOTE Confidence: 0.9553487

00:13:58.004 --> 00:13:59.213 changed drastically in the care

NOTE Confidence: 0.9553487

00:13:59.213 --> 00:14:00.378 of joining College of Patients,

NOTE Confidence: 0.9553487

00:14:00.380 --> 00:14:01.430 something that I'm going to

NOTE Confidence: 0.9553487

00:14:01.430 --> 00:14:02.060 talk about briefly,

NOTE Confidence: 0.9553487

00:14:02.060 --> 00:14:04.916 is how much we are able to do

NOTE Confidence: 0.9553487

00:14:04.916 --> 00:14:07.790 surgically in a minimally invasive way.

NOTE Confidence: 0.9553487

00:14:07.790 --> 00:14:09.490 So when you look at that data that I just

NOTE Confidence: 0.9553487

00:14:09.534 --> 00:14:11.070 pulled up and the data that you know,

NOTE Confidence: 0.9553487

00:14:11.070 --> 00:14:13.428 I study very closely and extensively,

NOTE Confidence: 0.9553487

00:14:13.430 --> 00:14:16.070 the culture of this field is

NOTE Confidence: 0.9553487

00:14:16.070 --> 00:14:17.830 changing to become almost

NOTE Confidence: 0.9553487

00:14:17.913 --> 00:14:20.439 predominantly outpatient field.

NOTE Confidence: 0.9553487

00:14:20.440 --> 00:14:22.462 Great majority of our women used

NOTE Confidence: 0.9553487

00:14:22.462 --> 00:14:24.621 to have the surgeries and have

NOTE Confidence: 0.9553487

00:14:24.621 --> 00:14:26.117 a prolonged inpatient stay.

NOTE Confidence: 0.9553487

00:14:26.120 --> 00:14:27.779 And now great majority of women are

NOTE Confidence: 0.9553487

00:14:27.779 --> 00:14:30.005 able to have the same kind of radical

NOTE Confidence: 0.9553487

00:14:30.005 --> 00:14:31.465 debarking surgeries in a minimally

NOTE Confidence: 0.9553487

00:14:31.514 --> 00:14:33.138 invasive way that I'll show you in

NOTE Confidence: 0.9553487

00:14:33.138 --> 00:14:36.120 a little bit and are able to be

NOTE Confidence: 0.9553487

00:14:36.120 --> 00:14:38.400 discharged home literally same day.

NOTE Confidence: 0.9553487

00:14:38.400 --> 00:14:41.923 And that is why so much of our financial

NOTE Confidence: 0.9553487

00:14:41.923 --> 00:14:44.738 representation has now become an

NOTE Confidence: 0.9553487

00:14:44.738 --> 00:14:47.860 outpatient service versus the inpatient.

NOTE Confidence: 0.9553487

00:14:47.860 --> 00:14:50.632 So surgery is very,

NOTE Confidence: 0.9553487

00:14:50.632 --> 00:14:52.018 very important.

NOTE Confidence: 0.9553487

00:14:52.020 --> 00:14:54.298 Let me just get rid of that.

NOTE Confidence: 0.9553487

00:14:54.300 --> 00:14:56.739 I don't know if that's supposed to be here.

NOTE Confidence: 0.9553487

00:14:56.740 --> 00:14:57.892 There we go.

NOTE Confidence: 0.9553487

00:14:57.892 --> 00:14:59.812 So surgery in gynecology is

NOTE Confidence: 0.9553487

00:14:59.812 --> 00:15:01.460 of paramount importance.

NOTE Confidence: 0.9553487

00:15:01.460 --> 00:15:03.215 We know for many different

NOTE Confidence: 0.9553487

00:15:03.215 --> 00:15:05.449 reasons that women who have had

NOTE Confidence: 0.9553487

00:15:05.449 --> 00:15:07.469 very radical surgery and their

NOTE Confidence: 0.9553487

00:15:07.469 --> 00:15:09.085 cancer was removed entirely

NOTE Confidence: 0.940355180416667

00:15:09.151 --> 00:15:10.779 with no residual disease,

NOTE Confidence: 0.940355180416667

00:15:10.780 --> 00:15:13.948 have done profoundly better.

NOTE Confidence: 0.940355180416667

00:15:13.950 --> 00:15:16.533 You can see here the overall survival  
NOTE Confidence: 0.940355180416667

00:15:16.533 --> 00:15:18.332 is significantly better for women  
NOTE Confidence: 0.940355180416667

00:15:18.332 --> 00:15:20.530 who have had 0 millimeters of disease  
NOTE Confidence: 0.940355180416667

00:15:20.530 --> 00:15:22.669 left at the completion of surgery.  
NOTE Confidence: 0.940355180416667

00:15:22.670 --> 00:15:23.708 This is kind of what things  
NOTE Confidence: 0.940355180416667

00:15:23.708 --> 00:15:24.670 look like when we begin.  
NOTE Confidence: 0.940355180416667

00:15:24.670 --> 00:15:27.630 This is kind of how ovarian cancer presents.  
NOTE Confidence: 0.940355180416667

00:15:27.630 --> 00:15:30.446 This is the cancer that spreads over the  
NOTE Confidence: 0.940355180416667

00:15:30.446 --> 00:15:33.819 bowel or momentum over the peritoneal surfaces.  
NOTE Confidence: 0.940355180416667

00:15:33.820 --> 00:15:36.100 And very frequently we hear especially  
NOTE Confidence: 0.940355180416667

00:15:36.100 --> 00:15:38.500 Yale give new adjuvant chemotherapy,  
NOTE Confidence: 0.940355180416667

00:15:38.500 --> 00:15:40.840 which is chemotherapy before the surgery  
NOTE Confidence: 0.940355180416667

00:15:40.840 --> 00:15:43.290 to increase the chances of successful  
NOTE Confidence: 0.940355180416667

00:15:43.290 --> 00:15:45.340 debulking to no residual disease.  
NOTE Confidence: 0.940355180416667

00:15:45.340 --> 00:15:48.324 So I want to talk briefly about approach  
NOTE Confidence: 0.940355180416667

00:15:48.324 --> 00:15:51.607 to surgery and again why this has to be

NOTE Confidence: 0.940355180416667  
00:15:51.607 --> 00:15:54.059 so personalized and so individualized.  
NOTE Confidence: 0.940355180416667  
00:15:54.060 --> 00:15:56.220 This was a big poster that  
NOTE Confidence: 0.940355180416667  
00:15:56.220 --> 00:15:58.300 was hanging in the office.  
NOTE Confidence: 0.940355180416667  
00:15:58.300 --> 00:16:00.898 Of my mentor and previous boss.  
NOTE Confidence: 0.940355180416667  
00:16:00.900 --> 00:16:02.700 And when I was younger,  
NOTE Confidence: 0.940355180416667  
00:16:02.700 --> 00:16:04.024 not that much younger.  
NOTE Confidence: 0.940355180416667  
00:16:04.024 --> 00:16:06.620 It was a big point of debate.  
NOTE Confidence: 0.940355180416667  
00:16:06.620 --> 00:16:08.200 The greater the surgeon,  
NOTE Confidence: 0.940355180416667  
00:16:08.200 --> 00:16:09.780 the bigger the incision.  
NOTE Confidence: 0.940355180416667  
00:16:09.780 --> 00:16:11.940 Certainly not the case.  
NOTE Confidence: 0.940355180416667  
00:16:11.940 --> 00:16:14.019 Granted, I now have his office and his job,  
NOTE Confidence: 0.940355180416667  
00:16:14.020 --> 00:16:17.770 so there's that.  
NOTE Confidence: 0.940355180416667  
00:16:17.770 --> 00:16:20.626 So many studies have showed the  
NOTE Confidence: 0.940355180416667  
00:16:20.626 --> 00:16:22.530 laparoscopy and minimally invasive  
NOTE Confidence: 0.940355180416667  
00:16:22.607 --> 00:16:24.455 approach to ovarian cancers  
NOTE Confidence: 0.940355180416667

00:16:24.455 --> 00:16:26.765 and gercolologic cancers not only  
NOTE Confidence: 0.940355180416667

00:16:26.765 --> 00:16:29.248 safe but completely appropriate.  
NOTE Confidence: 0.940355180416667

00:16:29.250 --> 00:16:32.010 We know that complications are less,  
NOTE Confidence: 0.940355180416667

00:16:32.010 --> 00:16:34.369 We know that efficiency is the same.  
NOTE Confidence: 0.940355180416667

00:16:34.370 --> 00:16:37.408 We know that effectiveness is the same.  
NOTE Confidence: 0.940355180416667

00:16:37.410 --> 00:16:37.996 So again,  
NOTE Confidence: 0.940355180416667

00:16:37.996 --> 00:16:40.340 everything has to be done in a very  
NOTE Confidence: 0.940355180416667

00:16:40.405 --> 00:16:43.009 personalized way that has to make sense,  
NOTE Confidence: 0.940355180416667

00:16:43.010 --> 00:16:44.882 the biggest thing in joint oncology  
NOTE Confidence: 0.940355180416667

00:16:44.882 --> 00:16:46.489 surgery and something that we  
NOTE Confidence: 0.940355180416667

00:16:46.489 --> 00:16:47.697 care so passionately about.  
NOTE Confidence: 0.940355180416667

00:16:47.700 --> 00:16:49.828 Is that masses do not get spilled  
NOTE Confidence: 0.940355180416667

00:16:49.828 --> 00:16:51.659 because when the mass ruptures,  
NOTE Confidence: 0.940355180416667

00:16:51.660 --> 00:16:53.590 that's up upstages the patient  
NOTE Confidence: 0.940355180416667

00:16:53.590 --> 00:16:55.134 and worsens their prognosis.  
NOTE Confidence: 0.940355180416667

00:16:55.140 --> 00:16:57.898 So all kinds of things are done

NOTE Confidence: 0.940355180416667  
00:16:57.900 --> 00:17:00.288 to prevent that.  
NOTE Confidence: 0.940355180416667  
00:17:00.288 --> 00:17:00.876 And again,  
NOTE Confidence: 0.940355180416667  
00:17:00.876 --> 00:17:03.665 in the older days used to be a big point  
NOTE Confidence: 0.940355180416667  
00:17:03.665 --> 00:17:05.820 of debate and big point of discussion.  
NOTE Confidence: 0.940355180416667  
00:17:05.820 --> 00:17:07.876 So I want to share some of the  
NOTE Confidence: 0.940355180416667  
00:17:07.876 --> 00:17:10.378 videos of mine and some of our  
NOTE Confidence: 0.940355180416667  
00:17:10.378 --> 00:17:13.740 partners Sudo Zodi that show how we  
NOTE Confidence: 0.940355180416667  
00:17:13.740 --> 00:17:16.884 deal with some of these concerns.  
NOTE Confidence: 0.940355180416667  
00:17:16.884 --> 00:17:19.920 So you know in ovarian cancer,  
NOTE Confidence: 0.940355180416667  
00:17:19.920 --> 00:17:21.520 because our patients are women,  
NOTE Confidence: 0.940355180416667  
00:17:21.520 --> 00:17:24.640 we use frequently the vaginal  
NOTE Confidence: 0.940355180416667  
00:17:24.640 --> 00:17:28.540 orifice as a site of of removal.  
NOTE Confidence: 0.940355180416667  
00:17:28.540 --> 00:17:34.300 So this is a young patient who had Carson  
NOTE Confidence: 0.940355180416667  
00:17:34.300 --> 00:17:38.935 Sarcoma that had isolated periodic mass.  
NOTE Confidence: 0.940355180416667  
00:17:38.935 --> 00:17:41.770 That you know in the older days,  
NOTE Confidence: 0.940355180416667

00:17:41.770 --> 00:17:44.535 again few years back would have just  
NOTE Confidence: 0.940355180416667

00:17:44.535 --> 00:17:47.314 been removed with a big incision,  
NOTE Confidence: 0.940355180416667

00:17:47.314 --> 00:17:50.290 with a huge resection and huge  
NOTE Confidence: 0.940355180416667

00:17:50.391 --> 00:17:52.090 recovery because of the concern  
NOTE Confidence: 0.940355180416667

00:17:52.090 --> 00:17:53.730 both for the complexity of the case.  
NOTE Confidence: 0.940355180416667

00:17:53.730 --> 00:17:56.570 So as you can see this is the great vessels,  
NOTE Confidence: 0.940355180416667

00:17:56.570 --> 00:17:57.746 this is the ureter,  
NOTE Confidence: 0.940355180416667

00:17:57.746 --> 00:18:00.134 this is the mask that was entirely  
NOTE Confidence: 0.940355180416667

00:18:00.134 --> 00:18:02.394 resected and then the concern would have  
NOTE Confidence: 0.940355180416667

00:18:02.394 --> 00:18:05.040 been how do you remove a mask like this.  
NOTE Confidence: 0.940355180416667

00:18:05.040 --> 00:18:06.750 And this is something that  
NOTE Confidence: 0.940355180416667

00:18:06.750 --> 00:18:08.250 we use a great deal.  
NOTE Confidence: 0.940355180416667

00:18:08.250 --> 00:18:10.156 And something that we talk about a  
NOTE Confidence: 0.940355180416667

00:18:10.156 --> 00:18:12.380 lot is that we're able to just play  
NOTE Confidence: 0.940355180416667

00:18:12.452 --> 00:18:14.717 something right through the vagina,  
NOTE Confidence: 0.940355180416667

00:18:14.720 --> 00:18:17.516 place the back into the vagina

NOTE Confidence: 0.940355180416667  
00:18:17.520 --> 00:18:20.880 that is only very, very small,  
NOTE Confidence: 0.940355180416667  
00:18:20.880 --> 00:18:22.624 small 10 millimeter incision  
NOTE Confidence: 0.940355180416667  
00:18:22.624 --> 00:18:25.240 and then remove it like this.  
NOTE Confidence: 0.940355180416667  
00:18:25.240 --> 00:18:26.536 And this patient was able to  
NOTE Confidence: 0.940355180416667  
00:18:26.536 --> 00:18:27.400 go home same day.  
NOTE Confidence: 0.911545551333333  
00:18:27.400 --> 00:18:30.235 This patient also had a metal diverticulum  
NOTE Confidence: 0.911545551333333  
00:18:30.235 --> 00:18:33.516 that we we resected at the same time.  
NOTE Confidence: 0.911545551333333  
00:18:33.520 --> 00:18:35.650 And also was removed similarly  
NOTE Confidence: 0.911545551333333  
00:18:35.650 --> 00:18:38.200 like that as you can see.  
NOTE Confidence: 0.911545551333333  
00:18:38.200 --> 00:18:40.314 So this is the the bowel surgery,  
NOTE Confidence: 0.911545551333333  
00:18:40.320 --> 00:18:43.239 the reticulum similarly placed in the bag,  
NOTE Confidence: 0.911545551333333  
00:18:43.240 --> 00:18:46.040 similarly placed in the vagina  
NOTE Confidence: 0.911545551333333  
00:18:46.040 --> 00:18:48.640 and similarly patient went home  
NOTE Confidence: 0.911545551333333  
00:18:48.640 --> 00:18:50.938 same day and had minimal minimal  
NOTE Confidence: 0.911545551333333  
00:18:50.938 --> 00:18:52.914 recovery from from something that  
NOTE Confidence: 0.911545551333333

00:18:52.914 --> 00:18:54.799 would have been very extensive.  
NOTE Confidence: 0.911545551333333

00:18:54.800 --> 00:18:57.404 Natural or laparoscopy is so important  
NOTE Confidence: 0.911545551333333

00:18:57.404 --> 00:19:01.035 and again we are lucky to be able to use  
NOTE Confidence: 0.911545551333333

00:19:01.040 --> 00:19:04.246 vaginal orifice in our patients for this.  
NOTE Confidence: 0.911545551333333

00:19:04.250 --> 00:19:06.488 So at times, again, you know,  
NOTE Confidence: 0.911545551333333

00:19:06.490 --> 00:19:07.650 everything has to make sense.  
NOTE Confidence: 0.911545551333333

00:19:07.650 --> 00:19:09.922 You know, this is the older patient who  
NOTE Confidence: 0.911545551333333

00:19:09.922 --> 00:19:12.822 had a very many medical comorbidities  
NOTE Confidence: 0.911545551333333

00:19:12.822 --> 00:19:15.737 who would not have withstood.  
NOTE Confidence: 0.911545551333333

00:19:15.740 --> 00:19:17.112 Overall, big large laparotomy,  
NOTE Confidence: 0.911545551333333

00:19:17.112 --> 00:19:19.579 which is what we would have done  
NOTE Confidence: 0.911545551333333

00:19:19.579 --> 00:19:21.655 usually for this 12 centimeter mass.  
NOTE Confidence: 0.911545551333333

00:19:21.660 --> 00:19:22.860 But at the same time,  
NOTE Confidence: 0.911545551333333

00:19:22.860 --> 00:19:24.948 we of course want to be very careful and  
NOTE Confidence: 0.911545551333333

00:19:24.948 --> 00:19:26.980 not rupture the mass and not leak it.  
NOTE Confidence: 0.911545551333333

00:19:26.980 --> 00:19:29.708 So we do all kinds of special techniques

NOTE Confidence: 0.911545551333333  
00:19:29.708 --> 00:19:32.239 again in a very truly personalized way  
NOTE Confidence: 0.911545551333333  
00:19:32.239 --> 00:19:35.341 to be able to provide our patients with  
NOTE Confidence: 0.911545551333333  
00:19:35.341 --> 00:19:37.849 the best care specifically for them.  
NOTE Confidence: 0.911545551333333  
00:19:37.850 --> 00:19:38.585 So this patient,  
NOTE Confidence: 0.911545551333333  
00:19:38.585 --> 00:19:39.565 as you can see,  
NOTE Confidence: 0.911545551333333  
00:19:39.570 --> 00:19:41.110 everything was protected and then  
NOTE Confidence: 0.911545551333333  
00:19:41.110 --> 00:19:43.203 the mask was insulated and we were  
NOTE Confidence: 0.911545551333333  
00:19:43.203 --> 00:19:44.685 actually able to see inside the  
NOTE Confidence: 0.911545551333333  
00:19:44.685 --> 00:19:46.461 mask and then we were able to see  
NOTE Confidence: 0.911545551333333  
00:19:46.461 --> 00:19:48.106 that this was a malignant mask.  
NOTE Confidence: 0.911545551333333  
00:19:48.106 --> 00:19:50.962 Once the fluid was removed in the  
NOTE Confidence: 0.911545551333333  
00:19:50.962 --> 00:19:53.725 contained way and that nothing was removed,  
NOTE Confidence: 0.911545551333333  
00:19:53.730 --> 00:19:55.970 nothing was nothing leaked.  
NOTE Confidence: 0.911545551333333  
00:19:55.970 --> 00:19:59.130 And then same same way we were able  
NOTE Confidence: 0.911545551333333  
00:19:59.130 --> 00:20:01.312 to just tie something around it  
NOTE Confidence: 0.911545551333333

00:20:01.312 --> 00:20:03.544 to make sure that nothing leaks.  
NOTE Confidence: 0.911545551333333  
00:20:03.550 --> 00:20:05.223 Remove it and then remove it similarly  
NOTE Confidence: 0.911545551333333  
00:20:05.223 --> 00:20:07.550 to the vagina like I showed you before  
NOTE Confidence: 0.911545551333333  
00:20:07.550 --> 00:20:09.083 and all the lymph nodes and everything  
NOTE Confidence: 0.911545551333333  
00:20:09.083 --> 00:20:10.709 else could be done laparoscopically.  
NOTE Confidence: 0.911545551333333  
00:20:10.710 --> 00:20:13.326 And again the spatial with multiple  
NOTE Confidence: 0.911545551333333  
00:20:13.326 --> 00:20:16.206 comorbidities was able to go home  
NOTE Confidence: 0.911545551333333  
00:20:16.206 --> 00:20:19.642 next morning with minimal recovery  
NOTE Confidence: 0.911545551333333  
00:20:19.642 --> 00:20:23.708 time and was able to have her  
NOTE Confidence: 0.911545551333333  
00:20:23.708 --> 00:20:25.307 cancer appropriately removed.  
NOTE Confidence: 0.911545551333333  
00:20:25.310 --> 00:20:27.305 We nowadays use something called high pack,  
NOTE Confidence: 0.911545551333333  
00:20:27.310 --> 00:20:30.366 which is what I mentioned to you before.  
NOTE Confidence: 0.911545551333333  
00:20:30.370 --> 00:20:33.667 Which is there's a lot of conceptual  
NOTE Confidence: 0.911545551333333  
00:20:33.667 --> 00:20:35.735 thinking that hyper hypothermia  
NOTE Confidence: 0.911545551333333  
00:20:35.735 --> 00:20:39.161 and neoplasia at the time of  
NOTE Confidence: 0.911545551333333  
00:20:39.161 --> 00:20:41.597 aggressive debulking really improves

NOTE Confidence: 0.911545551333333  
00:20:41.597 --> 00:20:43.487 the overall survival.  
NOTE Confidence: 0.911545551333333  
00:20:43.490 --> 00:20:45.290 And this is again, this is before debalking.  
NOTE Confidence: 0.911545551333333  
00:20:45.290 --> 00:20:46.702 This is after debalking,  
NOTE Confidence: 0.911545551333333  
00:20:46.702 --> 00:20:49.186 we remove all the disease and then  
NOTE Confidence: 0.911545551333333  
00:20:49.186 --> 00:20:51.770 we're able to place a cyst plan into  
NOTE Confidence: 0.911545551333333  
00:20:51.770 --> 00:20:55.410 the belly for 90 minutes that improves  
NOTE Confidence: 0.911545551333333  
00:20:55.410 --> 00:21:00.180 direct permeation of the tumors.  
NOTE Confidence: 0.911545551333333  
00:21:00.180 --> 00:21:01.552 And there's some very,  
NOTE Confidence: 0.911545551333333  
00:21:01.552 --> 00:21:03.267 very strong literature that supports  
NOTE Confidence: 0.911545551333333  
00:21:03.267 --> 00:21:05.380 it in this population with pretty,  
NOTE Confidence: 0.911545551333333  
00:21:05.380 --> 00:21:07.120 pretty significant improvement  
NOTE Confidence: 0.911545551333333  
00:21:07.120 --> 00:21:09.440 and progression free survival  
NOTE Confidence: 0.911545551333333  
00:21:09.440 --> 00:21:11.180 and overall survival.  
NOTE Confidence: 0.911545551333333  
00:21:11.180 --> 00:21:13.052 In the next two minutes that I have left,  
NOTE Confidence: 0.911545551333333  
00:21:13.060 --> 00:21:14.210 I promised I consenting that  
NOTE Confidence: 0.911545551333333

00:21:14.210 --> 00:21:15.819 I was going to be on time.  
NOTE Confidence: 0.911545551333333  
00:21:15.820 --> 00:21:17.934 I want to talk briefly about survivorship.  
NOTE Confidence: 0.911545551333333  
00:21:17.940 --> 00:21:19.860 So survivorship is so important.  
NOTE Confidence: 0.911545551333333  
00:21:19.860 --> 00:21:22.440 We for generations have undervalued  
NOTE Confidence: 0.911545551333333  
00:21:22.440 --> 00:21:25.020 under address the importance of  
NOTE Confidence: 0.911545551333333  
00:21:25.103 --> 00:21:27.567 survivorship in this population.  
NOTE Confidence: 0.911545551333333  
00:21:27.570 --> 00:21:28.710 It's because forever we,  
NOTE Confidence: 0.911545551333333  
00:21:28.710 --> 00:21:30.420 we thought the women get this  
NOTE Confidence: 0.911545551333333  
00:21:30.476 --> 00:21:31.846 cancers and then they die.  
NOTE Confidence: 0.911545551333333  
00:21:31.850 --> 00:21:33.050 That is not the case.  
NOTE Confidence: 0.911545551333333  
00:21:33.050 --> 00:21:35.482 As you see that as we're getting better  
NOTE Confidence: 0.911545551333333  
00:21:35.482 --> 00:21:37.510 in diagnosis is we're getting better  
NOTE Confidence: 0.911545551333333  
00:21:37.510 --> 00:21:39.544 in surgery as we're getting better  
NOTE Confidence: 0.871449994090909  
00:21:39.609 --> 00:21:41.156 in treatment, women are living  
NOTE Confidence: 0.871449994090909  
00:21:41.156 --> 00:21:42.728 longer and when they live longer,  
NOTE Confidence: 0.871449994090909  
00:21:42.730 --> 00:21:45.898 it is so important that we provide them with

NOTE Confidence: 0.871449994090909  
00:21:45.898 --> 00:21:47.987 survivorship techniques to support them.  
NOTE Confidence: 0.871449994090909  
00:21:47.990 --> 00:21:50.118 I'm actually so happy to see that we  
NOTE Confidence: 0.871449994090909  
00:21:50.118 --> 00:21:52.742 have our teal team here that help  
NOTE Confidence: 0.871449994090909  
00:21:52.742 --> 00:21:54.982 us concentrate on nutrition this  
NOTE Confidence: 0.871449994090909  
00:21:54.982 --> 00:21:57.200 population because this is yet another  
NOTE Confidence: 0.871449994090909  
00:21:57.200 --> 00:22:00.092 one of those aspects that really has  
NOTE Confidence: 0.871449994090909  
00:22:00.092 --> 00:22:02.188 been undervalued and underaddressed.  
NOTE Confidence: 0.871449994090909  
00:22:02.190 --> 00:22:06.794 So in in Galactic Cancers survivorship  
NOTE Confidence: 0.871449994090909  
00:22:06.794 --> 00:22:09.949 has so many different aspects,  
NOTE Confidence: 0.871449994090909  
00:22:09.950 --> 00:22:12.710 fear recurrence, toxicities from surgery,  
NOTE Confidence: 0.871449994090909  
00:22:12.710 --> 00:22:14.618 toxicities of chemo and radiation and  
NOTE Confidence: 0.871449994090909  
00:22:14.618 --> 00:22:16.989 that's what they got financial toxicity.  
NOTE Confidence: 0.871449994090909  
00:22:16.990 --> 00:22:18.550 Psychological body image and  
NOTE Confidence: 0.871449994090909  
00:22:18.550 --> 00:22:20.110 then sex and intimacy,  
NOTE Confidence: 0.871449994090909  
00:22:20.110 --> 00:22:23.702 which is a very profound aspect of women's  
NOTE Confidence: 0.871449994090909

00:22:23.702 --> 00:22:26.733 experiences that here at Yale we are  
NOTE Confidence: 0.871449994090909

00:22:26.733 --> 00:22:29.262 very passionate about the dressing so  
NOTE Confidence: 0.871449994090909

00:22:29.262 --> 00:22:32.718 I'll let this I'll leave this with Doctor  
NOTE Confidence: 0.871449994090909

00:22:32.718 --> 00:22:36.110 Sentine to with one minute to spare.  
NOTE Confidence: 0.871449994090909

00:22:36.110 --> 00:22:37.940 So in the one minute then I have I'm not  
NOTE Confidence: 0.871449994090909

00:22:37.995 --> 00:22:39.894 going to I'm not going to give away the  
NOTE Confidence: 0.871449994090909

00:22:39.894 --> 00:22:42.786 minute what separates us here at Yale.  
NOTE Confidence: 0.871449994090909

00:22:42.790 --> 00:22:45.198 Is that we are truly patient driven  
NOTE Confidence: 0.871449994090909

00:22:45.198 --> 00:22:48.286 and we are truly believe in the  
NOTE Confidence: 0.871449994090909

00:22:48.286 --> 00:22:50.266 importance of personalized care.  
NOTE Confidence: 0.871449994090909

00:22:50.270 --> 00:22:51.726 You know, we nobody,  
NOTE Confidence: 0.871449994090909

00:22:51.726 --> 00:22:53.546 nobody treats the cancer anymore.  
NOTE Confidence: 0.871449994090909

00:22:53.550 --> 00:22:56.150 We truly treat the women that we see.  
NOTE Confidence: 0.871449994090909

00:22:56.150 --> 00:22:57.362 We see their lives,  
NOTE Confidence: 0.871449994090909

00:22:57.362 --> 00:22:59.579 we see their experiences and then we do.  
NOTE Confidence: 0.871449994090909

00:22:59.580 --> 00:23:02.172 Everything we can to address their

NOTE Confidence: 0.871449994090909  
00:23:02.172 --> 00:23:04.301 personal experience from diagnosis to  
NOTE Confidence: 0.871449994090909  
00:23:04.301 --> 00:23:06.667 surgery to treatment and we'll we'll talk  
NOTE Confidence: 0.871449994090909  
00:23:06.667 --> 00:23:09.472 about and then to the survivorship and  
NOTE Confidence: 0.871449994090909  
00:23:09.472 --> 00:23:11.537 supporting them through their journey  
NOTE Confidence: 0.871449994090909  
00:23:11.540 --> 00:23:13.616 both during treatment and then after.  
NOTE Confidence: 0.871449994090909  
00:23:13.620 --> 00:23:15.452 And again we're only able to do it  
NOTE Confidence: 0.871449994090909  
00:23:15.452 --> 00:23:17.498 because of the amazing team that we have.  
NOTE Confidence: 0.871449994090909  
00:23:17.500 --> 00:23:17.820 Thank you  
NOTE Confidence: 0.8023952  
00:23:27.020 --> 00:23:31.650 so. Alina has already done a very  
NOTE Confidence: 0.8023952  
00:23:31.650 --> 00:23:33.860 nice introduction and this light  
NOTE Confidence: 0.8023952  
00:23:33.860 --> 00:23:36.612 for me is only to remind you that  
NOTE Confidence: 0.8023952  
00:23:36.620 --> 00:23:39.175 regardless to the how sophisticated  
NOTE Confidence: 0.8023952  
00:23:39.175 --> 00:23:42.647 our surgery can be and Alina show  
NOTE Confidence: 0.8023952  
00:23:42.647 --> 00:23:44.332 you minimally invasive approaches,  
NOTE Confidence: 0.8023952  
00:23:44.332 --> 00:23:47.300 sometimes we have to do ultra radical  
NOTE Confidence: 0.8023952

00:23:47.371 --> 00:23:49.618 surgery to to remove again the tumor

NOTE Confidence: 0.8023952

00:23:49.620 --> 00:23:51.328 regardless regardless the adjuvant

NOTE Confidence: 0.8023952

00:23:51.328 --> 00:23:53.890 treatment they were able to offer

NOTE Confidence: 0.8023952

00:23:53.961 --> 00:23:56.169 to this patient such as radiation

NOTE Confidence: 0.8023952

00:23:56.169 --> 00:23:58.360 therapy as well as chemotherapy.

NOTE Confidence: 0.8023952

00:23:58.360 --> 00:24:00.635 A significant number of our

NOTE Confidence: 0.8023952

00:24:00.635 --> 00:24:02.902 patients still again develop

NOTE Confidence: 0.8023952

00:24:02.902 --> 00:24:05.206 progression and recurrent disease.

NOTE Confidence: 0.8023952

00:24:05.210 --> 00:24:06.650 And as I show you here,

NOTE Confidence: 0.8023952

00:24:06.650 --> 00:24:09.434 of the 100,000 diagnosis with a

NOTE Confidence: 0.8023952

00:24:09.434 --> 00:24:11.610 gynecological cancer in the US,

NOTE Confidence: 0.8023952

00:24:11.610 --> 00:24:14.810 about 1/3 of women still die every year

NOTE Confidence: 0.8023952

00:24:14.810 --> 00:24:18.290 because of this difficult to treat cancer.

NOTE Confidence: 0.8023952

00:24:18.290 --> 00:24:22.520 So the question is what can we do to

NOTE Confidence: 0.8023952

00:24:22.520 --> 00:24:25.260 improve the outcome of this patient?

NOTE Confidence: 0.8023952

00:24:25.260 --> 00:24:27.868 And this again and what I'm going to

NOTE Confidence: 0.8023952

00:24:27.868 --> 00:24:30.609 show you here is our scientific vision

NOTE Confidence: 0.8023952

00:24:30.609 --> 00:24:33.910 and goals that we really we we we

NOTE Confidence: 0.8023952

00:24:33.910 --> 00:24:36.522 started thinking about how we could

NOTE Confidence: 0.8023952

00:24:36.522 --> 00:24:39.978 really face up with some medical need many,

NOTE Confidence: 0.8023952

00:24:39.980 --> 00:24:42.856 many years ago and we developed

NOTE Confidence: 0.8023952

00:24:42.856 --> 00:24:45.180 or we tried to develop a program,

NOTE Confidence: 0.8023952

00:24:45.180 --> 00:24:47.208 a personalized treatment program.

NOTE Confidence: 0.8023952

00:24:47.208 --> 00:24:50.250 Adding to what Alina show you,

NOTE Confidence: 0.8023952

00:24:50.250 --> 00:24:53.925 so this excellent clinical and surgical care,

NOTE Confidence: 0.8023952

00:24:53.930 --> 00:24:56.555 adding a translational research program

NOTE Confidence: 0.8023952

00:24:56.555 --> 00:25:00.454 above that in particular targeting the

NOTE Confidence: 0.8023952

00:25:00.454 --> 00:25:04.009 difficult to treat gynecological cancer.

NOTE Confidence: 0.8023952

00:25:04.010 --> 00:25:06.378 And when I say difficult to treat it

NOTE Confidence: 0.8023952

00:25:06.378 --> 00:25:08.600 means that the problem is really in

NOTE Confidence: 0.8023952

00:25:08.600 --> 00:25:11.125 our specialties not to take care of

NOTE Confidence: 0.8023952

00:25:11.125 --> 00:25:13.185 a well or moderately differentiated  
NOTE Confidence: 0.8023952

00:25:13.185 --> 00:25:14.009 uterine cancer.  
NOTE Confidence: 0.8023952

00:25:14.010 --> 00:25:16.537 Is really to take care of the  
NOTE Confidence: 0.8023952

00:25:16.537 --> 00:25:18.039 biologically aggressive such as  
NOTE Confidence: 0.8023952

00:25:18.039 --> 00:25:20.133 the uterine serous carcinoma or the  
NOTE Confidence: 0.8023952

00:25:20.133 --> 00:25:22.218 carcinos or comma or they grade  
NOTE Confidence: 0.8023952

00:25:22.218 --> 00:25:24.486 ovarian that are widespread and so on.  
NOTE Confidence: 0.8023952

00:25:24.490 --> 00:25:28.231 So we thought to really the one of  
NOTE Confidence: 0.8023952

00:25:28.231 --> 00:25:30.972 the of the the the winning strategies  
NOTE Confidence: 0.8023952

00:25:30.972 --> 00:25:34.130 was to provide access to our patient  
NOTE Confidence: 0.8023952

00:25:34.130 --> 00:25:36.902 in particular this group of patient  
NOTE Confidence: 0.8023952

00:25:36.902 --> 00:25:39.191 to precision medicine through a  
NOTE Confidence: 0.8023952

00:25:39.191 --> 00:25:41.405 pipeline of both pharma as well  
NOTE Confidence: 0.8023952

00:25:41.405 --> 00:25:43.300 as yield developed treatment.  
NOTE Confidence: 0.8023952

00:25:43.300 --> 00:25:45.010 Again validated within rigorous clinical  
NOTE Confidence: 0.8023952

00:25:45.010 --> 00:25:47.897 trial that I'm going to show you in a minute.

NOTE Confidence: 0.8023952

00:25:47.900 --> 00:25:50.716 But the other thing was really to to

NOTE Confidence: 0.8023952

00:25:50.716 --> 00:25:52.922 be able to build a multidisciplinary

NOTE Confidence: 0.8023952

00:25:52.922 --> 00:25:55.659 approach because if you want to be

NOTE Confidence: 0.8023952

00:25:55.659 --> 00:25:57.500 successful in a big Cancer Center,

NOTE Confidence: 0.8023952

00:25:57.500 --> 00:25:59.620 again the surgical is important,

NOTE Confidence: 0.8023952

00:25:59.620 --> 00:26:00.366 is important,

NOTE Confidence: 0.8023952

00:26:00.366 --> 00:26:01.112 the the,

NOTE Confidence: 0.8023952

00:26:01.112 --> 00:26:02.977 the chemotherapy or addition therapy

NOTE Confidence: 0.8023952

00:26:02.977 --> 00:26:05.114 is important by if you want to

NOTE Confidence: 0.8023952

00:26:05.114 --> 00:26:07.784 do one step farther and going to

NOTE Confidence: 0.8023952

00:26:07.784 --> 00:26:09.260 translational personalized medicine.

NOTE Confidence: 0.8023952

00:26:09.260 --> 00:26:11.288 This is really a team approach

NOTE Confidence: 0.8023952

00:26:11.288 --> 00:26:13.290 that goes outside our division.

NOTE Confidence: 0.8023952

00:26:13.290 --> 00:26:15.207 And that is what we try to build here.

NOTE Confidence: 0.8023952

00:26:15.210 --> 00:26:18.480 We involve and interact with other

NOTE Confidence: 0.8023952

00:26:18.480 --> 00:26:21.758 successful clinical as well as the  
NOTE Confidence: 0.8023952

00:26:21.758 --> 00:26:24.474 research program present in our Yale  
NOTE Confidence: 0.8023952

00:26:24.474 --> 00:26:27.555 Cancer Center and also of course take  
NOTE Confidence: 0.8023952

00:26:27.555 --> 00:26:30.075 advantage of the cutting edge resources  
NOTE Confidence: 0.8023952

00:26:30.075 --> 00:26:32.445 that we have available at Yale.  
NOTE Confidence: 0.8023952

00:26:32.450 --> 00:26:35.915 And I want to mention the the  
NOTE Confidence: 0.8023952

00:26:35.915 --> 00:26:37.691 genomic core sequencing facility  
NOTE Confidence: 0.8023952

00:26:37.691 --> 00:26:40.680 that we have in the West Campus.  
NOTE Confidence: 0.8023952

00:26:40.680 --> 00:26:43.440 As well as again the the pathology corps,  
NOTE Confidence: 0.8023952

00:26:43.440 --> 00:26:45.568 Doctor RIM is here that is doing an  
NOTE Confidence: 0.8023952

00:26:45.568 --> 00:26:47.241 excellent job is providing tissue to  
NOTE Confidence: 0.8023952

00:26:47.241 --> 00:26:49.407 to all the research area of the Yale  
NOTE Confidence: 0.8023952

00:26:49.407 --> 00:26:51.319 Cancer Center to be able to do what  
NOTE Confidence: 0.93421556

00:26:51.320 --> 00:26:54.850 I'm going to show you internal  
NOTE Confidence: 0.93421556

00:26:54.850 --> 00:26:56.870 personalized treatment.  
NOTE Confidence: 0.93421556

00:26:56.870 --> 00:27:00.302 So a lot of people talk about personalized

NOTE Confidence: 0.93421556

00:27:00.302 --> 00:27:02.960 treatment but what is personalized treatment,

NOTE Confidence: 0.93421556

00:27:02.960 --> 00:27:05.834 what is precision medicine in the

NOTE Confidence: 0.93421556

00:27:05.834 --> 00:27:08.180 division of gynecological oncology Yale.

NOTE Confidence: 0.93421556

00:27:08.180 --> 00:27:09.972 As Alina show you,

NOTE Confidence: 0.93421556

00:27:09.972 --> 00:27:12.660 everything start with the surgical part.

NOTE Confidence: 0.93421556

00:27:12.660 --> 00:27:15.936 So we are surgeon but ovarian uterine

NOTE Confidence: 0.93421556

00:27:15.936 --> 00:27:18.459 cancer are surgically staged tumor.

NOTE Confidence: 0.93421556

00:27:18.460 --> 00:27:20.140 So we that is the first time,

NOTE Confidence: 0.93421556

00:27:20.140 --> 00:27:21.960 the first moment in the

NOTE Confidence: 0.93421556

00:27:21.960 --> 00:27:23.416 treatment of our patient.

NOTE Confidence: 0.93421556

00:27:23.420 --> 00:27:24.620 And as Alina told you,

NOTE Confidence: 0.93421556

00:27:24.620 --> 00:27:27.550 we try to remove all the disease that we can

NOTE Confidence: 0.93421556

00:27:27.620 --> 00:27:29.696 see to improve the outcome of this patient.

NOTE Confidence: 0.93421556

00:27:29.700 --> 00:27:32.092 But one of the thing that we've been

NOTE Confidence: 0.93421556

00:27:32.092 --> 00:27:34.188 doing now for quite a long time.

NOTE Confidence: 0.93421556

00:27:34.190 --> 00:27:36.612 Starting probably as one of the First  
NOTE Confidence: 0.93421556

00:27:36.612 --> 00:27:38.628 Division in the US and worldwide  
NOTE Confidence: 0.93421556

00:27:38.628 --> 00:27:41.330 was to consent our patient at the  
NOTE Confidence: 0.93421556

00:27:41.330 --> 00:27:43.430 time of surgery before surgery  
NOTE Confidence: 0.93421556

00:27:43.430 --> 00:27:46.167 also to donate a piece of tissue  
NOTE Confidence: 0.93421556

00:27:46.167 --> 00:27:49.629 to go to our research laboratory  
NOTE Confidence: 0.93421556

00:27:49.630 --> 00:27:52.598 and this piece of tissue was used  
NOTE Confidence: 0.93421556

00:27:52.598 --> 00:27:55.030 to sequence to sequence the  
NOTE Confidence: 0.930604272727273

00:27:57.310 --> 00:27:59.314 DNA of the tumor of this  
NOTE Confidence: 0.930604272727273

00:27:59.314 --> 00:28:01.060 patient with the ultimate goal.  
NOTE Confidence: 0.930604272727273

00:28:01.060 --> 00:28:04.175 To have a better understanding of the  
NOTE Confidence: 0.930604272727273

00:28:04.175 --> 00:28:06.624 genetic landscape of that specific  
NOTE Confidence: 0.930604272727273

00:28:06.624 --> 00:28:09.700 patient tumor and and as I told you  
NOTE Confidence: 0.930604272727273

00:28:09.700 --> 00:28:12.780 we started close to 2010 to do that.  
NOTE Confidence: 0.930604272727273

00:28:12.780 --> 00:28:15.934 At that time point the commercial entity  
NOTE Confidence: 0.930604272727273

00:28:15.934 --> 00:28:19.737 that we were using to receive a some

NOTE Confidence: 0.930604272727273  
00:28:19.737 --> 00:28:22.992 sort of FDAGMP approved report was  
NOTE Confidence: 0.930604272727273  
00:28:22.992 --> 00:28:26.200 Foundation Medicine but at the same time  
NOTE Confidence: 0.930604272727273  
00:28:26.200 --> 00:28:29.649 in parallel we are also able to perform.  
NOTE Confidence: 0.930604272727273  
00:28:29.650 --> 00:28:33.050 All Axon sequencing at the West campus,  
NOTE Confidence: 0.930604272727273  
00:28:33.050 --> 00:28:35.690 as you know all Axon sequencing  
NOTE Confidence: 0.930604272727273  
00:28:35.690 --> 00:28:37.490 is quite expensive,  
NOTE Confidence: 0.930604272727273  
00:28:37.490 --> 00:28:39.919 was very expensive about 10-15 years ago  
NOTE Confidence: 0.930604272727273  
00:28:39.919 --> 00:28:42.448 when we started is still expensive now.  
NOTE Confidence: 0.930604272727273  
00:28:42.450 --> 00:28:44.810 So the question that some of you can ask me,  
NOTE Confidence: 0.930604272727273  
00:28:44.810 --> 00:28:46.819 but there's something how have you been  
NOTE Confidence: 0.930604272727273  
00:28:46.819 --> 00:28:49.200 able to do that 100 or gynecological  
NOTE Confidence: 0.930604272727273  
00:28:49.200 --> 00:28:51.250 cancer patient without asking you  
NOTE Confidence: 0.930604272727273  
00:28:51.250 --> 00:28:53.567 know the patient to pay for it.  
NOTE Confidence: 0.930604272727273  
00:28:53.570 --> 00:28:57.240 The answer is that we.  
NOTE Confidence: 0.930604272727273  
00:28:57.240 --> 00:28:58.138 You know,  
NOTE Confidence: 0.930604272727273

00:28:58.138 --> 00:29:00.832 we had this collaborative research program

NOTE Confidence: 0.930604272727273

00:29:00.832 --> 00:29:04.200 at Yale between Yale and Gilead Science.

NOTE Confidence: 0.930604272727273

00:29:04.200 --> 00:29:05.718 And this was a huge program,

NOTE Confidence: 0.930604272727273

00:29:05.720 --> 00:29:09.859 \$70 million in 10 years provided

NOTE Confidence: 0.930604272727273

00:29:09.859 --> 00:29:11.954 to us through Doctor Schlesinger

NOTE Confidence: 0.930604272727273

00:29:11.954 --> 00:29:14.156 was the Chair of pharmacology

NOTE Confidence: 0.930604272727273

00:29:14.156 --> 00:29:16.880 that was able to establish this

NOTE Confidence: 0.930604272727273

00:29:16.880 --> 00:29:18.314 collaborative research agreement.

NOTE Confidence: 0.930604272727273

00:29:18.314 --> 00:29:20.704 And thanks to this significant

NOTE Confidence: 0.930604272727273

00:29:20.704 --> 00:29:22.120 amount of money,

NOTE Confidence: 0.930604272727273

00:29:22.120 --> 00:29:24.142 we were able again to sequence

NOTE Confidence: 0.930604272727273

00:29:24.142 --> 00:29:26.853 over 800 gynecological cancer.

NOTE Confidence: 0.930604272727273

00:29:26.853 --> 00:29:31.310 Again all Axon sequencing, 21,000 gene,

NOTE Confidence: 0.930604272727273

00:29:31.310 --> 00:29:34.535 all the gene encoded protein.

NOTE Confidence: 0.930604272727273

00:29:34.540 --> 00:29:36.976 Another thing that we have been doing

NOTE Confidence: 0.930604272727273

00:29:36.976 --> 00:29:39.438 for the last 10 years is a little

NOTE Confidence: 0.930604272727273

00:29:39.438 --> 00:29:41.461 piece of this fresh tissue was going

NOTE Confidence: 0.930604272727273

00:29:41.461 --> 00:29:44.035 to my lab and in my lab we were

NOTE Confidence: 0.930604272727273

00:29:44.035 --> 00:29:45.980 trying to establish primary cell line

NOTE Confidence: 0.930604272727273

00:29:45.980 --> 00:29:49.256 as well as patient derives senokra.

NOTE Confidence: 0.930604272727273

00:29:49.260 --> 00:29:52.036 So in few words the viable tumor tissue

NOTE Confidence: 0.930604272727273

00:29:52.036 --> 00:29:54.619 was both placed in the Petri dish.

NOTE Confidence: 0.930604272727273

00:29:54.620 --> 00:29:57.516 As well as in an animal with the

NOTE Confidence: 0.930604272727273

00:29:57.516 --> 00:29:59.768 ultimate goal again to establish

NOTE Confidence: 0.930604272727273

00:29:59.768 --> 00:30:02.654 the disease in these avatar animals.

NOTE Confidence: 0.930604272727273

00:30:02.660 --> 00:30:04.850 Why is that important is because

NOTE Confidence: 0.930604272727273

00:30:04.850 --> 00:30:06.740 as I'm showing you here,

NOTE Confidence: 0.930604272727273

00:30:06.740 --> 00:30:09.785 the ultimate goal was to develop the

NOTE Confidence: 0.930604272727273

00:30:09.785 --> 00:30:11.795 patient to get the pathology report

NOTE Confidence: 0.930604272727273

00:30:11.795 --> 00:30:14.199 to start the patient on the standard

NOTE Confidence: 0.930604272727273

00:30:14.199 --> 00:30:16.099 treatment that as we discussed

NOTE Confidence: 0.930604272727273

00:30:16.100 --> 00:30:18.280 unfortunately sometime is unable  
NOTE Confidence: 0.930604272727273

00:30:18.280 --> 00:30:22.515 to cure the patient and having the  
NOTE Confidence: 0.930604272727273

00:30:22.515 --> 00:30:25.255 genetic sequencing data available.  
NOTE Confidence: 0.930604272727273

00:30:25.260 --> 00:30:28.230 To be able to identify potential  
NOTE Confidence: 0.930604272727273

00:30:28.230 --> 00:30:29.220 draggable marker,  
NOTE Confidence: 0.930604272727273

00:30:29.220 --> 00:30:31.845 test this potential drug in the avatar  
NOTE Confidence: 0.930604272727273

00:30:31.845 --> 00:30:34.659 animal on the tumor of the patient  
NOTE Confidence: 0.930604272727273

00:30:34.659 --> 00:30:37.083 when she was receiving the standard  
NOTE Confidence: 0.930604272727273

00:30:37.155 --> 00:30:39.697 of care and be ready for her in case  
NOTE Confidence: 0.930604272727273

00:30:39.697 --> 00:30:42.260 the disease come back or become resistant.  
NOTE Confidence: 0.930604272727273

00:30:42.260 --> 00:30:45.276 We already had tested in for that specific  
NOTE Confidence: 0.930604272727273

00:30:45.276 --> 00:30:48.313 patient a certain number of drug to  
NOTE Confidence: 0.930604272727273

00:30:48.313 --> 00:30:50.523 provide her again with personalized  
NOTE Confidence: 0.930604272727273

00:30:50.599 --> 00:30:53.209 treatment at the time of occurrence.  
NOTE Confidence: 0.930604272727273

00:30:53.210 --> 00:30:55.220 Another thing that we've been able  
NOTE Confidence: 0.930604272727273

00:30:55.220 --> 00:30:58.412 to to do in the last 5-6 years

NOTE Confidence: 0.930604272727273

00:30:58.412 --> 00:31:00.632 is also to provide personalized

NOTE Confidence: 0.930604272727273

00:31:00.632 --> 00:31:02.248 diagnostic to our patient.

NOTE Confidence: 0.930604272727273

00:31:02.250 --> 00:31:03.722 What does it mean?

NOTE Confidence: 0.930604272727273

00:31:03.722 --> 00:31:06.455 It mean to detect the present of

NOTE Confidence: 0.930604272727273

00:31:06.455 --> 00:31:08.650 circulating tumor DNA that is

NOTE Confidence: 0.930604272727273

00:31:08.650 --> 00:31:11.450 mutated DNA coming from the tumor

NOTE Confidence: 0.930604272727273

00:31:11.450 --> 00:31:14.450 and this was again possible because

NOTE Confidence: 0.930604272727273

00:31:14.450 --> 00:31:15.950 through the sequencing.

NOTE Confidence: 0.930604272727273

00:31:15.950 --> 00:31:18.380 We add knowledge about the potential

NOTE Confidence: 0.930604272727273

00:31:18.380 --> 00:31:20.909 driver mutation present in this patient,

NOTE Confidence: 0.930604272727273

00:31:20.910 --> 00:31:22.830 present the tumor of this patient.

NOTE Confidence: 0.930604272727273

00:31:22.830 --> 00:31:26.310 We design specific probe able to

NOTE Confidence: 0.930604272727273

00:31:26.310 --> 00:31:29.358 amplify this mutation present in the

NOTE Confidence: 0.930604272727273

00:31:29.358 --> 00:31:32.190 circulation of this patient and using

NOTE Confidence: 0.915300244615385

00:31:32.190 --> 00:31:35.406 a not invasive method that is a simple

NOTE Confidence: 0.915300244615385

00:31:35.406 --> 00:31:39.290 collection of of five to 10CC we were  
NOTE Confidence: 0.915300244615385

00:31:39.290 --> 00:31:42.864 able and this is a tumor inform assay to  
NOTE Confidence: 0.915300244615385

00:31:42.864 --> 00:31:45.710 detect the presence of the mutated DNA.  
NOTE Confidence: 0.915300244615385

00:31:45.710 --> 00:31:46.670 That correlate with the  
NOTE Confidence: 0.915300244615385

00:31:46.670 --> 00:31:48.290 presence of this in the patient.  
NOTE Confidence: 0.915300244615385

00:31:48.290 --> 00:31:52.142 So this is a new approach of course to  
NOTE Confidence: 0.915300244615385

00:31:52.142 --> 00:31:54.610 monitor and is called again personal  
NOTE Confidence: 0.915300244615385

00:31:54.610 --> 00:31:56.650 like diagnostic type of approach  
NOTE Confidence: 0.915300244615385

00:31:56.650 --> 00:31:59.191 because allow us to see the presence  
NOTE Confidence: 0.915300244615385

00:31:59.191 --> 00:32:01.770 of tumor DNA in the circulation.  
NOTE Confidence: 0.915300244615385

00:32:01.770 --> 00:32:04.815 But even more important being a tumor  
NOTE Confidence: 0.915300244615385

00:32:04.815 --> 00:32:07.702 inform approach this type of technology  
NOTE Confidence: 0.915300244615385

00:32:07.702 --> 00:32:12.310 become about 10 to 100 fold more sensitive.  
NOTE Confidence: 0.915300244615385

00:32:12.310 --> 00:32:14.776 Then the standard approach of looking  
NOTE Confidence: 0.915300244615385

00:32:14.776 --> 00:32:18.260 to again the Press of DNA when you don't  
NOTE Confidence: 0.915300244615385

00:32:18.260 --> 00:32:20.909 know what type of mutation is pressed.

NOTE Confidence: 0.915300244615385  
00:32:20.910 --> 00:32:22.206 So using this approach,  
NOTE Confidence: 0.915300244615385  
00:32:22.206 --> 00:32:25.174 let me show you a little bit the progress  
NOTE Confidence: 0.915300244615385  
00:32:25.174 --> 00:32:27.860 that we have done for the last again  
NOTE Confidence: 0.915300244615385  
00:32:27.860 --> 00:32:30.212 few years taking care in particular  
NOTE Confidence: 0.915300244615385  
00:32:30.212 --> 00:32:35.432 the difficult to treat patient and one  
NOTE Confidence: 0.915300244615385  
00:32:35.432 --> 00:32:39.524 of the most difficult uterine cancer.  
NOTE Confidence: 0.915300244615385  
00:32:39.530 --> 00:32:41.882 They were dealing with in the  
NOTE Confidence: 0.915300244615385  
00:32:41.882 --> 00:32:43.450 clinic are uterine seros.  
NOTE Confidence: 0.915300244615385  
00:32:43.450 --> 00:32:47.210 They are rare tumor 3:00 to 9:50 to  
NOTE Confidence: 0.915300244615385  
00:32:47.210 --> 00:32:50.528 10% over all of all uterine cancer,  
NOTE Confidence: 0.915300244615385  
00:32:50.530 --> 00:32:53.469 but they kill over 40% of our patient.  
NOTE Confidence: 0.915300244615385  
00:32:53.469 --> 00:32:55.347 Why is that is because they  
NOTE Confidence: 0.915300244615385  
00:32:55.347 --> 00:32:57.330 are biologically aggressive,  
NOTE Confidence: 0.915300244615385  
00:32:57.330 --> 00:33:00.180 they can start spreading very early  
NOTE Confidence: 0.915300244615385  
00:33:00.180 --> 00:33:02.639 and they're usually difficult to  
NOTE Confidence: 0.915300244615385

00:33:02.639 --> 00:33:04.567 treat in thermal chemotherapy.  
NOTE Confidence: 0.915300244615385

00:33:04.570 --> 00:33:07.377 One of the important thing is that.  
NOTE Confidence: 0.915300244615385

00:33:07.380 --> 00:33:10.208 The Gynong division at Yale has been  
NOTE Confidence: 0.915300244615385

00:33:10.208 --> 00:33:13.940 for a long time a really a place  
NOTE Confidence: 0.915300244615385

00:33:13.940 --> 00:33:16.540 where this patient were affair.  
NOTE Confidence: 0.915300244615385

00:33:16.540 --> 00:33:18.628 And this is because of course and this  
NOTE Confidence: 0.915300244615385

00:33:18.628 --> 00:33:20.857 is because of the work of Doctor Schwartz,  
NOTE Confidence: 0.915300244615385

00:33:20.860 --> 00:33:23.220 that work here for the last 50 years.  
NOTE Confidence: 0.915300244615385

00:33:23.220 --> 00:33:25.385 Doctor Schwartz has a specific  
NOTE Confidence: 0.915300244615385

00:33:25.385 --> 00:33:27.550 interest in studying this tumor.  
NOTE Confidence: 0.915300244615385

00:33:27.550 --> 00:33:29.517 And when he asked me to join  
NOTE Confidence: 0.915300244615385

00:33:29.517 --> 00:33:30.710 him 16 years ago,  
NOTE Confidence: 0.915300244615385

00:33:30.710 --> 00:33:32.908 I kept on going and and work  
NOTE Confidence: 0.915300244615385

00:33:32.908 --> 00:33:34.443 in specifically against this  
NOTE Confidence: 0.915300244615385

00:33:34.443 --> 00:33:36.030 biologically aggressive tumor.  
NOTE Confidence: 0.915300244615385

00:33:36.030 --> 00:33:38.800 So this is to say we see a lot of this

NOTE Confidence: 0.915300244615385  
00:33:38.800 --> 00:33:41.262 rare tumor and because of that we were  
NOTE Confidence: 0.915300244615385  
00:33:41.262 --> 00:33:44.052 able to collect a lot of specimen and  
NOTE Confidence: 0.915300244615385  
00:33:44.052 --> 00:33:48.126 we perform and we reported the first  
NOTE Confidence: 0.915300244615385  
00:33:48.126 --> 00:33:50.643 comprehensive genetic landscape analysis  
NOTE Confidence: 0.915300244615385  
00:33:50.643 --> 00:33:54.638 of the rare manigancy and this was published.  
NOTE Confidence: 0.915300244615385  
00:33:54.638 --> 00:33:55.010 Again,  
NOTE Confidence: 0.915300244615385  
00:33:55.010 --> 00:33:56.822 over 10 years ago,  
NOTE Confidence: 0.915300244615385  
00:33:56.822 --> 00:33:59.087 as you can see here,  
NOTE Confidence: 0.915300244615385  
00:33:59.090 --> 00:34:01.652 what we found in this study there  
NOTE Confidence: 0.915300244615385  
00:34:01.652 --> 00:34:04.530 was by the way before the TC  
NOTE Confidence: 0.915300244615385  
00:34:04.530 --> 00:34:06.796 published before the TCGA data,  
NOTE Confidence: 0.915300244615385  
00:34:06.796 --> 00:34:07.209 okay,  
NOTE Confidence: 0.915300244615385  
00:34:07.209 --> 00:34:09.687 about six months before the first  
NOTE Confidence: 0.915300244615385  
00:34:09.690 --> 00:34:11.882 major comprehensive analysis done  
NOTE Confidence: 0.915300244615385  
00:34:11.882 --> 00:34:15.170 by the Tumor Cancer Atlas Network,  
NOTE Confidence: 0.915300244615385

00:34:15.170 --> 00:34:17.290 important chronologically to say that  
NOTE Confidence: 0.915300244615385

00:34:17.290 --> 00:34:20.152 this is what we found, we sound,  
NOTE Confidence: 0.915300244615385

00:34:20.152 --> 00:34:22.007 we found something very interesting,  
NOTE Confidence: 0.915300244615385

00:34:22.010 --> 00:34:22.548 namely.  
NOTE Confidence: 0.915300244615385

00:34:22.548 --> 00:34:25.776 A small minority of this biological  
NOTE Confidence: 0.915300244615385

00:34:25.776 --> 00:34:28.173 aggressive cancer called uterine series  
NOTE Confidence: 0.915300244615385

00:34:28.173 --> 00:34:30.300 8 to 9% had this characteristic year.  
NOTE Confidence: 0.915300244615385

00:34:30.300 --> 00:34:33.258 They had a huge number of mutation.  
NOTE Confidence: 0.915300244615385

00:34:33.260 --> 00:34:35.164 They were ultra mutated,  
NOTE Confidence: 0.915300244615385

00:34:35.164 --> 00:34:38.700 but they were Microsoft and lie stable.  
NOTE Confidence: 0.915300244615385

00:34:38.700 --> 00:34:41.406 They didn't have any mismatch repair  
NOTE Confidence: 0.915300244615385

00:34:41.406 --> 00:34:43.540 deficiency. So what were this tumor?  
NOTE Confidence: 0.915300244615385

00:34:43.540 --> 00:34:44.938 We didn't know at that time,  
NOTE Confidence: 0.915300244615385

00:34:44.940 --> 00:34:47.418 but they had this genetic characteristic,  
NOTE Confidence: 0.915300244615385

00:34:47.420 --> 00:34:49.085 the remaining group.  
NOTE Confidence: 0.915300244615385

00:34:49.085 --> 00:34:52.415 There was again the striking majority

NOTE Confidence: 0.915300244615385  
00:34:52.420 --> 00:34:55.140 9095% where normal mutated tumor,  
NOTE Confidence: 0.915300244615385  
00:34:55.140 --> 00:34:57.460 very low number of mutation,  
NOTE Confidence: 0.915300244615385  
00:34:57.460 --> 00:35:00.770 MSI stable and cold meaning  
NOTE Confidence: 0.915300244615385  
00:35:00.770 --> 00:35:02.094 minimal inflammation,  
NOTE Confidence: 0.915300244615385  
00:35:02.100 --> 00:35:04.460 minimum inflammatory cell present  
NOTE Confidence: 0.915300244615385  
00:35:04.460 --> 00:35:06.820 in the tumor microenvironment.  
NOTE Confidence: 0.8958366125  
00:35:06.820 --> 00:35:10.154 So of course we start looking to the 92%,  
NOTE Confidence: 0.8958366125  
00:35:10.154 --> 00:35:11.824 right. And what I'm showing  
NOTE Confidence: 0.8958366125  
00:35:11.824 --> 00:35:13.780 you here was our finding,  
NOTE Confidence: 0.8958366125  
00:35:13.780 --> 00:35:16.816 we look to this 21,000 gene  
NOTE Confidence: 0.8958366125  
00:35:16.820 --> 00:35:19.410 and we found specific pathway.  
NOTE Confidence: 0.8958366125  
00:35:19.410 --> 00:35:21.960 That this aggressive tumor was using  
NOTE Confidence: 0.8958366125  
00:35:21.960 --> 00:35:24.854 to survive hemotherapy and then come  
NOTE Confidence: 0.8958366125  
00:35:24.854 --> 00:35:28.519 back after treatment and one of these  
NOTE Confidence: 0.8958366125  
00:35:28.519 --> 00:35:31.442 again pathway that I'm you know I'm  
NOTE Confidence: 0.8958366125

00:35:31.442 --> 00:35:33.570 highlighting here was the hair to new  
NOTE Confidence: 0.930428735769231

00:35:35.610 --> 00:35:39.174 PAKAKT enter pathway over 1/3 of  
NOTE Confidence: 0.930428735769231

00:35:39.174 --> 00:35:42.406 this patient had amplification on on  
NOTE Confidence: 0.930428735769231

00:35:42.406 --> 00:35:45.422 the C RB2 gene that encode for the  
NOTE Confidence: 0.930428735769231

00:35:45.523 --> 00:35:49.105 epidermal glow factor type 2 receptor.  
NOTE Confidence: 0.930428735769231

00:35:49.110 --> 00:35:51.348 This is well known in oncology.  
NOTE Confidence: 0.930428735769231

00:35:51.350 --> 00:35:53.750 Why? Because there are specific  
NOTE Confidence: 0.930428735769231

00:35:53.750 --> 00:35:56.150 treatment they target this pathway.  
NOTE Confidence: 0.930428735769231

00:35:56.150 --> 00:35:59.123 The target have to new trust is  
NOTE Confidence: 0.930428735769231

00:35:59.123 --> 00:36:01.588 monoclonal antibodies one of those.  
NOTE Confidence: 0.930428735769231

00:36:01.590 --> 00:36:04.902 But the problem is that this was  
NOTE Confidence: 0.930428735769231

00:36:04.902 --> 00:36:06.882 an antibody available for the  
NOTE Confidence: 0.930428735769231

00:36:06.882 --> 00:36:09.013 treatment of breast cancer patient  
NOTE Confidence: 0.930428735769231

00:36:09.013 --> 00:36:11.623 and later on gastric cancer patient.  
NOTE Confidence: 0.930428735769231

00:36:11.630 --> 00:36:13.826 But there was really no report,  
NOTE Confidence: 0.930428735769231

00:36:13.830 --> 00:36:16.050 no literature in the treatment

NOTE Confidence: 0.930428735769231

00:36:16.050 --> 00:36:17.826 of uterine serous carcinoma.

NOTE Confidence: 0.930428735769231

00:36:17.830 --> 00:36:20.166 So we decided to fill that gap and

NOTE Confidence: 0.930428735769231

00:36:20.166 --> 00:36:22.146 we designed a study here at Yale,

NOTE Confidence: 0.930428735769231

00:36:22.150 --> 00:36:25.280 we designed an investigator initiated

NOTE Confidence: 0.930428735769231

00:36:25.280 --> 00:36:28.385 trial there was again through a

NOTE Confidence: 0.930428735769231

00:36:28.385 --> 00:36:30.518 consortium of institution because as

NOTE Confidence: 0.930428735769231

00:36:30.518 --> 00:36:33.670 I just told you this is a rare cancer

NOTE Confidence: 0.930428735769231

00:36:33.670 --> 00:36:35.945 and we were and we were targeting

NOTE Confidence: 0.930428735769231

00:36:35.945 --> 00:36:37.992 about 30% of this rare cancer the

NOTE Confidence: 0.930428735769231

00:36:37.992 --> 00:36:39.590 one over expressing her to new.

NOTE Confidence: 0.930428735769231

00:36:39.590 --> 00:36:42.350 So we needed multiple side to do that.

NOTE Confidence: 0.930428735769231

00:36:42.350 --> 00:36:44.793 So we had eleven side going from

NOTE Confidence: 0.930428735769231

00:36:44.793 --> 00:36:47.258 John Hopkins to higher state and.

NOTE Confidence: 0.930428735769231

00:36:47.258 --> 00:36:49.130 The primary goal here,

NOTE Confidence: 0.930428735769231

00:36:49.130 --> 00:36:51.248 the primary objective was to understand

NOTE Confidence: 0.930428735769231

00:36:51.248 --> 00:36:53.748 if adding trust to the map this  
NOTE Confidence: 0.930428735769231

00:36:53.748 --> 00:36:55.453 monoclonal antibody to our standard  
NOTE Confidence: 0.930428735769231

00:36:55.453 --> 00:36:57.921 of care that is based on carbo packet  
NOTE Confidence: 0.930428735769231

00:36:57.921 --> 00:37:00.550 tax could make the difference in term  
NOTE Confidence: 0.930428735769231

00:37:00.550 --> 00:37:02.730 of increasing progression free survival,  
NOTE Confidence: 0.930428735769231

00:37:02.730 --> 00:37:04.314 increasing the objective response  
NOTE Confidence: 0.930428735769231

00:37:04.314 --> 00:37:06.294 rate and the overall survival  
NOTE Confidence: 0.930428735769231

00:37:06.294 --> 00:37:08.130 of this patient and so on.  
NOTE Confidence: 0.930428735769231

00:37:08.130 --> 00:37:10.330 And these are our result.  
NOTE Confidence: 0.930428735769231

00:37:10.330 --> 00:37:12.766 So we were able to show that  
NOTE Confidence: 0.930428735769231

00:37:12.766 --> 00:37:14.500 adding this monoclonal antibody.  
NOTE Confidence: 0.930428735769231

00:37:14.500 --> 00:37:16.148 Without any significant increase  
NOTE Confidence: 0.930428735769231

00:37:16.148 --> 00:37:18.208 in toxicity when compared to  
NOTE Confidence: 0.930428735769231

00:37:18.208 --> 00:37:20.338 the Carbo Parkly tax regiment,  
NOTE Confidence: 0.930428735769231

00:37:20.340 --> 00:37:23.028 we were able to increase of about 5  
NOTE Confidence: 0.930428735769231

00:37:23.028 --> 00:37:24.849 month progression free survival and

NOTE Confidence: 0.930428735769231

00:37:24.849 --> 00:37:27.376 close to six month the overall survival

NOTE Confidence: 0.930428735769231

00:37:27.446 --> 00:37:29.536 of the entire patient population.

NOTE Confidence: 0.930428735769231

00:37:29.540 --> 00:37:32.228 They were both advanced stage as well

NOTE Confidence: 0.930428735769231

00:37:32.228 --> 00:37:34.417 as recurrent patient with uterine

NOTE Confidence: 0.930428735769231

00:37:34.417 --> 00:37:36.586 serous carcinoma with a benefit

NOTE Confidence: 0.930428735769231

00:37:36.586 --> 00:37:39.400 even much higher in the chemo naive

NOTE Confidence: 0.930428735769231

00:37:39.486 --> 00:37:42.220 stage 3 and stage 4 disease so.

NOTE Confidence: 0.930428735769231

00:37:42.220 --> 00:37:45.020 This study is important because

NOTE Confidence: 0.930428735769231

00:37:45.020 --> 00:37:48.310 not only ask recognized important,

NOTE Confidence: 0.930428735769231

00:37:48.310 --> 00:37:49.206 you know,

NOTE Confidence: 0.930428735769231

00:37:49.206 --> 00:37:52.746 listing it as a major advancement in 2019,

NOTE Confidence: 0.930428735769231

00:37:52.746 --> 00:37:55.518 one of the five major advancement of

NOTE Confidence: 0.930428735769231

00:37:55.518 --> 00:37:58.914 that year in the oncology literature,

NOTE Confidence: 0.930428735769231

00:37:58.914 --> 00:38:02.862 but also because this increase in

NOTE Confidence: 0.930428735769231

00:38:02.862 --> 00:38:05.642 overall survival caused the revision

NOTE Confidence: 0.930428735769231

00:38:05.642 --> 00:38:07.578 of the National Comprehensive  
NOTE Confidence: 0.930428735769231

00:38:07.578 --> 00:38:10.052 Cancer Network guideline that are  
NOTE Confidence: 0.930428735769231

00:38:10.052 --> 00:38:12.096 widely used as standard.  
NOTE Confidence: 0.930428735769231

00:38:12.100 --> 00:38:14.914 Of care again in oncology by both  
NOTE Confidence: 0.930428735769231

00:38:14.914 --> 00:38:17.780 clinician as well as insurance company  
NOTE Confidence: 0.930428735769231

00:38:17.780 --> 00:38:21.756 and since that time 2019, Carboplatin,  
NOTE Confidence: 0.930428735769231

00:38:21.756 --> 00:38:24.380 Parkly, Taxol and Trastozoma.  
NOTE Confidence: 0.930428735769231

00:38:24.380 --> 00:38:27.110 So the yield regimen is now again  
NOTE Confidence: 0.930428735769231

00:38:27.110 --> 00:38:29.337 recommended in old patient with  
NOTE Confidence: 0.930428735769231

00:38:29.337 --> 00:38:31.792 utransitous carcinoma or expressing her  
NOTE Confidence: 0.930428735769231

00:38:31.792 --> 00:38:36.700 to you in the US as well as worldwide,  
NOTE Confidence: 0.930428735769231

00:38:36.700 --> 00:38:39.288 let me do now.  
NOTE Confidence: 0.930428735769231

00:38:39.290 --> 00:38:41.058 Let me tell you a little bit more  
NOTE Confidence: 0.930428735769231

00:38:41.058 --> 00:38:42.489 about the Poly ultramutated.  
NOTE Confidence: 0.930428735769231

00:38:42.490 --> 00:38:47.044 So we look to this uterines of carcinoma.  
NOTE Confidence: 0.930428735769231

00:38:47.050 --> 00:38:48.130 As I told you before,

NOTE Confidence: 0.930428735769231  
00:38:48.130 --> 00:38:49.621 a small minority,  
NOTE Confidence: 0.930428735769231  
00:38:49.621 --> 00:38:53.100 a nine percent had this abnormal alteration  
NOTE Confidence: 0.930428735769231  
00:38:53.185 --> 00:38:56.008 in a gene called DNA polymerase epsilon.  
NOTE Confidence: 0.930428735769231  
00:38:56.008 --> 00:38:58.970 This is a DNA polymerase at that time.  
NOTE Confidence: 0.930428735769231  
00:38:58.970 --> 00:39:01.328 I remind you this was over 10 years ago.  
NOTE Confidence: 0.930428735769231  
00:39:01.330 --> 00:39:04.210 Nobody knew what this really gene was doing,  
NOTE Confidence: 0.930428735769231  
00:39:04.210 --> 00:39:04.714 but.  
NOTE Confidence: 0.930428735769231  
00:39:04.714 --> 00:39:06.730 Look into this tumor,  
NOTE Confidence: 0.930428735769231  
00:39:06.730 --> 00:39:08.785 we immediately realize that was  
NOTE Confidence: 0.930428735769231  
00:39:08.785 --> 00:39:10.840 really playing a major role  
NOTE Confidence: 0.939061272941177  
00:39:10.918 --> 00:39:13.844 in the proofreading capability of the DNA.  
NOTE Confidence: 0.939061272941177  
00:39:13.850 --> 00:39:15.978 Why is that? Is because this tumor  
NOTE Confidence: 0.939061272941177  
00:39:15.978 --> 00:39:18.248 had a huge number of mutation.  
NOTE Confidence: 0.939061272941177  
00:39:18.250 --> 00:39:21.064 So polymerase epsilon in normal cell again  
NOTE Confidence: 0.939061272941177  
00:39:21.064 --> 00:39:24.010 is endowed with proofreading capability.  
NOTE Confidence: 0.939061272941177

00:39:24.010 --> 00:39:26.458 When the cell divide and the  
NOTE Confidence: 0.939061272941177

00:39:26.458 --> 00:39:28.666 DNA duplicate the DNA polymerase  
NOTE Confidence: 0.939061272941177

00:39:28.666 --> 00:39:31.116 epsilon proofread the sequence and  
NOTE Confidence: 0.939061272941177

00:39:31.116 --> 00:39:34.684 if there is an error, a mutation.  
NOTE Confidence: 0.939061272941177

00:39:34.684 --> 00:39:38.303 Stop and repair and fix the error.  
NOTE Confidence: 0.939061272941177

00:39:38.310 --> 00:39:41.091 But if one of the two allele present in  
NOTE Confidence: 0.939061272941177

00:39:41.091 --> 00:39:43.869 the cell encoding for the polymerase  
NOTE Confidence: 0.939061272941177

00:39:43.869 --> 00:39:46.000 epsilon mutate and the majority of  
NOTE Confidence: 0.939061272941177

00:39:46.000 --> 00:39:48.140 the special are also multi mutation  
NOTE Confidence: 0.939061272941177

00:39:48.140 --> 00:39:50.265 so acquired during the lifetime,  
NOTE Confidence: 0.939061272941177

00:39:50.270 --> 00:39:52.928 the cell survive but start acquiring  
NOTE Confidence: 0.939061272941177

00:39:52.928 --> 00:39:55.209 error mistakes and start accumulating  
NOTE Confidence: 0.939061272941177

00:39:55.209 --> 00:39:58.254 again mutation to the point where you  
NOTE Confidence: 0.939061272941177

00:39:58.254 --> 00:40:00.998 have this monster tumor they have.  
NOTE Confidence: 0.939061272941177

00:40:00.998 --> 00:40:03.966 1000 and 1000 mutation much higher than  
NOTE Confidence: 0.939061272941177

00:40:03.970 --> 00:40:07.490 any other human cancer including lung,

NOTE Confidence: 0.939061272941177  
00:40:07.490 --> 00:40:08.130 Melanoma,  
NOTE Confidence: 0.939061272941177  
00:40:08.130 --> 00:40:10.050 bladder cancer that are well known to be,  
NOTE Confidence: 0.939061272941177  
00:40:10.050 --> 00:40:12.570 I mean have a high number of mutation.  
NOTE Confidence: 0.939061272941177  
00:40:12.570 --> 00:40:14.989 So when we look to this tumor specifically  
NOTE Confidence: 0.939061272941177  
00:40:14.989 --> 00:40:17.263 we saw that in the exonuclease  
NOTE Confidence: 0.939061272941177  
00:40:17.263 --> 00:40:19.729 domain of the polymerase epsilon,  
NOTE Confidence: 0.939061272941177  
00:40:19.730 --> 00:40:21.905 the majority of recurrent mutation  
NOTE Confidence: 0.939061272941177  
00:40:21.905 --> 00:40:24.018 with localizing that area and  
NOTE Confidence: 0.939061272941177  
00:40:24.018 --> 00:40:25.490 why is that important?  
NOTE Confidence: 0.939061272941177  
00:40:25.490 --> 00:40:28.472 Is because even if the majority  
NOTE Confidence: 0.939061272941177  
00:40:28.472 --> 00:40:30.381 of the polyultramutated USC,  
NOTE Confidence: 0.939061272941177  
00:40:30.381 --> 00:40:33.258 they do well when compared to the  
NOTE Confidence: 0.939061272941177  
00:40:33.258 --> 00:40:35.644 other that I told you still some  
NOTE Confidence: 0.939061272941177  
00:40:35.644 --> 00:40:37.546 of this patient where they come  
NOTE Confidence: 0.939061272941177  
00:40:37.546 --> 00:40:39.746 back with recurring disease and  
NOTE Confidence: 0.939061272941177

00:40:39.746 --> 00:40:41.570 these tumor are relentless,  
NOTE Confidence: 0.939061272941177

00:40:41.570 --> 00:40:43.690 they are resistant to chemotherapy,  
NOTE Confidence: 0.939061272941177

00:40:43.690 --> 00:40:45.680 they are resistant to radiation  
NOTE Confidence: 0.939061272941177

00:40:45.680 --> 00:40:48.551 treatment and they kill our patient so.  
NOTE Confidence: 0.939061272941177

00:40:48.551 --> 00:40:50.938 Few years ago looking to the set  
NOTE Confidence: 0.939061272941177

00:40:50.938 --> 00:40:53.530 to the genetic characteristic,  
NOTE Confidence: 0.939061272941177

00:40:53.530 --> 00:40:55.728 to the fact they were all permuted,  
NOTE Confidence: 0.939061272941177

00:40:55.730 --> 00:40:58.538 we thought they could be exquisitely  
NOTE Confidence: 0.939061272941177

00:40:58.538 --> 00:41:01.130 sensitive to new checkpoint inhibitor  
NOTE Confidence: 0.939061272941177

00:41:01.130 --> 00:41:03.968 and and again few years ago and  
NOTE Confidence: 0.939061272941177

00:41:03.968 --> 00:41:05.489 here I'm showing you a case report.  
NOTE Confidence: 0.939061272941177

00:41:05.490 --> 00:41:07.882 This is one of my patient treated in  
NOTE Confidence: 0.939061272941177

00:41:07.882 --> 00:41:10.699 two or seven initially for an advanced  
NOTE Confidence: 0.939061272941177

00:41:10.699 --> 00:41:15.331 stage type 2 mix again uterine carcinoma.  
NOTE Confidence: 0.939061272941177

00:41:15.331 --> 00:41:18.466 She was treated with surgery.  
NOTE Confidence: 0.939061272941177

00:41:18.470 --> 00:41:19.702 Chemotherapy or addition treatment,

NOTE Confidence: 0.939061272941177  
00:41:19.702 --> 00:41:21.870 she did well for a few year,  
NOTE Confidence: 0.939061272941177  
00:41:21.870 --> 00:41:24.467 came back in 2012 with recurring disease,  
NOTE Confidence: 0.939061272941177  
00:41:24.470 --> 00:41:28.650 multiple metastatic lesion as  
NOTE Confidence: 0.939061272941177  
00:41:28.650 --> 00:41:32.810 usual and and at that time point  
NOTE Confidence: 0.939061272941177  
00:41:32.810 --> 00:41:34.185 she was retrieved with surgery,  
NOTE Confidence: 0.939061272941177  
00:41:34.190 --> 00:41:37.070 additional bowel resection,  
NOTE Confidence: 0.939061272941177  
00:41:37.070 --> 00:41:40.426 additional chemo and she start progressing.  
NOTE Confidence: 0.939061272941177  
00:41:40.426 --> 00:41:43.982 So she was referred to us by an outside  
NOTE Confidence: 0.939061272941177  
00:41:43.982 --> 00:41:46.622 medical oncologist for a second opinion.  
NOTE Confidence: 0.939061272941177  
00:41:46.622 --> 00:41:47.498 In reality,  
NOTE Confidence: 0.939061272941177  
00:41:47.500 --> 00:41:49.509 of course the referral was to for  
NOTE Confidence: 0.939061272941177  
00:41:49.509 --> 00:41:51.529 the patient to accept Hospice because  
NOTE Confidence: 0.939061272941177  
00:41:51.529 --> 00:41:53.354 there was really nothing that  
NOTE Confidence: 0.939061272941177  
00:41:53.354 --> 00:41:55.427 we could offer internal systemic  
NOTE Confidence: 0.939061272941177  
00:41:55.427 --> 00:41:57.135 treatment to this patient.  
NOTE Confidence: 0.939061272941177

00:41:57.140 --> 00:41:58.580 When she came to see us,  
NOTE Confidence: 0.939061272941177

00:41:58.580 --> 00:42:00.854 we sequenced the tumor with foundation  
NOTE Confidence: 0.939061272941177

00:42:00.854 --> 00:42:03.292 medicine and what we found was that  
NOTE Confidence: 0.939061272941177

00:42:03.292 --> 00:42:05.760 she had a Poly hotspot mutation  
NOTE Confidence: 0.939061272941177

00:42:05.760 --> 00:42:07.660 in the exonuclearized domain,  
NOTE Confidence: 0.939061272941177

00:42:07.660 --> 00:42:12.752 the P 2028 to 286 are this huge  
NOTE Confidence: 0.939061272941177

00:42:12.752 --> 00:42:17.090 number of mutation present so.  
NOTE Confidence: 0.939061272941177

00:42:17.090 --> 00:42:19.358 This is was a lucky patient because  
NOTE Confidence: 0.939061272941177

00:42:19.358 --> 00:42:23.994 at that time was about 2014 we had the  
NOTE Confidence: 0.939061272941177

00:42:23.994 --> 00:42:26.570 program on going at Yale with nivolumab.  
NOTE Confidence: 0.939061272941177

00:42:26.570 --> 00:42:28.684 This was a program that doctor Roy  
NOTE Confidence: 0.939061272941177

00:42:28.684 --> 00:42:30.944 Herbs as active in lung cancer at  
NOTE Confidence: 0.939061272941177

00:42:30.944 --> 00:42:32.549 that time point Nivolumab there  
NOTE Confidence: 0.939061272941177

00:42:32.549 --> 00:42:34.927 was the first immune checkpoint  
NOTE Confidence: 0.939061272941177

00:42:34.927 --> 00:42:36.923 inhibitor before before pembrolizumab.  
NOTE Confidence: 0.939061272941177

00:42:36.930 --> 00:42:39.422 OK true that everybody now is using

NOTE Confidence: 0.939061272941177  
00:42:39.422 --> 00:42:41.425 was only approving Melanoma but  
NOTE Confidence: 0.939061272941177  
00:42:41.425 --> 00:42:43.770 because of this program I was able  
NOTE Confidence: 0.9201268  
00:42:43.770 --> 00:42:47.360 to. To the OR through a compassionate  
NOTE Confidence: 0.9201268  
00:42:47.360 --> 00:42:49.567 base approval to offer to this  
NOTE Confidence: 0.9201268  
00:42:49.567 --> 00:42:51.217 patient NI volume for free.  
NOTE Confidence: 0.9201268  
00:42:51.220 --> 00:42:52.472 She signed a consent.  
NOTE Confidence: 0.9201268  
00:42:52.472 --> 00:42:54.776 I got the approval for the chief  
NOTE Confidence: 0.9201268  
00:42:54.776 --> 00:42:56.541 medical officer of the Yale  
NOTE Confidence: 0.9201268  
00:42:56.541 --> 00:42:58.846 Cancer Center was or Jerry or  
NOTE Confidence: 0.9201268  
00:42:58.846 --> 00:43:01.340 Lillenbaum and the rest of history.  
NOTE Confidence: 0.9201268  
00:43:01.340 --> 00:43:03.300 We start treating this patient.  
NOTE Confidence: 0.9201268  
00:43:03.300 --> 00:43:06.108 I don't know if you can see this is  
NOTE Confidence: 0.9201268  
00:43:06.108 --> 00:43:08.756 one of the metastatic deposit as big  
NOTE Confidence: 0.9201268  
00:43:08.756 --> 00:43:12.047 as a spleen as you can see here 7-8  
NOTE Confidence: 0.9201268  
00:43:12.047 --> 00:43:14.609 centimeter masses in the Donal cavity.  
NOTE Confidence: 0.9201268

00:43:14.610 --> 00:43:18.130 This is her bladder nodule or two 3  
NOTE Confidence: 0.9201268

00:43:18.130 --> 00:43:21.450 centimeter growing in the wall of the  
NOTE Confidence: 0.9201268

00:43:21.450 --> 00:43:23.370 bladder causing constant bleeding.  
NOTE Confidence: 0.9201268

00:43:23.370 --> 00:43:26.646 In a week the bleeding disappear  
NOTE Confidence: 0.9201268

00:43:26.650 --> 00:43:31.774 and in about 6 weeks pain disappear.  
NOTE Confidence: 0.9201268

00:43:31.774 --> 00:43:35.922 It took about 18 months to completely  
NOTE Confidence: 0.9201268

00:43:35.922 --> 00:43:38.834 melt out these pounds of cancer that  
NOTE Confidence: 0.9201268

00:43:38.834 --> 00:43:41.516 this patient had on the volume up.  
NOTE Confidence: 0.9201268

00:43:41.520 --> 00:43:43.585 The patient is still doing is cure  
NOTE Confidence: 0.9201268

00:43:43.585 --> 00:43:45.667 of the disease and I swear two  
NOTE Confidence: 0.9201268

00:43:45.667 --> 00:43:47.365 weeks ago in clinic eight years  
NOTE Confidence: 0.9201268

00:43:47.430 --> 00:43:49.356 after what I'm showing you here.  
NOTE Confidence: 0.9201268

00:43:49.360 --> 00:43:51.748 So this was a terminal patient  
NOTE Confidence: 0.9201268

00:43:51.748 --> 00:43:54.559 referred to us for again Hospice.  
NOTE Confidence: 0.9201268

00:43:54.560 --> 00:43:56.000 We sequenced the tumor,  
NOTE Confidence: 0.9201268

00:43:56.000 --> 00:43:58.160 we found that we are mutation,

NOTE Confidence: 0.9201268

00:43:58.160 --> 00:44:00.225 we treat the immune checkpoint

NOTE Confidence: 0.9201268

00:44:00.225 --> 00:44:01.877 inhibitor as visit response

NOTE Confidence: 0.9201268

00:44:01.877 --> 00:44:04.160 and of course we reported this,

NOTE Confidence: 0.9201268

00:44:04.160 --> 00:44:07.160 this is the first report of

NOTE Confidence: 0.9201268

00:44:07.160 --> 00:44:08.660 the successful treatment.

NOTE Confidence: 0.9201268

00:44:08.660 --> 00:44:11.444 Of a polyultramutated endometrial

NOTE Confidence: 0.9201268

00:44:11.444 --> 00:44:13.970 carcinoma and now the word know

NOTE Confidence: 0.9201268

00:44:13.970 --> 00:44:16.331 and everybody is looking to this

NOTE Confidence: 0.9201268

00:44:16.331 --> 00:44:18.540 patient and when they found the

NOTE Confidence: 0.9201268

00:44:18.540 --> 00:44:19.948 polyultramutation for their treatment

NOTE Confidence: 0.9201268

00:44:19.948 --> 00:44:21.860 with immune checkpoint inhibitor.

NOTE Confidence: 0.9201268

00:44:21.860 --> 00:44:24.037 Now the second tumor that I want

NOTE Confidence: 0.9201268

00:44:24.037 --> 00:44:26.540 to tell you in the last 5-6 minutes

NOTE Confidence: 0.9201268

00:44:26.540 --> 00:44:28.844 are carcinos or Comma, the uterus.

NOTE Confidence: 0.9201268

00:44:28.844 --> 00:44:30.140 Carcinos or Comma,

NOTE Confidence: 0.9201268

00:44:30.140 --> 00:44:32.690 the uterus are also biologically

NOTE Confidence: 0.9201268

00:44:32.690 --> 00:44:35.468 aggressive are rare 3 to 5%.

NOTE Confidence: 0.9201268

00:44:35.468 --> 00:44:38.430 But they account for over 20% of

NOTE Confidence: 0.9201268

00:44:38.430 --> 00:44:40.730 all death in uterine carcinoma.

NOTE Confidence: 0.9201268

00:44:40.730 --> 00:44:43.430 And one of the peculiarity about

NOTE Confidence: 0.9201268

00:44:43.430 --> 00:44:45.603 carcinofacoma of the uterine is

NOTE Confidence: 0.9201268

00:44:45.603 --> 00:44:48.186 that for over 150 years this tumor

NOTE Confidence: 0.9201268

00:44:48.186 --> 00:44:50.730 have been a subject of debate.

NOTE Confidence: 0.9201268

00:44:50.730 --> 00:44:51.930 And why is that?

NOTE Confidence: 0.9201268

00:44:51.930 --> 00:44:53.730 Is because they are mixed human,

NOTE Confidence: 0.9201268

00:44:53.730 --> 00:44:56.208 there is both an epithelial component

NOTE Confidence: 0.9201268

00:44:56.210 --> 00:44:58.688 as well as a sarcometous component.

NOTE Confidence: 0.9201268

00:44:58.690 --> 00:45:01.175 And the question is what are these

NOTE Confidence: 0.9201268

00:45:01.175 --> 00:45:03.387 mixed cancers? Are they carcinoma?

NOTE Confidence: 0.9201268

00:45:03.387 --> 00:45:05.383 That undergoes are comatus

NOTE Confidence: 0.9201268

00:45:05.383 --> 00:45:08.061 transformation or are sarcoma that

NOTE Confidence: 0.9201268

00:45:08.061 --> 00:45:10.265 undergo epitilla differentiation such

NOTE Confidence: 0.9201268

00:45:10.265 --> 00:45:13.130 As for instance synovial sarcoma.

NOTE Confidence: 0.9201268

00:45:13.130 --> 00:45:15.450 So we answer that question.

NOTE Confidence: 0.9201268

00:45:15.450 --> 00:45:17.634 This is another paper that we

NOTE Confidence: 0.9201268

00:45:17.634 --> 00:45:19.090 published few years ago.

NOTE Confidence: 0.9201268

00:45:19.090 --> 00:45:22.018 Again we sequenced over 70 carcino

NOTE Confidence: 0.9201268

00:45:22.018 --> 00:45:25.281 sarcoma of the uterus and we published

NOTE Confidence: 0.9201268

00:45:25.281 --> 00:45:27.903 again this high impact journal and

NOTE Confidence: 0.9201268

00:45:27.903 --> 00:45:30.527 what we found here is number one

NOTE Confidence: 0.9201268

00:45:30.530 --> 00:45:33.670 we were able through sequencing.

NOTE Confidence: 0.9201268

00:45:33.670 --> 00:45:36.910 We also perform multiple sequencing,

NOTE Confidence: 0.9201268

00:45:36.910 --> 00:45:39.570 so not only we sequence the 70

NOTE Confidence: 0.9201268

00:45:39.570 --> 00:45:41.905 specimen from the 70 patient but

NOTE Confidence: 0.9201268

00:45:41.905 --> 00:45:44.509 about five or six of this tumor.

NOTE Confidence: 0.9201268

00:45:44.510 --> 00:45:47.054 We were doing macro dissection and

NOTE Confidence: 0.9201268

00:45:47.054 --> 00:45:49.217 sequence area of epithelial tumor  
NOTE Confidence: 0.9201268

00:45:49.217 --> 00:45:51.197 and other sarcometous humor tumor  
NOTE Confidence: 0.9201268

00:45:51.197 --> 00:45:53.873 in the same patient and we were  
NOTE Confidence: 0.9201268

00:45:53.873 --> 00:45:55.678 overlapping the old Axon sequencing  
NOTE Confidence: 0.9201268

00:45:55.678 --> 00:45:58.015 data to try to understand are  
NOTE Confidence: 0.9201268

00:45:58.015 --> 00:46:00.140 these tumor epithelial or this  
NOTE Confidence: 0.9201268

00:46:00.140 --> 00:46:03.294 tumor mesenchymal and the answer is.  
NOTE Confidence: 0.9201268

00:46:03.294 --> 00:46:03.870 Unequivocally,  
NOTE Confidence: 0.9201268

00:46:03.870 --> 00:46:06.470 these are all epithelial cancer.  
NOTE Confidence: 0.9201268

00:46:06.470 --> 00:46:08.546 They all start as an epithelia,  
NOTE Confidence: 0.9201268

00:46:08.550 --> 00:46:09.584 uterine carcinoma,  
NOTE Confidence: 0.9201268

00:46:09.584 --> 00:46:13.203 but they go through clonal evolution and  
NOTE Confidence: 0.9201268

00:46:13.203 --> 00:46:16.467 part of the clone during the lifespan,  
NOTE Confidence: 0.95534864

00:46:16.470 --> 00:46:18.762 lifetime of the disease.  
NOTE Confidence: 0.95534864

00:46:18.762 --> 00:46:19.908 They differentiate.  
NOTE Confidence: 0.95534864

00:46:19.910 --> 00:46:21.167 They acquire epithelium,

NOTE Confidence: 0.95534864

00:46:21.167 --> 00:46:22.424 mesenchemal transition and

NOTE Confidence: 0.95534864

00:46:22.424 --> 00:46:24.670 there's as I'm showing you here,

NOTE Confidence: 0.95534864

00:46:24.670 --> 00:46:27.652 some of these carcinos or coma acquire

NOTE Confidence: 0.95534864

00:46:27.652 --> 00:46:29.391 this epithelium mesenchemal transition

NOTE Confidence: 0.95534864

00:46:29.391 --> 00:46:32.156 in some of the clone relatively early.

NOTE Confidence: 0.95534864

00:46:32.160 --> 00:46:34.878 Some very late during their lifetime.

NOTE Confidence: 0.95534864

00:46:34.880 --> 00:46:37.295 The 2nd and very important finding of

NOTE Confidence: 0.95534864

00:46:37.295 --> 00:46:39.787 the study is that we have identify

NOTE Confidence: 0.95534864

00:46:39.787 --> 00:46:42.140 for the first time some recurrent

NOTE Confidence: 0.95534864

00:46:42.140 --> 00:46:45.653 mutation in Eastern core gene that

NOTE Confidence: 0.95534864

00:46:45.653 --> 00:46:47.718 regulate the transcription of the

NOTE Confidence: 0.95534864

00:46:47.720 --> 00:46:51.848 DNA and these were correlated with

NOTE Confidence: 0.95534864

00:46:51.848 --> 00:46:53.912 the mesenchemal transformation.

NOTE Confidence: 0.95534864

00:46:53.920 --> 00:46:55.840 Now we are clinician, right.

NOTE Confidence: 0.95534864

00:46:55.840 --> 00:46:57.718 So we are very interesting science,

NOTE Confidence: 0.95534864

00:46:57.720 --> 00:46:59.995 but what we want is translation science,  
NOTE Confidence: 0.95534864

00:47:00.000 --> 00:47:02.223 we want to be able to help our patient.  
NOTE Confidence: 0.95534864

00:47:02.230 --> 00:47:04.222 One of the thing that we found in  
NOTE Confidence: 0.95534864

00:47:04.222 --> 00:47:06.210 carcinofer Com as well as you trying  
NOTE Confidence: 0.95534864

00:47:06.210 --> 00:47:07.910 serous carcinoma doing RNA sequencing  
NOTE Confidence: 0.95534864

00:47:07.910 --> 00:47:10.430 was that there was a appregulation  
NOTE Confidence: 0.95534864

00:47:10.430 --> 00:47:13.974 of the messenger RNA encoding for a  
NOTE Confidence: 0.95534864

00:47:13.974 --> 00:47:16.074 specific antigen called trophoblast  
NOTE Confidence: 0.95534864

00:47:16.074 --> 00:47:18.628 cells or face antigen or Trop 2.  
NOTE Confidence: 0.95534864

00:47:18.630 --> 00:47:20.870 And this is the work of two of  
NOTE Confidence: 0.95534864

00:47:20.870 --> 00:47:22.189 our recent fellow Dr.  
NOTE Confidence: 0.95534864

00:47:22.190 --> 00:47:24.174 Borazebek and Shannen Han.  
NOTE Confidence: 0.95534864

00:47:24.174 --> 00:47:26.158 So we look to.  
NOTE Confidence: 0.95534864

00:47:26.160 --> 00:47:27.978 Hundreds of this tumor and here  
NOTE Confidence: 0.95534864

00:47:27.978 --> 00:47:30.290 of course we have done this with  
NOTE Confidence: 0.95534864

00:47:30.290 --> 00:47:32.366 the help of our pathologist in

NOTE Confidence: 0.95534864

00:47:32.366 --> 00:47:34.640 particular Doctor Natalia Busa and Dr.

NOTE Confidence: 0.95534864

00:47:34.640 --> 00:47:35.520 Pei Wei.

NOTE Confidence: 0.95534864

00:47:35.520 --> 00:47:36.400 We did,

NOTE Confidence: 0.95534864

00:47:36.400 --> 00:47:39.732 we did tissue microarray and we found

NOTE Confidence: 0.95534864

00:47:39.732 --> 00:47:43.456 that indeed 60 to 90% of uterine

NOTE Confidence: 0.95534864

00:47:43.456 --> 00:47:46.528 serous carcinoma and the carcinosarcoma,

NOTE Confidence: 0.95534864

00:47:46.528 --> 00:47:48.256 they were really overexpressed

NOTE Confidence: 0.95534864

00:47:48.256 --> 00:47:49.440 in trophoblast too.

NOTE Confidence: 0.95534864

00:47:49.440 --> 00:47:51.664 So in the way that I show you

NOTE Confidence: 0.95534864

00:47:51.664 --> 00:47:53.765 before we generate patient that

NOTE Confidence: 0.95534864

00:47:53.765 --> 00:47:56.215 like sinograph from this patient.

NOTE Confidence: 0.95534864

00:47:56.220 --> 00:47:59.279 And we start testing in the animal

NOTE Confidence: 0.95534864

00:47:59.279 --> 00:48:02.260 the activity of a new agent called

NOTE Confidence: 0.95534864

00:48:02.260 --> 00:48:04.984 Rodelvi that is now a commercial

NOTE Confidence: 0.95534864

00:48:04.984 --> 00:48:07.629 agent approved for breast as well

NOTE Confidence: 0.95534864

00:48:07.629 --> 00:48:09.504 as bladder cancer that target  
NOTE Confidence: 0.95534864

00:48:09.504 --> 00:48:11.420 the DROP 2 receptor.  
NOTE Confidence: 0.95534864

00:48:11.420 --> 00:48:13.580 And this is an antibody track conjugate.  
NOTE Confidence: 0.95534864

00:48:13.580 --> 00:48:15.680 So it's a monoclonal antibody  
NOTE Confidence: 0.95534864

00:48:15.680 --> 00:48:18.500 targeting DROP 2 as a cleavable  
NOTE Confidence: 0.95534864

00:48:18.500 --> 00:48:21.100 linker and attached to the  
NOTE Confidence: 0.95534864

00:48:21.100 --> 00:48:24.454 antibody there is SN38 that is.  
NOTE Confidence: 0.95534864

00:48:24.454 --> 00:48:28.750 A topo isomerase 1 inhibitor and doing  
NOTE Confidence: 0.95534864

00:48:28.750 --> 00:48:32.538 that we were able to show that again  
NOTE Confidence: 0.95534864

00:48:32.538 --> 00:48:35.290 both in vitro as well as in vivo,  
NOTE Confidence: 0.95534864

00:48:35.290 --> 00:48:36.930 this tumor were highly sensitive.  
NOTE Confidence: 0.95534864

00:48:36.930 --> 00:48:38.757 This is actually the tumor in the  
NOTE Confidence: 0.95534864

00:48:38.757 --> 00:48:40.336 animal that complete as you can  
NOTE Confidence: 0.95534864

00:48:40.336 --> 00:48:41.818 see disappear when our control of  
NOTE Confidence: 0.95534864

00:48:41.818 --> 00:48:43.680 course we're growing and this is the  
NOTE Confidence: 0.95534864

00:48:43.680 --> 00:48:45.210 overall survival of this animal.

NOTE Confidence: 0.95534864

00:48:45.210 --> 00:48:47.786 So the question is PDX work,

NOTE Confidence: 0.95534864

00:48:47.786 --> 00:48:50.082 is it going to work in patient?

NOTE Confidence: 0.95534864

00:48:50.090 --> 00:48:51.810 Let me give you an example of that.

NOTE Confidence: 0.95534864

00:48:51.810 --> 00:48:54.470 This is again another of my patient.

NOTE Confidence: 0.95534864

00:48:54.470 --> 00:48:57.070 As you can see are 74 years old

NOTE Confidence: 0.95534864

00:48:57.070 --> 00:48:59.284 uterine serous carcinoma treated with

NOTE Confidence: 0.95534864

00:48:59.284 --> 00:49:01.606 a gold standard surgery followed by

NOTE Confidence: 0.95534864

00:49:01.606 --> 00:49:03.782 chemo by radiation recurring disease,

NOTE Confidence: 0.95534864

00:49:03.782 --> 00:49:06.274 more chemo to the point where the

NOTE Confidence: 0.95534864

00:49:06.274 --> 00:49:08.349 patient was progressing on anything.

NOTE Confidence: 0.95534864

00:49:08.350 --> 00:49:11.680 So at that time we have a Phase 1B

NOTE Confidence: 0.95534864

00:49:11.680 --> 00:49:14.830 trial ongoing a Yale with Trodelvi,

NOTE Confidence: 0.95534864

00:49:14.830 --> 00:49:18.150 so as you know calcium sarcoma rare tumor.

NOTE Confidence: 0.95534864

00:49:18.150 --> 00:49:20.796 So I had to convince the the

NOTE Confidence: 0.95534864

00:49:20.796 --> 00:49:22.819 medical monitor of the study.

NOTE Confidence: 0.95534864

00:49:22.820 --> 00:49:23.504 That time,  
NOTE Confidence: 0.95534864

00:49:23.504 --> 00:49:25.560 at that time was Immunomedics to  
NOTE Confidence: 0.95534864

00:49:25.560 --> 00:49:27.260 approve the treatment of this,  
NOTE Confidence: 0.95534864

00:49:27.260 --> 00:49:29.624 you know of this uterine serocarcinoma  
NOTE Confidence: 0.95534864

00:49:29.624 --> 00:49:32.900 patient rare tumor in the trial.  
NOTE Confidence: 0.95534864

00:49:32.900 --> 00:49:35.860 But I was able to do so patients  
NOTE Confidence: 0.95534864

00:49:35.860 --> 00:49:36.600 start receiving  
NOTE Confidence: 0.926333050909091

00:49:36.682 --> 00:49:39.015 Trudelvi and again as you can see here,  
NOTE Confidence: 0.926333050909091

00:49:39.020 --> 00:49:40.220 this is the baseline.  
NOTE Confidence: 0.926333050909091

00:49:40.220 --> 00:49:43.132 She had huge liver, meth as well as  
NOTE Confidence: 0.926333050909091

00:49:43.132 --> 00:49:44.844 carcinomatosis everywhere in the  
NOTE Confidence: 0.926333050909091

00:49:44.844 --> 00:49:48.452 donor cavity and the patient start  
NOTE Confidence: 0.926333050909091

00:49:48.452 --> 00:49:51.140 responding and we gave this patient.  
NOTE Confidence: 0.926333050909091

00:49:51.140 --> 00:49:53.618 As you can see here dramatic shrinkage  
NOTE Confidence: 0.926333050909091

00:49:53.618 --> 00:49:56.842 of all the disease over 66% reduction  
NOTE Confidence: 0.926333050909091

00:49:56.842 --> 00:50:01.092 by this is 1.1 criteria in the in the

NOTE Confidence: 0.926333050909091

00:50:01.092 --> 00:50:03.321 inner disease and we have this patient

NOTE Confidence: 0.926333050909091

00:50:03.321 --> 00:50:05.883 ten month of very good life with

NOTE Confidence: 0.926333050909091

00:50:05.883 --> 00:50:08.454 again because this is also very well

NOTE Confidence: 0.926333050909091

00:50:08.454 --> 00:50:11.740 tolerated antibody in term of treatment.

NOTE Confidence: 0.926333050909091

00:50:11.740 --> 00:50:14.740 So this was one patient, right.

NOTE Confidence: 0.926333050909091

00:50:14.740 --> 00:50:16.315 You cannot change a guideline

NOTE Confidence: 0.926333050909091

00:50:16.315 --> 00:50:17.260 with one patient.

NOTE Confidence: 0.926333050909091

00:50:17.260 --> 00:50:19.072 You need to design the proper

NOTE Confidence: 0.926333050909091

00:50:19.072 --> 00:50:20.856 study and that is what we've done.

NOTE Confidence: 0.926333050909091

00:50:20.860 --> 00:50:22.580 We had designed an IIT,

NOTE Confidence: 0.926333050909091

00:50:22.580 --> 00:50:24.445 so an investigator in shady

NOTE Confidence: 0.926333050909091

00:50:24.445 --> 00:50:25.937 trial with his agent,

NOTE Confidence: 0.926333050909091

00:50:25.940 --> 00:50:27.625 not easy because Immuno Medics

NOTE Confidence: 0.926333050909091

00:50:27.625 --> 00:50:29.380 was purchased by Gilead, right.

NOTE Confidence: 0.926333050909091

00:50:29.380 --> 00:50:31.660 So that create a little bit of a problem.

NOTE Confidence: 0.926333050909091

00:50:31.660 --> 00:50:34.348 But we were able to convince or so  
NOTE Confidence: 0.926333050909091

00:50:34.348 --> 00:50:37.354 Gilead to provide us with drug and some  
NOTE Confidence: 0.926333050909091

00:50:37.354 --> 00:50:40.206 money to design and of course perform  
NOTE Confidence: 0.926333050909091

00:50:40.206 --> 00:50:43.485 this phase two clinker trial with  
NOTE Confidence: 0.926333050909091

00:50:43.485 --> 00:50:45.900 the ultimate goal to evaluate again a  
NOTE Confidence: 0.926333050909091

00:50:45.900 --> 00:50:48.080 response rate as a primary objective.  
NOTE Confidence: 0.926333050909091

00:50:48.080 --> 00:50:51.278 As well as overall overall survival,  
NOTE Confidence: 0.926333050909091

00:50:51.280 --> 00:50:53.960 progression free survival and the  
NOTE Confidence: 0.926333050909091

00:50:53.960 --> 00:50:56.640 safety as a secondary objective.  
NOTE Confidence: 0.926333050909091

00:50:56.640 --> 00:50:58.494 And these are the result of  
NOTE Confidence: 0.926333050909091

00:50:58.494 --> 00:51:00.411 this trial that I'm going to  
NOTE Confidence: 0.926333050909091

00:51:00.411 --> 00:51:02.560 present in about 10 days at ASCO.  
NOTE Confidence: 0.926333050909091

00:51:02.560 --> 00:51:04.140 This is a presentation.  
NOTE Confidence: 0.926333050909091

00:51:04.140 --> 00:51:05.720 This is a preview.  
NOTE Confidence: 0.926333050909091

00:51:05.720 --> 00:51:08.798 I shouldn't do that, but I'll do it anyway.  
NOTE Confidence: 0.926333050909091

00:51:08.800 --> 00:51:10.756 And as you can see here,

NOTE Confidence: 0.926333050909091

00:51:10.760 --> 00:51:13.360 this study was designed as

NOTE Confidence: 0.926333050909091

00:51:13.360 --> 00:51:15.412 a Simon two stage design.

NOTE Confidence: 0.926333050909091

00:51:15.412 --> 00:51:17.710 That it means to enroll the

NOTE Confidence: 0.926333050909091

00:51:17.787 --> 00:51:19.737 1st 21 a valuable patient,

NOTE Confidence: 0.926333050909091

00:51:19.740 --> 00:51:22.386 see if there was any response and

NOTE Confidence: 0.926333050909091

00:51:22.386 --> 00:51:25.327 in case of three or more of PROCR,

NOTE Confidence: 0.926333050909091

00:51:25.327 --> 00:51:27.409 so either complete or partial response

NOTE Confidence: 0.926333050909091

00:51:27.409 --> 00:51:29.794 would have been able to move to the

NOTE Confidence: 0.926333050909091

00:51:29.794 --> 00:51:31.820 second stage and enroll a total of 50.

NOTE Confidence: 0.926333050909091

00:51:31.820 --> 00:51:36.130 So as you can see here over two third

NOTE Confidence: 0.926333050909091

00:51:36.130 --> 00:51:39.000 of the patient enroll in this trial.

NOTE Confidence: 0.926333050909091

00:51:39.000 --> 00:51:41.648 Where specifically uterine serous

NOTE Confidence: 0.926333050909091

00:51:41.648 --> 00:51:43.634 carcinoma and carcinosarcoma,

NOTE Confidence: 0.926333050909091

00:51:43.640 --> 00:51:46.412 the most difficult to treat uterine

NOTE Confidence: 0.926333050909091

00:51:46.412 --> 00:51:49.540 carcinoma and we had seven response

NOTE Confidence: 0.926333050909091

00:51:49.540 --> 00:51:53.162 not three so 33 response rate either  
NOTE Confidence: 0.926333050909091

00:51:53.162 --> 00:51:56.906 CR or PR and so positive stage one and  
NOTE Confidence: 0.926333050909091

00:51:56.906 --> 00:52:00.799 we are now a rolling the stage two,  
NOTE Confidence: 0.926333050909091

00:52:00.800 --> 00:52:03.103 so another 30 patient to try to  
NOTE Confidence: 0.926333050909091

00:52:03.103 --> 00:52:05.937 see in an overall of 50 patient.  
NOTE Confidence: 0.926333050909091

00:52:05.940 --> 00:52:07.980 How effective this agent is be,  
NOTE Confidence: 0.926333050909091

00:52:07.980 --> 00:52:10.038 but there is no doubt that there  
NOTE Confidence: 0.926333050909091

00:52:10.038 --> 00:52:12.328 is a strong signal and again this  
NOTE Confidence: 0.926333050909091

00:52:12.328 --> 00:52:14.740 is an IIT trial developed at Yale.  
NOTE Confidence: 0.926333050909091

00:52:14.740 --> 00:52:16.934 So I'd like to conclude analogy  
NOTE Confidence: 0.926333050909091

00:52:16.934 --> 00:52:18.818 and thanking a lot of people.  
NOTE Confidence: 0.926333050909091

00:52:18.820 --> 00:52:21.430 The particular Elena that is here  
NOTE Confidence: 0.926333050909091

00:52:21.430 --> 00:52:23.832 my cochief they attending of the  
NOTE Confidence: 0.926333050909091

00:52:23.832 --> 00:52:26.130 Juan oncology division that I listed  
NOTE Confidence: 0.926333050909091

00:52:26.197 --> 00:52:29.280 here and here in particular I want  
NOTE Confidence: 0.926333050909091

00:52:29.280 --> 00:52:32.685 to to to emphasize the the the

NOTE Confidence: 0.926333050909091  
00:52:32.685 --> 00:52:34.369 role of Doctor Schwartz.  
NOTE Confidence: 0.926333050909091  
00:52:34.370 --> 00:52:37.580 A mentor for all of us that has been work  
NOTE Confidence: 0.926333050909091  
00:52:37.666 --> 00:52:40.570 here for over 50 years is just retire  
NOTE Confidence: 0.926333050909091  
00:52:40.570 --> 00:52:43.330 as well as of course the group here.  
NOTE Confidence: 0.926333050909091  
00:52:43.330 --> 00:52:46.180 The support staff and the clinical  
NOTE Confidence: 0.926333050909091  
00:52:46.180 --> 00:52:47.852 trial coordinators again that  
NOTE Confidence: 0.926333050909091  
00:52:47.852 --> 00:52:50.379 I'm showing you here that are the  
NOTE Confidence: 0.926333050909091  
00:52:50.379 --> 00:52:52.722 reason why again we are successful  
NOTE Confidence: 0.926333050909091  
00:52:52.722 --> 00:52:54.632 in provided to our patient  
NOTE Confidence: 0.943943513333333  
00:52:54.706 --> 00:52:56.616 clinical trial because they are  
NOTE Confidence: 0.943943513333333  
00:52:56.616 --> 00:52:58.945 the one that make this happen.  
NOTE Confidence: 0.943943513333333  
00:52:58.945 --> 00:53:01.435 The clinical trial office in the  
NOTE Confidence: 0.943943513333333  
00:53:01.435 --> 00:53:03.310 division of gynecological oncology.  
NOTE Confidence: 0.943943513333333  
00:53:03.310 --> 00:53:05.690 And finally last man or least the  
NOTE Confidence: 0.943943513333333  
00:53:05.690 --> 00:53:07.777 researcher the lab people that are  
NOTE Confidence: 0.943943513333333

00:53:07.777 --> 00:53:10.108 doing they really the work with the  
NOTE Confidence: 0.943943513333333

00:53:10.180 --> 00:53:12.469 animals we are to do the sequencing  
NOTE Confidence: 0.943943513333333

00:53:12.470 --> 00:53:14.654 and of course these are all as you  
NOTE Confidence: 0.943943513333333

00:53:14.654 --> 00:53:16.793 can see young they come they get  
NOTE Confidence: 0.943943513333333

00:53:16.793 --> 00:53:19.495 trained in my lab they and after they  
NOTE Confidence: 0.943943513333333

00:53:19.495 --> 00:53:21.703 leave to get their faculty position.  
NOTE Confidence: 0.943943513333333

00:53:21.710 --> 00:53:25.306 So here is the Fania belona Dr.  
NOTE Confidence: 0.943943513333333

00:53:25.310 --> 00:53:29.198 Belona the lab chief of for that has been  
NOTE Confidence: 0.943943513333333

00:53:29.198 --> 00:53:31.840 working with me for the last 25 years.  
NOTE Confidence: 0.943943513333333

00:53:31.840 --> 00:53:33.562 And of course she's of she's the  
NOTE Confidence: 0.943943513333333

00:53:33.562 --> 00:53:35.476 person that I have to thank the most  
NOTE Confidence: 0.943943513333333

00:53:35.476 --> 00:53:37.443 for the work that I just show you  
NOTE Confidence: 0.943943513333333

00:53:37.443 --> 00:53:39.277 and I thank you for your attention.  
NOTE Confidence: 0.941371755555556

00:53:49.200 --> 00:53:50.919 If there is any question of course we're here  
NOTE Confidence: 0.9352219

00:53:56.200 --> 00:53:58.712 SD trial are you looking at the level  
NOTE Confidence: 0.9352219

00:53:58.712 --> 00:54:01.355 of troop tube or was it just all comers

NOTE Confidence: 0.9352219

00:54:01.355 --> 00:54:03.200 and if you can repeat the question.

NOTE Confidence: 0.9352219

00:54:03.200 --> 00:54:06.984 Yeah. So Dr. Reem is asking if the.

NOTE Confidence: 0.9352219

00:54:06.990 --> 00:54:09.066 The Trudelvi trial that I'm going

NOTE Confidence: 0.9352219

00:54:09.066 --> 00:54:11.220 to presented ask whether we have

NOTE Confidence: 0.9352219

00:54:11.220 --> 00:54:13.810 look into the expression of the drop

NOTE Confidence: 0.9352219

00:54:13.881 --> 00:54:16.563 two that is a target or not and the

NOTE Confidence: 0.9352219

00:54:16.563 --> 00:54:19.789 answer David is yes in the phase one.

NOTE Confidence: 0.9352219

00:54:19.790 --> 00:54:22.910 So the stage one of this trial we

NOTE Confidence: 0.9352219

00:54:22.910 --> 00:54:25.419 specifically look to drop to expression

NOTE Confidence: 0.9352219

00:54:25.419 --> 00:54:28.159 and only patient with 50 with expression

NOTE Confidence: 0.9352219

00:54:28.159 --> 00:54:31.090 or drop to any expression 1 + 2

NOTE Confidence: 0.9352219

00:54:31.090 --> 00:54:33.578 plus or three plus in at least 50%.

NOTE Confidence: 0.9352219

00:54:33.580 --> 00:54:35.372 Of the tumor cell we are eligible

NOTE Confidence: 0.9352219

00:54:35.372 --> 00:54:36.420 for the stage one.

NOTE Confidence: 0.938815971428571

00:55:00.830 --> 00:55:04.180 This is a good question again the so how

NOTE Confidence: 0.938815971428571

00:55:04.180 --> 00:55:06.105 many of these tumor with recurring disease

NOTE Confidence: 0.938815971428571

00:55:06.105 --> 00:55:08.429 they have estrogen or progesterone receptor.

NOTE Confidence: 0.938815971428571

00:55:08.430 --> 00:55:11.823 So let me answer to your question this way.

NOTE Confidence: 0.938815971428571

00:55:11.830 --> 00:55:14.734 UTRAN cancer is a very heterogeneous

NOTE Confidence: 0.938815971428571

00:55:14.734 --> 00:55:17.360 type of tumor, so you have.

NOTE Confidence: 0.938815971428571

00:55:17.360 --> 00:55:19.302 From one side, the endometrioid,

NOTE Confidence: 0.938815971428571

00:55:19.302 --> 00:55:22.004 so the one that are really resembling

NOTE Confidence: 0.938815971428571

00:55:22.004 --> 00:55:24.039 very closely the normal normal

NOTE Confidence: 0.938815971428571

00:55:24.039 --> 00:55:26.009 endometrium that can be well,

NOTE Confidence: 0.938815971428571

00:55:26.010 --> 00:55:27.526 moderately or poorly differentiated.

NOTE Confidence: 0.938815971428571

00:55:27.526 --> 00:55:29.800 And on the other side of

NOTE Confidence: 0.938815971428571

00:55:29.871 --> 00:55:31.486 the spectrum you have the,

NOTE Confidence: 0.938815971428571

00:55:31.490 --> 00:55:34.129 what we call still called type 2,

NOTE Confidence: 0.938815971428571

00:55:34.130 --> 00:55:36.370 right, the uterine serous carcinoma,

NOTE Confidence: 0.938815971428571

00:55:36.370 --> 00:55:39.610 the carcinosarcoma, the clear cell,

NOTE Confidence: 0.938815971428571

00:55:39.610 --> 00:55:41.878 you know uterine cancer,

NOTE Confidence: 0.938815971428571

00:55:41.878 --> 00:55:43.579 so in general.

NOTE Confidence: 0.938815971428571

00:55:43.580 --> 00:55:46.058 If you want you to endometrioid they

NOTE Confidence: 0.938815971428571

00:55:46.058 --> 00:55:48.339 over express astrogen receptor even when

NOTE Confidence: 0.938815971428571

00:55:48.339 --> 00:55:50.655 they come back with recurring disease.

NOTE Confidence: 0.938815971428571

00:55:50.660 --> 00:55:52.484 But those are only a minority

NOTE Confidence: 0.938815971428571

00:55:52.484 --> 00:55:54.046 of the recurring patient that

NOTE Confidence: 0.938815971428571

00:55:54.046 --> 00:55:55.738 we are treating in our clinic.

NOTE Confidence: 0.938815971428571

00:55:55.740 --> 00:55:57.170 Majority of the recurrences as

NOTE Confidence: 0.938815971428571

00:55:57.170 --> 00:55:59.311 I show you they take place in

NOTE Confidence: 0.938815971428571

00:55:59.311 --> 00:56:00.619 the uterine serious group,

NOTE Confidence: 0.938815971428571

00:56:00.620 --> 00:56:03.910 the carcinoso coma group that are the

NOTE Confidence: 0.938815971428571

00:56:03.910 --> 00:56:07.406 one that usually they do not express

NOTE Confidence: 0.938815971428571

00:56:07.406 --> 00:56:09.872 astrogen receptor or the minority

NOTE Confidence: 0.938815971428571

00:56:09.872 --> 00:56:13.308 even when they do I must tell you.

NOTE Confidence: 0.938815971428571

00:56:13.308 --> 00:56:14.796 By 20 year experience,

NOTE Confidence: 0.938815971428571

00:56:14.800 --> 00:56:17.176 they do not respond to anti  
NOTE Confidence: 0.938815971428571

00:56:17.176 --> 00:56:18.760 estrogen treatment because most  
NOTE Confidence: 0.938815971428571

00:56:18.834 --> 00:56:21.120 likely the receptor is not active.  
NOTE Confidence: 0.938815971428571

00:56:21.120 --> 00:56:22.536 It's present on the surface but  
NOTE Confidence: 0.938815971428571

00:56:22.536 --> 00:56:24.199 the pathway is not really working  
NOTE Confidence: 0.9402536

00:56:29.910 --> 00:56:30.230 sure.  
NOTE Confidence: 0.912391133333333

00:56:45.460 --> 00:56:47.773 So what is what are the side effect of  
NOTE Confidence: 0.912391133333333

00:56:47.773 --> 00:56:49.609 the trudelvides assitu Zumagovita can  
NOTE Confidence: 0.912391133333333

00:56:49.609 --> 00:56:52.308 trial that is using this top poisoner  
NOTE Confidence: 0.912391133333333

00:56:52.308 --> 00:56:54.456 is inhibitor as a toxic payload.  
NOTE Confidence: 0.912391133333333

00:56:54.460 --> 00:56:56.860 So the answer is this is a very  
NOTE Confidence: 0.912391133333333

00:56:56.860 --> 00:56:58.979 well tolerated drug and why am I  
NOTE Confidence: 0.912391133333333

00:56:58.979 --> 00:57:01.598 saying that is because it does not  
NOTE Confidence: 0.912391133333333

00:57:01.598 --> 00:57:04.191 cause the the bone marrow toxicity  
NOTE Confidence: 0.912391133333333

00:57:04.191 --> 00:57:06.453 that you know they can cause.  
NOTE Confidence: 0.912391133333333

00:57:06.460 --> 00:57:08.567 And the other thing that we have

NOTE Confidence: 0.9123911333333333

00:57:08.567 --> 00:57:10.795 noticed is that even the GI toxicity

NOTE Confidence: 0.9123911333333333

00:57:10.795 --> 00:57:12.679 that is typical of this drug.

NOTE Confidence: 0.9123911333333333

00:57:12.680 --> 00:57:14.948 Is much, much smaller and this

NOTE Confidence: 0.9123911333333333

00:57:14.948 --> 00:57:17.792 is once again is related to the

NOTE Confidence: 0.9123911333333333

00:57:17.792 --> 00:57:19.980 targeted type of approach, right.

NOTE Confidence: 0.9123911333333333

00:57:19.980 --> 00:57:23.270 So are only the tumor cell they

NOTE Confidence: 0.9123911333333333

00:57:23.270 --> 00:57:26.034 overexpress drop two that they get that

NOTE Confidence: 0.9123911333333333

00:57:26.034 --> 00:57:29.240 they get this toxic payload internalized.

NOTE Confidence: 0.9123911333333333

00:57:29.240 --> 00:57:31.816 1 important thing that I also am going

NOTE Confidence: 0.9123911333333333

00:57:31.816 --> 00:57:35.930 to stress to ASCO is that the Cornell

NOTE Confidence: 0.9123911333333333

00:57:35.930 --> 00:57:38.625 toxicity for instance that we are seeing

NOTE Confidence: 0.9123911333333333

00:57:38.625 --> 00:57:41.310 with many antibody that are conjugate.

NOTE Confidence: 0.9123911333333333

00:57:41.310 --> 00:57:43.626 Is not present with this antibody.

NOTE Confidence: 0.9123911333333333

00:57:43.630 --> 00:57:45.191 So that is another great thing because

NOTE Confidence: 0.9123911333333333

00:57:45.191 --> 00:57:47.312 as you know we're getting more and more

NOTE Confidence: 0.9123911333333333

00:57:47.312 --> 00:57:48.717 approval in terrible treatment with  
NOTE Confidence: 0.9123911333333333

00:57:48.764 --> 00:57:50.546 antibody that are conjugate our patient.  
NOTE Confidence: 0.9123911333333333

00:57:50.550 --> 00:57:52.602 But we must have now enough  
NOTE Confidence: 0.9123911333333333

00:57:52.602 --> 00:57:54.262 ophthalmology before even starting to  
NOTE Confidence: 0.9123911333333333

00:57:54.262 --> 00:57:56.198 look to the corner for this specific  
NOTE Confidence: 0.9123911333333333

00:57:56.198 --> 00:57:58.550 type of a DC is not necessary.  
NOTE Confidence: 0.9123911333333333

00:57:58.550 --> 00:57:59.126 We don't,  
NOTE Confidence: 0.9123911333333333

00:57:59.126 --> 00:58:01.142 we don't really see that toxicity those.  
NOTE Confidence: 0.9123911333333333

00:58:01.150 --> 00:58:02.670 So it's overall well tolerated.  
NOTE Confidence: 0.9123911333333333

00:58:02.670 --> 00:58:06.126 The only patient that are really  
NOTE Confidence: 0.9123911333333333

00:58:06.126 --> 00:58:08.430 experiencing some significant toxicity  
NOTE Confidence: 0.9123911333333333

00:58:08.430 --> 00:58:10.957 are the patient that have a polymorphism.  
NOTE Confidence: 0.9123911333333333

00:58:10.960 --> 00:58:16.078 In EU GT2B7 that is again this  
NOTE Confidence: 0.9123911333333333

00:58:16.080 --> 00:58:18.030 is this mechanism right that we  
NOTE Confidence: 0.9123911333333333

00:58:18.030 --> 00:58:20.494 have in our liver to catabolize at  
NOTE Confidence: 0.9123911333333333

00:58:20.494 --> 00:58:22.319 the top of isomerase about,

NOTE Confidence: 0.9123911333333333

00:58:22.320 --> 00:58:26.515 I'll say 1-2 out of 10 May

NOTE Confidence: 0.9123911333333333

00:58:26.515 --> 00:58:28.000 have this polymorphism.

NOTE Confidence: 0.9123911333333333

00:58:28.000 --> 00:58:29.519 They are more sensitive to the drug,

NOTE Confidence: 0.9123911333333333

00:58:29.520 --> 00:58:31.716 they usually respond better their cancer,

NOTE Confidence: 0.9123911333333333

00:58:31.720 --> 00:58:33.592 but there we have to do a dose reduction.

NOTE Confidence: 0.9123911333333333

00:58:33.600 --> 00:58:35.760 We go down from 10 usually to 7.5.

NOTE Confidence: 0.906658214

00:58:40.760 --> 00:58:42.120 We have two more answers

NOTE Confidence: 0.80246687

00:58:55.480 --> 00:58:55.600 that

NOTE Confidence: 0.92767435

00:58:59.120 --> 00:59:04.160 yes, so we I show you here our

NOTE Confidence: 0.92767435

00:59:04.160 --> 00:59:06.043 initial work with trust to Zuma and

NOTE Confidence: 0.92767435

00:59:06.043 --> 00:59:08.010 we have shown again for the first

NOTE Confidence: 0.92767435

00:59:08.010 --> 00:59:09.660 time that trust to Zuma added.

NOTE Confidence: 0.92767435

00:59:09.660 --> 00:59:12.444 To chemotherapy helps but in the

NOTE Confidence: 0.92767435

00:59:12.444 --> 00:59:14.940 recurrent setting we have multiple

NOTE Confidence: 0.92767435

00:59:14.940 --> 00:59:18.300 trial using antibody that are conjugate.

NOTE Confidence: 0.92767435

00:59:18.300 --> 00:59:24.220 So we have used some one that  
NOTE Confidence: 0.92767435

00:59:24.220 --> 00:59:28.640 is called symptom 985 that is a  
NOTE Confidence: 0.92767435

00:59:28.640 --> 00:59:30.600 I don't know if you're familiar  
NOTE Confidence: 0.92767435

00:59:30.600 --> 00:59:33.884 but again is a is the backbone is  
NOTE Confidence: 0.92767435

00:59:33.884 --> 00:59:36.064 throstozoma the linker is clivable.  
NOTE Confidence: 0.92767435

00:59:36.064 --> 00:59:38.530 The toxic payload is an alkylating  
NOTE Confidence: 0.92767435

00:59:38.606 --> 00:59:40.790 semi synthetic calculating agent  
NOTE Confidence: 0.92767435

00:59:40.790 --> 00:59:43.520 duocarmising extremely potent but also  
NOTE Confidence: 0.92767435

00:59:43.520 --> 00:59:46.272 toxic and so we have seen dramatic  
NOTE Confidence: 0.92767435

00:59:46.272 --> 00:59:48.302 response in the recurrence setting  
NOTE Confidence: 0.92767435

00:59:48.302 --> 00:59:50.254 intrastuzumab resistant uterine 0  
NOTE Confidence: 0.92767435

00:59:50.254 --> 00:59:53.030 carcinoma over expressing up to new.  
NOTE Confidence: 0.92767435

00:59:53.030 --> 00:59:54.842 But the corneltosis it was significant  
NOTE Confidence: 0.92767435

00:59:54.842 --> 00:59:57.335 in many of this patient we have to  
NOTE Confidence: 0.92767435

00:59:57.335 --> 00:59:59.556 stop treatment for for several weeks to  
NOTE Confidence: 0.92767435

00:59:59.556 --> 01:00:02.740 allow recovery and and that of course.

NOTE Confidence: 0.92767435  
01:00:02.740 --> 01:00:04.756 Was not good because during those  
NOTE Confidence: 0.92767435  
01:00:04.756 --> 01:00:06.100 68 sometime more weeks,  
NOTE Confidence: 0.92767435  
01:00:06.100 --> 01:00:07.336 the tumor will start growing again.  
NOTE Confidence: 0.92767435  
01:00:07.340 --> 01:00:07.460 Yes,  
NOTE Confidence: 0.856499678571429  
01:00:22.210 --> 01:00:23.568 we do in a very special way.  
NOTE Confidence: 0.856499678571429  
01:00:23.570 --> 01:00:24.848 There's different ways to do it.  
NOTE Confidence: 0.856499678571429  
01:00:24.850 --> 01:00:27.018 She's doing it.  
NOTE Confidence: 0.856499678571429  
01:00:27.018 --> 01:00:29.290 So we only do it in the newest.  
NOTE Confidence: 0.856499678571429  
01:00:29.290 --> 01:00:33.030 So we already have the diagnosis.  
NOTE Confidence: 0.856499678571429  
01:00:33.030 --> 01:00:34.210 We give 3 cycles. We  
NOTE Confidence: 0.950317  
01:00:36.490 --> 01:00:36.890 confirm the.  
NOTE Confidence: 0.9251585  
01:00:39.440 --> 01:00:40.280 But if it's  
NOTE Confidence: 0.958703166666667  
01:00:42.360 --> 01:00:44.960 done different ways, there's some  
NOTE Confidence: 0.958703166666667  
01:00:44.960 --> 01:00:47.440 studies that have it up front.  
NOTE Confidence: 0.9402536  
01:00:51.640 --> 01:00:52.040 Thank you.  
NOTE Confidence: 0.9352219

01:00:53.560 --> 01:00:56.540 Thank you so much to our

NOTE Confidence: 0.9352219

01:00:56.540 --> 01:00:58.000 wonderful 2 speakers.

NOTE Confidence: 0.9352219

01:00:58.000 --> 01:00:59.236 Have a wonderful day. Thank you.