

WEBVTT

NOTE duration:"01:33:02.1660000"

NOTE language:en-us

NOTE Confidence: 0.85384655

00:00:00.000 --> 00:00:02.610 I think we can get started.

NOTE Confidence: 0.85384655

00:00:02.610 --> 00:00:05.466 It is 602. So hello and welcome to

NOTE Confidence: 0.85384655

00:00:05.466 --> 00:00:08.710 the first annual Susan Barris MD CME

NOTE Confidence: 0.85384655

00:00:08.710 --> 00:00:11.150 events for Brain Tumor Symposium.

NOTE Confidence: 0.85384655

00:00:11.150 --> 00:00:14.723 It's really an exciting way to kick off the

NOTE Confidence: 0.85384655

00:00:14.723 --> 00:00:17.986 brain Tumor Awareness Month of May. And,

NOTE Confidence: 0.85384655

00:00:17.986 --> 00:00:21.394 of course, we could not have done tonight.

NOTE Confidence: 0.85384655

00:00:21.400 --> 00:00:25.234 I might as well just start by thanking Renee,

NOTE Confidence: 0.85384655

00:00:25.240 --> 00:00:27.802 got it for her unbelievable organization

NOTE Confidence: 0.85384655

00:00:27.802 --> 00:00:30.326 of the evening, so thank you.

NOTE Confidence: 0.85384655

00:00:30.326 --> 00:00:32.798 Immediately to her to my panelists

NOTE Confidence: 0.85384655

00:00:32.798 --> 00:00:34.756 who are here, of course,

NOTE Confidence: 0.85384655

00:00:34.756 --> 00:00:36.994 who will introduce as they start

NOTE Confidence: 0.85384655

00:00:36.994 --> 00:00:39.238 their talks and to Chris Cassano,

NOTE Confidence: 0.85384655

00:00:39.240 --> 00:00:41.484 who is the President of Connecticut

NOTE Confidence: 0.85384655

00:00:41.484 --> 00:00:42.606 Brain Tumor Alliance,

NOTE Confidence: 0.85384655

00:00:42.610 --> 00:00:45.102 who has been a huge supporter of

NOTE Confidence: 0.85384655

00:00:45.102 --> 00:00:46.607 brain tumor patients throughout

NOTE Confidence: 0.85384655

00:00:46.607 --> 00:00:48.821 the state of Connecticut of our

NOTE Confidence: 0.85384655

00:00:48.821 --> 00:00:51.210 work here at yelling at Smilow.

NOTE Confidence: 0.85384655

00:00:51.210 --> 00:00:53.454 And it's really great to partner

NOTE Confidence: 0.85384655

00:00:53.454 --> 00:00:55.698 in this event tonight, so Chris,

NOTE Confidence: 0.85384655

00:00:55.698 --> 00:00:58.690 if you want to say a few words,

NOTE Confidence: 0.8109805

00:00:58.690 --> 00:01:01.078 sure, thank you. Doctor Moliterno and.

NOTE Confidence: 0.8109805

00:01:01.080 --> 00:01:03.016 Other panelists and when they bring

NOTE Confidence: 0.8109805

00:01:03.016 --> 00:01:04.956 us together and at first doctors

NOTE Confidence: 0.8109805

00:01:04.956 --> 00:01:06.896 to see parents for the first

NOTE Confidence: 0.8109805

00:01:06.896 --> 00:01:08.201 annual Susie Breast Symposium,

NOTE Confidence: 0.8109805

00:01:08.201 --> 00:01:09.836 I'm looking forward to being

NOTE Confidence: 0.8109805

00:01:09.836 --> 00:01:12.062 part of this night and, you know,  
NOTE Confidence: 0.8109805

00:01:12.062 --> 00:01:14.325 sharing are more about our organization with  
NOTE Confidence: 0.8109805

00:01:14.325 --> 00:01:16.584 all the branches are pasted family stuff,  
NOTE Confidence: 0.8109805

00:01:16.584 --> 00:01:18.169 but again, we're we're excited.  
NOTE Confidence: 0.8109805

00:01:18.169 --> 00:01:20.739 We're happy we want to be a part  
NOTE Confidence: 0.8109805

00:01:20.739 --> 00:01:22.617 of your journey with you and  
NOTE Confidence: 0.8109805

00:01:22.617 --> 00:01:24.340 just know that we're here.  
NOTE Confidence: 0.8109805

00:01:24.340 --> 00:01:25.950 We're all patients and survivors,  
NOTE Confidence: 0.8109805

00:01:25.950 --> 00:01:27.888 caregivers, we've been in your shoes.  
NOTE Confidence: 0.8109805

00:01:27.890 --> 00:01:28.859 We understand it,  
NOTE Confidence: 0.8109805

00:01:28.860 --> 00:01:32.526 and that we're a phone call or email away so.  
NOTE Confidence: 0.8109805

00:01:32.530 --> 00:01:34.586 We're just really excited to be  
NOTE Confidence: 0.8109805

00:01:34.586 --> 00:01:36.650 partnering with GAIL on this presentation,  
NOTE Confidence: 0.85380363

00:01:36.650 --> 00:01:39.044 and you know, you're in your head,  
NOTE Confidence: 0.85380363

00:01:39.044 --> 00:01:42.130 so thank you very much looking forward to it.  
NOTE Confidence: 0.87366825

00:01:43.260 --> 00:01:46.088 Terrific, thank you again for being here.

NOTE Confidence: 0.87366825

00:01:46.090 --> 00:01:48.918 Alright so we will start the evening.

NOTE Confidence: 0.87366825

00:01:48.920 --> 00:01:52.547 I'm going to start off by sharing my screen.

NOTE Confidence: 0.91943973

00:02:04.430 --> 00:02:09.338 Can you see my screen? Yeah, OK. Alright.

NOTE Confidence: 0.9061312

00:02:15.890 --> 00:02:18.930 One second hold on.

NOTE Confidence: 0.9061312

00:02:18.930 --> 00:02:22.130 Started at the wrong part of the talk.

NOTE Confidence: 0.9061312

00:02:22.130 --> 00:02:26.346 OK. So again, thank you for being here.

NOTE Confidence: 0.9061312

00:02:26.350 --> 00:02:29.102 I want to tell you a little bit

NOTE Confidence: 0.9061312

00:02:29.102 --> 00:02:31.738 about the person who this is

NOTE Confidence: 0.9061312

00:02:31.738 --> 00:02:34.068 named after Doctor Susan Baras.

NOTE Confidence: 0.9061312

00:02:34.070 --> 00:02:36.500 She is a patient of mine,

NOTE Confidence: 0.9061312

00:02:36.500 --> 00:02:39.342 a patient of Nicks and Justin incredible

NOTE Confidence: 0.9061312

00:02:39.342 --> 00:02:41.682 person and survivor. I met her.

NOTE Confidence: 0.9061312

00:02:41.682 --> 00:02:45.430 It'll be 3 1/2 years ago soon knock Wood,

NOTE Confidence: 0.9061312

00:02:45.430 --> 00:02:48.279 which Susie makes me do an an.

NOTE Confidence: 0.9061312

00:02:48.280 --> 00:02:50.709 I do anyway but she had had

NOTE Confidence: 0.9061312

00:02:50.709 --> 00:02:53.150 a seizure as a pediatrician.  
NOTE Confidence: 0.9061312

00:02:53.150 --> 00:02:55.730 She was in her office an.  
NOTE Confidence: 0.9061312

00:02:55.730 --> 00:02:58.572 She began talking gibberish to her nurse  
NOTE Confidence: 0.9061312

00:02:58.572 --> 00:03:01.057 and then generalized and had a seizure,  
NOTE Confidence: 0.9061312

00:03:01.060 --> 00:03:04.489 and this was in the late summer of 2018.  
NOTE Confidence: 0.9061312

00:03:04.490 --> 00:03:06.730 She unfortunately found that she  
NOTE Confidence: 0.9061312

00:03:06.730 --> 00:03:09.673 had a glioblastoma and it was in  
NOTE Confidence: 0.9061312

00:03:09.673 --> 00:03:12.145 the motor area and as you can see  
NOTE Confidence: 0.9061312

00:03:12.227 --> 00:03:14.775 here on the picture on the right,  
NOTE Confidence: 0.9061312

00:03:14.780 --> 00:03:16.992 Susie is an avid fitness fanatic and  
NOTE Confidence: 0.9061312

00:03:16.992 --> 00:03:19.730 so she is maintaining her strength.  
NOTE Confidence: 0.9061312

00:03:19.730 --> 00:03:22.397 Of course to anyone is so important,  
NOTE Confidence: 0.9061312

00:03:22.400 --> 00:03:24.596 but particularly to her she was  
NOTE Confidence: 0.9061312

00:03:24.596 --> 00:03:26.990 seen at an outside hospital an  
NOTE Confidence: 0.9061312

00:03:26.990 --> 00:03:28.698 offered a brain biopsy.  
NOTE Confidence: 0.9061312

00:03:28.700 --> 00:03:31.570 And she knew being a physician herself,

NOTE Confidence: 0.9061312

00:03:31.570 --> 00:03:34.186 that there could be more aggressive

NOTE Confidence: 0.9061312

00:03:34.186 --> 00:03:36.367 ways to treat glioblastoma even

NOTE Confidence: 0.9061312

00:03:36.367 --> 00:03:38.539 if it involved the motor strip.

NOTE Confidence: 0.9061312

00:03:38.540 --> 00:03:42.166 So thankfully she was referred to me.

NOTE Confidence: 0.9061312

00:03:42.170 --> 00:03:43.980 We performed an awake craniotomy.

NOTE Confidence: 0.9061312

00:03:43.980 --> 00:03:45.780 She did beautifully an achieved.

NOTE Confidence: 0.9061312

00:03:45.780 --> 00:03:47.778 A gross total resection and she

NOTE Confidence: 0.9061312

00:03:47.778 --> 00:03:50.109 went home two days after surgery.

NOTE Confidence: 0.9061312

00:03:50.110 --> 00:03:51.958 This picture taken at the path

NOTE Confidence: 0.9061312

00:03:51.958 --> 00:03:54.080 of hope of the Connecticut,

NOTE Confidence: 0.9061312

00:03:54.080 --> 00:03:56.324 Connecticut Brain Tumor Alliance a few

NOTE Confidence: 0.9061312

00:03:56.324 --> 00:03:58.779 weeks later as Susie after she ran,

NOTE Confidence: 0.9061312

00:03:58.780 --> 00:04:02.029 not the 5K that it was supposed to be,

NOTE Confidence: 0.9061312

00:04:02.030 --> 00:04:05.040 but the 5K twice so she ran the 10K just

NOTE Confidence: 0.9061312

00:04:05.124 --> 00:04:08.516 a couple of weeks after her awake craniotomy.

NOTE Confidence: 0.9061312

00:04:08.520 --> 00:04:10.330 So she's an incredible person.  
NOTE Confidence: 0.9061312

00:04:10.330 --> 00:04:12.285 They featured her recently on  
NOTE Confidence: 0.9061312

00:04:12.285 --> 00:04:14.680 the cover of medicine at Yale.  
NOTE Confidence: 0.9061312

00:04:14.680 --> 00:04:16.430 As she she says herself,  
NOTE Confidence: 0.9061312

00:04:16.430 --> 00:04:18.530 she was never very philanthropic person.  
NOTE Confidence: 0.9061312

00:04:18.530 --> 00:04:20.847 But having a brain tumor really made  
NOTE Confidence: 0.9061312

00:04:20.847 --> 00:04:23.421 her become one an she recognized the  
NOTE Confidence: 0.9061312

00:04:23.421 --> 00:04:26.077 excellence in care that she received at  
NOTE Confidence: 0.9061312

00:04:26.077 --> 00:04:28.677 Yale and that she continues to receive it.  
NOTE Confidence: 0.9061312

00:04:28.680 --> 00:04:29.049 Yale,  
NOTE Confidence: 0.9061312

00:04:29.049 --> 00:04:32.001 she wanted to to make sure that other  
NOTE Confidence: 0.9061312

00:04:32.001 --> 00:04:34.443 people could have the same type of  
NOTE Confidence: 0.9061312

00:04:34.443 --> 00:04:37.181 care that she did and so we formed  
NOTE Confidence: 0.9061312

00:04:37.181 --> 00:04:39.530 this Susan Baras MD fund for the  
NOTE Confidence: 0.9061312

00:04:39.530 --> 00:04:41.280 male brain tumor Surgery program.  
NOTE Confidence: 0.9061312

00:04:41.280 --> 00:04:43.653 It's going to fund seminars such as

NOTE Confidence: 0.9061312

00:04:43.653 --> 00:04:45.870 this for education and collaboration.

NOTE Confidence: 0.9061312

00:04:45.870 --> 00:04:48.495 The community and to enhance patient care

NOTE Confidence: 0.9061312

00:04:48.495 --> 00:04:50.590 throughout the state of Connecticut.

NOTE Confidence: 0.9061312

00:04:50.590 --> 00:04:51.374 In addition,

NOTE Confidence: 0.9061312

00:04:51.374 --> 00:04:52.158 pretty excited.

NOTE Confidence: 0.9061312

00:04:52.158 --> 00:04:54.118 Yesterday was a press release,

NOTE Confidence: 0.9061312

00:04:54.120 --> 00:04:56.478 a children's book that I wrote.

NOTE Confidence: 0.9061312

00:04:56.480 --> 00:04:58.620 Trump parkers brainstorm when I

NOTE Confidence: 0.9061312

00:04:58.620 --> 00:05:01.161 was medical student and then one

NOTE Confidence: 0.9061312

00:05:01.161 --> 00:05:02.766 that I wrote last year.

NOTE Confidence: 0.9061312

00:05:02.770 --> 00:05:04.246 Parker's water to ride,

NOTE Confidence: 0.9061312

00:05:04.246 --> 00:05:07.090 which was part of a new series.

NOTE Confidence: 0.9061312

00:05:07.090 --> 00:05:09.448 We published it through the children's

NOTE Confidence: 0.9061312

00:05:09.448 --> 00:05:11.020 Brain Tumor Foundation illustrations.

NOTE Confidence: 0.9061312

00:05:11.020 --> 00:05:12.560 I had initially done,

NOTE Confidence: 0.9061312

00:05:12.560 --> 00:05:15.365 but have been redone and done much  
NOTE Confidence: 0.9061312

00:05:15.365 --> 00:05:17.825 better than my initial ones were.  
NOTE Confidence: 0.9061312

00:05:17.830 --> 00:05:20.414 By Trisha Group Day and so Susie is  
NOTE Confidence: 0.9061312

00:05:20.414 --> 00:05:22.738 foundation are her funds are going  
NOTE Confidence: 0.9061312

00:05:22.738 --> 00:05:25.144 towards these publications of these books,  
NOTE Confidence: 0.9061312

00:05:25.150 --> 00:05:27.694 as are our friends at me as miracles  
NOTE Confidence: 0.9061312

00:05:27.694 --> 00:05:29.539 and Love Mark Foundation,  
NOTE Confidence: 0.9061312

00:05:29.540 --> 00:05:31.526 who I'll talk about a little  
NOTE Confidence: 0.9061312

00:05:31.526 --> 00:05:32.850 bit later with these  
NOTE Confidence: 0.82611614

00:05:32.924 --> 00:05:34.832 books are being sent and have  
NOTE Confidence: 0.82611614

00:05:34.832 --> 00:05:37.100 been sent to kids and children's  
NOTE Confidence: 0.82611614

00:05:37.100 --> 00:05:39.420 hospitals all around the country,  
NOTE Confidence: 0.82611614

00:05:39.420 --> 00:05:41.622 so that's something else that that's  
NOTE Confidence: 0.82611614

00:05:41.622 --> 00:05:43.450 usually has been involved with.  
NOTE Confidence: 0.82611614

00:05:43.450 --> 00:05:45.646 So anyway, a very special lady,  
NOTE Confidence: 0.82611614

00:05:45.650 --> 00:05:48.080 very special person to me.

NOTE Confidence: 0.82611614

00:05:48.080 --> 00:05:50.216 And I, I think you know,

NOTE Confidence: 0.82611614

00:05:50.220 --> 00:05:53.856 this will be the beginning of a really nice

NOTE Confidence: 0.82611614

00:05:53.856 --> 00:05:57.019 series of seminars and lectures to come.

NOTE Confidence: 0.82611614

00:05:57.020 --> 00:05:59.246 So for me as a neurosurgeon,

NOTE Confidence: 0.82611614

00:05:59.250 --> 00:06:01.854 what I was going to focus on,

NOTE Confidence: 0.82611614

00:06:01.860 --> 00:06:03.715 which is what my practices

NOTE Confidence: 0.82611614

00:06:03.715 --> 00:06:05.199 is primary brain tumor,

NOTE Confidence: 0.82611614

00:06:05.200 --> 00:06:07.438 surgical strategies and give that overview.

NOTE Confidence: 0.82611614

00:06:07.440 --> 00:06:10.723 And then we'll segue into neuron koleji

NOTE Confidence: 0.82611614

00:06:10.723 --> 00:06:13.800 radiation oncology and then supportive care.

NOTE Confidence: 0.82611614

00:06:13.800 --> 00:06:16.716 So what we do here at Yale is really

NOTE Confidence: 0.82611614

00:06:16.716 --> 00:06:19.956 in terms of our brain tumor practice.

NOTE Confidence: 0.82611614

00:06:19.960 --> 00:06:22.848 We have the highest volume of brain tumor

NOTE Confidence: 0.82611614

00:06:22.848 --> 00:06:25.348 patients in the state of Connecticut,

NOTE Confidence: 0.82611614

00:06:25.350 --> 00:06:27.660 and we perform the most brain

NOTE Confidence: 0.82611614

00:06:27.660 --> 00:06:29.200 tumor surgeries as well.  
NOTE Confidence: 0.82611614

00:06:29.200 --> 00:06:31.510 We're fortunate to have so many  
NOTE Confidence: 0.82611614

00:06:31.510 --> 00:06:33.050 partners in the community,  
NOTE Confidence: 0.82611614

00:06:33.050 --> 00:06:35.227 and I'm really proud of the fact  
NOTE Confidence: 0.82611614

00:06:35.227 --> 00:06:38.006 that a large part of my practice  
NOTE Confidence: 0.82611614

00:06:38.006 --> 00:06:40.221 in particular comes from other  
NOTE Confidence: 0.82611614

00:06:40.221 --> 00:06:41.909 neurosurgeons in the community.  
NOTE Confidence: 0.82611614

00:06:41.910 --> 00:06:43.830 Other physicians in the community,  
NOTE Confidence: 0.82611614

00:06:43.830 --> 00:06:46.110 and across different system hospitals.  
NOTE Confidence: 0.82611614

00:06:46.110 --> 00:06:48.814 Which I think really goes to the fact  
NOTE Confidence: 0.82611614

00:06:48.814 --> 00:06:51.507 that we're all here to help patients an  
NOTE Confidence: 0.82611614

00:06:51.507 --> 00:06:54.450 we're all here to make sure that they  
NOTE Confidence: 0.82611614

00:06:54.450 --> 00:06:56.814 they receive the best possible care.  
NOTE Confidence: 0.82611614

00:06:56.820 --> 00:06:57.843 As a result,  
NOTE Confidence: 0.82611614

00:06:57.843 --> 00:07:01.039 the cases that we see and that we take  
NOTE Confidence: 0.82611614

00:07:01.039 --> 00:07:03.951 care of tend to be more complex cases,

NOTE Confidence: 0.82611614

00:07:03.960 --> 00:07:05.685 and so gliomas and eloquent

NOTE Confidence: 0.82611614

00:07:05.685 --> 00:07:07.410 cortex similar to Susie's tumor

NOTE Confidence: 0.82611614

00:07:07.471 --> 00:07:10.005 as well as skull based tumors and

NOTE Confidence: 0.82611614

00:07:10.005 --> 00:07:11.091 more aggressive meningiomas,

NOTE Confidence: 0.82611614

00:07:11.100 --> 00:07:13.599 which I'll talk a little bit about.

NOTE Confidence: 0.82611614

00:07:13.600 --> 00:07:16.113 We're fortunate that every tumor that we

NOTE Confidence: 0.82611614

00:07:16.113 --> 00:07:18.336 biopsy respect at Yale undergoes full

NOTE Confidence: 0.82611614

00:07:18.336 --> 00:07:20.849 exome sequencing and I am the director

NOTE Confidence: 0.82611614

00:07:20.917 --> 00:07:22.962 of the Multidisciplinary Tumor Board

NOTE Confidence: 0.82611614

00:07:22.962 --> 00:07:25.361 and the Precision Brain Tumor Board.

NOTE Confidence: 0.82611614

00:07:25.361 --> 00:07:28.169 And each week we discuss all of our

NOTE Confidence: 0.82611614

00:07:28.169 --> 00:07:30.903 patients and really rely on the precision

NOTE Confidence: 0.82611614

00:07:30.903 --> 00:07:33.140 brain report for making targeted,

NOTE Confidence: 0.82611614

00:07:33.140 --> 00:07:35.080 ANAN more precision care decisions.

NOTE Confidence: 0.8482356

00:07:37.560 --> 00:07:39.898 This is just a sampling of cases

NOTE Confidence: 0.8482356

00:07:39.898 --> 00:07:42.539 that that that I do pretty routinely.  
NOTE Confidence: 0.8482356

00:07:42.540 --> 00:07:44.592 My fellow had pulled my more  
NOTE Confidence: 0.8482356

00:07:44.592 --> 00:07:46.460 recent cases and so again,  
NOTE Confidence: 0.8482356

00:07:46.460 --> 00:07:48.284 you know, glioblastomas here.  
NOTE Confidence: 0.8482356

00:07:48.284 --> 00:07:52.116 I don't know if you can see my mouse  
NOTE Confidence: 0.8482356

00:07:52.116 --> 00:07:56.400 or not and it can you see? Good.  
NOTE Confidence: 0.8482356

00:07:56.400 --> 00:08:00.616 And snugly blastoma again in the motor area.  
NOTE Confidence: 0.8482356

00:08:00.620 --> 00:08:03.250 Some big CP angle tumors.  
NOTE Confidence: 0.8482356

00:08:03.250 --> 00:08:04.822 Other nasty glioblastomas.  
NOTE Confidence: 0.8482356

00:08:04.822 --> 00:08:06.918 Really aggressive meningiomas here  
NOTE Confidence: 0.8482356

00:08:06.918 --> 00:08:10.098 where we then reconstruct the orbit.  
NOTE Confidence: 0.8482356

00:08:10.100 --> 00:08:11.616 Additional again,  
NOTE Confidence: 0.8482356

00:08:11.616 --> 00:08:14.648 so annoyed wing meningiomas.  
NOTE Confidence: 0.8482356

00:08:14.650 --> 00:08:15.796 Brain stem tumors.  
NOTE Confidence: 0.8482356

00:08:15.796 --> 00:08:18.088 This patient down here had been  
NOTE Confidence: 0.8482356

00:08:18.088 --> 00:08:20.174 operated on several other by

NOTE Confidence: 0.8482356

00:08:20.174 --> 00:08:21.806 several other neurosurgeons and

NOTE Confidence: 0.8482356

00:08:21.806 --> 00:08:23.989 then sought care here and again.

NOTE Confidence: 0.8482356

00:08:23.990 --> 00:08:27.374 Just just a rough example of what we

NOTE Confidence: 0.8482356

00:08:27.374 --> 00:08:31.116 see and do on a pretty regular basis.

NOTE Confidence: 0.8482356

00:08:31.120 --> 00:08:33.202 The goals are primary brain tumor

NOTE Confidence: 0.8482356

00:08:33.202 --> 00:08:35.070 surgery are really quite simple.

NOTE Confidence: 0.8482356

00:08:35.070 --> 00:08:35.732 Of course,

NOTE Confidence: 0.8482356

00:08:35.732 --> 00:08:37.718 one is to establish a diagnosis

NOTE Confidence: 0.8482356

00:08:37.718 --> 00:08:39.380 to help guide further.

NOTE Confidence: 0.8482356

00:08:39.380 --> 00:08:41.528 Therapy is, but really it's important.

NOTE Confidence: 0.8482356

00:08:41.530 --> 00:08:43.914 A lot of times to respect as much

NOTE Confidence: 0.8482356

00:08:43.914 --> 00:08:45.858 tumor as possible to maintain

NOTE Confidence: 0.8482356

00:08:45.858 --> 00:08:47.983 or improve quality of life.

NOTE Confidence: 0.8482356

00:08:47.990 --> 00:08:49.880 We also know that that it has

NOTE Confidence: 0.8482356

00:08:49.880 --> 00:08:52.036 a huge impact in the overall

NOTE Confidence: 0.8482356

00:08:52.036 --> 00:08:53.744 survival and progression free  
NOTE Confidence: 0.8482356

00:08:53.744 --> 00:08:55.530 survival across various tumors.  
NOTE Confidence: 0.8482356

00:08:55.530 --> 00:08:57.325 And then I'll talk about  
NOTE Confidence: 0.8482356

00:08:57.325 --> 00:08:59.120 a little bit as well.  
NOTE Confidence: 0.8482356

00:08:59.120 --> 00:09:01.640 And then, as Nick will will discuss,  
NOTE Confidence: 0.8482356

00:09:01.640 --> 00:09:03.500 it's really important for clinical  
NOTE Confidence: 0.8482356

00:09:03.500 --> 00:09:04.988 trial enrollment as well.  
NOTE Confidence: 0.8482356

00:09:04.990 --> 00:09:05.962 Because of course,  
NOTE Confidence: 0.8482356

00:09:05.962 --> 00:09:08.682 we all know for for some of the  
NOTE Confidence: 0.8482356

00:09:08.682 --> 00:09:10.582 tumors the treatment does not  
NOTE Confidence: 0.8482356

00:09:10.582 --> 00:09:12.600 stop at just surgery alone.  
NOTE Confidence: 0.8482356

00:09:12.600 --> 00:09:15.752 One thing that I think we have become  
NOTE Confidence: 0.8482356

00:09:15.752 --> 00:09:18.195 really known for is is how do we?  
NOTE Confidence: 0.8482356

00:09:18.200 --> 00:09:20.181 How are we able to remove tumors  
NOTE Confidence: 0.8482356

00:09:20.181 --> 00:09:21.994 that that are otherwise deemed  
NOTE Confidence: 0.8482356

00:09:21.994 --> 00:09:23.798 inoperable like Susie's an?

NOTE Confidence: 0.8482356

00:09:23.800 --> 00:09:26.341 I think there's there's a few a

NOTE Confidence: 0.8482356

00:09:26.341 --> 00:09:29.521 few reasons as to why one is we

NOTE Confidence: 0.8482356

00:09:29.521 --> 00:09:31.129 have sub specialized expertise

NOTE Confidence: 0.8482356

00:09:31.129 --> 00:09:33.760 and so all we do day in and day

NOTE Confidence: 0.8482356

00:09:33.760 --> 00:09:35.209 out is brain tumor surgery.

NOTE Confidence: 0.8482356

00:09:35.209 --> 00:09:37.330 I don't do any other type of

NOTE Confidence: 0.8482356

00:09:37.395 --> 00:09:39.003 surgery except for microvascular

NOTE Confidence: 0.8482356

00:09:39.003 --> 00:09:41.415 decompression which is a type of

NOTE Confidence: 0.8482356

00:09:41.481 --> 00:09:43.707 skull based surgery but beyond that.

NOTE Confidence: 0.8482356

00:09:43.710 --> 00:09:45.964 Everything I do is focused on brain

NOTE Confidence: 0.8482356

00:09:45.964 --> 00:09:47.925 tumor surgery and I think there's

NOTE Confidence: 0.8482356

00:09:47.925 --> 00:09:49.785 something to be said for doing

NOTE Confidence: 0.8482356

00:09:49.785 --> 00:09:51.798 that literally every single day.

NOTE Confidence: 0.8482356

00:09:51.800 --> 00:09:53.774 What's more is that we're subspecialized

NOTE Confidence: 0.8482356

00:09:53.774 --> 00:09:55.949 even based on the type of tumor,

NOTE Confidence: 0.8482356

00:09:55.950 --> 00:09:57.858 and so for primary brain tumors,  
NOTE Confidence: 0.8482356

00:09:57.860 --> 00:10:00.086 which is my focus, Joe Pete Mayer,  
NOTE Confidence: 0.8482356

00:10:00.090 --> 00:10:02.010 who's in the picture with me,  
NOTE Confidence: 0.8482356

00:10:02.010 --> 00:10:04.236 has since retired and blend to my,  
NOTE Confidence: 0.8482356

00:10:04.240 --> 00:10:06.028 has really stepped in and and  
NOTE Confidence: 0.8482356

00:10:06.028 --> 00:10:08.302 has also been doing a lot of  
NOTE Confidence: 0.8482356

00:10:08.302 --> 00:10:09.658 primary brain tumor surgeries.  
NOTE Confidence: 0.8482356

00:10:09.660 --> 00:10:10.620 But Veronica Chang,  
NOTE Confidence: 0.8482356

00:10:10.620 --> 00:10:11.900 as you can see,  
NOTE Confidence: 0.8482356

00:10:11.900 --> 00:10:13.909 there is the leader of our meta  
NOTE Confidence: 0.8482356

00:10:13.909 --> 00:10:15.880 static program and she focuses on  
NOTE Confidence: 0.8482356

00:10:15.880 --> 00:10:17.635 on metastatic brain tumor surgery.  
NOTE Confidence: 0.8482356

00:10:17.640 --> 00:10:19.649 And so I think that that really  
NOTE Confidence: 0.8482356

00:10:19.649 --> 00:10:21.876 adds a lot of value because  
NOTE Confidence: 0.8482356

00:10:21.876 --> 00:10:23.596 we're treating the patient.  
NOTE Confidence: 0.8482356

00:10:23.600 --> 00:10:27.176 For the the overall cancer or

NOTE Confidence: 0.8482356

00:10:27.176 --> 00:10:30.580 the overall Uncle logic problem.

NOTE Confidence: 0.8482356

00:10:30.580 --> 00:10:31.925 There's other types of things

NOTE Confidence: 0.8482356

00:10:31.925 --> 00:10:33.744 in terms of the resources and

NOTE Confidence: 0.8482356

00:10:33.744 --> 00:10:35.420 infrastructure that's really important

NOTE Confidence: 0.8482356

00:10:35.420 --> 00:10:37.096 to making neurosurgery successful,

NOTE Confidence: 0.8482356

00:10:37.100 --> 00:10:38.472 and so it's standard.

NOTE Confidence: 0.8482356

00:10:38.472 --> 00:10:40.360 You know, everyone has GPS systems.

NOTE Confidence: 0.8482356

00:10:40.360 --> 00:10:42.930 I also tend to use an ultrasound,

NOTE Confidence: 0.8482356

00:10:42.930 --> 00:10:44.640 which gives real time feedback,

NOTE Confidence: 0.8482356

00:10:44.640 --> 00:10:47.460 and you can see there is a picture of me

NOTE Confidence: 0.85618085

00:10:47.540 --> 00:10:49.448 there using the ultrasound,

NOTE Confidence: 0.85618085

00:10:49.450 --> 00:10:51.358 and that's a really large meningioma

NOTE Confidence: 0.85618085

00:10:51.358 --> 00:10:53.429 and there's the middle cerebral artery

NOTE Confidence: 0.85618085

00:10:53.429 --> 00:10:55.279 that's black running through it,

NOTE Confidence: 0.85618085

00:10:55.280 --> 00:10:56.990 so having that frame of

NOTE Confidence: 0.85618085

00:10:56.990 --> 00:10:58.358 reference is always important.  
NOTE Confidence: 0.85618085

00:10:58.360 --> 00:11:00.706 And then the intra operative MRI.  
NOTE Confidence: 0.85618085

00:11:00.710 --> 00:11:03.400 So we're the only center in the in the state  
NOTE Confidence: 0.85618085

00:11:03.469 --> 00:11:05.856 that has an intra operative MRI really.  
NOTE Confidence: 0.85618085

00:11:05.860 --> 00:11:06.832 Actually quite helpful,  
NOTE Confidence: 0.85618085

00:11:06.832 --> 00:11:09.100 and I'll show an example as to  
NOTE Confidence: 0.85618085

00:11:09.165 --> 00:11:11.181 why even when we do these these  
NOTE Confidence: 0.85618085

00:11:11.181 --> 00:11:12.829 surgeries day in and day out,  
NOTE Confidence: 0.85618085

00:11:12.830 --> 00:11:14.618 it's really nice when the patients  
NOTE Confidence: 0.85618085

00:11:14.618 --> 00:11:16.940 are still on the table to get a  
NOTE Confidence: 0.85618085

00:11:16.940 --> 00:11:18.956 quick MRI that shows if there's any  
NOTE Confidence: 0.85618085

00:11:18.956 --> 00:11:21.008 additional tumor that can be removed.  
NOTE Confidence: 0.85618085

00:11:21.010 --> 00:11:23.038 We also have hybrid intra operative  
NOTE Confidence: 0.85618085

00:11:23.038 --> 00:11:25.127 angio suite capability is if we need  
NOTE Confidence: 0.85618085

00:11:25.127 --> 00:11:27.106 to embolize a tumor and then I think  
NOTE Confidence: 0.85618085

00:11:27.106 --> 00:11:29.430 what really goes back to the sub

NOTE Confidence: 0.85618085

00:11:29.430 --> 00:11:31.009 specialized expertise is the ability

NOTE Confidence: 0.85618085

00:11:31.009 --> 00:11:32.524 to do more sophisticated microsurgery.

NOTE Confidence: 0.85618085

00:11:32.530 --> 00:11:34.570 And I'll show an example.

NOTE Confidence: 0.85618085

00:11:34.570 --> 00:11:35.815 Those as well,

NOTE Confidence: 0.85618085

00:11:35.815 --> 00:11:37.890 so frequently doing functional mapping,

NOTE Confidence: 0.85618085

00:11:37.890 --> 00:11:38.720 motor mapping,

NOTE Confidence: 0.85618085

00:11:38.720 --> 00:11:40.795 language mapping during awake craniotomy,

NOTE Confidence: 0.85618085

00:11:40.800 --> 00:11:43.290 for instance with Susie for instance,

NOTE Confidence: 0.85618085

00:11:43.290 --> 00:11:45.372 allowed us to to safely remove

NOTE Confidence: 0.85618085

00:11:45.372 --> 00:11:47.820 as much tumor as possible while

NOTE Confidence: 0.85618085

00:11:47.820 --> 00:11:50.760 maintaining the function of the brain.

NOTE Confidence: 0.85618085

00:11:50.760 --> 00:11:52.835 And that's what's the goal

NOTE Confidence: 0.85618085

00:11:52.835 --> 00:11:54.080 in those surgeries.

NOTE Confidence: 0.85618085

00:11:54.080 --> 00:11:57.600 This was a slide that I was given by Bob

NOTE Confidence: 0.85618085

00:11:57.693 --> 00:12:01.130 Carter who's the chair of mass general,

NOTE Confidence: 0.85618085

00:12:01.130 --> 00:12:04.203 and I think this is a really  
NOTE Confidence: 0.85618085

00:12:04.203 --> 00:12:05.520 interesting and good.  
NOTE Confidence: 0.85618085

00:12:05.520 --> 00:12:05.944 Example,  
NOTE Confidence: 0.85618085

00:12:05.944 --> 00:12:08.064 this basically shows that patient  
NOTE Confidence: 0.85618085

00:12:08.064 --> 00:12:10.693 mortality is lowest for cranial surgery  
NOTE Confidence: 0.85618085

00:12:10.693 --> 00:12:12.848 among surgeons who perform cranial  
NOTE Confidence: 0.85618085

00:12:12.848 --> 00:12:15.428 surgery the most and more regularly,  
NOTE Confidence: 0.85618085

00:12:15.430 --> 00:12:18.878 and I think that really does hold true,  
NOTE Confidence: 0.85618085

00:12:18.880 --> 00:12:20.604 particularly for more complex  
NOTE Confidence: 0.85618085

00:12:20.604 --> 00:12:21.897 brain tumor surgeries,  
NOTE Confidence: 0.85618085

00:12:21.900 --> 00:12:24.875 and certainly having a high volume of  
NOTE Confidence: 0.85618085

00:12:24.875 --> 00:12:27.947 cases and and doing these surgeries day  
NOTE Confidence: 0.85618085

00:12:27.947 --> 00:12:32.688 in and day out, I think really does.  
NOTE Confidence: 0.85618085

00:12:32.690 --> 00:12:35.450 Influence outcomes.  
NOTE Confidence: 0.85618085

00:12:35.450 --> 00:12:37.874 This was a patient I shared with Nick  
NOTE Confidence: 0.85618085

00:12:37.874 --> 00:12:40.378 and I think this is a good example

NOTE Confidence: 0.85618085

00:12:40.378 --> 00:12:43.393 of of why it's so important to be

NOTE Confidence: 0.85618085

00:12:43.393 --> 00:12:45.548 collaborative and to be collaborative

NOTE Confidence: 0.85618085

00:12:45.548 --> 00:12:47.660 with with other people in the

NOTE Confidence: 0.85618085

00:12:47.660 --> 00:12:49.340 Community to ensure that patients

NOTE Confidence: 0.85618085

00:12:49.398 --> 00:12:51.600 really receive the best care possible.

NOTE Confidence: 0.85618085

00:12:51.600 --> 00:12:54.016 And so when he presented he was 63

NOTE Confidence: 0.85618085

00:12:54.016 --> 00:12:56.113 and had an expressive aphasia and

NOTE Confidence: 0.85618085

00:12:56.113 --> 00:12:59.071 so the top left you can see here

NOTE Confidence: 0.85618085

00:12:59.071 --> 00:13:00.981 this was his preoperative scan

NOTE Confidence: 0.85618085

00:13:00.981 --> 00:13:03.554 that was done in December 2018 and

NOTE Confidence: 0.85618085

00:13:03.554 --> 00:13:05.690 you can see the tumor here.

NOTE Confidence: 0.85618085

00:13:05.690 --> 00:13:08.000 Left sided GBM underneath the language

NOTE Confidence: 0.85618085

00:13:08.000 --> 00:13:10.290 area so obviously explaining his aphasia.

NOTE Confidence: 0.85618085

00:13:10.290 --> 00:13:13.242 This is his post OP CIT and although

NOTE Confidence: 0.85618085

00:13:13.242 --> 00:13:16.231 it's not an MRI you can make out

NOTE Confidence: 0.85618085

00:13:16.231 --> 00:13:18.563 that there's still a fair amount  
NOTE Confidence: 0.85618085

00:13:18.563 --> 00:13:21.377 of tumor even after what was what  
NOTE Confidence: 0.85618085

00:13:21.377 --> 00:13:23.690 was said to be a resection.  
NOTE Confidence: 0.85618085

00:13:23.690 --> 00:13:25.988 This is his scan in January,  
NOTE Confidence: 0.85618085

00:13:25.990 --> 00:13:28.646 so a few weeks later and you can  
NOTE Confidence: 0.85618085

00:13:28.646 --> 00:13:31.212 see that the tumor that we see  
NOTE Confidence: 0.85618085

00:13:31.212 --> 00:13:34.067 here is very similar to what you  
NOTE Confidence: 0.85618085

00:13:34.067 --> 00:13:36.437 see in the initial preoperative.  
NOTE Confidence: 0.85618085

00:13:36.440 --> 00:13:38.635 Scan and unfortunately I see  
NOTE Confidence: 0.85618085

00:13:38.635 --> 00:13:40.830 patients like this often an  
NOTE Confidence: 0.85618085

00:13:40.917 --> 00:13:43.427 where they've undergone a quote,  
NOTE Confidence: 0.85618085

00:13:43.430 --> 00:13:46.226 unquote open biopsy, or they pad,  
NOTE Confidence: 0.85618085

00:13:46.230 --> 00:13:48.090 you know, limited reception,  
NOTE Confidence: 0.85618085

00:13:48.090 --> 00:13:49.020 and that,  
NOTE Confidence: 0.85618085

00:13:49.020 --> 00:13:49.423 really,  
NOTE Confidence: 0.85618085

00:13:49.423 --> 00:13:50.229 you know,

NOTE Confidence: 0.85618085

00:13:50.229 --> 00:13:53.667 is is a shame because there are opportunities

NOTE Confidence: 0.85618085

00:13:53.667 --> 00:13:57.405 to be more aggressive in others hands.

NOTE Confidence: 0.85618085

00:13:57.410 --> 00:13:59.830 So Nick actually saw the

NOTE Confidence: 0.85618085

00:13:59.830 --> 00:14:02.250 patient an noticed how aphasic

NOTE Confidence: 0.7926559

00:14:02.344 --> 00:14:04.402 he was an thought. Well,

NOTE Confidence: 0.7926559

00:14:04.402 --> 00:14:08.178 maybe he could have more of a reception.

NOTE Confidence: 0.7926559

00:14:08.180 --> 00:14:10.547 Performed so he sent him to me and a

NOTE Confidence: 0.7926559

00:14:10.547 --> 00:14:12.728 few days later had another functional

NOTE Confidence: 0.7926559

00:14:12.728 --> 00:14:15.609 MRI which allows us to see the function

NOTE Confidence: 0.7926559

00:14:15.609 --> 00:14:17.870 of the brain and so Broca's area

NOTE Confidence: 0.7926559

00:14:17.870 --> 00:14:20.124 you can't see it in this picture.

NOTE Confidence: 0.7926559

00:14:20.130 --> 00:14:22.384 But it was just overlying over here,

NOTE Confidence: 0.7926559

00:14:22.390 --> 00:14:24.328 and then the arcuate fasciculi us.

NOTE Confidence: 0.7926559

00:14:24.330 --> 00:14:25.950 You're starting to see there.

NOTE Confidence: 0.7926559

00:14:25.950 --> 00:14:29.180 I was able to do an awake craniotomy on him,

NOTE Confidence: 0.7926559

00:14:29.180 --> 00:14:31.620 which I'll show you an example of an  
NOTE Confidence: 0.7926559

00:14:31.620 --> 00:14:34.016 then this is his post opera section,  
NOTE Confidence: 0.7926559

00:14:34.020 --> 00:14:35.874 and of course, having the tumor  
NOTE Confidence: 0.7926559

00:14:35.874 --> 00:14:37.570 removed really did influences outcome,  
NOTE Confidence: 0.7926559

00:14:37.570 --> 00:14:40.288 which I'll show some examples of.  
NOTE Confidence: 0.7926559

00:14:40.290 --> 00:14:42.820 This is a short video, but I think.  
NOTE Confidence: 0.7926559

00:14:42.820 --> 00:14:45.064 Few minutes, not all that short,  
NOTE Confidence: 0.7926559

00:14:45.064 --> 00:14:47.639 but I think a really good example  
NOTE Confidence: 0.7926559

00:14:47.639 --> 00:14:49.937 of what an awake craniotomy is  
NOTE Confidence: 0.7926559

00:14:49.937 --> 00:14:53.154 and how we are able to to really  
NOTE Confidence: 0.7926559

00:14:53.154 --> 00:14:55.144 push the extent of resection.  
NOTE Confidence: 0.8536503

00:14:57.470 --> 00:14:58.650 To a Fox 61  
NOTE Confidence: 0.8536503

00:14:58.650 --> 00:15:00.115 exclusive now it's a nightmare  
NOTE Confidence: 0.8536503

00:15:00.115 --> 00:15:01.287 scenario when undergoing surgery.  
NOTE Confidence: 0.8536503

00:15:01.290 --> 00:15:03.299 Waking up in the middle of the  
NOTE Confidence: 0.8536503

00:15:03.299 --> 00:15:05.109 procedure and knowing what's going on.

NOTE Confidence: 0.8536503

00:15:05.110 --> 00:15:07.756 But in some cases that can be a lifesaver,

NOTE Confidence: 0.8536503

00:15:07.756 --> 00:15:08.638 lifesaver and necessary.

NOTE Confidence: 0.8536503

00:15:08.640 --> 00:15:10.995 We're going to explain that in a moment,

NOTE Confidence: 0.8536503

00:15:10.995 --> 00:15:13.355 but first we want to introduce you to

NOTE Confidence: 0.8536503

00:15:13.355 --> 00:15:15.738 a man named Andy Andy is a husband

NOTE Confidence: 0.8536503

00:15:15.738 --> 00:15:18.052 and father of two kids and a nurse.

NOTE Confidence: 0.8536503

00:15:18.052 --> 00:15:19.519 Another interesting fact about him,

NOTE Confidence: 0.8536503

00:15:19.519 --> 00:15:21.279 he's also a professionally trained singer.

NOTE Confidence: 0.8536503

00:15:21.280 --> 00:15:22.750 He's even performed with his

NOTE Confidence: 0.8536503

00:15:22.750 --> 00:15:24.220 church choir at Carnegie Hall,

NOTE Confidence: 0.8536503

00:15:24.220 --> 00:15:27.460 but Andy felt his entire life come to a halt.

NOTE Confidence: 0.8536503

00:15:27.460 --> 00:15:29.660 When he was diagnosed with brain cancer,

NOTE Confidence: 0.8536503

00:15:29.660 --> 00:15:31.540 he needed surgery to remove as

NOTE Confidence: 0.8536503

00:15:31.540 --> 00:15:33.430 much of a tumor as possible.

NOTE Confidence: 0.8536503

00:15:33.430 --> 00:15:35.502 That tumor in the part of his

NOTE Confidence: 0.8536503

00:15:35.502 --> 00:15:36.880 brain that controls speech.  
NOTE Confidence: 0.8536503

00:15:36.880 --> 00:15:37.822 And, yes, singing.  
NOTE Confidence: 0.8536503

00:15:37.822 --> 00:15:40.020 That's where a special surgery comes in.  
NOTE Confidence: 0.8536503

00:15:40.020 --> 00:15:40.950 Surgeons at Yale,  
NOTE Confidence: 0.8536503

00:15:40.950 --> 00:15:42.500 New Haven Smilow Cancer Hospital  
NOTE Confidence: 0.8536503

00:15:42.500 --> 00:15:43.795 have perfected a procedure  
NOTE Confidence: 0.8536503

00:15:43.795 --> 00:15:45.035 called in awake craniotomy.  
NOTE Confidence: 0.8536503

00:15:45.040 --> 00:15:46.696 They invited us into the operating  
NOTE Confidence: 0.8536503

00:15:46.696 --> 00:15:49.259 room and we did not hesitate to see  
NOTE Confidence: 0.8536503

00:15:49.259 --> 00:15:51.009 this incredible procedure first hand.  
NOTE Confidence: 0.83831733

00:15:51.850 --> 00:15:52.490 I think you're right.  
NOTE Confidence: 0.9019976

00:15:54.670 --> 00:15:56.700 In an operating room at Yale,  
NOTE Confidence: 0.9019976

00:15:56.700 --> 00:15:59.480 New Haven Hospital. Doctors  
NOTE Confidence: 0.7940856

00:15:59.480 --> 00:16:01.236 are working to remove it.  
NOTE Confidence: 0.7940856

00:16:01.236 --> 00:16:04.400 Tumor from the brain of a 31 year old  
NOTE Confidence: 0.7940856

00:16:04.400 --> 00:16:06.850 man named Andy. He is a singer.

NOTE Confidence: 0.7940856

00:16:06.850 --> 00:16:09.310 Yeah a husband and father of two.

NOTE Confidence: 0.8878196

00:16:10.710 --> 00:16:13.559 Surgeries waking up in the middle of

NOTE Confidence: 0.8878196

00:16:13.559 --> 00:16:15.520 the operation would be a disaster.

NOTE Confidence: 0.8070778

00:16:17.640 --> 00:16:19.020 Today an anesthesiologist

NOTE Confidence: 0.8070778

00:16:19.020 --> 00:16:21.320 doing his best to make

NOTE Confidence: 0.8070778

00:16:21.320 --> 00:16:23.620 sure Andy does just that.

NOTE Confidence: 0.84695834

00:16:25.390 --> 00:16:26.838 Any Stacy surgeons have

NOTE Confidence: 0.84695834

00:16:26.840 --> 00:16:29.192 drilled through his skull and have

NOTE Confidence: 0.84695834

00:16:29.192 --> 00:16:31.920 already begun to remove part of a tumor.

NOTE Confidence: 0.84695834

00:16:31.920 --> 00:16:33.740 Located on the left side

NOTE Confidence: 0.84695834

00:16:33.740 --> 00:16:35.188 of his temporal lobe,

NOTE Confidence: 0.84695834

00:16:35.188 --> 00:16:38.680 the area which controls language.

NOTE Confidence: 0.84695834

00:16:38.680 --> 00:16:41.661 Medical staff puts a microphone on it if

NOTE Confidence: 0.84695834

00:16:41.661 --> 00:16:45.020 not for our cameras it so the entire room,

NOTE Confidence: 0.84695834

00:16:45.020 --> 00:16:46.528 including the operating surgeon,

NOTE Confidence: 0.84695834

00:16:46.528 --> 00:16:49.120 can hear what Andy has to set.  
NOTE Confidence: 0.782905

00:16:51.310 --> 00:16:53.065 The procedure is called an  
NOTE Confidence: 0.782905

00:16:53.065 --> 00:16:54.470 awake craniotomy headache. I  
NOTE Confidence: 0.782905

00:16:54.470 --> 00:16:56.927 was telling you earlier I I don't  
NOTE Confidence: 0.782905

00:16:56.927 --> 00:16:59.380 know if it's from the brain surgery  
NOTE Confidence: 0.782905

00:16:59.380 --> 00:17:02.539 or the fact that I ever had a Cup  
NOTE Confidence: 0.782905

00:17:02.540 --> 00:17:03.599 of coffee. Is  
NOTE Confidence: 0.782905

00:17:03.600 --> 00:17:05.052 forming physiologist Brooke Callaghan  
NOTE Confidence: 0.782905

00:17:05.052 --> 00:17:07.460 sits next to him and begins her  
NOTE Confidence: 0.782905

00:17:07.460 --> 00:17:10.619 work. I am going to say it sentence and  
NOTE Confidence: 0.782905

00:17:10.620 --> 00:17:12.720 I want you to repeat after  
NOTE Confidence: 0.782905

00:17:12.720 --> 00:17:14.826 me. The seashore smells like dog.  
NOTE Confidence: 0.782905

00:17:14.830 --> 00:17:15.880 The seashore smells.  
NOTE Confidence: 0.83499825

00:17:17.440 --> 00:17:19.918 Interaction can be heard on the  
NOTE Confidence: 0.83499825

00:17:19.920 --> 00:17:21.568 speaker throughout the room.  
NOTE Confidence: 0.83499825

00:17:21.570 --> 00:17:25.130 Neurosurgeon Doctor Jennifer moliterno.

NOTE Confidence: 0.83499825  
00:17:25.130 --> 00:17:26.870 Has mastered multi-tasking,  
NOTE Confidence: 0.83499825  
00:17:26.870 --> 00:17:30.170 operating and listening.  
NOTE Confidence: 0.8340454  
00:17:30.170 --> 00:17:31.139 Great Doctor Moliterno  
NOTE Confidence: 0.8340454  
00:17:31.140 --> 00:17:33.310 and her team worked diligently to remove  
NOTE Confidence: 0.8340454  
00:17:33.310 --> 00:17:35.638 as much of the tumor as possible,  
NOTE Confidence: 0.8340454  
00:17:35.640 --> 00:17:37.578 which he can't see are critical  
NOTE Confidence: 0.8340454  
00:17:37.580 --> 00:17:39.190 microscopic language fibers which are  
NOTE Confidence: 0.8340454  
00:17:39.190 --> 00:17:41.758 splayed over the tumor. The best way to  
NOTE Confidence: 0.8340454  
00:17:41.760 --> 00:17:44.014 try to remove as much tumor and  
NOTE Confidence: 0.8340454  
00:17:44.014 --> 00:17:45.629 preserve his language is to  
NOTE Confidence: 0.8340454  
00:17:45.630 --> 00:17:47.880 do it with him away. Get too  
NOTE Confidence: 0.8340454  
00:17:47.880 --> 00:17:49.490 close to those critical fibers.  
NOTE Confidence: 0.8340454  
00:17:49.490 --> 00:17:51.420 You'll know it. What do you  
NOTE Confidence: 0.8340454  
00:17:51.420 --> 00:17:54.870 do in a chair? Problem.  
NOTE Confidence: 0.8959268  
00:17:57.540 --> 00:17:58.419 I don't know.  
NOTE Confidence: 0.8755471

00:18:00.140 --> 00:18:01.328 Little bit of confusion,  
NOTE Confidence: 0.8755471

00:18:01.330 --> 00:18:04.600 so that's a great way to me to tell me to,  
NOTE Confidence: 0.8755471

00:18:04.600 --> 00:18:06.020 even though there might be  
NOTE Confidence: 0.8755471

00:18:06.020 --> 00:18:07.860 a little bit of tumor there,  
NOTE Confidence: 0.8755471

00:18:07.860 --> 00:18:10.038 the risk and benefit of removing  
NOTE Confidence: 0.8755471

00:18:10.038 --> 00:18:12.140 that tumor and having him not  
NOTE Confidence: 0.8755471

00:18:12.140 --> 00:18:14.177 speak for the rest of his life.  
NOTE Confidence: 0.8755471

00:18:14.180 --> 00:18:16.708 Tells you exactly what the right decision is.  
NOTE Confidence: 0.8755471

00:18:16.710 --> 00:18:18.915 If he was asleep, I would have  
NOTE Confidence: 0.8557084

00:18:18.920 --> 00:18:21.122 had no idea as Doctor, Marla Turner  
NOTE Confidence: 0.8557084

00:18:21.122 --> 00:18:22.988 continues operating in a safer spot  
NOTE Confidence: 0.8557084

00:18:22.988 --> 00:18:25.240 and he surprises us when this happens.  
NOTE Confidence: 0.84026587

00:18:31.510 --> 00:18:34.380 He does in the middle of surgery.  
NOTE Confidence: 0.84026587

00:18:34.380 --> 00:18:36.020 Andy, a classically trained  
NOTE Confidence: 0.84026587

00:18:36.020 --> 00:18:37.660 singer, shares his talent.  
NOTE Confidence: 0.8429015

00:18:42.030 --> 00:18:43.110 You wanna half hours

NOTE Confidence: 0.8429015

00:18:43.110 --> 00:18:44.784 into the procedure dramal Aterno decides

NOTE Confidence: 0.8429015

00:18:44.784 --> 00:18:46.910 it's time to wrap up. The surgeons are

NOTE Confidence: 0.8429015

00:18:46.910 --> 00:18:49.078 done with the first part of the surgery.

NOTE Confidence: 0.8429015

00:18:49.080 --> 00:18:50.164 So what's happening as

NOTE Confidence: 0.8429015

00:18:50.164 --> 00:18:51.519 they're bringing in an hour?

NOTE Confidence: 0.8429015

00:18:51.520 --> 00:18:52.880 I machine and they're going

NOTE Confidence: 0.8429015

00:18:52.880 --> 00:18:54.793 to look at the work that they

NOTE Confidence: 0.8429015

00:18:54.793 --> 00:18:56.529 did and see how much of the

NOTE Confidence: 0.8429015

00:18:56.529 --> 00:18:58.288 tumor they were able to remove.

NOTE Confidence: 0.7530878

00:19:00.890 --> 00:19:04.370 Orange window and are able to sit with

NOTE Confidence: 0.7530878

00:19:04.370 --> 00:19:06.548 Doctor Maternal. She analyzes her

NOTE Confidence: 0.7530878

00:19:06.550 --> 00:19:10.030 work. The before here is the tumor answer.

NOTE Confidence: 0.91094863

00:19:13.370 --> 00:19:14.497 You don't have to go back in.

NOTE Confidence: 0.8078372

00:19:17.320 --> 00:19:20.368 Him being awake allowed us to get that

NOTE Confidence: 0.8078372

00:19:20.368 --> 00:19:22.888 outcome and preserve his function.

NOTE Confidence: 0.8078372

00:19:22.890 --> 00:19:25.081 Now Andy was back home with his  
NOTE Confidence: 0.8078372

00:19:25.081 --> 00:19:27.029 family two days after surgery,  
NOTE Confidence: 0.8078372

00:19:27.030 --> 00:19:28.760 five days after the surgery,  
NOTE Confidence: 0.8078372

00:19:28.760 --> 00:19:31.856 he was able to sing at his son's baptism.  
NOTE Confidence: 0.8078372

00:19:31.860 --> 00:19:33.786 He's also saying again with his  
NOTE Confidence: 0.8078372

00:19:33.786 --> 00:19:35.999 church choir and the Yale Camerata,  
NOTE Confidence: 0.8078372

00:19:36.000 --> 00:19:37.730 which is a professional choir.  
NOTE Confidence: 0.8078372

00:19:37.730 --> 00:19:40.250 Just a couple of weeks ago and he is  
NOTE Confidence: 0.8078372

00:19:40.250 --> 00:19:42.208 undergoing chemotherapy and radiation.  
NOTE Confidence: 0.8078372

00:19:42.210 --> 00:19:44.280 But he does say he's feeling  
NOTE Confidence: 0.8078372

00:19:44.280 --> 00:19:46.350 good and of course, warm wishes.  
NOTE Confidence: 0.8078372

00:19:46.350 --> 00:19:47.730 Kim is equal fast.  
NOTE Confidence: 0.84137017

00:19:49.160 --> 00:19:54.083 This is really why we do what we do.  
NOTE Confidence: 0.84137017

00:19:54.090 --> 00:19:56.477 Not every patient needs to be awake  
NOTE Confidence: 0.84137017

00:19:56.477 --> 00:19:59.246 to still have that sort of an outcome,  
NOTE Confidence: 0.84137017

00:19:59.250 --> 00:20:01.308 and so this was a patient.

NOTE Confidence: 0.84137017

00:20:01.310 --> 00:20:03.272 You can see the date 2013

NOTE Confidence: 0.84137017

00:20:03.272 --> 00:20:05.440 he was 40 at the time,

NOTE Confidence: 0.84137017

00:20:05.440 --> 00:20:07.869 father of two and went to another

NOTE Confidence: 0.84137017

00:20:07.869 --> 00:20:10.715 hospital and had a biopsy because it was

NOTE Confidence: 0.84137017

00:20:10.715 --> 00:20:13.700 felt that this lesion that you can see here,

NOTE Confidence: 0.84137017

00:20:13.700 --> 00:20:16.444 which is a glioblastoma Perry 8 real located,

NOTE Confidence: 0.84137017

00:20:16.450 --> 00:20:18.508 was too high risk for resection.

NOTE Confidence: 0.84137017

00:20:18.510 --> 00:20:20.799 After his biopsy he was referred down

NOTE Confidence: 0.84137017

00:20:20.799 --> 00:20:23.733 to me for resection and I thought that

NOTE Confidence: 0.84137017

00:20:23.733 --> 00:20:26.239 we could safely resect it using a.

NOTE Confidence: 0.84137017

00:20:26.240 --> 00:20:27.564 And translocal approach and

NOTE Confidence: 0.84137017

00:20:27.564 --> 00:20:28.888 really preserving the cortex.

NOTE Confidence: 0.84137017

00:20:28.890 --> 00:20:30.888 This is a good case example

NOTE Confidence: 0.84137017

00:20:30.888 --> 00:20:32.530 of how even for me,

NOTE Confidence: 0.84137017

00:20:32.530 --> 00:20:34.516 someone who does this literally every

NOTE Confidence: 0.84137017

00:20:34.516 --> 00:20:36.502 single day removing tumors, brain tumors,  
NOTE Confidence: 0.84137017

00:20:36.502 --> 00:20:38.488 I can still leave tumor behind.  
NOTE Confidence: 0.84137017

00:20:38.490 --> 00:20:41.178 So this is the beauty of the intra  
NOTE Confidence: 0.84137017

00:20:41.178 --> 00:20:43.119 operative MRI you can see here.  
NOTE Confidence: 0.84137017

00:20:43.120 --> 00:20:45.437 There's a little bit of residual tumor,  
NOTE Confidence: 0.84137017

00:20:45.440 --> 00:20:48.112 a little bit there that really just got  
NOTE Confidence: 0.84137017

00:20:48.112 --> 00:20:50.067 tucked underneath the brain and hidden.  
NOTE Confidence: 0.84137017

00:20:50.070 --> 00:20:52.068 And this is our intra operative  
NOTE Confidence: 0.84137017

00:20:52.068 --> 00:20:54.220 MRI that runs back and forth  
NOTE Confidence: 0.84137017

00:20:54.220 --> 00:20:56.470 between two of our operating rooms.  
NOTE Confidence: 0.84137017

00:20:56.470 --> 00:20:58.926 So I went back while he was on  
NOTE Confidence: 0.84137017

00:20:58.926 --> 00:21:00.998 the table and didn't take much  
NOTE Confidence: 0.84137017

00:21:00.998 --> 00:21:04.025 much time at all and was able to  
NOTE Confidence: 0.84137017

00:21:04.025 --> 00:21:06.215 achieve a gross total resection.  
NOTE Confidence: 0.84137017

00:21:06.220 --> 00:21:07.664 He had, you know,  
NOTE Confidence: 0.84137017

00:21:07.664 --> 00:21:09.469 an MGM T unmethylated tumor.

NOTE Confidence: 0.84137017

00:21:09.470 --> 00:21:11.875 Pretty poor in terms of

NOTE Confidence: 0.84137017

00:21:11.875 --> 00:21:13.799 prognosis you would think.

NOTE Confidence: 0.84137017

00:21:13.800 --> 00:21:16.957 He went on to be managed by.

NOTE Confidence: 0.84137017

00:21:16.960 --> 00:21:19.810 You are comparing ofner oncology Ann

NOTE Confidence: 0.84137017

00:21:19.810 --> 00:21:22.489 and underwent stupid therapy and then

NOTE Confidence: 0.84137017

00:21:22.489 --> 00:21:25.297 ended up getting enrolled in one of our

NOTE Confidence: 0.84137017

00:21:25.371 --> 00:21:27.926 own homegrown novel clinical trials

NOTE Confidence: 0.84137017

00:21:27.926 --> 00:21:30.481 that Ranjeet Bindra had developed.

NOTE Confidence: 0.84137017

00:21:30.490 --> 00:21:31.378 He progressed,

NOTE Confidence: 0.84137017

00:21:31.378 --> 00:21:33.598 he was enrolled in another

NOTE Confidence: 0.84137017

00:21:33.598 --> 00:21:36.724 clinical trial and then went on to

NOTE Confidence: 0.84137017

00:21:36.724 --> 00:21:38.440 bevacizumab and then progressed

NOTE Confidence: 0.84137017

00:21:38.440 --> 00:21:40.858 about four years after surgery,

NOTE Confidence: 0.84137017

00:21:40.860 --> 00:21:43.295 3 1/2 years after surgery

NOTE Confidence: 0.84137017

00:21:43.295 --> 00:21:45.730 on Bevis is in math.

NOTE Confidence: 0.84137017

00:21:45.730 --> 00:21:48.250 It was held that you can see.  
NOTE Confidence: 0.84137017

00:21:48.250 --> 00:21:49.905 Here is his recurrence and  
NOTE Confidence: 0.84137017

00:21:49.905 --> 00:21:52.210 I took him back for surgery.  
NOTE Confidence: 0.84137017

00:21:52.210 --> 00:21:55.218 This time I did a wider resection and  
NOTE Confidence: 0.84137017

00:21:55.218 --> 00:21:57.970 what's nice is as I had mentioned.  
NOTE Confidence: 0.84137017

00:21:57.970 --> 00:21:59.945 We performed whole exome sequencing  
NOTE Confidence: 0.84137017

00:21:59.945 --> 00:22:02.859 on every patient and so here what you  
NOTE Confidence: 0.84137017

00:22:02.859 --> 00:22:05.328 can see basically is he has a hyper  
NOTE Confidence: 0.84137017

00:22:05.328 --> 00:22:07.620 mutated phenotype and we know that  
NOTE Confidence: 0.84137017

00:22:07.620 --> 00:22:09.685 these tumors can be more susceptible  
NOTE Confidence: 0.84137017

00:22:09.685 --> 00:22:11.515 are more amenable to treatment with  
NOTE Confidence: 0.84137017

00:22:11.515 --> 00:22:13.448 immune mediated checkpoint inhibitors.  
NOTE Confidence: 0.84137017

00:22:13.450 --> 00:22:17.098 So post operatively, he was put on nivolumab.  
NOTE Confidence: 0.84137017

00:22:17.100 --> 00:22:19.398 He progressed despite nivolumab and Avastin,  
NOTE Confidence: 0.84137017

00:22:19.400 --> 00:22:22.442 and I really respected him in 2019 and  
NOTE Confidence: 0.84137017

00:22:22.442 --> 00:22:25.928 you can see him there with Monica Lawrence,

NOTE Confidence: 0.84137017

00:22:25.930 --> 00:22:28.618 one of our outstanding or oncology piece.

NOTE Confidence: 0.84137017

00:22:28.620 --> 00:22:31.308 So he's currently doing well on deficits.

NOTE Confidence: 0.84137017

00:22:31.310 --> 00:22:34.313 Maben Niveau 7 1/2 years after his

NOTE Confidence: 0.84137017

00:22:34.313 --> 00:22:36.679 initial diagnosis and so no way am.

NOTE Confidence: 0.84137017

00:22:36.680 --> 00:22:40.090 I trying to sit here and say that all of

NOTE Confidence: 0.84137017

00:22:40.183 --> 00:22:43.599 our GBM patients are living 7 1/2 years.

NOTE Confidence: 0.84137017

00:22:43.600 --> 00:22:45.136 I certainly wish that

NOTE Confidence: 0.84137017

00:22:45.136 --> 00:22:47.440 was the case in one day.

NOTE Confidence: 0.84137017

00:22:47.440 --> 00:22:48.194 I am.

NOTE Confidence: 0.84137017

00:22:48.194 --> 00:22:50.456 Hopefully that will be the case,

NOTE Confidence: 0.84137017

00:22:50.460 --> 00:22:52.707 but I do know that if he

NOTE Confidence: 0.84137017

00:22:52.707 --> 00:22:54.750 had stopped at that biopsy,

NOTE Confidence: 0.84137017

00:22:54.750 --> 00:22:56.898 he definitely would not be here.

NOTE Confidence: 0.84137017

00:22:56.900 --> 00:22:59.000 7 1/2 years later and so

NOTE Confidence: 0.84137017

00:22:59.000 --> 00:23:00.400 really being aggressive with

NOTE Confidence: 0.85780776

00:23:00.470 --> 00:23:02.700 surgery and safe with surgery  
NOTE Confidence: 0.85780776

00:23:02.700 --> 00:23:04.038 is incredibly important.  
NOTE Confidence: 0.85780776

00:23:04.040 --> 00:23:05.572 Switching gears real quick  
NOTE Confidence: 0.85780776

00:23:05.572 --> 00:23:07.870 before I hand over to Nick.  
NOTE Confidence: 0.85780776

00:23:07.870 --> 00:23:10.243 This is a patient with what looks  
NOTE Confidence: 0.85780776

00:23:10.243 --> 00:23:12.080 like a convexity meningioma.  
NOTE Confidence: 0.85780776

00:23:12.080 --> 00:23:13.995 He's an older gentleman who  
NOTE Confidence: 0.85780776

00:23:13.995 --> 00:23:15.910 initially had surgery in 2015.  
NOTE Confidence: 0.85780776

00:23:15.910 --> 00:23:17.830 I don't have those scans,  
NOTE Confidence: 0.85780776

00:23:17.830 --> 00:23:20.935 but so was told he had a gross told  
NOTE Confidence: 0.85780776

00:23:20.935 --> 00:23:23.956 over section of a benign grade one.  
NOTE Confidence: 0.85780776

00:23:23.960 --> 00:23:26.634 Meningioma told not to worry about it.  
NOTE Confidence: 0.85780776

00:23:26.640 --> 00:23:30.744 2017 he had this growth that you can see.  
NOTE Confidence: 0.85780776

00:23:30.750 --> 00:23:32.365 He had options and actually  
NOTE Confidence: 0.85780776

00:23:32.365 --> 00:23:35.033 went to New York City for those  
NOTE Confidence: 0.85780776

00:23:35.033 --> 00:23:36.500 and underwent radiosurgery.

NOTE Confidence: 0.85780776

00:23:36.500 --> 00:23:39.174 He had complications with stroke and MI,

NOTE Confidence: 0.85780776

00:23:39.180 --> 00:23:41.466 and then intractable seizures and weaknesses.

NOTE Confidence: 0.85780776

00:23:41.470 --> 00:23:44.534 So when he presented to me in 2019,

NOTE Confidence: 0.85780776

00:23:44.540 --> 00:23:48.370 he had this tumor and he was in a wheelchair.

NOTE Confidence: 0.85780776

00:23:48.370 --> 00:23:51.044 And so I achieved gross total resection.

NOTE Confidence: 0.85780776

00:23:51.050 --> 00:23:52.965 His weakness improved and his

NOTE Confidence: 0.85780776

00:23:52.965 --> 00:23:54.497 seizures improved as well.

NOTE Confidence: 0.85780776

00:23:54.500 --> 00:23:56.084 But the question is,

NOTE Confidence: 0.85780776

00:23:56.084 --> 00:23:58.460 could this have been better predicted

NOTE Confidence: 0.85780776

00:23:58.532 --> 00:24:01.058 an manage differently the first time?

NOTE Confidence: 0.85780776

00:24:01.060 --> 00:24:03.510 And this is where our work behind

NOTE Confidence: 0.85780776

00:24:03.510 --> 00:24:05.910 the scenes is really important.

NOTE Confidence: 0.85780776

00:24:05.910 --> 00:24:07.522 An even within neurosurgery.

NOTE Confidence: 0.85780776

00:24:07.522 --> 00:24:09.537 And so Moroccan ALS lab,

NOTE Confidence: 0.85780776

00:24:09.540 --> 00:24:10.988 as well as others,

NOTE Confidence: 0.85780776

00:24:10.988 --> 00:24:12.798 have really understood what the  
NOTE Confidence: 0.85780776

00:24:12.798 --> 00:24:14.648 somatic genomic landscape of  
NOTE Confidence: 0.85780776

00:24:14.648 --> 00:24:16.797 approximately 80% of grade one  
NOTE Confidence: 0.85780776

00:24:16.797 --> 00:24:19.191 meningioma czar and more recently we  
NOTE Confidence: 0.85780776

00:24:19.191 --> 00:24:21.890 have correlated this with outcomes.  
NOTE Confidence: 0.85780776

00:24:21.890 --> 00:24:24.396 I won't go into the details now,  
NOTE Confidence: 0.85780776

00:24:24.400 --> 00:24:26.710 but would be happy to do so  
NOTE Confidence: 0.85780776

00:24:26.710 --> 00:24:29.049 in a talk in the future,  
NOTE Confidence: 0.85780776

00:24:29.050 --> 00:24:30.390 but basically there's six  
NOTE Confidence: 0.85780776

00:24:30.390 --> 00:24:31.730 subgroups of meningiomas based  
NOTE Confidence: 0.85780776

00:24:31.730 --> 00:24:33.699 on their genomic driver mutation,  
NOTE Confidence: 0.85780776

00:24:33.700 --> 00:24:37.356 and this was published in Science in 2013.  
NOTE Confidence: 0.85780776

00:24:37.360 --> 00:24:39.622 When I was a fellow at  
NOTE Confidence: 0.85780776

00:24:39.622 --> 00:24:40.753 Memorial Sloan Kettering,  
NOTE Confidence: 0.85780776

00:24:40.760 --> 00:24:43.220 I did work that really understood  
NOTE Confidence: 0.85780776

00:24:43.220 --> 00:24:44.860 that more aggressive meningiomas

NOTE Confidence: 0.85780776

00:24:44.924 --> 00:24:47.084 could present Dinovo or they could

NOTE Confidence: 0.85780776

00:24:47.084 --> 00:24:49.460 progress from low grade to high grade,

NOTE Confidence: 0.85780776

00:24:49.460 --> 00:24:50.459 much like gliomas.

NOTE Confidence: 0.85780776

00:24:50.459 --> 00:24:53.257 Marotte also looked at that from a more

NOTE Confidence: 0.85780776

00:24:53.257 --> 00:24:55.237 basic science perspective and Anne

NOTE Confidence: 0.85780776

00:24:55.237 --> 00:24:57.677 found the mechanisms to explain that

NOTE Confidence: 0.85780776

00:24:57.677 --> 00:25:00.035 usually these tumors are NFT mutated,

NOTE Confidence: 0.85780776

00:25:00.040 --> 00:25:01.174 were in Mail,

NOTE Confidence: 0.85780776

00:25:01.174 --> 00:25:02.308 acquire chromosomal instability

NOTE Confidence: 0.85780776

00:25:02.308 --> 00:25:03.820 or smart Bianco mutation,

NOTE Confidence: 0.85780776

00:25:03.820 --> 00:25:05.650 and then become Dinovo atypical

NOTE Confidence: 0.85780776

00:25:05.650 --> 00:25:07.950 meningiomas as opposed to the ones

NOTE Confidence: 0.85780776

00:25:07.950 --> 00:25:10.000 that harbor Terr promoter mutations.

NOTE Confidence: 0.85780776

00:25:10.000 --> 00:25:12.600 And progress.

NOTE Confidence: 0.85780776

00:25:12.600 --> 00:25:15.183 What I was alluding to before was

NOTE Confidence: 0.85780776

00:25:15.183 --> 00:25:18.055 that in a in a recent publication  
NOTE Confidence: 0.85780776

00:25:18.055 --> 00:25:20.575 of ours a few months ago,  
NOTE Confidence: 0.85780776

00:25:20.580 --> 00:25:22.818 for the first time we have  
NOTE Confidence: 0.85780776

00:25:22.818 --> 00:25:23.937 identified these molecular  
NOTE Confidence: 0.85780776

00:25:23.937 --> 00:25:26.066 subgroups of meningiomas to be  
NOTE Confidence: 0.85780776

00:25:26.066 --> 00:25:27.754 independent predictor of recurrence,  
NOTE Confidence: 0.85780776

00:25:27.760 --> 00:25:30.912 and so we found that there is divergent  
NOTE Confidence: 0.85780776

00:25:30.912 --> 00:25:33.180 clinical courses amongst meningiomas.  
NOTE Confidence: 0.85780776

00:25:33.180 --> 00:25:34.440 For aggressive subgroups,  
NOTE Confidence: 0.85780776

00:25:34.440 --> 00:25:36.540 which are NFT mutated tumors,  
NOTE Confidence: 0.85780776

00:25:36.540 --> 00:25:39.613 trap 7 mutated tumors and those that  
NOTE Confidence: 0.85780776

00:25:39.613 --> 00:25:42.417 have molecules that are mutated in PR.  
NOTE Confidence: 0.85780776

00:25:42.420 --> 00:25:42.903 3,  
NOTE Confidence: 0.85780776

00:25:42.903 --> 00:25:44.835 kinase and hedgehog signaling  
NOTE Confidence: 0.85780776

00:25:44.835 --> 00:25:46.767 pathways versus more quiescent  
NOTE Confidence: 0.85780776

00:25:46.767 --> 00:25:48.804 types of meningiomas that have

NOTE Confidence: 0.85780776

00:25:48.804 --> 00:25:51.828 Kayla for polar two ANS mark be one

NOTE Confidence: 0.85780776

00:25:51.828 --> 00:25:54.179 commutations and so we have even

NOTE Confidence: 0.85780776

00:25:54.179 --> 00:25:56.693 found that this holds true amongst

NOTE Confidence: 0.85780776

00:25:56.693 --> 00:25:59.257 grade one meningiomas and so grade

NOTE Confidence: 0.85780776

00:25:59.257 --> 00:26:01.317 one convexity chip shot meningioma,

NOTE Confidence: 0.85780776

00:26:01.320 --> 00:26:04.330 like the one that I just described.

NOTE Confidence: 0.85780776

00:26:04.330 --> 00:26:05.970 Is not necessarily a grade

NOTE Confidence: 0.85780776

00:26:05.970 --> 00:26:06.954 one benign meningioma,

NOTE Confidence: 0.85780776

00:26:06.960 --> 00:26:09.090 and so it's really important for

NOTE Confidence: 0.85780776

00:26:09.090 --> 00:26:10.510 meningiomas in particular to

NOTE Confidence: 0.85780776

00:26:10.570 --> 00:26:12.526 realize that they're not as benign

NOTE Confidence: 0.85780776

00:26:12.526 --> 00:26:14.528 as everyone thinks of them to be.

NOTE Confidence: 0.85780776

00:26:14.530 --> 00:26:16.763 So when we go back to this

NOTE Confidence: 0.85780776

00:26:16.763 --> 00:26:18.150 patient could have that.

NOTE Confidence: 0.85780776

00:26:18.150 --> 00:26:19.790 Could this have been better

NOTE Confidence: 0.85780776

00:26:19.790 --> 00:26:21.430 predicted and manage the first  
NOTE Confidence: 0.860762

00:26:21.487 --> 00:26:23.410 time? And the answer is yes,  
NOTE Confidence: 0.860762

00:26:23.410 --> 00:26:26.011 and so this is an example of our whole  
NOTE Confidence: 0.860762

00:26:26.011 --> 00:26:28.858 exome sequencing report that we have on each  
NOTE Confidence: 0.860762

00:26:28.858 --> 00:26:31.639 of our patients tumors and what we found.  
NOTE Confidence: 0.860762

00:26:31.640 --> 00:26:34.997 As you can see here is first of all.  
NOTE Confidence: 0.860762

00:26:35.000 --> 00:26:37.050 The Histology with atypical meningioma,  
NOTE Confidence: 0.860762

00:26:37.050 --> 00:26:39.504 but we found that the patient  
NOTE Confidence: 0.860762

00:26:39.504 --> 00:26:41.140 had an NF2 mutation.  
NOTE Confidence: 0.860762

00:26:41.140 --> 00:26:42.776 Ann had chromosomal instability,  
NOTE Confidence: 0.860762

00:26:42.776 --> 00:26:45.230 particularly with the chromosome 1P deletion,  
NOTE Confidence: 0.860762

00:26:45.230 --> 00:26:48.494 but quite a bit of copy number alterations,  
NOTE Confidence: 0.860762

00:26:48.500 --> 00:26:50.540 suggesting that this was a  
NOTE Confidence: 0.860762

00:26:50.540 --> 00:26:51.764 denovo atypical meningioma,  
NOTE Confidence: 0.860762

00:26:51.770 --> 00:26:55.442 and so this was a typical from the start,  
NOTE Confidence: 0.860762

00:26:55.450 --> 00:26:57.082 and typically we followed

NOTE Confidence: 0.860762  
00:26:57.082 --> 00:26:58.714 these patients either closely,  
NOTE Confidence: 0.860762  
00:26:58.720 --> 00:27:01.590 very closely, or we radiate up front,  
NOTE Confidence: 0.860762  
00:27:01.590 --> 00:27:05.430 which is more more typically what we do.  
NOTE Confidence: 0.860762  
00:27:05.430 --> 00:27:06.639 And so again,  
NOTE Confidence: 0.860762  
00:27:06.639 --> 00:27:08.654 another example of how really  
NOTE Confidence: 0.860762  
00:27:08.654 --> 00:27:10.859 understanding the tumors is important.  
NOTE Confidence: 0.860762  
00:27:10.860 --> 00:27:13.450 An back in the Science Paper 2013  
NOTE Confidence: 0.860762  
00:27:13.450 --> 00:27:16.067 and more recent in a publication  
NOTE Confidence: 0.860762  
00:27:16.067 --> 00:27:17.967 in Journal of Neurosurgery,  
NOTE Confidence: 0.860762  
00:27:17.970 --> 00:27:20.202 we also have shown that these  
NOTE Confidence: 0.860762  
00:27:20.202 --> 00:27:22.245 genomic subgroups can be predicted  
NOTE Confidence: 0.860762  
00:27:22.245 --> 00:27:24.655 based on intra cranial location.  
NOTE Confidence: 0.860762  
00:27:24.660 --> 00:27:27.693 So we use this all the time in our  
NOTE Confidence: 0.860762  
00:27:27.693 --> 00:27:29.587 clinics where just understanding  
NOTE Confidence: 0.860762  
00:27:29.587 --> 00:27:33.017 where the location is will say yeah,  
NOTE Confidence: 0.860762

00:27:33.020 --> 00:27:36.079 that's likely to be this mutated meningioma.

NOTE Confidence: 0.860762

00:27:36.080 --> 00:27:37.970 And based on the neuron College

NOTE Confidence: 0.860762

00:27:37.970 --> 00:27:38.600 paper recently,

NOTE Confidence: 0.860762

00:27:38.600 --> 00:27:40.442 summers are going to behave more

NOTE Confidence: 0.860762

00:27:40.442 --> 00:27:42.041 aggressively and it really does

NOTE Confidence: 0.860762

00:27:42.041 --> 00:27:43.955 influence how we treat these patients.

NOTE Confidence: 0.860762

00:27:43.960 --> 00:27:46.158 Of course, not everything ends with surgery.

NOTE Confidence: 0.860762

00:27:46.160 --> 00:27:47.740 I wish that it did,

NOTE Confidence: 0.860762

00:27:47.740 --> 00:27:49.660 and that you know patients could

NOTE Confidence: 0.860762

00:27:49.660 --> 00:27:51.200 be cured and move on,

NOTE Confidence: 0.860762

00:27:51.200 --> 00:27:53.090 but unfortunately that's not the case.

NOTE Confidence: 0.860762

00:27:53.090 --> 00:27:54.670 And what we deal with,

NOTE Confidence: 0.860762

00:27:54.670 --> 00:27:56.721 and so that's why we have our

NOTE Confidence: 0.860762

00:27:56.721 --> 00:27:57.968 precision brain tumor treatment

NOTE Confidence: 0.860762

00:27:57.968 --> 00:27:59.828 program an our tumor board that

NOTE Confidence: 0.860762

00:27:59.828 --> 00:28:01.910 that we need and discuss weekly.

NOTE Confidence: 0.860762  
00:28:01.910 --> 00:28:02.696 And of course,  
NOTE Confidence: 0.860762  
00:28:02.696 --> 00:28:04.530 we could not do what we do  
NOTE Confidence: 0.860762  
00:28:04.595 --> 00:28:06.640 without support of our patients.  
NOTE Confidence: 0.860762  
00:28:06.640 --> 00:28:08.250 And so Connecticut Brain Tumor  
NOTE Confidence: 0.860762  
00:28:08.250 --> 00:28:09.860 Alliance has been amazing supporting.  
NOTE Confidence: 0.860762  
00:28:09.860 --> 00:28:11.615 Some of the meningioma research  
NOTE Confidence: 0.860762  
00:28:11.615 --> 00:28:13.019 that I just discussed,  
NOTE Confidence: 0.860762  
00:28:13.020 --> 00:28:14.770 especially all the clinical correlations,  
NOTE Confidence: 0.860762  
00:28:14.770 --> 00:28:16.525 research that I just discussed  
NOTE Confidence: 0.860762  
00:28:16.525 --> 00:28:18.280 as well as patients themselves.  
NOTE Confidence: 0.860762  
00:28:18.280 --> 00:28:20.674 The Love Mark Foundation on TV  
NOTE Confidence: 0.860762  
00:28:20.674 --> 00:28:22.629 and Jamie Lovemark dream Love  
NOTE Confidence: 0.860762  
00:28:22.629 --> 00:28:24.596 Mark is a is a PGA golfer.  
NOTE Confidence: 0.860762  
00:28:24.600 --> 00:28:26.754 They've donated nearly a half \$1,000,000  
NOTE Confidence: 0.860762  
00:28:26.754 --> 00:28:29.168 with every penny going to our patients,  
NOTE Confidence: 0.860762

00:28:29.170 --> 00:28:32.320 and so we can't thank them enough because it.

NOTE Confidence: 0.860762

00:28:32.320 --> 00:28:35.140 It really does help in terms

NOTE Confidence: 0.860762

00:28:35.140 --> 00:28:37.020 of of their care.

NOTE Confidence: 0.860762

00:28:37.020 --> 00:28:39.884 And a special thank you to our primary

NOTE Confidence: 0.860762

00:28:39.884 --> 00:28:42.259 brain tumor surgery clinical team.

NOTE Confidence: 0.860762

00:28:42.260 --> 00:28:45.364 So if and when you ever speak to

NOTE Confidence: 0.860762

00:28:45.364 --> 00:28:47.904 someone from my office, Jillian Bongard,

NOTE Confidence: 0.860762

00:28:47.904 --> 00:28:50.718 who's all the way to the left,

NOTE Confidence: 0.860762

00:28:50.720 --> 00:28:53.534 she is one of our APR ends.

NOTE Confidence: 0.860762

00:28:53.540 --> 00:28:55.152 She's an absolute superstar.

NOTE Confidence: 0.860762

00:28:55.152 --> 00:28:56.766 Marcy Diggs, another superstar.

NOTE Confidence: 0.860762

00:28:56.766 --> 00:28:57.169 Actually,

NOTE Confidence: 0.860762

00:28:57.169 --> 00:28:59.184 they're all superstars Kelly Mishad,

NOTE Confidence: 0.860762

00:28:59.190 --> 00:29:01.602 who is one of our Nurse

NOTE Confidence: 0.860762

00:29:01.602 --> 00:29:02.808 coordinators Marcia Williams,

NOTE Confidence: 0.860762

00:29:02.810 --> 00:29:04.694 and then Amorini Pina,

NOTE Confidence: 0.860762

00:29:04.694 --> 00:29:07.049 who is our administrative assistant.

NOTE Confidence: 0.860762

00:29:07.050 --> 00:29:10.291 We can be reached at anytime and

NOTE Confidence: 0.860762

00:29:10.291 --> 00:29:12.851 so any questions just feel free

NOTE Confidence: 0.860762

00:29:12.851 --> 00:29:16.310 to give us a call or to email me.

NOTE Confidence: 0.860762

00:29:16.310 --> 00:29:19.607 Alright, so that is the surgical overview.

NOTE Confidence: 0.860762

00:29:19.610 --> 00:29:22.543 Next we have Doctor Nick Bond and

NOTE Confidence: 0.860762

00:29:22.543 --> 00:29:26.199 who is a new oncologist at Yale.

NOTE Confidence: 0.860762

00:29:26.200 --> 00:29:28.712 He has practiced also.

NOTE Confidence: 0.860762

00:29:28.712 --> 00:29:31.224 Let me stop sharing.

NOTE Confidence: 0.860762

00:29:31.230 --> 00:29:35.220 At Trumbull smilow.

NOTE Confidence: 0.860762

00:29:35.220 --> 00:29:36.640 Anne has been a really

NOTE Confidence: 0.860762

00:29:36.640 --> 00:29:38.060 good friend of mine and

NOTE Confidence: 0.86479473

00:29:38.125 --> 00:29:39.860 Ann is really, really good doctor.

NOTE Confidence: 0.8145384

00:29:41.570 --> 00:29:46.060 Well, thanks for those kind words, Jen and.

NOTE Confidence: 0.8145384

00:29:46.060 --> 00:29:47.344 Thanks for the opportunity

NOTE Confidence: 0.8145384

00:29:47.344 --> 00:29:48.949 to participate in this talk.  
NOTE Confidence: 0.8145384

00:29:48.950 --> 00:29:51.176 It's really been not privilege of mine  
NOTE Confidence: 0.8145384

00:29:51.176 --> 00:29:54.087 to be part of the Yale brain tumor team.  
NOTE Confidence: 0.8145384

00:29:54.090 --> 00:29:56.810 For the last two and a half years now and  
NOTE Confidence: 0.8145384

00:29:56.881 --> 00:29:59.534 work together with such other fine docs,  
NOTE Confidence: 0.8145384

00:29:59.540 --> 00:30:01.647 I really feel like we're making a  
NOTE Confidence: 0.8145384

00:30:01.647 --> 00:30:03.718 difference for folks here in Connecticut,  
NOTE Confidence: 0.8145384

00:30:03.720 --> 00:30:07.808 so only start sharing my screen here.  
NOTE Confidence: 0.8145384

00:30:07.810 --> 00:30:08.620 Alright.  
NOTE Confidence: 0.86127996

00:30:10.750 --> 00:30:12.820 I'm going to provide an update  
NOTE Confidence: 0.86127996

00:30:12.820 --> 00:30:14.802 in brain tumor management from  
NOTE Confidence: 0.86127996

00:30:14.802 --> 00:30:16.419 the neurooncology perspective,  
NOTE Confidence: 0.86127996

00:30:16.420 --> 00:30:18.445 and I'll be specifically focusing  
NOTE Confidence: 0.86127996

00:30:18.445 --> 00:30:21.000 on glioblastoma, the most common  
NOTE Confidence: 0.86127996

00:30:21.000 --> 00:30:23.900 malignant brain tumor in adults.  
NOTE Confidence: 0.86127996

00:30:23.900 --> 00:30:25.804 Do not touch on other brain tumors such

NOTE Confidence: 0.86127996

00:30:25.804 --> 00:30:27.358 as meningioma in this particular saw.

NOTE Confidence: 0.74802816

00:30:29.520 --> 00:30:31.556 Here's my disclosure. Slide.

NOTE Confidence: 0.74802816

00:30:31.556 --> 00:30:34.840 I participate as Aryel investigator for a.

NOTE Confidence: 0.74802816

00:30:34.840 --> 00:30:36.188 Nonprofit organization called Global

NOTE Confidence: 0.74802816

00:30:36.188 --> 00:30:37.536 Coalition for Adaptive Research.

NOTE Confidence: 0.74802816

00:30:37.540 --> 00:30:39.906 Orji car running a large clinical trial,

NOTE Confidence: 0.74802816

00:30:39.910 --> 00:30:41.190 which I'll speak on.

NOTE Confidence: 0.74802816

00:30:41.190 --> 00:30:43.630 Also do consulting for Novocure and Biocept,

NOTE Confidence: 0.74802816

00:30:43.630 --> 00:30:45.430 and have no stock or financial

NOTE Confidence: 0.74802816

00:30:45.430 --> 00:30:47.680 interest in any of these companies,

NOTE Confidence: 0.74802816

00:30:47.680 --> 00:30:50.150 and I produced this presentation.

NOTE Confidence: 0.74802816

00:30:50.150 --> 00:30:51.942 So I'm going to start by just

NOTE Confidence: 0.74802816

00:30:51.942 --> 00:30:53.853 touching base on some basic overview

NOTE Confidence: 0.74802816

00:30:53.853 --> 00:30:55.663 information and clear blastoma so

NOTE Confidence: 0.74802816

00:30:55.663 --> 00:30:57.799 I mentioned it's the most common

NOTE Confidence: 0.74802816

00:30:57.799 --> 00:30:59.833 malignant primary brain tumor in adults.

NOTE Confidence: 0.74802816

00:30:59.840 --> 00:31:01.875 The incidence is around three

NOTE Confidence: 0.74802816

00:31:01.875 --> 00:31:03.910 folks per 100,000 per year,

NOTE Confidence: 0.74802816

00:31:03.910 --> 00:31:06.520 and so we estimate that there's

NOTE Confidence: 0.74802816

00:31:06.520 --> 00:31:09.322 probably 100 to 150 new cases

NOTE Confidence: 0.74802816

00:31:09.322 --> 00:31:11.258 per year in Connecticut.

NOTE Confidence: 0.74802816

00:31:11.260 --> 00:31:11.800 And.

NOTE Confidence: 0.74802816

00:31:11.800 --> 00:31:15.580 So consider brain cancer arising from the

NOTE Confidence: 0.74802816

00:31:15.580 --> 00:31:17.879 cancerous transformation of glial cells,

NOTE Confidence: 0.74802816

00:31:17.880 --> 00:31:20.337 which are normal cells that exist in

NOTE Confidence: 0.74802816

00:31:20.337 --> 00:31:23.613 the brain and help kind of support the

NOTE Confidence: 0.74802816

00:31:23.613 --> 00:31:25.758 brain structure and release hormones

NOTE Confidence: 0.74802816

00:31:25.829 --> 00:31:28.009 that maintain neuron integrity,

NOTE Confidence: 0.74802816

00:31:28.010 --> 00:31:30.120 and these cells generally don't

NOTE Confidence: 0.74802816

00:31:30.120 --> 00:31:31.386 divide in adults,

NOTE Confidence: 0.74802816

00:31:31.390 --> 00:31:33.940 but they can develop mutations or

NOTE Confidence: 0.74802816

00:31:33.940 --> 00:31:35.640 abnormal chromosome numbers that

NOTE Confidence: 0.74802816

00:31:35.707 --> 00:31:37.767 cause them to become cancerous

NOTE Confidence: 0.74802816

00:31:37.767 --> 00:31:39.827 and develop a glioblastoma tumor.

NOTE Confidence: 0.74802816

00:31:39.830 --> 00:31:42.548 And once the tumor has developed.

NOTE Confidence: 0.74802816

00:31:42.550 --> 00:31:44.734 By the time it's causing symptoms

NOTE Confidence: 0.74802816

00:31:44.734 --> 00:31:47.167 and discovered it is both nodule

NOTE Confidence: 0.74802816

00:31:47.167 --> 00:31:48.967 and also infiltrating cells.

NOTE Confidence: 0.74802816

00:31:48.970 --> 00:31:51.430 So by infiltrating I mean tumor

NOTE Confidence: 0.74802816

00:31:51.430 --> 00:31:53.520 cells that are spreading into

NOTE Confidence: 0.74802816

00:31:53.520 --> 00:31:55.776 the normal tissue of the brain,

NOTE Confidence: 0.74802816

00:31:55.780 --> 00:31:58.162 and so the really the problem

NOTE Confidence: 0.74802816

00:31:58.162 --> 00:32:00.192 of glioblastoma is that while

NOTE Confidence: 0.74802816

00:32:00.192 --> 00:32:02.712 the visible tumor on an MRI can

NOTE Confidence: 0.74802816

00:32:02.712 --> 00:32:05.009 be removed and doctor maternal,

NOTE Confidence: 0.74802816

00:32:05.010 --> 00:32:07.416 so they're up some really neat

NOTE Confidence: 0.74802816

00:32:07.416 --> 00:32:09.020 techniques to achieve that.  
NOTE Confidence: 0.74802816

00:32:09.020 --> 00:32:09.836 Now, unfortunately,  
NOTE Confidence: 0.74802816

00:32:09.836 --> 00:32:11.876 there will be residual glioblastoma  
NOTE Confidence: 0.74802816

00:32:11.876 --> 00:32:12.692 cells that.  
NOTE Confidence: 0.74802816

00:32:12.700 --> 00:32:14.536 Exist in the brain and could  
NOTE Confidence: 0.74802816

00:32:14.536 --> 00:32:16.684 regrow into new tumors or cause  
NOTE Confidence: 0.74802816

00:32:16.684 --> 00:32:18.412 more neurological disability by  
NOTE Confidence: 0.74802816

00:32:18.412 --> 00:32:20.140 spreading throughout the brain.  
NOTE Confidence: 0.74802816

00:32:20.140 --> 00:32:22.500 So it's my job as a neuro oncologist  
NOTE Confidence: 0.74802816

00:32:22.500 --> 00:32:24.458 to try to provide chemotherapy  
NOTE Confidence: 0.74802816

00:32:24.458 --> 00:32:27.050 and other treatments to slow the  
NOTE Confidence: 0.74802816

00:32:27.050 --> 00:32:29.067 growth of those tumors cells,  
NOTE Confidence: 0.74802816

00:32:29.070 --> 00:32:32.406 or really ideally completely inactivate them.  
NOTE Confidence: 0.74802816

00:32:32.410 --> 00:32:33.388 And so again,  
NOTE Confidence: 0.74802816

00:32:33.388 --> 00:32:35.344 it's a disease which can't be  
NOTE Confidence: 0.74802816

00:32:35.344 --> 00:32:36.480 cured by surgery,

NOTE Confidence: 0.74802816

00:32:36.480 --> 00:32:38.205 but the extensive surgery is

NOTE Confidence: 0.74802816

00:32:38.205 --> 00:32:39.585 critical with complete removal

NOTE Confidence: 0.74802816

00:32:39.585 --> 00:32:41.217 of all the visible tumor.

NOTE Confidence: 0.74802816

00:32:41.220 --> 00:32:44.160 Really providing a much better chance for

NOTE Confidence: 0.74802816

00:32:44.160 --> 00:32:47.299 the patient to be a long term survivor.

NOTE Confidence: 0.74802816

00:32:47.300 --> 00:32:49.340 And following removal of the tumor,

NOTE Confidence: 0.74802816

00:32:49.340 --> 00:32:50.360 common treatment options,

NOTE Confidence: 0.74802816

00:32:50.360 --> 00:32:52.060 or radiation and chemotherapy again,

NOTE Confidence: 0.74802816

00:32:52.060 --> 00:32:54.442 I'll be touching on the chemotherapy

NOTE Confidence: 0.74802816

00:32:54.442 --> 00:32:56.456 and my colleague Doctor McGibbon

NOTE Confidence: 0.74802816

00:32:56.456 --> 00:32:58.598 will be touching on the radiation

NOTE Confidence: 0.74802816

00:32:58.598 --> 00:33:00.270 on the next segment.

NOTE Confidence: 0.74802816

00:33:00.270 --> 00:33:03.714 So it glioblastoma is typically found by

NOTE Confidence: 0.74802816

00:33:03.714 --> 00:33:07.477 causing a first time seizure in an adult.

NOTE Confidence: 0.74802816

00:33:07.480 --> 00:33:10.369 So anyone from.

NOTE Confidence: 0.74802816

00:33:10.370 --> 00:33:11.925 Kind of adolescents on that  
NOTE Confidence: 0.74802816

00:33:11.925 --> 00:33:13.480 has a first time seizure.  
NOTE Confidence: 0.74802816

00:33:13.480 --> 00:33:15.955 A common cause of that would be a brain  
NOTE Confidence: 0.74802816

00:33:15.955 --> 00:33:18.437 tumor and then specifically glioblastoma.  
NOTE Confidence: 0.74802816

00:33:18.440 --> 00:33:20.432 That would lead to imaging such  
NOTE Confidence: 0.74802816

00:33:20.432 --> 00:33:23.348 as a CAT scan or MRI showing a  
NOTE Confidence: 0.74802816

00:33:23.348 --> 00:33:25.233 mass within the brain tissue.  
NOTE Confidence: 0.74802816

00:33:25.240 --> 00:33:27.030 An characteristic findings of this,  
NOTE Confidence: 0.74802816

00:33:27.030 --> 00:33:29.010 including a dark middle area of  
NOTE Confidence: 0.74802816

00:33:29.010 --> 00:33:30.970 the tumor called the necrosis,  
NOTE Confidence: 0.74802816

00:33:30.970 --> 00:33:32.554 is consistent with glioblastoma,  
NOTE Confidence: 0.74802816

00:33:32.554 --> 00:33:35.299 so we could know even preoperative that  
NOTE Confidence: 0.74802816

00:33:35.299 --> 00:33:37.763 a tumor looks likely to be a glioblastoma,  
NOTE Confidence: 0.74802816

00:33:37.770 --> 00:33:40.546 but we need the tumor to be removed  
NOTE Confidence: 0.74802816

00:33:40.546 --> 00:33:42.796 and pathology testing to be done  
NOTE Confidence: 0.74802816

00:33:42.796 --> 00:33:44.641 to confirm that before proceed

NOTE Confidence: 0.74802816

00:33:44.641 --> 00:33:47.072 to further treatment and then

NOTE Confidence: 0.74802816

00:33:47.072 --> 00:33:49.060 beyond seizures other common.

NOTE Confidence: 0.811282830434783

00:33:49.060 --> 00:33:50.504 Presenting symptoms could be.

NOTE Confidence: 0.811282830434783

00:33:50.504 --> 00:33:53.064 Visual changes loss of part of the

NOTE Confidence: 0.811282830434783

00:33:53.064 --> 00:33:55.381 peripheral vision or visual field and then

NOTE Confidence: 0.811282830434783

00:33:55.381 --> 00:33:57.790 also new onset cognitive impairments.

NOTE Confidence: 0.811282830434783

00:33:57.790 --> 00:33:59.848 So a common story would be someone

NOTE Confidence: 0.811282830434783

00:33:59.848 --> 00:34:01.974 that seemed to be developing memory

NOTE Confidence: 0.811282830434783

00:34:01.974 --> 00:34:04.332 loss or almost dementia like symptoms,

NOTE Confidence: 0.811282830434783

00:34:04.340 --> 00:34:06.284 symptoms worsening over weeks to a

NOTE Confidence: 0.811282830434783

00:34:06.284 --> 00:34:09.080 few months that can be due to brain

NOTE Confidence: 0.811282830434783

00:34:09.080 --> 00:34:11.240 dysfunction from a glioblastoma brain tumor.

NOTE Confidence: 0.81438845

00:34:13.530 --> 00:34:15.756 And so in regards to prognosis.

NOTE Confidence: 0.81438845

00:34:15.760 --> 00:34:17.620 I had mentioned the extensive

NOTE Confidence: 0.81438845

00:34:17.620 --> 00:34:19.108 surgical resection is important,

NOTE Confidence: 0.81438845

00:34:19.110 --> 00:34:21.707 but another critical factor is simply age,  
NOTE Confidence: 0.81438845

00:34:21.710 --> 00:34:24.160 age of a patient and.  
NOTE Confidence: 0.81438845

00:34:24.160 --> 00:34:26.862 Studies have indicated that an age of  
NOTE Confidence: 0.81438845

00:34:26.862 --> 00:34:29.950 70 is kind of a cut off benchmark.  
NOTE Confidence: 0.81438845

00:34:29.950 --> 00:34:32.698 So if a person is diagnosed  
NOTE Confidence: 0.81438845

00:34:32.698 --> 00:34:34.530 young 69 and younger.  
NOTE Confidence: 0.81438845

00:34:34.530 --> 00:34:36.612 They may be able to tolerate  
NOTE Confidence: 0.81438845

00:34:36.612 --> 00:34:37.653 more intensive treatment,  
NOTE Confidence: 0.81438845

00:34:37.660 --> 00:34:38.809 more extensive radiation,  
NOTE Confidence: 0.81438845

00:34:38.809 --> 00:34:40.724 higher doses of chemotherapy compared  
NOTE Confidence: 0.81438845

00:34:40.724 --> 00:34:42.530 to someone who's 70 and older,  
NOTE Confidence: 0.81438845

00:34:42.530 --> 00:34:44.540 and I like to think of  
NOTE Confidence: 0.81438845

00:34:44.540 --> 00:34:46.360 this similar to you know,  
NOTE Confidence: 0.81438845

00:34:46.360 --> 00:34:47.752 dosing of Tylenol for  
NOTE Confidence: 0.81438845

00:34:47.752 --> 00:34:48.796 Pediatrics versus adults.  
NOTE Confidence: 0.81438845

00:34:48.800 --> 00:34:51.432 So you can't give a child an adult

NOTE Confidence: 0.81438845

00:34:51.432 --> 00:34:53.668 dosage of Tylenol or mot ring.

NOTE Confidence: 0.81438845

00:34:53.670 --> 00:34:56.214 You have to base the treatment on the

NOTE Confidence: 0.81438845

00:34:56.214 --> 00:34:59.235 age of the patient and their body size.

NOTE Confidence: 0.81438845

00:34:59.240 --> 00:35:01.328 So again, looking at a patient,

NOTE Confidence: 0.81438845

00:35:01.330 --> 00:35:03.390 I'm going to treat someone

NOTE Confidence: 0.81438845

00:35:03.390 --> 00:35:05.450 differently based on their age.

NOTE Confidence: 0.81438845

00:35:05.450 --> 00:35:07.320 And then.

NOTE Confidence: 0.81438845

00:35:07.320 --> 00:35:09.330 Their disability of a person could

NOTE Confidence: 0.81438845

00:35:09.330 --> 00:35:11.788 depend on where the tumor is located,

NOTE Confidence: 0.81438845

00:35:11.790 --> 00:35:14.562 so ideally the tumor is grown in a place

NOTE Confidence: 0.81438845

00:35:14.562 --> 00:35:16.950 where Jen can completely respect it,

NOTE Confidence: 0.81438845

00:35:16.950 --> 00:35:19.372 but in some cases tumors will arise

NOTE Confidence: 0.81438845

00:35:19.372 --> 00:35:21.768 in more central areas of the brain,

NOTE Confidence: 0.81438845

00:35:21.770 --> 00:35:23.158 the thalamus or brainstem,

NOTE Confidence: 0.81438845

00:35:23.158 --> 00:35:26.579 and in these areas only a biopsy can be done,

NOTE Confidence: 0.81438845

00:35:26.580 --> 00:35:28.148 and so neurological disabilities  
NOTE Confidence: 0.81438845

00:35:28.148 --> 00:35:30.108 unfortunately will persist after the  
NOTE Confidence: 0.81438845

00:35:30.108 --> 00:35:32.087 diagnosis and be more difficult to treat.  
NOTE Confidence: 0.81438845

00:35:32.090 --> 00:35:33.830 And then there are some molecular  
NOTE Confidence: 0.81438845

00:35:33.830 --> 00:35:35.486 factors which are of critical  
NOTE Confidence: 0.81438845

00:35:35.486 --> 00:35:37.246 for understanding the prognosis.  
NOTE Confidence: 0.81438845

00:35:37.250 --> 00:35:39.135 2 main factors with glioblastoma  
NOTE Confidence: 0.81438845

00:35:39.135 --> 00:35:41.020 are The MGM T status.  
NOTE Confidence: 0.81438845

00:35:41.020 --> 00:35:41.782 And IDH,  
NOTE Confidence: 0.81438845

00:35:41.782 --> 00:35:44.449 one status MGMT is an enzyme that  
NOTE Confidence: 0.81438845

00:35:44.449 --> 00:35:47.493 can repair the damage done to tumor  
NOTE Confidence: 0.81438845

00:35:47.493 --> 00:35:50.004 cells by Thomas Ola, my chemotherapy.  
NOTE Confidence: 0.81438845

00:35:50.004 --> 00:35:52.748 And so patients have high amounts of  
NOTE Confidence: 0.81438845

00:35:52.748 --> 00:35:55.367 MGMT enzyme within their tumor cells.  
NOTE Confidence: 0.81438845

00:35:55.370 --> 00:35:57.010 They'll be relatively resistant  
NOTE Confidence: 0.81438845

00:35:57.010 --> 00:35:58.240 to temodar chemotherapy.

NOTE Confidence: 0.81438845

00:35:58.240 --> 00:36:00.290 It won't work as well,

NOTE Confidence: 0.81438845

00:36:00.290 --> 00:36:03.572 and those patients generally have poorer

NOTE Confidence: 0.81438845

00:36:03.572 --> 00:36:06.620 prognosis for long term survival.

NOTE Confidence: 0.81438845

00:36:06.620 --> 00:36:09.049 And so his doctor Will Turner had

NOTE Confidence: 0.81438845

00:36:09.049 --> 00:36:11.595 mentioned we do whole exome sequencing

NOTE Confidence: 0.81438845

00:36:11.595 --> 00:36:13.970 or essentially DNA sequencing of

NOTE Confidence: 0.81438845

00:36:13.970 --> 00:36:16.629 tumor cells after they are removed.

NOTE Confidence: 0.81438845

00:36:16.630 --> 00:36:18.750 To understand what mutations exist

NOTE Confidence: 0.81438845

00:36:18.750 --> 00:36:21.762 in the tumor beyond what their MGM

NOTE Confidence: 0.81438845

00:36:21.762 --> 00:36:24.216 T molecular statuses and their IDH

NOTE Confidence: 0.81438845

00:36:24.216 --> 00:36:27.124 one mutation status and we look for

NOTE Confidence: 0.81438845

00:36:27.124 --> 00:36:29.134 mutations which could be targeted

NOTE Confidence: 0.81438845

00:36:29.140 --> 00:36:30.604 by new generation chemotherapy.

NOTE Confidence: 0.81438845

00:36:30.604 --> 00:36:33.730 So in a small percentage of glioblastomas,

NOTE Confidence: 0.81438845

00:36:33.730 --> 00:36:35.370 unfortunately less than 5%.

NOTE Confidence: 0.81438845

00:36:35.370 --> 00:36:38.242 At this point there do exist mutation  
NOTE Confidence: 0.81438845

00:36:38.242 --> 00:36:40.958 and such as B. Raff and NTR K.  
NOTE Confidence: 0.81438845

00:36:40.958 --> 00:36:41.300 Fusion,  
NOTE Confidence: 0.81438845

00:36:41.300 --> 00:36:43.020 for which new generation chemotherapy  
NOTE Confidence: 0.81438845

00:36:43.020 --> 00:36:45.097 exists can cross the blood brain  
NOTE Confidence: 0.81438845

00:36:45.097 --> 00:36:46.903 barrier and be effective to treat  
NOTE Confidence: 0.81438845

00:36:46.903 --> 00:36:48.830 those tumors and delay progression,  
NOTE Confidence: 0.81438845

00:36:48.830 --> 00:36:49.862 sometimes for years.  
NOTE Confidence: 0.81438845

00:36:49.862 --> 00:36:52.270 So we want to test every patient  
NOTE Confidence: 0.81438845

00:36:52.337 --> 00:36:54.359 for their genomics of their two  
NOTE Confidence: 0.81438845

00:36:54.359 --> 00:36:56.440 men to understand if they would  
NOTE Confidence: 0.81438845

00:36:56.440 --> 00:36:58.757 have a treatment option for one of  
NOTE Confidence: 0.81438845

00:36:58.757 --> 00:37:01.166 these new treatments and further  
NOTE Confidence: 0.81438845

00:37:01.166 --> 00:37:03.761 just understanding what is the  
NOTE Confidence: 0.81438845

00:37:03.761 --> 00:37:05.450 prognosis of this tumor.  
NOTE Confidence: 0.81438845

00:37:05.450 --> 00:37:08.257 And so it now the standard therapies,

NOTE Confidence: 0.81438845

00:37:08.260 --> 00:37:09.860 which I haven't unfortunately,

NOTE Confidence: 0.81438845

00:37:09.860 --> 00:37:11.060 are fairly limited.

NOTE Confidence: 0.81438845

00:37:11.060 --> 00:37:13.436 I feel jealous of my medical

NOTE Confidence: 0.81438845

00:37:13.436 --> 00:37:15.020 oncology colleagues who may

NOTE Confidence: 0.81438845

00:37:15.097 --> 00:37:17.077 have a number of treatments,

NOTE Confidence: 0.81438845

00:37:17.080 --> 00:37:20.006 like for example breast cancer has more

NOTE Confidence: 0.81438845

00:37:20.006 --> 00:37:22.688 than 30 approved drugs to treat it,

NOTE Confidence: 0.81438845

00:37:22.690 --> 00:37:23.932 whereas for glioblastomas,

NOTE Confidence: 0.81438845

00:37:23.932 --> 00:37:26.830 unfortunately we only have a few drugs

NOTE Confidence: 0.81438845

00:37:26.897 --> 00:37:29.508 FDA approved for treatment in one device,

NOTE Confidence: 0.8347169

00:37:29.510 --> 00:37:32.534 and so the initial standard of care for

NOTE Confidence: 0.8347169

00:37:32.534 --> 00:37:34.720 glioblastoma was established in 2005,

NOTE Confidence: 0.8347169

00:37:34.720 --> 00:37:36.016 which combines temozolomide

NOTE Confidence: 0.8347169

00:37:36.016 --> 00:37:37.744 olanzapine or TMZ chemotherapy.

NOTE Confidence: 0.8347169

00:37:37.750 --> 00:37:39.856 Along with radiation treatment for the

NOTE Confidence: 0.8347169

00:37:39.856 --> 00:37:42.032 initial phase of treatment and then  
NOTE Confidence: 0.8347169

00:37:42.032 --> 00:37:44.180 monthly maintenance rounds of Tim's Olamide,  
NOTE Confidence: 0.8347169

00:37:44.180 --> 00:37:46.651 and this did provide a few months  
NOTE Confidence: 0.8347169

00:37:46.651 --> 00:37:48.561 longer survival on average for  
NOTE Confidence: 0.8347169

00:37:48.561 --> 00:37:50.883 patients with a subgroup of patients  
NOTE Confidence: 0.8347169

00:37:50.883 --> 00:37:53.733 with the low energy and she enzyme  
NOTE Confidence: 0.8347169

00:37:53.733 --> 00:37:55.333 level surviving for longer.  
NOTE Confidence: 0.8347169

00:37:55.340 --> 00:37:56.156 Then in 2009.  
NOTE Confidence: 0.8347169

00:37:56.156 --> 00:37:59.440 But this is a map or a vast and was approved  
NOTE Confidence: 0.8347169

00:37:59.440 --> 00:38:02.530 by the FDA for use in recurrent GBM.  
NOTE Confidence: 0.8347169

00:38:02.530 --> 00:38:05.023 This is a drug which will bind to a  
NOTE Confidence: 0.8347169

00:38:05.023 --> 00:38:07.422 hormone called veg F and slow down  
NOTE Confidence: 0.8347169

00:38:07.422 --> 00:38:09.203 blood vessel growth around tumors  
NOTE Confidence: 0.8347169

00:38:09.203 --> 00:38:11.291 and basically starve tumors of oxygen  
NOTE Confidence: 0.8347169

00:38:11.291 --> 00:38:13.524 and so by treating a patient with.  
NOTE Confidence: 0.8347169

00:38:13.524 --> 00:38:15.965 This is a map you can slow the

NOTE Confidence: 0.8347169

00:38:15.965 --> 00:38:18.037 growth of the tumor and in some

NOTE Confidence: 0.8347169

00:38:18.037 --> 00:38:19.903 cases completely stabilize it with

NOTE Confidence: 0.8347169

00:38:19.903 --> 00:38:22.804 an effect being an average of a few

NOTE Confidence: 0.8347169

00:38:22.804 --> 00:38:24.439 months of further survival time.

NOTE Confidence: 0.8347169

00:38:24.440 --> 00:38:26.260 Some patients could go even.

NOTE Confidence: 0.8347169

00:38:26.260 --> 00:38:28.570 For many months, if their tumors acceptable,

NOTE Confidence: 0.8347169

00:38:28.570 --> 00:38:30.220 but generally speaking it's a.

NOTE Confidence: 0.8347169

00:38:30.220 --> 00:38:32.200 It's another three to four months

NOTE Confidence: 0.8347169

00:38:32.200 --> 00:38:33.520 of longer survival time.

NOTE Confidence: 0.8347169

00:38:33.520 --> 00:38:35.500 A person could get with that.

NOTE Confidence: 0.8347169

00:38:35.500 --> 00:38:36.564 This is a map.

NOTE Confidence: 0.8347169

00:38:36.564 --> 00:38:38.702 And then in 2018 or the Optune

NOTE Confidence: 0.8347169

00:38:38.702 --> 00:38:40.118 device was approved.

NOTE Confidence: 0.8347169

00:38:40.120 --> 00:38:41.902 So for some patients that are

NOTE Confidence: 0.8347169

00:38:41.902 --> 00:38:44.080 able to use the Optune device,

NOTE Confidence: 0.8347169

00:38:44.080 --> 00:38:45.754 it's a device of four arrays  
NOTE Confidence: 0.8347169

00:38:45.754 --> 00:38:47.772 which are placed on the scalp  
NOTE Confidence: 0.8347169

00:38:47.772 --> 00:38:49.029 creating electrical field,  
NOTE Confidence: 0.8347169

00:38:49.030 --> 00:38:50.680 which interferes with the mechanical  
NOTE Confidence: 0.8347169

00:38:50.680 --> 00:38:52.000 process of cell division.  
NOTE Confidence: 0.8347169

00:38:52.000 --> 00:38:54.154 So as tumor cells attempt to  
NOTE Confidence: 0.8347169

00:38:54.154 --> 00:38:56.818 divide from 1 cell into two cells.  
NOTE Confidence: 0.8347169

00:38:56.820 --> 00:38:58.735 Applying electrical fields can block  
NOTE Confidence: 0.8347169

00:38:58.735 --> 00:39:01.061 that process from happening and cause  
NOTE Confidence: 0.8347169

00:39:01.061 --> 00:39:02.831 the cell to ultimately self-destruct  
NOTE Confidence: 0.8347169

00:39:02.831 --> 00:39:05.270 and not complete the division process.  
NOTE Confidence: 0.8347169

00:39:05.270 --> 00:39:07.664 So Optune is now used for  
NOTE Confidence: 0.8347169

00:39:07.664 --> 00:39:08.861 patients following radiation  
NOTE Confidence: 0.8347169

00:39:08.861 --> 00:39:10.637 treatment along with Tim's Ola.  
NOTE Confidence: 0.8347169

00:39:10.640 --> 00:39:12.800 My chemotherapy with that M as  
NOTE Confidence: 0.8347169

00:39:12.800 --> 00:39:15.429 Olamide damaging the DNA and then the

NOTE Confidence: 0.8347169

00:39:15.429 --> 00:39:17.294 option device slowing or preventing

NOTE Confidence: 0.8347169

00:39:17.294 --> 00:39:19.738 the cell division process and with

NOTE Confidence: 0.8347169

00:39:19.738 --> 00:39:21.773 that current standard of care,

NOTE Confidence: 0.8347169

00:39:21.780 --> 00:39:24.204 on average we're looking for about

NOTE Confidence: 0.8347169

00:39:24.204 --> 00:39:26.761 a two years survival time for

NOTE Confidence: 0.8347169

00:39:26.761 --> 00:39:28.477 a newly diagnosed patient.

NOTE Confidence: 0.8347169

00:39:28.480 --> 00:39:30.130 And for patients over 870,

NOTE Confidence: 0.8347169

00:39:30.130 --> 00:39:32.202 they may not be able to tolerate

NOTE Confidence: 0.8347169

00:39:32.202 --> 00:39:34.593 Timmons Olamide or or they may have

NOTE Confidence: 0.8347169

00:39:34.593 --> 00:39:36.398 side effects from these chemotherapies,

NOTE Confidence: 0.8347169

00:39:36.400 --> 00:39:38.596 so their survival on average maybe

NOTE Confidence: 0.8347169

00:39:38.596 --> 00:39:41.190 about one year one you know 1 to

NOTE Confidence: 0.8347169

00:39:41.190 --> 00:39:43.184 1 1/2 years and then for patients

NOTE Confidence: 0.8347169

00:39:43.184 --> 00:39:45.606 with The MGM T methylated status

NOTE Confidence: 0.8347169

00:39:45.606 --> 00:39:48.280 or low levels of The MGM T enzyme.

NOTE Confidence: 0.8347169

00:39:48.280 --> 00:39:50.146 I'm looking for an average at  
NOTE Confidence: 0.8347169

00:39:50.146 --> 00:39:51.806 least three years survival from  
NOTE Confidence: 0.8347169

00:39:51.806 --> 00:39:53.230 diagnosis for that patient,  
NOTE Confidence: 0.8347169

00:39:53.230 --> 00:39:55.540 so we want we want more drugs,  
NOTE Confidence: 0.8347169

00:39:55.540 --> 00:39:57.190 and we want better options.  
NOTE Confidence: 0.8347169

00:39:57.190 --> 00:39:59.350 And we want non toxic drugs.  
NOTE Confidence: 0.8347169

00:39:59.350 --> 00:40:01.216 So people can maintain their quality  
NOTE Confidence: 0.8347169

00:40:01.216 --> 00:40:03.685 of life while also getting the Disease  
NOTE Confidence: 0.8347169

00:40:03.685 --> 00:40:05.630 Control and not having progression.  
NOTE Confidence: 0.8347169

00:40:05.630 --> 00:40:08.406 So this is where clinical trials come in.  
NOTE Confidence: 0.8347169

00:40:08.410 --> 00:40:10.734 We have the opportunity to participate in  
NOTE Confidence: 0.8347169

00:40:10.734 --> 00:40:13.608 a number of clinical trials here at Yale,  
NOTE Confidence: 0.8347169

00:40:13.610 --> 00:40:16.074 and I'm going to touch on a few  
NOTE Confidence: 0.8347169

00:40:16.074 --> 00:40:18.119 which I am excited about,  
NOTE Confidence: 0.8347169

00:40:18.120 --> 00:40:20.202 the first being the GBM agile  
NOTE Confidence: 0.8347169

00:40:20.202 --> 00:40:21.243 clinical trial GBM.

NOTE Confidence: 0.8347169  
00:40:21.250 --> 00:40:23.698 Agile is not only a national  
NOTE Confidence: 0.8347169  
00:40:23.698 --> 00:40:25.330 but an international effort.  
NOTE Confidence: 0.8347169  
00:40:25.330 --> 00:40:27.115 To treat newly diagnosed and  
NOTE Confidence: 0.8347169  
00:40:27.115 --> 00:40:28.900 recurrent GBM and the way  
NOTE Confidence: 0.8002533  
00:40:28.974 --> 00:40:31.291 the study is designed as that is  
NOTE Confidence: 0.8002533  
00:40:31.291 --> 00:40:33.861 a master protocol that can open up  
NOTE Confidence: 0.8002533  
00:40:33.861 --> 00:40:35.369 new experience experimental arms  
NOTE Confidence: 0.8002533  
00:40:35.369 --> 00:40:37.570 for new drugs and new treatments.  
NOTE Confidence: 0.8002533  
00:40:37.570 --> 00:40:39.370 So currently for clinical trials,  
NOTE Confidence: 0.8002533  
00:40:39.370 --> 00:40:41.841 one drug would have its own clinical  
NOTE Confidence: 0.8002533  
00:40:41.841 --> 00:40:44.742 trial and need to recruit half of the  
NOTE Confidence: 0.8002533  
00:40:44.742 --> 00:40:46.930 patients for the standard of care.  
NOTE Confidence: 0.8002533  
00:40:46.930 --> 00:40:48.730 Half of the patients for  
NOTE Confidence: 0.8002533  
00:40:48.730 --> 00:40:49.810 the experimental treatment.  
NOTE Confidence: 0.8002533  
00:40:49.810 --> 00:40:51.610 However, in GBM agile net,  
NOTE Confidence: 0.8002533

00:40:51.610 --> 00:40:54.144 there may be many arms of experimental

NOTE Confidence: 0.8002533

00:40:54.144 --> 00:40:56.029 therapies all referencing one standard.

NOTE Confidence: 0.8002533

00:40:56.030 --> 00:40:57.900 Common standard of care therapy.

NOTE Confidence: 0.8002533

00:40:57.900 --> 00:41:00.884 And as I showed on the current slide,

NOTE Confidence: 0.8002533

00:41:00.890 --> 00:41:02.658 unfortunately our standard Care

NOTE Confidence: 0.8002533

00:41:02.658 --> 00:41:05.310 isn't really not acceptable to me

NOTE Confidence: 0.8002533

00:41:05.378 --> 00:41:07.562 and I think that the GBM Agile

NOTE Confidence: 0.8002533

00:41:07.562 --> 00:41:09.986 offers a chance to move new drugs

NOTE Confidence: 0.8002533

00:41:09.986 --> 00:41:12.104 forward or understand if new drugs

NOTE Confidence: 0.8002533

00:41:12.110 --> 00:41:13.850 are effective with exposing less

NOTE Confidence: 0.8002533

00:41:13.850 --> 00:41:16.469 people to the placebo or just the

NOTE Confidence: 0.8002533

00:41:16.469 --> 00:41:18.097 common standard oral treatment.

NOTE Confidence: 0.8002533

00:41:18.100 --> 00:41:20.188 So currently we have the study

NOTE Confidence: 0.8002533

00:41:20.188 --> 00:41:22.064 opening you're looking at drug

NOTE Confidence: 0.8002533

00:41:22.064 --> 00:41:24.174 called Regehr Alphanim which inhibits

NOTE Confidence: 0.8002533

00:41:24.174 --> 00:41:26.240 multiple enzymes within a cell.

NOTE Confidence: 0.8002533

00:41:26.240 --> 00:41:28.328 Responsible for tumor cell growth and

NOTE Confidence: 0.8002533

00:41:28.328 --> 00:41:30.171 regular alphanim is being compared

NOTE Confidence: 0.8002533

00:41:30.171 --> 00:41:32.106 to Tim's Olamide and maintenance.

NOTE Confidence: 0.8002533

00:41:32.110 --> 00:41:34.215 Newly diagnosed patients and also

NOTE Confidence: 0.8002533

00:41:34.215 --> 00:41:36.707 for recurrent GBM treatment and then

NOTE Confidence: 0.8002533

00:41:36.707 --> 00:41:38.645 two other drugs will be entering

NOTE Confidence: 0.8002533

00:41:38.645 --> 00:41:40.716 into the GBM agile study shortly

NOTE Confidence: 0.8002533

00:41:40.716 --> 00:41:43.117 within the next few weeks here at

NOTE Confidence: 0.8002533

00:41:43.120 --> 00:41:45.689 Yale and those drugs are fellow 83,

NOTE Confidence: 0.8002533

00:41:45.690 --> 00:41:47.886 a drug similar to Tim's Olamide

NOTE Confidence: 0.8002533

00:41:47.886 --> 00:41:48.984 and Paxil listed,

NOTE Confidence: 0.8002533

00:41:48.990 --> 00:41:50.825 which is another molecular inhibitor

NOTE Confidence: 0.8002533

00:41:50.825 --> 00:41:53.400 blocking a molecule called P I3 trainees,

NOTE Confidence: 0.8002533

00:41:53.400 --> 00:41:57.928 so we're excited to offer this to patients.

NOTE Confidence: 0.8002533

00:41:57.930 --> 00:41:59.553 We haven't screening,

NOTE Confidence: 0.8002533

00:41:59.553 --> 00:42:01.717 only diagnosed patients offer  
NOTE Confidence: 0.8002533

00:42:01.717 --> 00:42:03.340 participation in this.  
NOTE Confidence: 0.8002533

00:42:03.340 --> 00:42:05.362 And then another line of therapy  
NOTE Confidence: 0.8002533

00:42:05.362 --> 00:42:07.674 that we are actively looking into  
NOTE Confidence: 0.8002533

00:42:07.674 --> 00:42:09.458 his immunotherapy for glioblastoma  
NOTE Confidence: 0.8002533

00:42:09.458 --> 00:42:12.257 treatment and Yale has participated in  
NOTE Confidence: 0.8002533

00:42:12.257 --> 00:42:14.627 the initial studies of immunotherapy  
NOTE Confidence: 0.8002533

00:42:14.627 --> 00:42:15.575 for treatment,  
NOTE Confidence: 0.8002533

00:42:15.580 --> 00:42:17.690 the checkmate studies comparing Opdivo,  
NOTE Confidence: 0.8002533

00:42:17.690 --> 00:42:20.637 also known as new volume AB checkpoint  
NOTE Confidence: 0.8002533

00:42:20.637 --> 00:42:23.170 inhibitor drug versus standard of care,  
NOTE Confidence: 0.8002533

00:42:23.170 --> 00:42:25.230 chemotherapy's an unfortunately in  
NOTE Confidence: 0.8002533

00:42:25.230 --> 00:42:28.320 these studies in the volume app  
NOTE Confidence: 0.8002533

00:42:28.404 --> 00:42:29.808 was not proven to.  
NOTE Confidence: 0.8002533

00:42:29.810 --> 00:42:31.695 Improve improve survival for patients  
NOTE Confidence: 0.8002533

00:42:31.695 --> 00:42:34.634 or lead to you no longer progression

NOTE Confidence: 0.8002533

00:42:34.634 --> 00:42:37.568 time until progression or or maintain.

NOTE Confidence: 0.8002533

00:42:37.570 --> 00:42:40.876 Maintain health for longer and so.

NOTE Confidence: 0.8002533

00:42:40.880 --> 00:42:41.181 Really,

NOTE Confidence: 0.8002533

00:42:41.181 --> 00:42:43.288 the drug it seems to be highly

NOTE Confidence: 0.8002533

00:42:43.288 --> 00:42:44.952 effective in some cancer types

NOTE Confidence: 0.8002533

00:42:44.952 --> 00:42:46.956 such as Melanoma and lung cancer,

NOTE Confidence: 0.8002533

00:42:46.960 --> 00:42:48.886 but in affective in glioblastoma an

NOTE Confidence: 0.8002533

00:42:48.886 --> 00:42:50.887 the study was designed really before

NOTE Confidence: 0.8002533

00:42:50.887 --> 00:42:52.849 there was a basic science understanding

NOTE Confidence: 0.8002533

00:42:52.849 --> 00:42:55.277 of of the immune system of the brain.

NOTE Confidence: 0.8002533

00:42:55.280 --> 00:42:57.149 It was just hoped that this this

NOTE Confidence: 0.8002533

00:42:57.149 --> 00:42:59.440 would be a treatment for patients,

NOTE Confidence: 0.8002533

00:42:59.440 --> 00:43:01.576 but we now know that there are some

NOTE Confidence: 0.8002533

00:43:01.576 --> 00:43:03.431 factors in cells within the brain

NOTE Confidence: 0.8002533

00:43:03.431 --> 00:43:05.315 tumor that can block the effect

NOTE Confidence: 0.8002533

00:43:05.375 --> 00:43:06.839 of these particular immunotherapy  
NOTE Confidence: 0.8002533

00:43:06.839 --> 00:43:09.497 drugs when they used on their own.  
NOTE Confidence: 0.8002533

00:43:09.497 --> 00:43:12.696 And so new drugs are being developed  
NOTE Confidence: 0.8002533

00:43:12.696 --> 00:43:16.080 which I'll touch on in the next slide.  
NOTE Confidence: 0.8002533

00:43:16.080 --> 00:43:18.424 But it also appears that now we now  
NOTE Confidence: 0.8002533

00:43:18.424 --> 00:43:19.944 believe that combining immunotherapy  
NOTE Confidence: 0.8002533

00:43:19.944 --> 00:43:22.548 with surgery or radiation for recurrent  
NOTE Confidence: 0.8002533

00:43:22.548 --> 00:43:25.188 GBM may improve their effectiveness.  
NOTE Confidence: 0.8002533

00:43:25.190 --> 00:43:27.075 Small study was published utilizing  
NOTE Confidence: 0.8002533

00:43:27.075 --> 00:43:29.462 she Trudeau with surgery or with  
NOTE Confidence: 0.8002533

00:43:29.462 --> 00:43:30.340 repeat radiation,  
NOTE Confidence: 0.8002533

00:43:30.340 --> 00:43:32.512 a second on radiation and patients  
NOTE Confidence: 0.8002533

00:43:32.512 --> 00:43:34.885 appear to have longer survival times  
NOTE Confidence: 0.8002533

00:43:34.885 --> 00:43:37.453 and better outcome with that strategy.  
NOTE Confidence: 0.8805834

00:43:40.170 --> 00:43:42.600 So with our new clinical trial.  
NOTE Confidence: 0.8805834

00:43:42.600 --> 00:43:44.400 It's designed to block TIGIT,

NOTE Confidence: 0.8805834

00:43:44.400 --> 00:43:47.039 which is a new molecule involved in

NOTE Confidence: 0.8805834

00:43:47.039 --> 00:43:49.078 immune system function in the brain.

NOTE Confidence: 0.8805834

00:43:49.080 --> 00:43:50.820 The molecule is actually discovered

NOTE Confidence: 0.8805834

00:43:50.820 --> 00:43:53.343 in the course of research for multiple

NOTE Confidence: 0.8805834

00:43:53.343 --> 00:43:55.143 sclerosis through a research effort

NOTE Confidence: 0.8805834

00:43:55.143 --> 00:43:57.720 headed up here by David Hafler that

NOTE Confidence: 0.8805834

00:43:57.720 --> 00:43:59.880 you're of the Yellow Neurology Department,

NOTE Confidence: 0.8805834

00:43:59.880 --> 00:44:02.351 and it turns out in patients with

NOTE Confidence: 0.8805834

00:44:02.351 --> 00:44:04.174 multiple sclerosis they have low

NOTE Confidence: 0.8805834

00:44:04.174 --> 00:44:06.256 levels of digit and an overactive

NOTE Confidence: 0.8805834

00:44:06.256 --> 00:44:08.116 immune system in patients with

NOTE Confidence: 0.8805834

00:44:08.116 --> 00:44:09.946 glioblastoma have high levels of

NOTE Confidence: 0.8805834

00:44:09.946 --> 00:44:12.060 digit and a suppressed immune system.

NOTE Confidence: 0.8805834

00:44:12.060 --> 00:44:14.587 So the hope is that by blocking

NOTE Confidence: 0.8805834

00:44:14.587 --> 00:44:16.867 TIGIT we can activate the immune

NOTE Confidence: 0.8805834

00:44:16.867 --> 00:44:20.084 system in the brain and now will have

NOTE Confidence: 0.8805834

00:44:20.084 --> 00:44:22.089 effectiveness to treat GBM tumors.

NOTE Confidence: 0.8805834

00:44:22.090 --> 00:44:23.992 So the study has been designed

NOTE Confidence: 0.8805834

00:44:23.992 --> 00:44:26.545 to use an anti TIGIT antibody or

NOTE Confidence: 0.8805834

00:44:26.545 --> 00:44:28.570 a molecule that block TIGIT.

NOTE Confidence: 0.8805834

00:44:28.570 --> 00:44:30.570 Combine that with a standard

NOTE Confidence: 0.8805834

00:44:30.570 --> 00:44:32.570 checkpoint inhibitor called a B122

NOTE Confidence: 0.8805834

00:44:32.636 --> 00:44:34.612 and our hope is that this will be

NOTE Confidence: 0.8805834

00:44:34.612 --> 00:44:36.853 a new effective treatment and a

NOTE Confidence: 0.8805834

00:44:36.853 --> 00:44:39.367 breakthrough for immuno therapy for GBM.

NOTE Confidence: 0.81072026

00:44:42.960 --> 00:44:44.612 And then of course,

NOTE Confidence: 0.81072026

00:44:44.612 --> 00:44:47.090 a key factor in glioblastoma management

NOTE Confidence: 0.81072026

00:44:47.166 --> 00:44:49.896 is adjunctive care and supportive care.

NOTE Confidence: 0.81072026

00:44:49.900 --> 00:44:51.205 Understanding how corticosteroids,

NOTE Confidence: 0.81072026

00:44:51.205 --> 00:44:54.122 such as dexamethasone, can impact a patient.

NOTE Confidence: 0.81072026

00:44:54.122 --> 00:44:55.734 Steroids can be helpful

NOTE Confidence: 0.81072026

00:44:55.734 --> 00:44:57.719 to reduce brain swelling,

NOTE Confidence: 0.81072026

00:44:57.720 --> 00:45:00.667 but they can have harmful side effects

NOTE Confidence: 0.81072026

00:45:00.667 --> 00:45:03.359 such as weakening the immune system,

NOTE Confidence: 0.81072026

00:45:03.360 --> 00:45:05.958 causing weight gain, causing fragile skin,

NOTE Confidence: 0.81072026

00:45:05.960 --> 00:45:07.696 and cause immunosuppression so,

NOTE Confidence: 0.81072026

00:45:07.696 --> 00:45:10.300 close management of dexamethasone is key,

NOTE Confidence: 0.81072026

00:45:10.300 --> 00:45:11.485 it's something I.

NOTE Confidence: 0.81072026

00:45:11.485 --> 00:45:13.855 Think about every day for most

NOTE Confidence: 0.81072026

00:45:13.855 --> 00:45:16.197 of the patients that I see.

NOTE Confidence: 0.81072026

00:45:16.200 --> 00:45:18.629 Are they on text about the zone?

NOTE Confidence: 0.81072026

00:45:18.630 --> 00:45:19.671 What's their dose?

NOTE Confidence: 0.81072026

00:45:19.671 --> 00:45:21.059 Can it be reduced?

NOTE Confidence: 0.81072026

00:45:21.060 --> 00:45:22.785 Isn't necessary and just understanding

NOTE Confidence: 0.81072026

00:45:22.785 --> 00:45:24.901 how to optimize for an individual

NOTE Confidence: 0.81072026

00:45:24.901 --> 00:45:26.566 patient what their best line

NOTE Confidence: 0.81072026

00:45:26.566 --> 00:45:28.662 of treatment is and then anti  
NOTE Confidence: 0.81072026

00:45:28.662 --> 00:45:30.062 convulsant medication also may  
NOTE Confidence: 0.81072026

00:45:30.062 --> 00:45:31.857 be necessary for some patients,  
NOTE Confidence: 0.81072026

00:45:31.857 --> 00:45:33.405 particularly anyone who has  
NOTE Confidence: 0.81072026

00:45:33.405 --> 00:45:36.227 suffered a seizure at the onset of  
NOTE Confidence: 0.81072026

00:45:36.227 --> 00:45:38.282 glioblastoma or anyone with seizures  
NOTE Confidence: 0.81072026

00:45:38.282 --> 00:45:40.395 or suspected seizures at any points  
NOTE Confidence: 0.81072026

00:45:40.395 --> 00:45:42.285 need to be on an anti seizure.  
NOTE Confidence: 0.81072026

00:45:42.290 --> 00:45:43.738 Medication and understanding the  
NOTE Confidence: 0.81072026

00:45:43.738 --> 00:45:45.548 side effects of these medications  
NOTE Confidence: 0.81072026

00:45:45.548 --> 00:45:47.512 really can be critical to optimizing  
NOTE Confidence: 0.81072026

00:45:47.512 --> 00:45:48.748 someone's quality of life,  
NOTE Confidence: 0.81072026

00:45:48.750 --> 00:45:50.556 and if someone is having side  
NOTE Confidence: 0.81072026

00:45:50.556 --> 00:45:52.490 effects on a seizure medication,  
NOTE Confidence: 0.81072026

00:45:52.490 --> 00:45:54.764 it's best to change that method  
NOTE Confidence: 0.81072026

00:45:54.764 --> 00:45:57.039 utilized a different Med rather than

NOTE Confidence: 0.81072026

00:45:57.039 --> 00:45:59.799 have the patient you know have a poorer

NOTE Confidence: 0.81072026

00:45:59.870 --> 00:46:02.509 quality of life from from side effects.

NOTE Confidence: 0.81072026

00:46:02.510 --> 00:46:04.370 Then I actively utilized counseling

NOTE Confidence: 0.81072026

00:46:04.370 --> 00:46:06.790 for a number of patients of mine,

NOTE Confidence: 0.81072026

00:46:06.790 --> 00:46:08.842 Brian, who was also on the

NOTE Confidence: 0.81072026

00:46:08.842 --> 00:46:10.720 call and be speaking later,

NOTE Confidence: 0.81072026

00:46:10.720 --> 00:46:13.576 has been just truly wonderful to work with.

NOTE Confidence: 0.81072026

00:46:13.580 --> 00:46:15.445 The trouble he's been extremely

NOTE Confidence: 0.81072026

00:46:15.445 --> 00:46:17.859 helpful with so many patients in mind,

NOTE Confidence: 0.81072026

00:46:17.860 --> 00:46:20.580 and I really think that this is an

NOTE Confidence: 0.81072026

00:46:20.580 --> 00:46:22.150 important component of treatment,

NOTE Confidence: 0.81072026

00:46:22.150 --> 00:46:24.286 which I'm proud that we offer.

NOTE Confidence: 0.81072026

00:46:24.290 --> 00:46:25.002 It's Milo.

NOTE Confidence: 0.81072026

00:46:25.002 --> 00:46:27.142 And then of course, physical therapy,

NOTE Confidence: 0.81072026

00:46:27.142 --> 00:46:27.854 rehabilitation, exercise,

NOTE Confidence: 0.81072026

00:46:27.854 --> 00:46:28.566 or key,  
NOTE Confidence: 0.81072026

00:46:28.570 --> 00:46:31.120 I advise patients exercise as  
NOTE Confidence: 0.81072026

00:46:31.120 --> 00:46:32.650 much as possible.  
NOTE Confidence: 0.81072026

00:46:32.650 --> 00:46:35.051 Doctor Paris is an example in my  
NOTE Confidence: 0.81072026

00:46:35.051 --> 00:46:38.233 mind of someone who has been able to  
NOTE Confidence: 0.81072026

00:46:38.233 --> 00:46:39.893 maintain exercise after diagnosis  
NOTE Confidence: 0.81072026

00:46:39.893 --> 00:46:42.523 and a truly believe it's been very  
NOTE Confidence: 0.81072026

00:46:42.523 --> 00:46:45.352 helpful for for her up to this point.  
NOTE Confidence: 0.81072026

00:46:45.352 --> 00:46:47.909 So I speak with everyone else about  
NOTE Confidence: 0.81072026

00:46:47.909 --> 00:46:50.261 exercise and fitness and see if  
NOTE Confidence: 0.81072026

00:46:50.261 --> 00:46:52.628 we can optimize that for folks.  
NOTE Confidence: 0.81072026

00:46:52.630 --> 00:46:55.438 And then of course also optimizing  
NOTE Confidence: 0.81072026

00:46:55.438 --> 00:46:57.932 nutrition and utilizing our nutritionist  
NOTE Confidence: 0.81072026

00:46:57.932 --> 00:47:00.637 Rebecca and the tribal office.  
NOTE Confidence: 0.81072026

00:47:00.640 --> 00:47:00.956 Alright,  
NOTE Confidence: 0.81072026

00:47:00.956 --> 00:47:04.193 I will wrap up at that point on my talk

NOTE Confidence: 0.81072026

00:47:04.193 --> 00:47:07.037 and I think I'll pass it back to Jenn.

NOTE Confidence: 0.8471315

00:47:09.900 --> 00:47:11.568 For moderation, yes, and

NOTE Confidence: 0.8471315

00:47:11.570 --> 00:47:14.078 I'm going to pass it right

NOTE Confidence: 0.8471315

00:47:14.078 --> 00:47:15.750 along to Doctor McGibbon,

NOTE Confidence: 0.8471315

00:47:15.750 --> 00:47:17.840 who is also a friend,

NOTE Confidence: 0.8471315

00:47:17.840 --> 00:47:19.512 an A radiation oncologist

NOTE Confidence: 0.8471315

00:47:19.512 --> 00:47:21.184 out of Greenwich primarily.

NOTE Confidence: 0.81701535

00:47:22.080 --> 00:47:23.685 Yeah, thanks so much introduction

NOTE Confidence: 0.81701535

00:47:23.685 --> 00:47:26.100 we try to share my screen here.

NOTE Confidence: 0.68255514

00:47:28.580 --> 00:47:35.580 See can see see that OK switch to. Slideshow.

NOTE Confidence: 0.85751534

00:47:38.960 --> 00:47:40.148 OK look OK.

NOTE Confidence: 0.7843451

00:47:42.440 --> 00:47:45.037 So yes, thanks again for the introduction,

NOTE Confidence: 0.7843451

00:47:45.040 --> 00:47:47.272 so I have the pleasure of

NOTE Confidence: 0.7843451

00:47:47.272 --> 00:47:48.760 starting work for Yale.

NOTE Confidence: 0.7843451

00:47:48.760 --> 00:47:51.392 12 years ago, up in the Trumbull area

NOTE Confidence: 0.7843451

00:47:51.392 --> 00:47:53.757 and First start working with Doctor  
NOTE Confidence: 0.7843451

00:47:53.757 --> 00:47:56.199 One in there and Doctor Montero.  
NOTE Confidence: 0.7843451

00:47:56.200 --> 00:47:58.060 And now the medical Director  
NOTE Confidence: 0.7843451

00:47:58.060 --> 00:47:59.176 for Radiation Oncology,  
NOTE Confidence: 0.7843451

00:47:59.180 --> 00:48:01.095 Greenwich Hospital and getting to  
NOTE Confidence: 0.7843451

00:48:01.095 --> 00:48:03.428 extend the smile care down this  
NOTE Confidence: 0.7843451

00:48:03.428 --> 00:48:05.885 way and actually I have a personal  
NOTE Confidence: 0.7843451

00:48:05.885 --> 00:48:07.740 connection with Doctor Bear says,  
NOTE Confidence: 0.7843451

00:48:07.740 --> 00:48:09.248 well, kind of highlights,  
NOTE Confidence: 0.7843451

00:48:09.248 --> 00:48:11.510 the nice coordination mean the system.  
NOTE Confidence: 0.7843451

00:48:11.510 --> 00:48:13.106 Are within the system because colleague  
NOTE Confidence: 0.7843451

00:48:13.106 --> 00:48:15.100 of mine and the radiation side Dr.  
NOTE Confidence: 0.7843451

00:48:15.100 --> 00:48:17.308 Contesti was actually the 1st to see her,  
NOTE Confidence: 0.7843451

00:48:17.310 --> 00:48:18.816 but she lived closer to tremble  
NOTE Confidence: 0.7843451

00:48:18.816 --> 00:48:21.135 and so I got to see her and offer  
NOTE Confidence: 0.7843451

00:48:21.135 --> 00:48:23.077 that same kind of yield quality of

NOTE Confidence: 0.7843451

00:48:23.077 --> 00:48:24.961 radiation there and so it's wonderful

NOTE Confidence: 0.7843451

00:48:24.961 --> 00:48:28.650 to see her doing doing so well.

NOTE Confidence: 0.7843451

00:48:28.650 --> 00:48:31.050 Can I just talk through at least some

NOTE Confidence: 0.7843451

00:48:31.050 --> 00:48:33.367 of the roles of radiation therapy

NOTE Confidence: 0.7843451

00:48:33.367 --> 00:48:35.827 in the treatment of brain tumors?

NOTE Confidence: 0.7843451

00:48:35.830 --> 00:48:37.630 I don't have any disclosures,

NOTE Confidence: 0.7843451

00:48:37.630 --> 00:48:38.569 by the way,

NOTE Confidence: 0.7843451

00:48:38.569 --> 00:48:40.447 so where does radiation therapy fit

NOTE Confidence: 0.7843451

00:48:40.447 --> 00:48:43.001 in so in benign tumors sometimes will

NOTE Confidence: 0.7843451

00:48:43.001 --> 00:48:44.925 do so called definitive radiation

NOTE Confidence: 0.7843451

00:48:44.925 --> 00:48:46.960 as a replacement for surgery,

NOTE Confidence: 0.7843451

00:48:46.960 --> 00:48:50.182 or as it's been shown earlier in the talks,

NOTE Confidence: 0.7843451

00:48:50.190 --> 00:48:52.338 will do post operative radiation therapy.

NOTE Confidence: 0.7843451

00:48:52.340 --> 00:48:54.482 If there's been left behind or were

NOTE Confidence: 0.7843451

00:48:54.482 --> 00:48:56.931 worried that it will progress in Casa

NOTE Confidence: 0.7843451

00:48:56.931 --> 00:48:59.127 problem and more commonly were involved  
NOTE Confidence: 0.7843451

00:48:59.195 --> 00:49:01.775 in malignant tumors like the glioblastomas.  
NOTE Confidence: 0.7843451

00:49:01.780 --> 00:49:04.548 Either after a biopsy has been done or  
NOTE Confidence: 0.7843451

00:49:04.548 --> 00:49:07.437 after when the more impressive surgeries,  
NOTE Confidence: 0.7843451

00:49:07.440 --> 00:49:09.455 like the maximum safe resections  
NOTE Confidence: 0.7843451

00:49:09.455 --> 00:49:10.664 like Doctor Moliterno,  
NOTE Confidence: 0.7843451

00:49:10.670 --> 00:49:11.478 was highlighting.  
NOTE Confidence: 0.7843451

00:49:11.478 --> 00:49:12.690 And of course,  
NOTE Confidence: 0.7843451

00:49:12.690 --> 00:49:15.395 we're always collaborating with Neurooncology  
NOTE Confidence: 0.7843451

00:49:15.395 --> 00:49:18.100 as well for concurrent chemotherapy  
NOTE Confidence: 0.7843451

00:49:18.168 --> 00:49:20.436 and other treatments of that type.  
NOTE Confidence: 0.7843451

00:49:20.440 --> 00:49:21.020 For us,  
NOTE Confidence: 0.7843451

00:49:21.020 --> 00:49:22.760 the people become familiar with this.  
NOTE Confidence: 0.7843451

00:49:22.760 --> 00:49:25.289 If you only see my cursor on the top  
NOTE Confidence: 0.7843451

00:49:25.289 --> 00:49:27.973 left is a picture of one of our common.  
NOTE Confidence: 0.7843451

00:49:27.980 --> 00:49:29.430 It's called a linear accelerator.

NOTE Confidence: 0.7843451

00:49:29.430 --> 00:49:31.098 It's the machine that shoots the

NOTE Confidence: 0.7843451

00:49:31.098 --> 00:49:33.164 X Rays and we have what looks

NOTE Confidence: 0.7843451

00:49:33.164 --> 00:49:34.940 like a black table top here,

NOTE Confidence: 0.7843451

00:49:34.940 --> 00:49:36.632 and patients will lie on that

NOTE Confidence: 0.7843451

00:49:36.632 --> 00:49:38.420 and will create a face mask.

NOTE Confidence: 0.7843451

00:49:38.420 --> 00:49:41.030 And this is just one example of a mask.

NOTE Confidence: 0.7843451

00:49:41.030 --> 00:49:42.190 We have different ones,

NOTE Confidence: 0.7843451

00:49:42.190 --> 00:49:43.350 some have opening some,

NOTE Confidence: 0.7843451

00:49:43.350 --> 00:49:44.088 some do not,

NOTE Confidence: 0.7843451

00:49:44.088 --> 00:49:46.223 but the idea is we're going to be

NOTE Confidence: 0.7843451

00:49:46.223 --> 00:49:47.988 using radiation for multiple days.

NOTE Confidence: 0.7843451

00:49:47.990 --> 00:49:50.591 We need to make sure the X Rays are

NOTE Confidence: 0.7843451

00:49:50.591 --> 00:49:52.967 hitting the exact same spot each time.

NOTE Confidence: 0.7843451

00:49:52.970 --> 00:49:54.778 And so we need something to hold the

NOTE Confidence: 0.7843451

00:49:54.778 --> 00:49:56.837 head and shoulders in the same position.

NOTE Confidence: 0.81071264

00:49:59.260 --> 00:50:00.900 To go further from there,  
NOTE Confidence: 0.81071264

00:50:00.900 --> 00:50:02.846 you know we need to really customize  
NOTE Confidence: 0.81071264

00:50:02.846 --> 00:50:05.048 the X Ray beam so they're only  
NOTE Confidence: 0.81071264

00:50:05.048 --> 00:50:07.004 shooting where we want and trying  
NOTE Confidence: 0.81071264

00:50:07.073 --> 00:50:09.068 to spare the surrounding tissues.  
NOTE Confidence: 0.81071264

00:50:09.070 --> 00:50:11.254 And we do that if it look in  
NOTE Confidence: 0.81071264

00:50:11.254 --> 00:50:13.319 where the Red Arrows pointing,  
NOTE Confidence: 0.81071264

00:50:13.320 --> 00:50:15.276 that's the head of this machine,  
NOTE Confidence: 0.81071264

00:50:15.280 --> 00:50:18.223 and in that there's this object to the right.  
NOTE Confidence: 0.81071264

00:50:18.230 --> 00:50:19.654 Scalding multileaf collimator and  
NOTE Confidence: 0.81071264

00:50:19.654 --> 00:50:22.132 it's a series of stacked leaves metal  
NOTE Confidence: 0.81071264

00:50:22.132 --> 00:50:23.806 leaves that can create any shape  
NOTE Confidence: 0.81071264

00:50:23.806 --> 00:50:25.748 that we want within a rectangle,  
NOTE Confidence: 0.81071264

00:50:25.750 --> 00:50:27.210 and between creating different  
NOTE Confidence: 0.81071264

00:50:27.210 --> 00:50:28.670 shapes with that MLC.  
NOTE Confidence: 0.81071264

00:50:28.670 --> 00:50:30.749 And moving the actual head of the

NOTE Confidence: 0.81071264

00:50:30.749 --> 00:50:32.687 machine to different angles around the

NOTE Confidence: 0.81071264

00:50:32.687 --> 00:50:34.337 patient and adjusting the intensity

NOTE Confidence: 0.81071264

00:50:34.337 --> 00:50:36.650 of the beam at each of those angles,

NOTE Confidence: 0.81071264

00:50:36.650 --> 00:50:39.482 we can get a very fancy

NOTE Confidence: 0.81071264

00:50:39.482 --> 00:50:40.898 dose distribution inside.

NOTE Confidence: 0.81071264

00:50:40.900 --> 00:50:41.436 And Furthermore,

NOTE Confidence: 0.81071264

00:50:41.436 --> 00:50:43.580 we can take what look like the arms

NOTE Confidence: 0.81071264

00:50:43.640 --> 00:50:45.536 of the machine here on each side and

NOTE Confidence: 0.81071264

00:50:45.536 --> 00:50:47.595 spend the machine around a patient each

NOTE Confidence: 0.81071264

00:50:47.595 --> 00:50:49.646 day before treatment and take an image.

NOTE Confidence: 0.81071264

00:50:49.646 --> 00:50:52.410 We see a couple of examples in the left here,

NOTE Confidence: 0.81071264

00:50:52.410 --> 00:50:54.579 so we can make sure that how we've planned

NOTE Confidence: 0.81071264

00:50:54.579 --> 00:50:56.644 the person based on a special CAT scan

NOTE Confidence: 0.81071264

00:50:56.644 --> 00:50:58.980 as to exactly how they're lined internally,

NOTE Confidence: 0.81071264

00:50:58.980 --> 00:51:00.402 so we have the mask to

NOTE Confidence: 0.81071264

00:51:00.402 --> 00:51:02.000 help get us in position,  
NOTE Confidence: 0.81071264

00:51:02.000 --> 00:51:03.918 but we don't rely just on that.  
NOTE Confidence: 0.81071264

00:51:03.920 --> 00:51:06.251 We go further with imaging to make  
NOTE Confidence: 0.81071264

00:51:06.251 --> 00:51:08.684 sure we are right on target before  
NOTE Confidence: 0.81071264

00:51:08.684 --> 00:51:11.090 we turn the beam on that day.  
NOTE Confidence: 0.81071264

00:51:11.090 --> 00:51:12.830 I guess I mean helpful.  
NOTE Confidence: 0.81071264

00:51:12.830 --> 00:51:14.560 Just go through 2 examples,  
NOTE Confidence: 0.81071264

00:51:14.560 --> 00:51:15.256 one glioblastoma,  
NOTE Confidence: 0.81071264

00:51:15.256 --> 00:51:16.300 an one meningioma,  
NOTE Confidence: 0.81071264

00:51:16.300 --> 00:51:18.911 and I think they both really highlight  
NOTE Confidence: 0.81071264

00:51:18.911 --> 00:51:20.415 the close collaboration that's  
NOTE Confidence: 0.81071264

00:51:20.415 --> 00:51:22.359 necessary and that we really enjoy  
NOTE Confidence: 0.81071264

00:51:22.359 --> 00:51:24.724 in this yell system and a cross  
NOTE Confidence: 0.81071264

00:51:24.724 --> 00:51:26.710 between New Haven and the satellite.  
NOTE Confidence: 0.81071264

00:51:26.710 --> 00:51:28.440 So in this one case,  
NOTE Confidence: 0.81071264

00:51:28.440 --> 00:51:30.954 the patient was in with headaches

NOTE Confidence: 0.81071264

00:51:30.954 --> 00:51:32.630 and difficulty with concentrating.

NOTE Confidence: 0.81071264

00:51:32.630 --> 00:51:35.396 And an MRI was performed which

NOTE Confidence: 0.81071264

00:51:35.396 --> 00:51:38.568 showed this lesion on the left side.

NOTE Confidence: 0.81071264

00:51:38.570 --> 00:51:40.614 And you notice that there's one type

NOTE Confidence: 0.81071264

00:51:40.614 --> 00:51:42.050 of sequence samaritas called T1.

NOTE Confidence: 0.81071264

00:51:42.050 --> 00:51:43.500 It's with contrast, reshoot, Diane,

NOTE Confidence: 0.81071264

00:51:43.500 --> 00:51:45.820 but there's another type of scenes called T2.

NOTE Confidence: 0.81071264

00:51:45.820 --> 00:51:47.972 And if you look at the top left

NOTE Confidence: 0.81071264

00:51:47.972 --> 00:51:49.300 in the top right,

NOTE Confidence: 0.81071264

00:51:49.300 --> 00:51:51.040 this has taken a similar slice,

NOTE Confidence: 0.81071264

00:51:51.040 --> 00:51:53.360 but it looks quite different between the two,

NOTE Confidence: 0.81071264

00:51:53.360 --> 00:51:54.820 and it's really highlighting the

NOTE Confidence: 0.81071264

00:51:54.820 --> 00:51:56.839 bulk of the tumor on the left,

NOTE Confidence: 0.81071264

00:51:56.840 --> 00:51:58.961 but showing some of the fluid dynamics

NOTE Confidence: 0.81071264

00:51:58.961 --> 00:52:00.610 and swelling around on the right,

NOTE Confidence: 0.81071264

00:52:00.610 --> 00:52:02.142 which becomes important for  
NOTE Confidence: 0.81071264

00:52:02.142 --> 00:52:03.674 us from radiation planning.  
NOTE Confidence: 0.81071264

00:52:03.680 --> 00:52:05.320 And you know what's the?  
NOTE Confidence: 0.81071264

00:52:05.320 --> 00:52:06.960 What's the basic algorithm here?  
NOTE Confidence: 0.81071264

00:52:06.960 --> 00:52:08.600 We want maximum safe surgery.  
NOTE Confidence: 0.81071264

00:52:08.600 --> 00:52:10.490 Then there's a gap for healing  
NOTE Confidence: 0.81071264

00:52:10.490 --> 00:52:12.210 about three to six weeks,  
NOTE Confidence: 0.81071264

00:52:12.210 --> 00:52:14.298 and then we start with Tim's  
NOTE Confidence: 0.81071264

00:52:14.298 --> 00:52:15.690 online telephone line chemotherapy  
NOTE Confidence: 0.81071264

00:52:15.747 --> 00:52:17.457 and radiation at the same time.  
NOTE Confidence: 0.81071264

00:52:17.460 --> 00:52:19.170 And then we keep going with  
NOTE Confidence: 0.81071264

00:52:19.170 --> 00:52:21.060 the time zone line afterwards,  
NOTE Confidence: 0.81071264

00:52:21.060 --> 00:52:22.740 and then possibly do those  
NOTE Confidence: 0.81071264

00:52:22.740 --> 00:52:24.084 alternating electrical fields that  
NOTE Confidence: 0.81071264

00:52:24.084 --> 00:52:25.657 Hunter Biden was talking about.  
NOTE Confidence: 0.81071264

00:52:25.660 --> 00:52:27.949 So when the patient comes to us,

NOTE Confidence: 0.81071264

00:52:27.950 --> 00:52:29.740 they've already we are established

NOTE Confidence: 0.81071264

00:52:29.740 --> 00:52:32.163 with their performance test is like and

NOTE Confidence: 0.81071264

00:52:32.163 --> 00:52:34.172 some of the special markers like that.

NOTE Confidence: 0.81071264

00:52:34.180 --> 00:52:36.286 MGM T that was mentioned and.

NOTE Confidence: 0.81071264

00:52:36.290 --> 00:52:38.210 We see if there are eligible

NOTE Confidence: 0.81071264

00:52:38.210 --> 00:52:39.490 for any clinical trials.

NOTE Confidence: 0.81071264

00:52:39.490 --> 00:52:42.148 And then we get into what

NOTE Confidence: 0.81071264

00:52:42.148 --> 00:52:43.920 style of radiation should

NOTE Confidence: 0.8468915

00:52:44.008 --> 00:52:46.046 we offer? And the standard ratio

NOTE Confidence: 0.8468915

00:52:46.046 --> 00:52:47.930 that we give is 30 treatments.

NOTE Confidence: 0.8468915

00:52:47.930 --> 00:52:50.086 It has an initial phase with slightly

NOTE Confidence: 0.8468915

00:52:50.086 --> 00:52:52.326 bigger fields and a second phase called

NOTE Confidence: 0.8468915

00:52:52.326 --> 00:52:54.210 the Cone down with smaller fields,

NOTE Confidence: 0.8468915

00:52:54.210 --> 00:52:55.780 but it's 30 individual days

NOTE Confidence: 0.8468915

00:52:55.780 --> 00:52:57.036 done Monday to Friday,

NOTE Confidence: 0.8468915

00:52:57.040 --> 00:52:58.610 weekends off and at each  
NOTE Confidence: 0.8468915

00:52:58.610 --> 00:53:00.180 treatment takes about 15 minutes,  
NOTE Confidence: 0.8468915

00:53:00.180 --> 00:53:03.508 and so it's about a six week course.  
NOTE Confidence: 0.8468915

00:53:03.510 --> 00:53:04.985 And there are some special  
NOTE Confidence: 0.8468915

00:53:04.985 --> 00:53:06.165 circumstances where will do.  
NOTE Confidence: 0.8468915

00:53:06.170 --> 00:53:07.640 It's called hypo fractionated radiation.  
NOTE Confidence: 0.8468915

00:53:07.640 --> 00:53:09.852 We're using a shorter course or it's  
NOTE Confidence: 0.8468915

00:53:09.852 --> 00:53:11.930 a little higher dose per day and  
NOTE Confidence: 0.8468915

00:53:11.930 --> 00:53:13.840 we have that as a potential too,  
NOTE Confidence: 0.8468915

00:53:13.840 --> 00:53:16.306 and that's part of the multidisciplinary  
NOTE Confidence: 0.8468915

00:53:16.306 --> 00:53:19.104 discussion as to really which is the best  
NOTE Confidence: 0.8468915

00:53:19.104 --> 00:53:21.949 and how can we pair this with chemotherapy.  
NOTE Confidence: 0.8468915

00:53:21.950 --> 00:53:23.798 So the first thing we do,  
NOTE Confidence: 0.8468915

00:53:23.800 --> 00:53:25.350 we generally meet the patient  
NOTE Confidence: 0.8468915

00:53:25.350 --> 00:53:27.558 after surgery and if else is and  
NOTE Confidence: 0.8468915

00:53:27.558 --> 00:53:29.334 they've usually gotten an MRI with,

NOTE Confidence: 0.8468915

00:53:29.340 --> 00:53:30.880 they've come to us outside.

NOTE Confidence: 0.8468915

00:53:30.880 --> 00:53:33.643 We get one and we really want to see.

NOTE Confidence: 0.8468915

00:53:33.650 --> 00:53:36.086 OK, what's the difference now in the

NOTE Confidence: 0.8468915

00:53:36.086 --> 00:53:38.946 in the cavity and even see compared to

NOTE Confidence: 0.8468915

00:53:38.946 --> 00:53:41.390 before that you know this has been.

NOTE Confidence: 0.8468915

00:53:41.390 --> 00:53:42.242 Debo quite a bit.

NOTE Confidence: 0.8468915

00:53:42.242 --> 00:53:44.303 There's a little bit of a white here

NOTE Confidence: 0.8468915

00:53:44.303 --> 00:53:45.759 that's more postoperative change,

NOTE Confidence: 0.8468915

00:53:45.760 --> 00:53:47.020 not necessarily cancer left behind

NOTE Confidence: 0.8468915

00:53:47.020 --> 00:53:49.029 and you can see the difference now.

NOTE Confidence: 0.8468915

00:53:49.030 --> 00:53:50.668 Things look again between the T1

NOTE Confidence: 0.8468915

00:53:50.668 --> 00:53:52.981 for these left room, just empty 2.

NOTE Confidence: 0.8468915

00:53:52.981 --> 00:53:55.423 And when it comes to radiation,

NOTE Confidence: 0.8468915

00:53:55.430 --> 00:53:57.278 the principle is we were going

NOTE Confidence: 0.8468915

00:53:57.278 --> 00:53:58.940 to get a CAT scan.

NOTE Confidence: 0.8468915

00:53:58.940 --> 00:54:00.535 We're going to overlay the  
NOTE Confidence: 0.8468915

00:54:00.535 --> 00:54:02.130 various Mrs and so here.  
NOTE Confidence: 0.8468915

00:54:02.130 --> 00:54:04.370 We've taken in this blueish color is  
NOTE Confidence: 0.8468915

00:54:04.370 --> 00:54:06.654 we've copied in what the tumor look  
NOTE Confidence: 0.8468915

00:54:06.654 --> 00:54:08.912 like before the surgery and now copy  
NOTE Confidence: 0.8468915

00:54:08.912 --> 00:54:11.068 it onto the MRI from after surgery.  
NOTE Confidence: 0.8468915

00:54:11.070 --> 00:54:14.260 And then we draw in more in the middle here.  
NOTE Confidence: 0.8468915

00:54:14.260 --> 00:54:15.328 This pink drawing.  
NOTE Confidence: 0.8468915

00:54:15.328 --> 00:54:15.684 OK?  
NOTE Confidence: 0.8468915

00:54:15.684 --> 00:54:17.464 What are we concerned about  
NOTE Confidence: 0.8468915

00:54:17.464 --> 00:54:19.633 just from the MRI afterwards we  
NOTE Confidence: 0.8468915

00:54:19.633 --> 00:54:21.840 combine these things on the right.  
NOTE Confidence: 0.8468915

00:54:21.840 --> 00:54:24.080 And then we get to work with  
NOTE Confidence: 0.8468915

00:54:24.080 --> 00:54:25.040 our physics crew.  
NOTE Confidence: 0.8468915

00:54:25.040 --> 00:54:27.632 And if you kind of adjust your eyes  
NOTE Confidence: 0.8468915

00:54:27.632 --> 00:54:30.257 from this is a 3D or 2D representation

NOTE Confidence: 0.8468915

00:54:30.257 --> 00:54:33.039 of a 3D process so you can see here.

NOTE Confidence: 0.8468915

00:54:33.040 --> 00:54:35.182 It looks like someone's face with the

NOTE Confidence: 0.8468915

00:54:35.182 --> 00:54:37.812 nose and the eyes and these pink and

NOTE Confidence: 0.8468915

00:54:37.812 --> 00:54:40.079 blue is highlighting where the tumor is.

NOTE Confidence: 0.8468915

00:54:40.080 --> 00:54:41.790 The red dashed line is simulating

NOTE Confidence: 0.8468915

00:54:41.790 --> 00:54:44.240 the Ark as the machine moves around,

NOTE Confidence: 0.8468915

00:54:44.240 --> 00:54:46.160 and these yellow little funny rectangles.

NOTE Confidence: 0.8468915

00:54:46.160 --> 00:54:47.084 That's that MLC,

NOTE Confidence: 0.8468915

00:54:47.084 --> 00:54:48.316 creating the different shapes

NOTE Confidence: 0.8468915

00:54:48.316 --> 00:54:49.680 as it goes around.

NOTE Confidence: 0.8468915

00:54:49.680 --> 00:54:51.485 So manipulating all those things

NOTE Confidence: 0.8468915

00:54:51.485 --> 00:54:53.290 in the field design process.

NOTE Confidence: 0.8468915

00:54:53.290 --> 00:54:54.012 We get.

NOTE Confidence: 0.8468915

00:54:54.012 --> 00:54:55.817 This type of dose distribution

NOTE Confidence: 0.8468915

00:54:55.817 --> 00:54:57.919 you can see on the right.

NOTE Confidence: 0.8468915

00:54:57.920 --> 00:54:59.660 So now we've taken those drawings.  
NOTE Confidence: 0.8468915

00:54:59.660 --> 00:55:01.110 We've actually created real dose.  
NOTE Confidence: 0.8468915

00:55:01.110 --> 00:55:02.916 We can see that we're trying to  
NOTE Confidence: 0.8468915

00:55:02.916 --> 00:55:05.025 spare the rest of the brain and  
NOTE Confidence: 0.8468915

00:55:05.025 --> 00:55:06.615 really concentrate what's in here,  
NOTE Confidence: 0.8468915

00:55:06.620 --> 00:55:08.706 and this is a multi day process  
NOTE Confidence: 0.8468915

00:55:08.706 --> 00:55:10.866 to get things right between our  
NOTE Confidence: 0.8468915

00:55:10.866 --> 00:55:12.856 planning session when we're ready  
NOTE Confidence: 0.8468915

00:55:12.856 --> 00:55:14.979 to ready to start treatment.  
NOTE Confidence: 0.8468915

00:55:14.980 --> 00:55:16.606 And as part of the review,  
NOTE Confidence: 0.8468915

00:55:16.610 --> 00:55:17.970 we look at something called  
NOTE Confidence: 0.8468915

00:55:17.970 --> 00:55:19.058 the dose volume histogram,  
NOTE Confidence: 0.8468915

00:55:19.060 --> 00:55:21.236 where every structure go to the next slide.  
NOTE Confidence: 0.8468915

00:55:21.240 --> 00:55:22.890 Every structure that we care bout  
NOTE Confidence: 0.8468915

00:55:22.890 --> 00:55:24.230 between what's called the PTV,  
NOTE Confidence: 0.8166814

00:55:24.230 --> 00:55:26.127 which is what we're planning to target.

NOTE Confidence: 0.8166814

00:55:26.130 --> 00:55:27.756 The optic nerves eyes the Coakley,

NOTE Confidence: 0.8166814

00:55:27.760 --> 00:55:28.848 the brainstem, anything that

NOTE Confidence: 0.8166814

00:55:28.848 --> 00:55:30.480 we care about that's in there.

NOTE Confidence: 0.8166814

00:55:30.480 --> 00:55:32.188 We can model. How much dose is

NOTE Confidence: 0.8166814

00:55:32.188 --> 00:55:34.431 going to it and we have very strict

NOTE Confidence: 0.8166814

00:55:34.431 --> 00:55:36.469 criteria about how much is too much,

NOTE Confidence: 0.8166814

00:55:36.470 --> 00:55:38.630 how much can be repaired and we keep

NOTE Confidence: 0.8166814

00:55:38.630 --> 00:55:40.463 going round and round and round till

NOTE Confidence: 0.8166814

00:55:40.463 --> 00:55:42.908 we have a plan that meets all the goals

NOTE Confidence: 0.8166814

00:55:42.908 --> 00:55:45.170 while maximizing goes to the to the tumor.

NOTE Confidence: 0.7818672

00:55:48.600 --> 00:55:51.472 Move on to a meningioma, some enjoy the say.

NOTE Confidence: 0.7818672

00:55:51.472 --> 00:55:53.062 The overall treatment concept here.

NOTE Confidence: 0.7818672

00:55:53.070 --> 00:55:56.507 If we go to the NCCN guidelines.

NOTE Confidence: 0.7818672

00:55:56.510 --> 00:55:59.030 The just read this here, so trim

NOTE Confidence: 0.7818672

00:55:59.030 --> 00:56:01.190 selection should be based on assessment,

NOTE Confidence: 0.7818672

00:56:01.190 --> 00:56:02.630 variety of interrelated factors,  
NOTE Confidence: 0.7818672

00:56:02.630 --> 00:56:04.430 including patient features, tumor features,  
NOTE Confidence: 0.7818672

00:56:04.430 --> 00:56:06.590 potential for causing or logic consequences.  
NOTE Confidence: 0.7818672

00:56:06.590 --> 00:56:07.637 If untreated presences,  
NOTE Confidence: 0.7818672

00:56:07.637 --> 00:56:09.033 various symptoms and treatment  
NOTE Confidence: 0.7818672

00:56:09.033 --> 00:56:10.872 related factors such as neurologic  
NOTE Confidence: 0.7818672

00:56:10.872 --> 00:56:12.350 consequences from surgery, radiation,  
NOTE Confidence: 0.7818672

00:56:12.350 --> 00:56:13.790 likelihood of complete resection.  
NOTE Confidence: 0.7818672

00:56:13.790 --> 00:56:15.590 Can we do complete irradiation  
NOTE Confidence: 0.7818672

00:56:15.590 --> 00:56:16.670 with different techniques?  
NOTE Confidence: 0.7818672

00:56:16.670 --> 00:56:18.470 Treatability with Jennifer Progressives, etc.  
NOTE Confidence: 0.7818672

00:56:18.470 --> 00:56:20.990 So you can see it's very complicated.  
NOTE Confidence: 0.7818672

00:56:20.990 --> 00:56:23.090 We really need that multi display  
NOTE Confidence: 0.7818672

00:56:23.090 --> 00:56:25.305 input which is ending with the  
NOTE Confidence: 0.7818672

00:56:25.305 --> 00:56:27.549 national lines actually speak to that.  
NOTE Confidence: 0.7818672

00:56:27.550 --> 00:56:30.484 And that's what we practice at Yale for sure.

NOTE Confidence: 0.7818672

00:56:30.490 --> 00:56:31.471 Meeting every week.

NOTE Confidence: 0.7818672

00:56:31.471 --> 00:56:33.106 I'm talking about individual patients.

NOTE Confidence: 0.7818672

00:56:33.110 --> 00:56:36.350 How can we really get this so it's

NOTE Confidence: 0.7818672

00:56:36.350 --> 00:56:39.638 customized and we have the best combination?

NOTE Confidence: 0.7818672

00:56:39.640 --> 00:56:40.510 For us generally,

NOTE Confidence: 0.7818672

00:56:40.510 --> 00:56:42.871 if you know meningiomas coming in and and

NOTE Confidence: 0.7818672

00:56:42.871 --> 00:56:44.810 Doctor Martin give a lot more details,

NOTE Confidence: 0.7818672

00:56:44.810 --> 00:56:46.526 I'm being a little broad here,

NOTE Confidence: 0.7818672

00:56:46.530 --> 00:56:48.336 but if something is small and doesn't

NOTE Confidence: 0.7818672

00:56:48.336 --> 00:56:49.690 seem regression some progressing,

NOTE Confidence: 0.7818672

00:56:49.690 --> 00:56:51.120 sometimes it can be observed,

NOTE Confidence: 0.7818672

00:56:51.120 --> 00:56:52.268 but usually it's surgery

NOTE Confidence: 0.7818672

00:56:52.268 --> 00:56:53.416 that we're leading with,

NOTE Confidence: 0.7818672

00:56:53.420 --> 00:56:56.290 and if it turns out to be a grade 1/2,

NOTE Confidence: 0.7818672

00:56:56.290 --> 00:56:59.338 which is the lowest kind of least aggressive.

NOTE Confidence: 0.7818672

00:56:59.340 --> 00:57:00.940 Then we can sometimes observe  
NOTE Confidence: 0.7818672

00:57:00.940 --> 00:57:01.900 sometimes to radiation.  
NOTE Confidence: 0.7818672

00:57:01.900 --> 00:57:04.266 If it's great to, or almost definitely  
NOTE Confidence: 0.7818672

00:57:04.266 --> 00:57:06.058 doing radiation of his grade 3,  
NOTE Confidence: 0.7818672

00:57:06.060 --> 00:57:07.240 or definitely doing it,  
NOTE Confidence: 0.7818672

00:57:07.240 --> 00:57:08.420 and occasionally radiation would  
NOTE Confidence: 0.7818672

00:57:08.420 --> 00:57:10.220 be a replacement for surgery.  
NOTE Confidence: 0.7818672

00:57:10.220 --> 00:57:13.349 But that's not as not as common.  
NOTE Confidence: 0.7818672

00:57:13.350 --> 00:57:14.970 And in terms of UPS,  
NOTE Confidence: 0.7818672

00:57:14.970 --> 00:57:16.266 the technique usually similar  
NOTE Confidence: 0.7818672

00:57:16.266 --> 00:57:17.238 to the glioblastoma.  
NOTE Confidence: 0.7818672

00:57:17.240 --> 00:57:18.715 It's a daily treatment for  
NOTE Confidence: 0.7818672

00:57:18.715 --> 00:57:20.800 anywhere from 25 to 30 sessions.  
NOTE Confidence: 0.7818672

00:57:20.800 --> 00:57:22.415 Sometimes if it's small enough  
NOTE Confidence: 0.7818672

00:57:22.415 --> 00:57:24.370 and we feel more confident that,  
NOTE Confidence: 0.7818672

00:57:24.370 --> 00:57:25.990 say, a grade one tumor,

NOTE Confidence: 0.7818672

00:57:25.990 --> 00:57:28.244 although like Doctor Martin was pointing out,

NOTE Confidence: 0.7818672

00:57:28.250 --> 00:57:29.870 sometimes we're wrong about that.

NOTE Confidence: 0.7818672

00:57:29.870 --> 00:57:32.130 So with very highly selected

NOTE Confidence: 0.7818672

00:57:32.130 --> 00:57:33.938 patients sometimes will do

NOTE Confidence: 0.7818672

00:57:33.938 --> 00:57:35.929 radiosurgery as a single treatment.

NOTE Confidence: 0.7818672

00:57:35.930 --> 00:57:37.556 And here's a nice collaboration example,

NOTE Confidence: 0.7818672

00:57:37.560 --> 00:57:39.544 so we have a 41 year old female

NOTE Confidence: 0.7818672

00:57:39.544 --> 00:57:41.100 who presented with eye symptoms.

NOTE Confidence: 0.7818672

00:57:41.100 --> 00:57:42.460 If you look this MRI,

NOTE Confidence: 0.7818672

00:57:42.460 --> 00:57:43.273 there's clearly something

NOTE Confidence: 0.7818672

00:57:43.273 --> 00:57:44.628 is a little different here.

NOTE Confidence: 0.7818672

00:57:44.630 --> 00:57:46.208 These images always like you're looking

NOTE Confidence: 0.7818672

00:57:46.208 --> 00:57:48.169 so from their feet towards their head,

NOTE Confidence: 0.7818672

00:57:48.170 --> 00:57:49.997 so the left side of your screen

NOTE Confidence: 0.7818672

00:57:49.997 --> 00:57:51.977 is the right side of their body.

NOTE Confidence: 0.7818672

00:57:51.980 --> 00:57:53.072 So this right side.  
NOTE Confidence: 0.7818672

00:57:53.072 --> 00:57:53.891 There's something different  
NOTE Confidence: 0.7818672

00:57:53.891 --> 00:57:54.970 here compared to here,  
NOTE Confidence: 0.7818672

00:57:54.970 --> 00:57:56.560 and this is the I here's  
NOTE Confidence: 0.7818672

00:57:56.560 --> 00:57:57.960 the optic nerve coming back.  
NOTE Confidence: 0.7818672

00:57:57.960 --> 00:58:00.408 If you like these kind of black arrows here,  
NOTE Confidence: 0.7818672

00:58:00.410 --> 00:58:02.036 these are very important blood vessels.  
NOTE Confidence: 0.7818672

00:58:02.040 --> 00:58:03.944 If you look at this object here,  
NOTE Confidence: 0.7818672

00:58:03.950 --> 00:58:06.276 this is the brain stem, so this is.  
NOTE Confidence: 0.7818672

00:58:06.276 --> 00:58:08.208 A very very critical area and  
NOTE Confidence: 0.7818672

00:58:08.208 --> 00:58:10.599 this lady in particular had some  
NOTE Confidence: 0.7818672

00:58:10.599 --> 00:58:13.020 worsening vision over about a year,  
NOTE Confidence: 0.7818672

00:58:13.020 --> 00:58:16.149 but then it really escalated pretty quickly.  
NOTE Confidence: 0.7818672

00:58:16.150 --> 00:58:16.486 Scott,  
NOTE Confidence: 0.7818672

00:58:16.486 --> 00:58:18.166 the MRI showed that that  
NOTE Confidence: 0.7818672

00:58:18.166 --> 00:58:19.510 a nasty appearing lesion,

NOTE Confidence: 0.7818672

00:58:19.510 --> 00:58:22.198 and so the question is what to do?

NOTE Confidence: 0.7818672

00:58:22.200 --> 00:58:24.545 Should we do surgeries to do radiation?

NOTE Confidence: 0.7818672

00:58:24.550 --> 00:58:24.886 Well,

NOTE Confidence: 0.7818672

00:58:24.886 --> 00:58:26.566 at this point the patient

NOTE Confidence: 0.7818672

00:58:26.566 --> 00:58:27.910 has very serious symptoms.

NOTE Confidence: 0.7818672

00:58:27.910 --> 00:58:29.926 An radiation is not going to

NOTE Confidence: 0.7818672

00:58:29.926 --> 00:58:31.270 reverse the vision symptoms.

NOTE Confidence: 0.7818672

00:58:31.270 --> 00:58:32.227 In that case,

NOTE Confidence: 0.7818672

00:58:32.227 --> 00:58:34.460 it's radiation for meningioma is excellent at

NOTE Confidence: 0.83236545

00:58:34.522 --> 00:58:36.307 stopping it from growing further,

NOTE Confidence: 0.83236545

00:58:36.310 --> 00:58:37.985 and can sometimes have a

NOTE Confidence: 0.83236545

00:58:37.985 --> 00:58:39.325 little shrinkage over time,

NOTE Confidence: 0.83236545

00:58:39.330 --> 00:58:41.689 but it can't have a rapid shrinkage,

NOTE Confidence: 0.83236545

00:58:41.690 --> 00:58:42.695 can't reverse symptoms

NOTE Confidence: 0.83236545

00:58:42.695 --> 00:58:44.370 quickly like she need it,

NOTE Confidence: 0.83236545

00:58:44.370 --> 00:58:47.466 so surgery was the right call.  
NOTE Confidence: 0.83236545

00:58:47.470 --> 00:58:49.504 Thankfully, she met with Doctor Moliterno  
NOTE Confidence: 0.83236545

00:58:49.504 --> 00:58:52.528 did took out as much as could be respected.  
NOTE Confidence: 0.83236545

00:58:52.530 --> 00:58:54.380 That's all those very delicate  
NOTE Confidence: 0.83236545

00:58:54.380 --> 00:58:56.620 structures have to be so careful  
NOTE Confidence: 0.83236545

00:58:56.620 --> 00:58:59.148 about as much as taking out as could  
NOTE Confidence: 0.83236545

00:58:59.148 --> 00:59:01.710 be turned out to be great one and  
NOTE Confidence: 0.83236545

00:59:01.710 --> 00:59:03.984 which was great is that her vision  
NOTE Confidence: 0.83236545

00:59:03.984 --> 00:59:05.328 improved dramatically after surgery.  
NOTE Confidence: 0.83236545

00:59:05.330 --> 00:59:08.026 Had a little bit of double vision left,  
NOTE Confidence: 0.83236545

00:59:08.030 --> 00:59:10.292 but the cutie was excellent and  
NOTE Confidence: 0.83236545

00:59:10.292 --> 00:59:13.398 moved on to a post offer of MRI.  
NOTE Confidence: 0.83236545

00:59:13.400 --> 00:59:15.188 And the post off of MRI,  
NOTE Confidence: 0.83236545

00:59:15.190 --> 00:59:17.470 the pre 8 properties on the left and  
NOTE Confidence: 0.83236545

00:59:17.470 --> 00:59:19.680 post office on the right and be easier  
NOTE Confidence: 0.83236545

00:59:19.680 --> 00:59:21.739 to tell with with multiple slices.

NOTE Confidence: 0.83236545

00:59:21.740 --> 00:59:23.791 But you get the sense that there's

NOTE Confidence: 0.83236545

00:59:23.791 --> 00:59:25.379 a little something left behind

NOTE Confidence: 0.83236545

00:59:25.379 --> 00:59:27.335 'cause we're so close to these

NOTE Confidence: 0.83236545

00:59:27.335 --> 00:59:28.599 special arteries and so on,

NOTE Confidence: 0.83236545

00:59:28.600 --> 00:59:31.000 but it's been debunked and it's had a

NOTE Confidence: 0.83236545

00:59:31.000 --> 00:59:33.067 huge impact in her quality of life.

NOTE Confidence: 0.83236545

00:59:33.070 --> 00:59:34.560 So now radiation comes in.

NOTE Confidence: 0.83236545

00:59:34.560 --> 00:59:36.348 How can we help out too?

NOTE Confidence: 0.83236545

00:59:36.350 --> 00:59:38.174 Now stabilize this and and take

NOTE Confidence: 0.83236545

00:59:38.174 --> 00:59:40.517 it to the next level and so on.

NOTE Confidence: 0.83236545

00:59:40.520 --> 00:59:42.026 A very similar process to what

NOTE Confidence: 0.83236545

00:59:42.026 --> 00:59:43.800 I showed in the glioblastoma.

NOTE Confidence: 0.83236545

00:59:43.800 --> 00:59:46.418 There's a modeling process making a mask.

NOTE Confidence: 0.83236545

00:59:46.420 --> 00:59:49.324 Creating a CAT scan and MRI who create

NOTE Confidence: 0.83236545

00:59:49.324 --> 00:59:52.213 these beams in the center and then we

NOTE Confidence: 0.83236545

00:59:52.213 --> 00:59:54.630 have ultimately a dose distribution.

NOTE Confidence: 0.83236545

00:59:54.630 --> 00:59:55.814 Now we look again.

NOTE Confidence: 0.83236545

00:59:55.814 --> 00:59:56.998 This color cloud here.

NOTE Confidence: 0.83236545

00:59:57.000 --> 00:59:58.475 Here's what I here's that

NOTE Confidence: 0.83236545

00:59:58.475 --> 00:59:59.655 optic nerve coming back.

NOTE Confidence: 0.83236545

00:59:59.660 --> 01:00:01.502 So we're we're sculpting dose away

NOTE Confidence: 0.83236545

01:00:01.502 --> 01:00:03.622 from the brain stem back here and

NOTE Confidence: 0.83236545

01:00:03.622 --> 01:00:05.290 the optic nerve here so again,

NOTE Confidence: 0.83236545

01:00:05.290 --> 01:00:06.642 having this concentration of

NOTE Confidence: 0.83236545

01:00:06.642 --> 01:00:08.332 dose where we're most worried

NOTE Confidence: 0.83236545

01:00:08.332 --> 01:00:10.150 and then sculpting those away.

NOTE Confidence: 0.83236545

01:00:10.150 --> 01:00:12.688 From the areas that are critical,

NOTE Confidence: 0.83236545

01:00:12.690 --> 01:00:14.730 but again an outcome which is

NOTE Confidence: 0.83236545

01:00:14.730 --> 01:00:16.673 really only possible with this

NOTE Confidence: 0.83236545

01:00:16.673 --> 01:00:18.227 special collaboration between

NOTE Confidence: 0.83236545

01:00:18.227 --> 01:00:20.299 you know neurosurgeon radiation,

NOTE Confidence: 0.83236545

01:00:20.300 --> 01:00:23.828 or in other cases with the

NOTE Confidence: 0.83236545

01:00:23.828 --> 01:00:25.592 neurologist as well.

NOTE Confidence: 0.83236545

01:00:25.600 --> 01:00:27.581 I just want to quickly highlight something

NOTE Confidence: 0.83236545

01:00:27.581 --> 01:00:29.889 from one of my colleagues size picture

NOTE Confidence: 0.83236545

01:00:29.889 --> 01:00:31.995 earlier Doctor Bindra and Doctor Schiff.

NOTE Confidence: 0.83236545

01:00:32.000 --> 01:00:34.160 Just it's nice to see within the L

NOTE Confidence: 0.83236545

01:00:34.160 --> 01:00:36.104 system all the things were already

NOTE Confidence: 0.83236545

01:00:36.104 --> 01:00:38.531 mentioned and there's just a lot of

NOTE Confidence: 0.83236545

01:00:38.531 --> 01:00:40.637 work this homegrown aspect looking at.

NOTE Confidence: 0.83236545

01:00:40.640 --> 01:00:42.418 How can we use our resources to

NOTE Confidence: 0.83236545

01:00:42.418 --> 01:00:44.307 develop new new therapeutics or not

NOTE Confidence: 0.83236545

01:00:44.307 --> 01:00:46.092 only participating in trials that

NOTE Confidence: 0.83236545

01:00:46.092 --> 01:00:48.320 other people have design things forward?

NOTE Confidence: 0.83236545

01:00:48.320 --> 01:00:48.944 We're innovating,

NOTE Confidence: 0.83236545

01:00:48.944 --> 01:00:51.440 he ran and bring the best for our

NOTE Confidence: 0.83236545

01:00:51.503 --> 01:00:53.183 patients in this particular trial  
NOTE Confidence: 0.83236545

01:00:53.183 --> 01:00:54.863 is for people with a.  
NOTE Confidence: 0.83236545

01:00:54.870 --> 01:00:56.570 Recurrent type of glioma.  
NOTE Confidence: 0.83236545

01:00:56.570 --> 01:00:59.668 But it's just wonderful to see this  
NOTE Confidence: 0.83236545

01:00:59.668 --> 01:01:02.464 this kind of effort and collaboration.  
NOTE Confidence: 0.83236545

01:01:02.470 --> 01:01:04.886 And that's it for my portion of time.  
NOTE Confidence: 0.83236545

01:01:04.890 --> 01:01:06.708 Thanks so much for including me.  
NOTE Confidence: 0.86554575

01:01:09.820 --> 01:01:12.448 Thanks so much, Bruce.  
NOTE Confidence: 0.86554575

01:01:12.450 --> 01:01:14.875 So will hold all questions to the  
NOTE Confidence: 0.86554575

01:01:14.875 --> 01:01:17.500 end an our last panelist in our last  
NOTE Confidence: 0.86554575

01:01:17.500 --> 01:01:19.896 talk is Brian Jenn who is a licensed  
NOTE Confidence: 0.86554575

01:01:19.896 --> 01:01:22.458 social worker with Smilow as well.  
NOTE Confidence: 0.8958651

01:01:34.610 --> 01:01:36.356 So thank you for having me.  
NOTE Confidence: 0.83947015

01:02:00.110 --> 01:02:01.750 Sorry, a little technical difficulties,  
NOTE Confidence: 0.83947015

01:02:01.750 --> 01:02:04.046 but here I have my screen here.  
NOTE Confidence: 0.8218864

01:02:08.950 --> 01:02:10.900 Can you guys hear me OK?

NOTE Confidence: 0.8218864

01:02:10.900 --> 01:02:12.850 Thank you. OK so I'm Brian.

NOTE Confidence: 0.8218864

01:02:12.850 --> 01:02:14.475 I'm one of the clinical

NOTE Confidence: 0.8218864

01:02:14.475 --> 01:02:15.775 social workers at Smilow.

NOTE Confidence: 0.8218864

01:02:15.780 --> 01:02:18.148 I work mainly out of the Trumbull office

NOTE Confidence: 0.8218864

01:02:18.148 --> 01:02:20.931 but I also work at the Greenwich Office

NOTE Confidence: 0.8218864

01:02:20.931 --> 01:02:23.250 and it's my privilege to work with.

NOTE Confidence: 0.8218864

01:02:23.250 --> 01:02:24.880 Doctor Blunden and Doctor McKibben,

NOTE Confidence: 0.8218864

01:02:24.880 --> 01:02:27.393 and my talk is going to be

NOTE Confidence: 0.8218864

01:02:27.393 --> 01:02:28.470 specifically about supporting

NOTE Confidence: 0.8218864

01:02:28.538 --> 01:02:30.588 patients and families through this

NOTE Confidence: 0.8218864

01:02:30.588 --> 01:02:32.998 process and all the different ways

NOTE Confidence: 0.8218864

01:02:32.998 --> 01:02:35.014 we can try to support and help.

NOTE Confidence: 0.8218864

01:02:35.020 --> 01:02:37.476 Through this difficult journey,

NOTE Confidence: 0.8218864

01:02:37.476 --> 01:02:41.160 so I have no disclosures my.

NOTE Confidence: 0.85245454

01:02:46.590 --> 01:02:48.620 My focus will really be on going

NOTE Confidence: 0.85245454

01:02:48.620 --> 01:02:50.415 through the framework and then practical  
NOTE Confidence: 0.85245454

01:02:50.415 --> 01:02:52.669 resources and ways that we can support.  
NOTE Confidence: 0.85245454

01:02:52.670 --> 01:02:54.070 So oftentimes when we're dealing  
NOTE Confidence: 0.85245454

01:02:54.070 --> 01:02:56.010 with the tumor or cancer diagnosis,  
NOTE Confidence: 0.85245454

01:02:56.010 --> 01:02:58.138 the question is, how do we cope?  
NOTE Confidence: 0.85245454

01:02:58.140 --> 01:02:59.970 How do we get through this?  
NOTE Confidence: 0.85245454

01:02:59.970 --> 01:03:02.697 How do we make it a little bit easier,  
NOTE Confidence: 0.85245454

01:03:02.700 --> 01:03:04.764 a little bit better and the truth of  
NOTE Confidence: 0.85245454

01:03:04.764 --> 01:03:07.260 it is it's a really complex question.  
NOTE Confidence: 0.85245454

01:03:07.260 --> 01:03:08.780 It really depends on who's  
NOTE Confidence: 0.85245454

01:03:08.780 --> 01:03:10.300 involved in the family system,  
NOTE Confidence: 0.85245454

01:03:10.300 --> 01:03:12.724 what experiences do they bring to the table?  
NOTE Confidence: 0.85245454

01:03:12.730 --> 01:03:14.430 What losses or previous diagnosis  
NOTE Confidence: 0.85245454

01:03:14.430 --> 01:03:16.720 had they gone through as a family?  
NOTE Confidence: 0.85245454

01:03:16.720 --> 01:03:20.216 And also where they are at when diagnosed,  
NOTE Confidence: 0.85245454

01:03:20.220 --> 01:03:23.049 it's an incredibly.

NOTE Confidence: 0.85245454

01:03:23.050 --> 01:03:25.048 Difficult proposition to sort of bring

NOTE Confidence: 0.85245454

01:03:25.048 --> 01:03:27.047 this all together and really address

NOTE Confidence: 0.85245454

01:03:27.047 --> 01:03:29.487 what is most pressing at any given time.

NOTE Confidence: 0.85245454

01:03:29.490 --> 01:03:31.386 There's a lot of different processes

NOTE Confidence: 0.85245454

01:03:31.386 --> 01:03:33.351 that have to come together to

NOTE Confidence: 0.85245454

01:03:33.351 --> 01:03:34.635 shape what coping is,

NOTE Confidence: 0.85245454

01:03:34.640 --> 01:03:36.566 so the framework that I use,

NOTE Confidence: 0.85245454

01:03:36.570 --> 01:03:38.502 the model that is most helpful

NOTE Confidence: 0.85245454

01:03:38.502 --> 01:03:39.790 is family systems illness,

NOTE Confidence: 0.85245454

01:03:39.790 --> 01:03:42.184 modeled by John Rowland and I think

NOTE Confidence: 0.85245454

01:03:42.184 --> 01:03:44.350 he developed it while he was at

NOTE Confidence: 0.85245454

01:03:44.350 --> 01:03:46.371 Yale and then went on to University

NOTE Confidence: 0.85245454

01:03:46.371 --> 01:03:49.107 of Chicago and why this is such a

NOTE Confidence: 0.85245454

01:03:49.107 --> 01:03:51.145 useful way of sort of approaching

NOTE Confidence: 0.85245454

01:03:51.145 --> 01:03:53.160 a family and an individual who.

NOTE Confidence: 0.85245454

01:03:53.160 --> 01:03:55.434 Is suffering through an illness and  
NOTE Confidence: 0.85245454

01:03:55.434 --> 01:03:57.727 specifically like a cancer diagnosis is  
NOTE Confidence: 0.85245454

01:03:57.727 --> 01:04:00.212 that it breaks up the dimensions and  
NOTE Confidence: 0.85245454

01:04:00.212 --> 01:04:02.159 multiple ways and sort of interweaves  
NOTE Confidence: 0.85245454

01:04:02.159 --> 01:04:04.656 it together so at the center of it  
NOTE Confidence: 0.85245454

01:04:04.656 --> 01:04:06.910 you have the individual you have the  
NOTE Confidence: 0.85245454

01:04:06.981 --> 01:04:08.856 individual whose life has changed  
NOTE Confidence: 0.85245454

01:04:08.856 --> 01:04:11.482 and has been altered in a significant  
NOTE Confidence: 0.85245454

01:04:11.482 --> 01:04:13.876 way and then bring that brings with  
NOTE Confidence: 0.85245454

01:04:13.876 --> 01:04:15.728 it emotional turmoil at times.  
NOTE Confidence: 0.85245454

01:04:15.728 --> 01:04:17.990 There's also changes in terms of  
NOTE Confidence: 0.85245454

01:04:18.053 --> 01:04:20.188 what is a person going to process,  
NOTE Confidence: 0.85245454

01:04:20.190 --> 01:04:22.689 how are they going to deal with  
NOTE Confidence: 0.85245454

01:04:22.689 --> 01:04:23.760 their basic needs.  
NOTE Confidence: 0.85245454

01:04:23.760 --> 01:04:25.896 What are the practical concerns that  
NOTE Confidence: 0.85245454

01:04:25.896 --> 01:04:28.746 they have and then it alters every

NOTE Confidence: 0.85245454

01:04:28.746 --> 01:04:30.558 relationship within their sphere.

NOTE Confidence: 0.85245454

01:04:30.560 --> 01:04:32.560 These relationship includes their spouses,

NOTE Confidence: 0.85245454

01:04:32.560 --> 01:04:34.072 their children, their work,

NOTE Confidence: 0.85245454

01:04:34.072 --> 01:04:35.962 their friendships and also their

NOTE Confidence: 0.85245454

01:04:35.962 --> 01:04:37.360 developing new relationships.

NOTE Confidence: 0.85245454

01:04:37.360 --> 01:04:40.312 And the most important one is with

NOTE Confidence: 0.85245454

01:04:40.312 --> 01:04:42.554 their medical team and developing

NOTE Confidence: 0.85245454

01:04:42.554 --> 01:04:44.939 that collaboration to work together

NOTE Confidence: 0.85245454

01:04:44.939 --> 01:04:47.130 to achieve a goal together.

NOTE Confidence: 0.85245454

01:04:47.130 --> 01:04:49.146 So it also recognizes that each

NOTE Confidence: 0.85245454

01:04:49.146 --> 01:04:51.230 stage and phase is different.

NOTE Confidence: 0.85245454

01:04:51.230 --> 01:04:53.834 Often times when I meet with patients,

NOTE Confidence: 0.85245454

01:04:53.840 --> 01:04:56.948 it's not. Always when their first diagnosis.

NOTE Confidence: 0.85245454

01:04:56.950 --> 01:04:58.435 Sometimes I'm meeting with somebody

NOTE Confidence: 0.85245454

01:04:58.435 --> 01:05:00.918 who's in a stage of remission and it

NOTE Confidence: 0.85245454

01:05:00.918 --> 01:05:02.483 looks very different from somebody  
NOTE Confidence: 0.85245454

01:05:02.483 --> 01:05:04.630 who is processing a new diagnosis.  
NOTE Confidence: 0.85245454

01:05:04.630 --> 01:05:06.884 You know you can see this sort  
NOTE Confidence: 0.85245454

01:05:06.884 --> 01:05:08.788 of onset category that he puts,  
NOTE Confidence: 0.85245454

01:05:08.790 --> 01:05:10.710 and oftentimes I sit with patients,  
NOTE Confidence: 0.85245454

01:05:10.710 --> 01:05:12.754 and I say it's like being shot  
NOTE Confidence: 0.85245454

01:05:12.754 --> 01:05:14.870 out of a cannon. It's it's.  
NOTE Confidence: 0.85245454

01:05:14.870 --> 01:05:16.470 There's no time to prepare.  
NOTE Confidence: 0.85245454

01:05:16.470 --> 01:05:18.070 It's a shock and surreal.  
NOTE Confidence: 0.85245454

01:05:18.070 --> 01:05:19.385 And so recognizing what the  
NOTE Confidence: 0.85245454

01:05:19.385 --> 01:05:21.166 needs are and what the different  
NOTE Confidence: 0.85245454

01:05:21.166 --> 01:05:23.186 challenges are is vitally important.  
NOTE Confidence: 0.85245454

01:05:23.190 --> 01:05:26.460 And this does a very good job of sort of.  
NOTE Confidence: 0.85245454

01:05:26.460 --> 01:05:29.106 Breaking down the challenges that come in  
NOTE Confidence: 0.85245454

01:05:29.106 --> 01:05:31.970 each stage when you have a chronic stage,  
NOTE Confidence: 0.85245454

01:05:31.970 --> 01:05:34.166 it's it's a place of stability,

NOTE Confidence: 0.85245454

01:05:34.170 --> 01:05:36.378 but it's different and and that

NOTE Confidence: 0.85245454

01:05:36.378 --> 01:05:38.970 adaption takes a lot of work and

NOTE Confidence: 0.85245454

01:05:38.970 --> 01:05:41.399 there still works to process out what

NOTE Confidence: 0.85344154

01:05:41.475 --> 01:05:42.609 this looks like.

NOTE Confidence: 0.85344154

01:05:42.610 --> 01:05:44.440 How do we find significant

NOTE Confidence: 0.85344154

01:05:44.440 --> 01:05:45.904 meaning during that time?

NOTE Confidence: 0.85344154

01:05:45.910 --> 01:05:48.106 And then this is a process

NOTE Confidence: 0.85344154

01:05:48.106 --> 01:05:49.204 of constant adaption,

NOTE Confidence: 0.85344154

01:05:49.210 --> 01:05:50.314 so there's transitions.

NOTE Confidence: 0.85344154

01:05:50.314 --> 01:05:51.418 There's new treatments.

NOTE Confidence: 0.85344154

01:05:51.420 --> 01:05:53.616 There is also endings at times,

NOTE Confidence: 0.85344154

01:05:53.620 --> 01:05:55.990 and all these things need to

NOTE Confidence: 0.85344154

01:05:55.990 --> 01:05:57.570 be addressed and supporting.

NOTE Confidence: 0.85344154

01:05:57.570 --> 01:05:59.518 Supporting both the patient

NOTE Confidence: 0.85344154

01:05:59.518 --> 01:06:01.466 and the family together.

NOTE Confidence: 0.85344154

01:06:01.470 --> 01:06:03.766 So in the first crisis Phase I  
NOTE Confidence: 0.85344154

01:06:03.766 --> 01:06:05.946 wanted to highlight a few of the  
NOTE Confidence: 0.85344154

01:06:05.946 --> 01:06:08.060 challenges that come up and in the  
NOTE Confidence: 0.85344154

01:06:08.060 --> 01:06:10.538 crisis stage phase you have the need  
NOTE Confidence: 0.85344154

01:06:10.538 --> 01:06:12.586 to understand what was going on.  
NOTE Confidence: 0.85344154

01:06:12.586 --> 01:06:15.488 What does it mean in terms of my life?  
NOTE Confidence: 0.85344154

01:06:15.490 --> 01:06:17.604 What does it mean in terms of  
NOTE Confidence: 0.85344154

01:06:17.604 --> 01:06:19.400 the treatment will be receiving?  
NOTE Confidence: 0.85344154

01:06:19.400 --> 01:06:22.008 How does affect what I was doing previously?  
NOTE Confidence: 0.85344154

01:06:22.010 --> 01:06:24.935 You know, if if you're sending off your kids,  
NOTE Confidence: 0.85344154

01:06:24.940 --> 01:06:26.896 your kids off the truck college,  
NOTE Confidence: 0.85344154

01:06:26.900 --> 01:06:29.273 how does it look to support them  
NOTE Confidence: 0.85344154

01:06:29.273 --> 01:06:31.339 when they're trying to separate in?  
NOTE Confidence: 0.85344154

01:06:31.340 --> 01:06:33.190 Differentiate themselves from the family  
NOTE Confidence: 0.85344154

01:06:33.190 --> 01:06:35.819 family unit at one of the aspects.  
NOTE Confidence: 0.85344154

01:06:35.820 --> 01:06:36.684 I really like.

NOTE Confidence: 0.85344154

01:06:36.684 --> 01:06:38.700 A lot is the third one creating

NOTE Confidence: 0.85344154

01:06:38.770 --> 01:06:40.706 meaning that promotes family

NOTE Confidence: 0.85344154

01:06:40.706 --> 01:06:42.158 mastering and competency,

NOTE Confidence: 0.85344154

01:06:42.160 --> 01:06:45.821 and this is really the narrative that

NOTE Confidence: 0.85344154

01:06:45.821 --> 01:06:49.166 patients and individuals come to in terms of.

NOTE Confidence: 0.85344154

01:06:49.170 --> 01:06:51.627 How I make sense of this and

NOTE Confidence: 0.85344154

01:06:51.627 --> 01:06:53.560 how I transcend beyond it?

NOTE Confidence: 0.85344154

01:06:53.560 --> 01:06:55.792 It is the narrative that incorporate

NOTE Confidence: 0.85344154

01:06:55.792 --> 01:06:58.149 family histories of my parents were

NOTE Confidence: 0.85344154

01:06:58.149 --> 01:07:00.567 extremely resilient and my dad never

NOTE Confidence: 0.85344154

01:07:00.567 --> 01:07:03.079 complained and he always got up for work.

NOTE Confidence: 0.85344154

01:07:03.080 --> 01:07:05.215 These are the things we can tap

NOTE Confidence: 0.85344154

01:07:05.215 --> 01:07:07.040 in the inherent straight strength

NOTE Confidence: 0.85344154

01:07:07.040 --> 01:07:09.150 of family systems and individuals

NOTE Confidence: 0.85344154

01:07:09.150 --> 01:07:11.129 that are that are there.

NOTE Confidence: 0.85344154

01:07:11.130 --> 01:07:13.008 And also there's a grief process  
NOTE Confidence: 0.85344154

01:07:13.008 --> 01:07:15.600 that comes up and grieving for the  
NOTE Confidence: 0.85344154

01:07:15.600 --> 01:07:17.715 family identity before this disorder.  
NOTE Confidence: 0.85344154

01:07:17.720 --> 01:07:19.412 Often times I've heard.  
NOTE Confidence: 0.85344154

01:07:19.412 --> 01:07:20.258 You know,  
NOTE Confidence: 0.85344154

01:07:20.260 --> 01:07:23.634 spouses share how they're feeling angry at.  
NOTE Confidence: 0.85344154

01:07:23.640 --> 01:07:26.050 Just watching watching another family,  
NOTE Confidence: 0.85344154

01:07:26.050 --> 01:07:29.914 going to a diner because it's so normal.  
NOTE Confidence: 0.85344154

01:07:29.920 --> 01:07:31.369 It's so routine,  
NOTE Confidence: 0.85344154

01:07:31.369 --> 01:07:34.750 this is something that needs its place.  
NOTE Confidence: 0.85344154

01:07:34.750 --> 01:07:39.088 It needs time to be fully felt and healed.  
NOTE Confidence: 0.85344154

01:07:39.090 --> 01:07:40.686 And of course,  
NOTE Confidence: 0.85344154

01:07:40.686 --> 01:07:43.346 establishing a relationship with your  
NOTE Confidence: 0.85344154

01:07:43.346 --> 01:07:46.435 health care providers and developing  
NOTE Confidence: 0.85344154

01:07:46.435 --> 01:07:49.660 that trust and collaborative process.  
NOTE Confidence: 0.85344154

01:07:49.660 --> 01:07:50.614 The chronic phase.

NOTE Confidence: 0.85344154

01:07:50.614 --> 01:07:51.250 It's a.

NOTE Confidence: 0.85344154

01:07:51.250 --> 01:07:52.840 It's a little bit different.

NOTE Confidence: 0.85344154

01:07:52.840 --> 01:07:53.474 You know.

NOTE Confidence: 0.85344154

01:07:53.474 --> 01:07:55.693 It's you found a place of stability,

NOTE Confidence: 0.85344154

01:07:55.700 --> 01:07:56.537 but you know,

NOTE Confidence: 0.85344154

01:07:56.537 --> 01:07:57.653 I've heard patients really

NOTE Confidence: 0.85344154

01:07:57.653 --> 01:07:59.289 describe sort of living with

NOTE Confidence: 0.85344154

01:07:59.289 --> 01:08:00.789 anticipatory loss and uncertainty.

NOTE Confidence: 0.85344154

01:08:00.790 --> 01:08:02.062 I've had people say,

NOTE Confidence: 0.85344154

01:08:02.062 --> 01:08:03.970 you know I've returned to normal.

NOTE Confidence: 0.85344154

01:08:03.970 --> 01:08:04.906 It's it's completely.

NOTE Confidence: 0.85344154

01:08:04.906 --> 01:08:07.470 I'm baking and gardening and it feels great,

NOTE Confidence: 0.85344154

01:08:07.470 --> 01:08:09.500 but at times I feel really insecure

NOTE Confidence: 0.85344154

01:08:09.500 --> 01:08:11.949 and it's it's really hard when you

NOTE Confidence: 0.85344154

01:08:11.949 --> 01:08:13.844 have those two incongruent emotional

NOTE Confidence: 0.85344154

01:08:13.844 --> 01:08:15.916 states at one time and making sense  
NOTE Confidence: 0.85344154

01:08:15.916 --> 01:08:18.662 of that and being open to each place.  
NOTE Confidence: 0.85344154

01:08:18.662 --> 01:08:21.140 And validating is is is tremendous  
NOTE Confidence: 0.85344154

01:08:21.216 --> 01:08:23.760 Lee difficult to do also within  
NOTE Confidence: 0.85344154

01:08:23.760 --> 01:08:25.032 the family system?  
NOTE Confidence: 0.85344154

01:08:25.040 --> 01:08:26.000 You know,  
NOTE Confidence: 0.85344154

01:08:26.000 --> 01:08:27.920 developing open communication lines  
NOTE Confidence: 0.85344154

01:08:27.920 --> 01:08:30.308 really sharing the burden amongst  
NOTE Confidence: 0.85344154

01:08:30.308 --> 01:08:32.660 the whole family unit and supporting  
NOTE Confidence: 0.85344154

01:08:32.660 --> 01:08:34.860 each other is a key process.  
NOTE Confidence: 0.84469044

01:08:37.100 --> 01:08:38.828 And and extending on into grief  
NOTE Confidence: 0.84469044

01:08:38.828 --> 01:08:40.750 is is sort of acceptance.  
NOTE Confidence: 0.84469044

01:08:40.750 --> 01:08:43.074 You know, the grief process hasn't stages.  
NOTE Confidence: 0.84469044

01:08:43.080 --> 01:08:45.138 It has all its difficult emotions  
NOTE Confidence: 0.84469044

01:08:45.138 --> 01:08:47.060 that can come up and it.  
NOTE Confidence: 0.84469044

01:08:47.060 --> 01:08:48.971 But one of the things it leads

NOTE Confidence: 0.84469044

01:08:48.971 --> 01:08:51.380 to is a degree of acceptance.

NOTE Confidence: 0.84469044

01:08:51.380 --> 01:08:53.040 A degree of acceptance of

NOTE Confidence: 0.84469044

01:08:53.040 --> 01:08:54.700 where the new normal is,

NOTE Confidence: 0.84469044

01:08:54.700 --> 01:08:55.960 where people are at,

NOTE Confidence: 0.84469044

01:08:55.960 --> 01:08:58.205 and you know where they can do

NOTE Confidence: 0.84469044

01:08:58.205 --> 01:09:00.179 what they can do from there and

NOTE Confidence: 0.84469044

01:09:00.179 --> 01:09:02.329 how they can empower themselves.

NOTE Confidence: 0.859428

01:09:04.990 --> 01:09:07.916 So there is another stage of transitions.

NOTE Confidence: 0.859428

01:09:07.920 --> 01:09:10.254 Anytime there's a change anytime the

NOTE Confidence: 0.859428

01:09:10.254 --> 01:09:12.785 family system needs to find equilibrium

NOTE Confidence: 0.859428

01:09:12.785 --> 01:09:15.045 needs to redefine hoping goals,

NOTE Confidence: 0.859428

01:09:15.050 --> 01:09:17.661 and sometimes that includes an ending phased

NOTE Confidence: 0.859428

01:09:17.661 --> 01:09:20.679 in which you know individuals and families

NOTE Confidence: 0.859428

01:09:20.679 --> 01:09:23.427 have to identify an unfinished business.

NOTE Confidence: 0.859428

01:09:23.430 --> 01:09:26.040 What's really important to accomplish and

NOTE Confidence: 0.859428

01:09:26.040 --> 01:09:28.869 then really maximizing the quality of life,  
NOTE Confidence: 0.859428

01:09:28.870 --> 01:09:31.810 the meaning, the purpose, and you know,  
NOTE Confidence: 0.859428

01:09:31.810 --> 01:09:35.350 bringing that time together to its.  
NOTE Confidence: 0.859428

01:09:35.350 --> 01:09:37.933 To it, to maximize the goodness that  
NOTE Confidence: 0.859428

01:09:37.933 --> 01:09:40.818 can come from spending time together.  
NOTE Confidence: 0.859428

01:09:40.820 --> 01:09:43.212 So this is one of the frameworks that  
NOTE Confidence: 0.859428

01:09:43.212 --> 01:09:45.803 helps me sort of support patients and  
NOTE Confidence: 0.859428

01:09:45.803 --> 01:09:48.639 recognize what is important in a given time,  
NOTE Confidence: 0.859428

01:09:48.640 --> 01:09:51.006 and it's really excellent in terms of  
NOTE Confidence: 0.859428

01:09:51.006 --> 01:09:53.397 recognizing the whole picture of the patient.  
NOTE Confidence: 0.859428

01:09:53.400 --> 01:09:54.760 You know, their history,  
NOTE Confidence: 0.859428

01:09:54.760 --> 01:09:55.780 their family history,  
NOTE Confidence: 0.859428

01:09:55.780 --> 01:09:57.140 the multi generational stories  
NOTE Confidence: 0.859428

01:09:57.140 --> 01:09:59.180 that are shared among them that  
NOTE Confidence: 0.859428

01:09:59.235 --> 01:10:00.880 have helped them through this.  
NOTE Confidence: 0.859428

01:10:00.880 --> 01:10:03.128 And also it's a very positive one in

NOTE Confidence: 0.859428

01:10:03.128 --> 01:10:05.661 terms of it's really encourage ING the

NOTE Confidence: 0.859428

01:10:05.661 --> 01:10:08.340 family to meet these challenges and for

NOTE Confidence: 0.859428

01:10:08.340 --> 01:10:10.818 something like a brain cancer diagnosis it.

NOTE Confidence: 0.859428

01:10:10.820 --> 01:10:11.882 Ripples it did.

NOTE Confidence: 0.859428

01:10:11.882 --> 01:10:13.298 The effect extends throughout

NOTE Confidence: 0.859428

01:10:13.298 --> 01:10:14.360 the family system,

NOTE Confidence: 0.859428

01:10:14.360 --> 01:10:15.776 and it's an extraordinarily

NOTE Confidence: 0.859428

01:10:15.776 --> 01:10:17.546 hard challenge to meet alone.

NOTE Confidence: 0.859428

01:10:17.550 --> 01:10:20.727 So the fact that you have people around you,

NOTE Confidence: 0.859428

01:10:20.730 --> 01:10:24.216 the people that can support you.

NOTE Confidence: 0.859428

01:10:24.220 --> 01:10:27.356 It's vital to tap into that reserve.

NOTE Confidence: 0.86585623

01:10:29.820 --> 01:10:31.955 And you know this is something that you

NOTE Confidence: 0.86585623

01:10:31.955 --> 01:10:34.278 know has been spoken about in terms of

NOTE Confidence: 0.86585623

01:10:34.278 --> 01:10:36.080 maximizing you know why we're fighting

NOTE Confidence: 0.86585623

01:10:36.080 --> 01:10:38.054 and why we're going through this is

NOTE Confidence: 0.86585623

01:10:38.054 --> 01:10:40.608 that we have to be as a medical team.

NOTE Confidence: 0.86585623

01:10:40.610 --> 01:10:42.236 Very mindful of those goals of

NOTE Confidence: 0.86585623

01:10:42.236 --> 01:10:44.020 what a good life looks like.

NOTE Confidence: 0.86585623

01:10:44.020 --> 01:10:46.127 You know, I've heard Doctor Blondin mentioned

NOTE Confidence: 0.86585623

01:10:46.127 --> 01:10:48.557 you know such and such is going to wedding.

NOTE Confidence: 0.86585623

01:10:48.560 --> 01:10:50.712 I'm going to hold off on the treatment

NOTE Confidence: 0.86585623

01:10:50.712 --> 01:10:52.439 for this week and they're going

NOTE Confidence: 0.86585623

01:10:52.439 --> 01:10:54.530 to have fun and and that's vital.

NOTE Confidence: 0.86585623

01:10:54.530 --> 01:10:57.599 I mean, This is why we go through all

NOTE Confidence: 0.86585623

01:10:57.599 --> 01:11:00.170 these hardships is to enjoy life.

NOTE Confidence: 0.86585623

01:11:00.170 --> 01:11:02.555 So you know pulling it back to sort of

NOTE Confidence: 0.86585623

01:11:02.555 --> 01:11:05.048 what we do and then in the crisis stage,

NOTE Confidence: 0.86585623

01:11:05.050 --> 01:11:06.898 this is often one of the things that

NOTE Confidence: 0.86585623

01:11:06.898 --> 01:11:08.839 we will help support patients with.

NOTE Confidence: 0.86585623

01:11:08.840 --> 01:11:10.200 This is the practical service.

NOTE Confidence: 0.86585623

01:11:10.200 --> 01:11:12.368 How am I going to pay my bills?

NOTE Confidence: 0.86585623

01:11:12.370 --> 01:11:14.530 But you know, can I return to work?

NOTE Confidence: 0.86585623

01:11:14.530 --> 01:11:16.441 What are the things that are going

NOTE Confidence: 0.86585623

01:11:16.441 --> 01:11:18.058 to be helpful in this time?

NOTE Confidence: 0.86585623

01:11:18.060 --> 01:11:19.686 And these are things that social

NOTE Confidence: 0.86585623

01:11:19.686 --> 01:11:20.499 work entail quick.

NOTE Confidence: 0.86585623

01:11:20.500 --> 01:11:22.257 There's a number of resources that I

NOTE Confidence: 0.86585623

01:11:22.257 --> 01:11:24.235 will share at the end and turn websites

NOTE Confidence: 0.86585623

01:11:24.235 --> 01:11:26.122 that you can find out more information

NOTE Confidence: 0.86585623

01:11:26.122 --> 01:11:28.078 about how to navigate this process.

NOTE Confidence: 0.86585623

01:11:28.080 --> 01:11:29.470 Because you know they didn't

NOTE Confidence: 0.86585623

01:11:29.470 --> 01:11:30.860 teach us this in school.

NOTE Confidence: 0.86585623

01:11:30.860 --> 01:11:33.108 This is kind of just thrust upon us,

NOTE Confidence: 0.86585623

01:11:33.110 --> 01:11:35.560 and so one of the things that we can try

NOTE Confidence: 0.86585623

01:11:35.622 --> 01:11:37.774 to help with is get you the resources

NOTE Confidence: 0.86585623

01:11:37.774 --> 01:11:39.847 of how to apply for disability,

NOTE Confidence: 0.86585623

01:11:39.850 --> 01:11:41.656 if that's if that's an option that  
NOTE Confidence: 0.86585623

01:11:41.656 --> 01:11:43.693 when people want to pursue how to  
NOTE Confidence: 0.86585623

01:11:43.693 --> 01:11:44.905 maintain your health insurance,  
NOTE Confidence: 0.86585623

01:11:44.910 --> 01:11:46.877 maybe you know Medicaid is an option.  
NOTE Confidence: 0.86585623

01:11:46.880 --> 01:11:49.330 How do we access the.  
NOTE Confidence: 0.86585623

01:11:49.330 --> 01:11:49.988 Oh, sorry,  
NOTE Confidence: 0.86585623

01:11:49.988 --> 01:11:51.962 the marketplace to find an insurance  
NOTE Confidence: 0.86585623

01:11:51.962 --> 01:11:52.620 that fits.  
NOTE Confidence: 0.86585623

01:11:52.620 --> 01:11:55.100 So all these sort of things that are  
NOTE Confidence: 0.86585623

01:11:55.100 --> 01:11:58.210 basic to our well being and living our life.  
NOTE Confidence: 0.86585623

01:11:58.210 --> 01:11:59.860 We will support people with.  
NOTE Confidence: 0.86585623

01:11:59.860 --> 01:12:02.121 There was also grants that people can  
NOTE Confidence: 0.86585623

01:12:02.121 --> 01:12:04.459 access to help out with basic needs.  
NOTE Confidence: 0.86585623

01:12:04.460 --> 01:12:06.440 Paying for utilities, maybe a rent,  
NOTE Confidence: 0.86585623

01:12:06.440 --> 01:12:07.740 maybe a mortgage payment.  
NOTE Confidence: 0.86585623

01:12:07.740 --> 01:12:10.060 All these sort of things you know,

NOTE Confidence: 0.86585623

01:12:10.060 --> 01:12:12.775 laying the foundation to getting

NOTE Confidence: 0.86585623

01:12:12.775 --> 01:12:14.404 through this process.

NOTE Confidence: 0.86585623

01:12:14.410 --> 01:12:15.542 The emotional challenges and,

NOTE Confidence: 0.86585623

01:12:15.542 --> 01:12:17.380 you know, one of the things that

NOTE Confidence: 0.86585623

01:12:17.380 --> 01:12:19.499 were shared with me so succinctly is,

NOTE Confidence: 0.86585623

01:12:19.500 --> 01:12:23.000 you know, a patient said to me.

NOTE Confidence: 0.86585623

01:12:23.000 --> 01:12:23.933 It's the brain.

NOTE Confidence: 0.86585623

01:12:23.933 --> 01:12:26.882 It's kind of who we are and this was

NOTE Confidence: 0.86585623

01:12:26.882 --> 01:12:29.311 into in regards to the terror that

NOTE Confidence: 0.86585623

01:12:29.311 --> 01:12:31.839 they felt in terms of the changes.

NOTE Confidence: 0.86585623

01:12:31.840 --> 01:12:33.208 The fear of loss.

NOTE Confidence: 0.86585623

01:12:33.208 --> 01:12:35.919 I have had a individual share with me,

NOTE Confidence: 0.86585623

01:12:35.920 --> 01:12:37.600 recognizing that she had lost

NOTE Confidence: 0.86585623

01:12:37.600 --> 01:12:39.660 the ability to sign her name,

NOTE Confidence: 0.86585623

01:12:39.660 --> 01:12:40.340 her signature,

NOTE Confidence: 0.86585623

01:12:40.340 --> 01:12:42.040 and that's so fundamentally us.  
NOTE Confidence: 0.86585623

01:12:42.040 --> 01:12:44.384 And so this is a very unique challenge  
NOTE Confidence: 0.86585623

01:12:44.384 --> 01:12:46.712 to brain brain tumors and brain cancers  
NOTE Confidence: 0.86585623

01:12:46.712 --> 01:12:49.520 that it's really how we define ourselves.  
NOTE Confidence: 0.86585623

01:12:49.520 --> 01:12:50.880 It's it's our function.  
NOTE Confidence: 0.86585623

01:12:50.880 --> 01:12:51.900 It's our balance,  
NOTE Confidence: 0.86585623

01:12:51.900 --> 01:12:52.998 it's our eyesight.  
NOTE Confidence: 0.86585623

01:12:52.998 --> 01:12:54.096 It's driving it.  
NOTE Confidence: 0.86585623

01:12:54.100 --> 01:12:54.408 Independence,  
NOTE Confidence: 0.86585623

01:12:54.408 --> 01:12:57.534 and this is a profound in terms of how it  
NOTE Confidence: 0.86585623

01:12:57.534 --> 01:13:00.099 affects our life and how it shapes our lives.  
NOTE Confidence: 0.86585623

01:13:00.100 --> 01:13:02.500 So often times when I'm sitting with people,  
NOTE Confidence: 0.86585623

01:13:02.500 --> 01:13:03.700 there's two different processes  
NOTE Confidence: 0.86585623

01:13:03.700 --> 01:13:05.500 that I sort of flesh out  
NOTE Confidence: 0.85824853

01:13:05.563 --> 01:13:07.804 with them, and one is a degree of  
NOTE Confidence: 0.85824853

01:13:07.804 --> 01:13:09.699 trauma that it's going to trigger.

NOTE Confidence: 0.85824853

01:13:09.700 --> 01:13:11.200 Our anxiety are survival mechanisms,

NOTE Confidence: 0.85824853

01:13:11.200 --> 01:13:12.400 I tell family members.

NOTE Confidence: 0.85824853

01:13:12.400 --> 01:13:14.200 And when I first meet them,

NOTE Confidence: 0.85824853

01:13:14.200 --> 01:13:16.216 are you a little more irritable with

NOTE Confidence: 0.85824853

01:13:16.216 --> 01:13:18.099 each other and they're like yes,

NOTE Confidence: 0.85824853

01:13:18.100 --> 01:13:20.060 and it's that's normal because it's part

NOTE Confidence: 0.85824853

01:13:20.060 --> 01:13:22.300 of our flight fight or flight mechanism.

NOTE Confidence: 0.85824853

01:13:22.300 --> 01:13:24.250 And then knowing that and being.

NOTE Confidence: 0.85824853

01:13:24.250 --> 01:13:25.900 Cognizant of that you know helps

NOTE Confidence: 0.85824853

01:13:25.900 --> 01:13:28.281 us sort of be a little bit more

NOTE Confidence: 0.85824853

01:13:28.281 --> 01:13:30.111 gentle to ourselves that you know

NOTE Confidence: 0.85824853

01:13:30.170 --> 01:13:32.389 that we recognize we're a little bit

NOTE Confidence: 0.85824853

01:13:32.389 --> 01:13:34.174 under stress and this is natural.

NOTE Confidence: 0.85824853

01:13:34.174 --> 01:13:35.842 Alot of my job is normalizing

NOTE Confidence: 0.85824853

01:13:35.842 --> 01:13:37.651 these emotions that it feels so

NOTE Confidence: 0.85824853

01:13:37.651 --> 01:13:39.522 intense in the very beginning and  
NOTE Confidence: 0.85824853

01:13:39.522 --> 01:13:41.217 then giving tools like meditation,  
NOTE Confidence: 0.85824853

01:13:41.220 --> 01:13:43.947 prayer in itself is a way of staying present,  
NOTE Confidence: 0.85824853

01:13:43.950 --> 01:13:44.542 you know,  
NOTE Confidence: 0.85824853

01:13:44.542 --> 01:13:46.022 and having people access the  
NOTE Confidence: 0.85824853

01:13:46.022 --> 01:13:47.880 things that make them feel better.  
NOTE Confidence: 0.85824853

01:13:47.880 --> 01:13:49.320 The other emotional process that  
NOTE Confidence: 0.85824853

01:13:49.320 --> 01:13:52.071 I tend to see is a grief one and  
NOTE Confidence: 0.85824853

01:13:52.071 --> 01:13:53.636 that comes with any limitations.  
NOTE Confidence: 0.85824853

01:13:53.640 --> 01:13:55.596 Anytime we have obstacle or wall.  
NOTE Confidence: 0.85824853

01:13:55.600 --> 01:13:57.721 We triggered the grief process and that  
NOTE Confidence: 0.85824853

01:13:57.721 --> 01:14:00.066 grief process can roll into all past losses,  
NOTE Confidence: 0.85824853

01:14:00.070 --> 01:14:02.023 and so this is when I oftentimes  
NOTE Confidence: 0.85824853

01:14:02.023 --> 01:14:03.554 they really identify and really  
NOTE Confidence: 0.85824853

01:14:03.554 --> 01:14:05.134 stress because it's not linear.  
NOTE Confidence: 0.85824853

01:14:05.140 --> 01:14:06.916 It's not even logical at times,

NOTE Confidence: 0.85824853

01:14:06.920 --> 01:14:09.208 but it's just the power of those emotions

NOTE Confidence: 0.85824853

01:14:09.208 --> 01:14:11.690 in the expression that need to be had.

NOTE Confidence: 0.85824853

01:14:11.690 --> 01:14:13.776 And healing grief is just very simple.

NOTE Confidence: 0.85824853

01:14:13.780 --> 01:14:16.120 It's feeling the emotions and then

NOTE Confidence: 0.85824853

01:14:16.120 --> 01:14:18.113 reconnecting life and the good

NOTE Confidence: 0.85824853

01:14:18.113 --> 01:14:20.285 ways that really pull you through.

NOTE Confidence: 0.85824853

01:14:20.290 --> 01:14:23.174 So I also want to address the

NOTE Confidence: 0.85824853

01:14:23.174 --> 01:14:23.998 caregivers because.

NOTE Confidence: 0.85824853

01:14:24.000 --> 01:14:26.779 Their job is is vital and these

NOTE Confidence: 0.85824853

01:14:26.779 --> 01:14:29.330 are things that I always share.

NOTE Confidence: 0.85824853

01:14:29.330 --> 01:14:30.490 You're doing a superb,

NOTE Confidence: 0.85824853

01:14:30.490 --> 01:14:32.730 wonderful job caring for the people you love,

NOTE Confidence: 0.85824853

01:14:32.730 --> 01:14:34.704 and oftentimes it doesn't feel that way.

NOTE Confidence: 0.85824853

01:14:34.710 --> 01:14:36.966 And the problem is, the game is rigged.

NOTE Confidence: 0.85824853

01:14:36.970 --> 01:14:38.315 You're you're balancing two moral

NOTE Confidence: 0.85824853

01:14:38.315 --> 01:14:40.080 virtues together of caring for yourself,  
NOTE Confidence: 0.85824853

01:14:40.080 --> 01:14:41.778 caring for the person you love,  
NOTE Confidence: 0.85824853

01:14:41.780 --> 01:14:44.044 and there's never enough hours in the day.  
NOTE Confidence: 0.85824853

01:14:44.050 --> 01:14:46.024 So I just want to tell you,  
NOTE Confidence: 0.85824853

01:14:46.030 --> 01:14:48.286 doing a superb job and a wonderful job,  
NOTE Confidence: 0.85824853

01:14:48.290 --> 01:14:50.089 the other part of that is that  
NOTE Confidence: 0.85824853

01:14:50.089 --> 01:14:52.250 guilt is a school for self care.  
NOTE Confidence: 0.85824853

01:14:52.250 --> 01:14:54.236 So if you're feeling guilty that  
NOTE Confidence: 0.85824853

01:14:54.236 --> 01:14:56.224 you can't do something and you're  
NOTE Confidence: 0.85824853

01:14:56.224 --> 01:14:57.729 just a little bit tired.  
NOTE Confidence: 0.85824853

01:14:57.730 --> 01:14:59.250 It's really your body saying  
NOTE Confidence: 0.85824853

01:14:59.250 --> 01:15:01.370 I want to and I'm willing,  
NOTE Confidence: 0.85824853

01:15:01.370 --> 01:15:04.687 but I I need to take care of this so it's  
NOTE Confidence: 0.85824853

01:15:04.687 --> 01:15:07.655 OK to care for yourself to slow down.  
NOTE Confidence: 0.85824853

01:15:07.660 --> 01:15:08.539 Take a time,  
NOTE Confidence: 0.85824853

01:15:08.539 --> 01:15:10.953 take a time to walk and maybe go

NOTE Confidence: 0.85824853

01:15:10.953 --> 01:15:13.241 to a movie or talk to a friend

NOTE Confidence: 0.85824853

01:15:13.241 --> 01:15:15.594 because you're self care is modeling

NOTE Confidence: 0.85824853

01:15:15.594 --> 01:15:17.921 within your family system of how

NOTE Confidence: 0.85824853

01:15:17.921 --> 01:15:19.576 to prioritize your well being.

NOTE Confidence: 0.85824853

01:15:19.580 --> 01:15:21.560 How to nurture yourself and if

NOTE Confidence: 0.85824853

01:15:21.560 --> 01:15:23.600 that energy get gets rippled out

NOTE Confidence: 0.85824853

01:15:23.600 --> 01:15:25.868 to all the people in your family.

NOTE Confidence: 0.8848299

01:15:28.330 --> 01:15:32.768 So just in terms of ending the.

NOTE Confidence: 0.8848299

01:15:32.770 --> 01:15:34.856 The talk I really wanted to address,

NOTE Confidence: 0.8848299

01:15:34.860 --> 01:15:36.939 sort of the unsung gifts of cancer,

NOTE Confidence: 0.8848299

01:15:36.940 --> 01:15:38.220 and this is science.

NOTE Confidence: 0.8848299

01:15:38.220 --> 01:15:40.140 Certain things that have been shared

NOTE Confidence: 0.8848299

01:15:40.201 --> 01:15:42.084 with me that have really made an

NOTE Confidence: 0.8848299

01:15:42.084 --> 01:15:44.124 impact in terms of the wisdom that

NOTE Confidence: 0.8848299

01:15:44.124 --> 01:15:45.876 can come from a cancer diagnosis.

NOTE Confidence: 0.8848299

01:15:45.880 --> 01:15:47.668 The fact that individuals will share,  
NOTE Confidence: 0.8848299

01:15:47.670 --> 01:15:48.746 like you know, I,  
NOTE Confidence: 0.8848299

01:15:48.746 --> 01:15:51.286 I quit my job and it was the best  
NOTE Confidence: 0.8848299

01:15:51.286 --> 01:15:53.998 thing I ever done did in my life and  
NOTE Confidence: 0.8848299

01:15:53.998 --> 01:15:56.280 I really prospered in in terms of  
NOTE Confidence: 0.8848299

01:15:56.280 --> 01:15:58.339 the things I loved and that sort of  
NOTE Confidence: 0.8848299

01:15:58.339 --> 01:16:00.496 being true to their authentic self and  
NOTE Confidence: 0.8848299

01:16:00.496 --> 01:16:02.870 listening to what's most important to them.  
NOTE Confidence: 0.8848299

01:16:02.870 --> 01:16:04.258 There's a real clarity  
NOTE Confidence: 0.8848299

01:16:04.258 --> 01:16:05.993 that comes from a really.  
NOTE Confidence: 0.8848299

01:16:06.000 --> 01:16:09.936 Major diagnosis like this and also the fact  
NOTE Confidence: 0.8848299

01:16:09.936 --> 01:16:14.137 that our attitude is profoundly important.  
NOTE Confidence: 0.8848299

01:16:14.140 --> 01:16:17.176 So we're not diminishing the emotional  
NOTE Confidence: 0.8848299

01:16:17.176 --> 01:16:20.524 impact in the difficulties that arise, but.  
NOTE Confidence: 0.8848299

01:16:20.524 --> 01:16:23.212 We have the capacity sort of transcending  
NOTE Confidence: 0.8848299

01:16:23.212 --> 01:16:25.218 those difficulties and those obstacles,

NOTE Confidence: 0.8848299

01:16:25.220 --> 01:16:27.820 and that's one of the things that you

NOTE Confidence: 0.8848299

01:16:27.820 --> 01:16:30.139 know social work wants to help with.

NOTE Confidence: 0.8848299

01:16:30.140 --> 01:16:32.654 Counseling can help with our spiritual

NOTE Confidence: 0.8848299

01:16:32.654 --> 01:16:35.334 practice can help with and to really

NOTE Confidence: 0.8848299

01:16:35.334 --> 01:16:37.997 tap into that as a resource and a

NOTE Confidence: 0.8848299

01:16:37.997 --> 01:16:40.117 tool to getting through difficulty.

NOTE Confidence: 0.8848299

01:16:40.120 --> 01:16:42.560 So I'm going to run through a number

NOTE Confidence: 0.8848299

01:16:42.560 --> 01:16:44.358 of resources we have at smilow.

NOTE Confidence: 0.8848299

01:16:44.360 --> 01:16:44.966 Most importantly,

NOTE Confidence: 0.8848299

01:16:44.966 --> 01:16:47.087 we have the brain tumor Support Group,

NOTE Confidence: 0.8848299

01:16:47.090 --> 01:16:49.204 which is up and running through Stephanie.

NOTE Confidence: 0.8848299

01:16:49.210 --> 01:16:51.149 I saw that mentioned in the chat

NOTE Confidence: 0.8848299

01:16:51.149 --> 01:16:52.540 and I I really,

NOTE Confidence: 0.8848299

01:16:52.540 --> 01:16:53.768 highly recommend support groups.

NOTE Confidence: 0.8848299

01:16:53.768 --> 01:16:55.933 It's a great way to breakdown feelings

NOTE Confidence: 0.8848299

01:16:55.933 --> 01:16:58.109 of isolation to give mutual aid to help  
NOTE Confidence: 0.8848299

01:16:58.109 --> 01:17:00.116 people to get other people's perspective.  
NOTE Confidence: 0.8848299

01:17:00.120 --> 01:17:01.332 It's a beautiful thing.  
NOTE Confidence: 0.8848299

01:17:01.332 --> 01:17:02.847 There's great sense of humor,  
NOTE Confidence: 0.8848299

01:17:02.850 --> 01:17:04.360 it's it's a wonderful thing.  
NOTE Confidence: 0.8848299

01:17:04.360 --> 01:17:05.875 There's also a caregiver support  
NOTE Confidence: 0.8848299

01:17:05.875 --> 01:17:07.390 group that's in the evening,  
NOTE Confidence: 0.8848299

01:17:07.390 --> 01:17:10.374 so it's a little bit easier for caregivers.  
NOTE Confidence: 0.8848299

01:17:10.380 --> 01:17:13.140 To try to attend and these are all  
NOTE Confidence: 0.8848299

01:17:13.140 --> 01:17:15.886 by Zoom who's who's run by Mary.  
NOTE Confidence: 0.8848299

01:17:15.890 --> 01:17:17.590 There's also a meaning centered  
NOTE Confidence: 0.8848299

01:17:17.590 --> 01:17:19.290 psychotherapy group and that was  
NOTE Confidence: 0.8848299

01:17:19.347 --> 01:17:21.675 developer cancer patient and some very  
NOTE Confidence: 0.8848299

01:17:21.675 --> 01:17:23.227 structured Psycho Ed intervention.  
NOTE Confidence: 0.8848299

01:17:23.230 --> 01:17:25.492 And that's really to address sort  
NOTE Confidence: 0.8848299

01:17:25.492 --> 01:17:28.450 of that feeling of how do I find

NOTE Confidence: 0.8848299

01:17:28.450 --> 01:17:29.826 my purpose through this?

NOTE Confidence: 0.8848299

01:17:29.830 --> 01:17:32.766 What is my my new life look like?

NOTE Confidence: 0.8848299

01:17:32.770 --> 01:17:34.948 And it's done through seven week

NOTE Confidence: 0.8848299

01:17:34.948 --> 01:17:37.170 individual sessions and eight week groups.

NOTE Confidence: 0.8848299

01:17:37.170 --> 01:17:39.010 That palliative care has it.

NOTE Confidence: 0.8848299

01:17:39.010 --> 01:17:42.066 There's a number of social workers that are.

NOTE Confidence: 0.8848299

01:17:42.070 --> 01:17:42.847 Trained in it,

NOTE Confidence: 0.8848299

01:17:42.847 --> 01:17:45.003 and so you can just ask your team

NOTE Confidence: 0.8848299

01:17:45.003 --> 01:17:46.659 and they can do a referral.

NOTE Confidence: 0.8848299

01:17:46.660 --> 01:17:48.785 We have nutrition as Doctor

NOTE Confidence: 0.8848299

01:17:48.785 --> 01:17:49.635 Blunden mentioned.

NOTE Confidence: 0.8848299

01:17:49.640 --> 01:17:52.615 We have integrated medicine who

NOTE Confidence: 0.8848299

01:17:52.615 --> 01:17:54.995 have wonderful guided meditations.

NOTE Confidence: 0.8848299

01:17:55.000 --> 01:17:57.220 The Covid we did have massage

NOTE Confidence: 0.8848299

01:17:57.220 --> 01:17:58.330 therapy at times,

NOTE Confidence: 0.8848299

01:17:58.330 --> 01:18:00.490 and different classes that you can  
NOTE Confidence: 0.8848299

01:18:00.490 --> 01:18:02.770 attend in person like Gentle Yoga.  
NOTE Confidence: 0.8848299

01:18:02.770 --> 01:18:04.990 They're doing a little more remote.  
NOTE Confidence: 0.8848299

01:18:04.990 --> 01:18:06.840 There is also art therapy.  
NOTE Confidence: 0.8848299

01:18:06.840 --> 01:18:09.430 We also have a referral to pack,  
NOTE Confidence: 0.8848299

01:18:09.430 --> 01:18:12.020 which is parenting at a challenging time.  
NOTE Confidence: 0.8848299

01:18:12.020 --> 01:18:12.656 You know,  
NOTE Confidence: 0.8848299

01:18:12.656 --> 01:18:14.564 for individuals with children of any  
NOTE Confidence: 0.8848299

01:18:14.564 --> 01:18:17.568 age we have a module that helps people  
NOTE Confidence: 0.8848299

01:18:17.568 --> 01:18:19.104 figure out communication tenants  
NOTE Confidence: 0.8848299

01:18:19.168 --> 01:18:21.268 how to maintain open communication,  
NOTE Confidence: 0.8848299

01:18:21.270 --> 01:18:24.214 what emotions to sort of look for and  
NOTE Confidence: 0.8848299

01:18:24.214 --> 01:18:27.087 describe and reach for in their children.  
NOTE Confidence: 0.86480135

01:18:27.090 --> 01:18:29.274 And just sort of just ways of creating  
NOTE Confidence: 0.86480135

01:18:29.274 --> 01:18:31.627 a a normal structure to support  
NOTE Confidence: 0.86480135

01:18:31.627 --> 01:18:33.797 people through a difficult time.

NOTE Confidence: 0.86480135

01:18:33.800 --> 01:18:35.208 Also palliative care is

NOTE Confidence: 0.86480135

01:18:35.208 --> 01:18:36.264 another wonderful referral.

NOTE Confidence: 0.86480135

01:18:36.270 --> 01:18:38.405 They have a holistic practice

NOTE Confidence: 0.86480135

01:18:38.405 --> 01:18:41.526 and they have a very large team

NOTE Confidence: 0.86480135

01:18:41.526 --> 01:18:44.214 that people can have access to.

NOTE Confidence: 0.86480135

01:18:44.220 --> 01:18:45.306 Community resources,

NOTE Confidence: 0.86480135

01:18:45.306 --> 01:18:48.564 so the connected Brain Tumor Alliance

NOTE Confidence: 0.86480135

01:18:48.564 --> 01:18:50.851 education advocacy they have they

NOTE Confidence: 0.86480135

01:18:50.851 --> 01:18:53.107 they have support groups as well.

NOTE Confidence: 0.86480135

01:18:53.110 --> 01:18:55.445 There's An's place who have

NOTE Confidence: 0.86480135

01:18:55.445 --> 01:18:57.313 individual and group counseling.

NOTE Confidence: 0.86480135

01:18:57.320 --> 01:19:01.532 Cancer Care has online kids hugs is for kids,

NOTE Confidence: 0.86480135

01:19:01.540 --> 01:19:03.260 parents and their children.

NOTE Confidence: 0.86480135

01:19:03.260 --> 01:19:05.840 The American Cancer Society has a

NOTE Confidence: 0.86480135

01:19:05.914 --> 01:19:07.918 number of information transportation

NOTE Confidence: 0.86480135

01:19:07.918 --> 01:19:10.423 they did have before covid.  
NOTE Confidence: 0.86480135

01:19:10.430 --> 01:19:13.040 And then there's a number of  
NOTE Confidence: 0.86480135

01:19:13.040 --> 01:19:15.580 other ones cancer in careers,  
NOTE Confidence: 0.86480135

01:19:15.580 --> 01:19:16.428 triage, cancers.  
NOTE Confidence: 0.86480135

01:19:16.428 --> 01:19:18.548 Which helps with employment and  
NOTE Confidence: 0.86480135

01:19:18.548 --> 01:19:20.849 legal support and then of course,  
NOTE Confidence: 0.86480135

01:19:20.850 --> 01:19:22.660 financial grants to help people  
NOTE Confidence: 0.86480135

01:19:22.660 --> 01:19:24.470 meet needs during their treatment.  
NOTE Confidence: 0.86480135

01:19:24.470 --> 01:19:25.914 There's a cancer Connecticut  
NOTE Confidence: 0.86480135

01:19:25.914 --> 01:19:26.636 Cancer Foundation,  
NOTE Confidence: 0.86480135

01:19:26.640 --> 01:19:28.890 Lovemark Foundation and cancer care and  
NOTE Confidence: 0.86480135

01:19:28.890 --> 01:19:31.707 then this is just the one last slide.  
NOTE Confidence: 0.86480135

01:19:31.710 --> 01:19:33.594 It is long term care options  
NOTE Confidence: 0.86480135

01:19:33.594 --> 01:19:35.690 through the state of Connecticut.  
NOTE Confidence: 0.86480135

01:19:35.690 --> 01:19:36.776 Sometimes when individuals  
NOTE Confidence: 0.86480135

01:19:36.776 --> 01:19:38.586 need extra support at home.

NOTE Confidence: 0.86480135

01:19:38.590 --> 01:19:41.117 These are the programs that are available.

NOTE Confidence: 0.86480135

01:19:41.120 --> 01:19:44.054 The one thing I wanted to point out was

NOTE Confidence: 0.86480135

01:19:44.054 --> 01:19:46.744 that if if people under under age 64

NOTE Confidence: 0.86480135

01:19:46.744 --> 01:19:49.658 there is not a lot of great resources,

NOTE Confidence: 0.86480135

01:19:49.660 --> 01:19:52.530 the wait list for that is four to five years.

NOTE Confidence: 0.86480135

01:19:52.530 --> 01:19:54.150 So if anyone is interested in

NOTE Confidence: 0.86480135

01:19:54.150 --> 01:19:55.588 talking about in finding more

NOTE Confidence: 0.86480135

01:19:55.588 --> 01:19:57.128 information they can contact me.

NOTE Confidence: 0.86480135

01:19:57.130 --> 01:19:58.719 And also I would also recommend if

NOTE Confidence: 0.86480135

01:19:58.719 --> 01:20:00.493 we could call your representative and

NOTE Confidence: 0.86480135

01:20:00.493 --> 01:20:02.575 advocate that that's kind of unacceptable.

NOTE Confidence: 0.86480135

01:20:02.580 --> 01:20:04.260 If that if people need help

NOTE Confidence: 0.86480135

01:20:04.260 --> 01:20:05.740 that we should have that.

NOTE Confidence: 0.86480135

01:20:05.740 --> 01:20:08.130 So I want to thank you and I had to

NOTE Confidence: 0.86480135

01:20:08.200 --> 01:20:10.600 give a special thank you to my wife

NOTE Confidence: 0.86480135

01:20:10.600 --> 01:20:13.117 who kept the house is quiet as I've  
NOTE Confidence: 0.86480135

01:20:13.117 --> 01:20:15.510 ever heard it with our three little boys.  
NOTE Confidence: 0.86480135

01:20:15.510 --> 01:20:18.359 So it was a little leery for a little bit,  
NOTE Confidence: 0.86480135

01:20:18.360 --> 01:20:20.088 but thank you for the time.  
NOTE Confidence: 0.8691634

01:20:23.540 --> 01:20:25.230 Thank you so much, Brian.  
NOTE Confidence: 0.8691634

01:20:25.230 --> 01:20:28.560 I know I have my almost 6 year old son who  
NOTE Confidence: 0.8691634

01:20:28.560 --> 01:20:31.530 I know is gonna race in here any minute  
NOTE Confidence: 0.8691634

01:20:31.614 --> 01:20:34.686 so I can feel the stress and understand.  
NOTE Confidence: 0.8691634

01:20:34.690 --> 01:20:37.732 But that was a really beautiful talk and Ann.  
NOTE Confidence: 0.8691634

01:20:37.740 --> 01:20:39.576 Thank you so much for summarizing  
NOTE Confidence: 0.8691634

01:20:39.576 --> 01:20:41.450 all of those those resources.  
NOTE Confidence: 0.8691634

01:20:41.450 --> 01:20:42.464 That's incredibly helpful,  
NOTE Confidence: 0.8691634

01:20:42.464 --> 01:20:43.816 so really appreciate that.  
NOTE Confidence: 0.8691634

01:20:43.820 --> 01:20:45.906 And yeah, Jillian had mentioned in the  
NOTE Confidence: 0.8691634

01:20:45.906 --> 01:20:48.653 chat and of course you mentioned the brain  
NOTE Confidence: 0.8691634

01:20:48.653 --> 01:20:50.920 Tumor Support Group is really useful.

NOTE Confidence: 0.8691634

01:20:50.920 --> 01:20:51.754 Really helpful.

NOTE Confidence: 0.8691634

01:20:51.754 --> 01:20:55.090 And now you know is occurring through zoom.

NOTE Confidence: 0.8691634

01:20:55.090 --> 01:20:57.556 So we can have all of our patients and

NOTE Confidence: 0.8691634

01:20:57.556 --> 01:21:00.058 and really very remotely participate,

NOTE Confidence: 0.8691634

01:21:00.060 --> 01:21:03.168 and that's open to everyone in anyone.

NOTE Confidence: 0.8691634

01:21:03.170 --> 01:21:06.032 So I think what we can now do in

NOTE Confidence: 0.8691634

01:21:06.032 --> 01:21:08.690 the interest of time and children

NOTE Confidence: 0.8691634

01:21:08.690 --> 01:21:11.300 who are going to lose it.

NOTE Confidence: 0.8691634

01:21:11.300 --> 01:21:12.140 An adults.

NOTE Confidence: 0.8691634

01:21:12.140 --> 01:21:15.080 Perhaps we can switch to some questions

NOTE Confidence: 0.8691634

01:21:15.080 --> 01:21:17.877 so we have some in the chat box.

NOTE Confidence: 0.84093803

01:21:21.060 --> 01:21:22.818 I'm never very good at.

NOTE Confidence: 0.84093803

01:21:22.818 --> 01:21:25.990 And so I'll start at the beginning.

NOTE Confidence: 0.84093803

01:21:25.990 --> 01:21:28.524 Yes, it is possible to get the

NOTE Confidence: 0.84093803

01:21:28.524 --> 01:21:31.408 recording of this session and Renee had

NOTE Confidence: 0.84093803

01:21:31.408 --> 01:21:33.988 already provided the link for that.  
NOTE Confidence: 0.84093803

01:21:33.990 --> 01:21:37.590 It will be posted in the next few days.  
NOTE Confidence: 0.84093803

01:21:37.590 --> 01:21:42.720 I believe she said. Uhm?  
NOTE Confidence: 0.84093803

01:21:42.720 --> 01:21:44.340 Yep, so she has that.  
NOTE Confidence: 0.84093803

01:21:44.340 --> 01:21:46.440 We have a question of a friend  
NOTE Confidence: 0.84093803

01:21:46.440 --> 01:21:48.230 recently diagnosed with a glioblastoma.  
NOTE Confidence: 0.84093803

01:21:48.230 --> 01:21:48.898 She's 67.  
NOTE Confidence: 0.84093803

01:21:48.898 --> 01:21:50.902 She was otherwise in good health  
NOTE Confidence: 0.84093803

01:21:50.902 --> 01:21:52.760 before suffering a grand Mal seizure.  
NOTE Confidence: 0.84093803

01:21:52.760 --> 01:21:55.154 She had a total resection last week and is  
NOTE Confidence: 0.84093803

01:21:55.154 --> 01:21:57.619 now starting chemo and radiation therapy.  
NOTE Confidence: 0.84093803

01:21:57.620 --> 01:22:00.220 She qualifies, do too as I understand it,  
NOTE Confidence: 0.84093803

01:22:00.220 --> 01:22:02.324 a type of virus she has been exposed  
NOTE Confidence: 0.84093803

01:22:02.324 --> 01:22:04.587 to in the past for a clinical  
NOTE Confidence: 0.84093803

01:22:04.587 --> 01:22:06.702 trial being conducted at Duke where  
NOTE Confidence: 0.84093803

01:22:06.702 --> 01:22:08.637 she is currently being treated.

NOTE Confidence: 0.84093803

01:22:08.640 --> 01:22:10.518 Can you discuss the options for

NOTE Confidence: 0.84093803

01:22:10.518 --> 01:22:12.530 clinical trials that might be available?

NOTE Confidence: 0.84093803

01:22:12.530 --> 01:22:14.420 Please discuss in lay terms.

NOTE Confidence: 0.84093803

01:22:14.420 --> 01:22:16.460 Nick, do you know you've already,

NOTE Confidence: 0.84093803

01:22:16.460 --> 01:22:18.160 I think elaborated some, but.

NOTE Confidence: 0.89355797

01:22:19.320 --> 01:22:21.925 Yeah thanks. I mean, generally

NOTE Confidence: 0.89355797

01:22:21.925 --> 01:22:25.230 speaking in terms of clinical trials.

NOTE Confidence: 0.89355797

01:22:25.230 --> 01:22:27.180 There are individual factors for each

NOTE Confidence: 0.89355797

01:22:27.180 --> 01:22:29.140 trial regarding a person's eligibility,

NOTE Confidence: 0.89355797

01:22:29.140 --> 01:22:31.933 so it may be the type of

NOTE Confidence: 0.89355797

01:22:31.933 --> 01:22:33.730 tumor that they have.

NOTE Confidence: 0.89355797

01:22:33.730 --> 01:22:35.956 Even within glioblastoma Fedsmith later on,

NOTE Confidence: 0.89355797

01:22:35.960 --> 01:22:37.735 not related, and then there's

NOTE Confidence: 0.89355797

01:22:37.735 --> 01:22:39.510 certain time points at which

NOTE Confidence: 0.89355797

01:22:39.578 --> 01:22:41.538 folks can enter clinical trials.

NOTE Confidence: 0.89355797

01:22:41.540 --> 01:22:43.772 So one time point is generally  
NOTE Confidence: 0.89355797

01:22:43.772 --> 01:22:45.260 after surgery before radiation,  
NOTE Confidence: 0.89355797

01:22:45.260 --> 01:22:48.420 and then a second time point is at times when  
NOTE Confidence: 0.89355797

01:22:48.495 --> 01:22:51.589 recurrence or relapse happens in the future.  
NOTE Confidence: 0.89355797

01:22:51.590 --> 01:22:54.082 A few ways to find out about  
NOTE Confidence: 0.89355797

01:22:54.082 --> 01:22:56.050 clinical trials are number one.  
NOTE Confidence: 0.89355797

01:22:56.050 --> 01:22:57.103 Ask your doctor.  
NOTE Confidence: 0.89355797

01:22:57.103 --> 01:22:59.209 They'll be aware of the clinical  
NOTE Confidence: 0.89355797

01:22:59.209 --> 01:23:01.260 trials open at their institution.  
NOTE Confidence: 0.89355797

01:23:01.260 --> 01:23:04.070 For example here at Yale.  
NOTE Confidence: 0.89355797

01:23:04.070 --> 01:23:06.986 I'm aware of all the trials that we have  
NOTE Confidence: 0.89355797

01:23:06.986 --> 01:23:09.814 open and the investigators for the site  
NOTE Confidence: 0.89355797

01:23:09.814 --> 01:23:13.020 will be the different docs in the practice.  
NOTE Confidence: 0.89355797

01:23:13.020 --> 01:23:15.624 So at Yale is myself Doctor Romero,  
NOTE Confidence: 0.89355797

01:23:15.630 --> 01:23:16.376 Doctor Barrington.  
NOTE Confidence: 0.89355797

01:23:16.376 --> 01:23:16.749 Dr.

NOTE Confidence: 0.89355797

01:23:16.749 --> 01:23:18.614 Corbin then looking more broadly,

NOTE Confidence: 0.89355797

01:23:18.620 --> 01:23:21.406 your doctor probably will have a sense

NOTE Confidence: 0.89355797

01:23:21.406 --> 01:23:23.901 of other clinical trials open and a

NOTE Confidence: 0.89355797

01:23:23.901 --> 01:23:26.450 way to kind of search for yourself.

NOTE Confidence: 0.89355797

01:23:26.450 --> 01:23:30.257 Or do you own research is to go to

NOTE Confidence: 0.89355797

01:23:30.257 --> 01:23:31.474 websiteclinicaltrials.gov and within

NOTE Confidence: 0.89355797

01:23:31.474 --> 01:23:33.994 that there's a on the landing page.

NOTE Confidence: 0.89355797

01:23:34.000 --> 01:23:36.816 There is a field that you can enter.

NOTE Confidence: 0.89355797

01:23:36.820 --> 01:23:38.356 Search being for glioblastoma

NOTE Confidence: 0.89355797

01:23:38.356 --> 01:23:41.015 and then filter by the state that

NOTE Confidence: 0.89355797

01:23:41.015 --> 01:23:42.450 you live in your age.

NOTE Confidence: 0.89355797

01:23:42.450 --> 01:23:44.739 What type of trial you would be

NOTE Confidence: 0.89355797

01:23:44.739 --> 01:23:46.795 interested in and look that way

NOTE Confidence: 0.89355797

01:23:46.795 --> 01:23:48.799 an another way that you could

NOTE Confidence: 0.89355797

01:23:48.799 --> 01:23:50.538 search for clinical trials.

NOTE Confidence: 0.89355797

01:23:50.540 --> 01:23:52.652 Just do the national Brain Tumor  
NOTE Confidence: 0.89355797

01:23:52.652 --> 01:23:53.708 Society website [whichisbraintumor.org](http://whichisbraintumor.org).  
NOTE Confidence: 0.89355797

01:23:53.710 --> 01:23:55.726 They have a clinical trial search  
NOTE Confidence: 0.89355797

01:23:55.726 --> 01:23:58.034 feature which may be a little bit  
NOTE Confidence: 0.89355797

01:23:58.034 --> 01:23:59.828 easier for less tech savvy folks  
NOTE Confidence: 0.89355797

01:23:59.828 --> 01:24:01.810 to use in [clinicaltrials.gov](http://clinicaltrials.gov).  
NOTE Confidence: 0.77353203

01:24:04.080 --> 01:24:05.760 So I know it Chris mentioned the goal  
NOTE Confidence: 0.77353203

01:24:05.760 --> 01:24:07.479 of the Connecticut brain tumor alliances  
NOTE Confidence: 0.77353203

01:24:07.479 --> 01:24:09.345 to make Connecticut a center of  
NOTE Confidence: 0.77353203

01:24:09.396 --> 01:24:11.356 excellence for different clinical trials.  
NOTE Confidence: 0.77353203

01:24:11.360 --> 01:24:14.267 And I I. Do know that Yale has the  
NOTE Confidence: 0.77353203

01:24:14.267 --> 01:24:17.248 most number of clinical trials open,  
NOTE Confidence: 0.77353203

01:24:17.250 --> 01:24:19.371 but then Hartford Hospital and you can't  
NOTE Confidence: 0.77353203

01:24:19.371 --> 01:24:21.768 help also have different clinical trials.  
NOTE Confidence: 0.77353203

01:24:21.770 --> 01:24:24.059 So there are a variety of clinical  
NOTE Confidence: 0.77353203

01:24:24.059 --> 01:24:25.988 trials open for patients and they

NOTE Confidence: 0.77353203

01:24:25.988 --> 01:24:28.586 come and go as they fill up their

NOTE Confidence: 0.77353203

01:24:28.586 --> 01:24:30.470 recruitment goal for patients.

NOTE Confidence: 0.77353203

01:24:30.470 --> 01:24:33.011 And we're always looking to expand the

NOTE Confidence: 0.77353203

01:24:33.011 --> 01:24:35.783 number of trials that we offer here and

NOTE Confidence: 0.77353203

01:24:35.783 --> 01:24:38.130 bring that to fruition for the state.

NOTE Confidence: 0.8758151

01:24:41.530 --> 01:24:43.679 Great, and along those lines you can

NOTE Confidence: 0.8758151

01:24:43.679 --> 01:24:46.313 always reach out to us for second opinions

NOTE Confidence: 0.8758151

01:24:46.313 --> 01:24:48.550 with regards to clinical trials and care.

NOTE Confidence: 0.7630119

01:24:50.700 --> 01:24:52.785 Alright, are there any additional

NOTE Confidence: 0.7630119

01:24:52.785 --> 01:24:55.560 trials for Optune device in GBM Nick?

NOTE Confidence: 0.8271177

01:24:56.120 --> 01:24:58.544 So there is a device trial

NOTE Confidence: 0.8271177

01:24:58.544 --> 01:25:00.160 for newly diagnosed patients.

NOTE Confidence: 0.8271177

01:25:00.160 --> 01:25:02.752 It's open at Hartford Hospital and

NOTE Confidence: 0.8271177

01:25:02.752 --> 01:25:05.644 smaller hospitals around the US and in

NOTE Confidence: 0.8271177

01:25:05.644 --> 01:25:07.834 this study there comparing two groups,

NOTE Confidence: 0.8271177

01:25:07.840 --> 01:25:10.563 the first group being patients who will  
NOTE Confidence: 0.8271177

01:25:10.563 --> 01:25:12.622 receive Optune device after radiation  
NOTE Confidence: 0.8271177

01:25:12.622 --> 01:25:15.106 is finished in the standard fashion.  
NOTE Confidence: 0.8271177

01:25:15.110 --> 01:25:17.679 That's the kind of the control group  
NOTE Confidence: 0.8271177

01:25:17.679 --> 01:25:20.156 and the experimental group starts Optune  
NOTE Confidence: 0.8271177

01:25:20.156 --> 01:25:22.772 device when they start radiation therapy,  
NOTE Confidence: 0.8271177

01:25:22.780 --> 01:25:25.195 with the theory being that  
NOTE Confidence: 0.8271177

01:25:25.195 --> 01:25:27.127 starting up soon earlier.  
NOTE Confidence: 0.8271177

01:25:27.130 --> 01:25:29.237 It's just longer time of exposure to  
NOTE Confidence: 0.8271177

01:25:29.237 --> 01:25:31.339 the fields which could be beneficial,  
NOTE Confidence: 0.8271177

01:25:31.340 --> 01:25:33.629 and there may be some interaction between  
NOTE Confidence: 0.8271177

01:25:33.629 --> 01:25:35.663 electrical fields and radiation that that  
NOTE Confidence: 0.8271177

01:25:35.663 --> 01:25:37.655 could be more beneficial killing tumor  
NOTE Confidence: 0.8271177

01:25:37.655 --> 01:25:39.851 cells so that study is currently open  
NOTE Confidence: 0.8271177

01:25:39.851 --> 01:25:41.708 for enrollment in Hartford I believe,  
NOTE Confidence: 0.8271177

01:25:41.708 --> 01:25:43.328 and I and other places,

NOTE Confidence: 0.8271177

01:25:43.330 --> 01:25:44.950 and I'm I'm looking forward

NOTE Confidence: 0.8271177

01:25:44.950 --> 01:25:46.246 to seeing the results.

NOTE Confidence: 0.8271177

01:25:46.250 --> 01:25:47.866 The results of that study,

NOTE Confidence: 0.8271177

01:25:47.866 --> 01:25:49.810 probably in a couple of years

NOTE Confidence: 0.8271177

01:25:49.810 --> 01:25:51.106 off into the future.

NOTE Confidence: 0.814859

01:25:53.190 --> 01:25:54.670 Next question from email.

NOTE Confidence: 0.814859

01:25:54.670 --> 01:25:56.520 We have some concerns regarding

NOTE Confidence: 0.814859

01:25:56.520 --> 01:25:58.976 the covid vaccines for brain tumor

NOTE Confidence: 0.814859

01:25:58.976 --> 01:26:00.592 patients in active treatment,

NOTE Confidence: 0.814859

01:26:00.600 --> 01:26:02.852 particularly on the clinical

NOTE Confidence: 0.814859

01:26:02.852 --> 01:26:05.667 trial with Tim is Olumide.

NOTE Confidence: 0.814859

01:26:05.670 --> 01:26:07.959 How will we know if the code

NOTE Confidence: 0.814859

01:26:07.959 --> 01:26:09.390 vaccine is effectively brain?

NOTE Confidence: 0.814859

01:26:09.390 --> 01:26:10.738 Can't is affecting brain

NOTE Confidence: 0.814859

01:26:10.738 --> 01:26:11.749 cancer patients negatively?

NOTE Confidence: 0.814859

01:26:11.750 --> 01:26:13.440 Or if it is ineffective  
NOTE Confidence: 0.814859

01:26:13.440 --> 01:26:14.792 for brain tumor patients,  
NOTE Confidence: 0.814859

01:26:14.800 --> 01:26:16.490 is just being studied currently?  
NOTE Confidence: 0.814859

01:26:16.490 --> 01:26:19.164 Or is the data specific to this  
NOTE Confidence: 0.814859

01:26:19.164 --> 01:26:21.619 demographic not being collected at all?  
NOTE Confidence: 0.814859

01:26:21.620 --> 01:26:23.040 Are there any symptoms that  
NOTE Confidence: 0.814859

01:26:23.040 --> 01:26:24.176 cancer patients and treatment  
NOTE Confidence: 0.814859

01:26:24.176 --> 01:26:25.664 should watch out for with the  
NOTE Confidence: 0.814859

01:26:25.664 --> 01:26:26.819 first or second vaccine shot?  
NOTE Confidence: 0.7914201

01:26:30.230 --> 01:26:32.489 I'd be happy to weigh in on that huge.  
NOTE Confidence: 0.7914201

01:26:32.490 --> 01:26:34.330 I've had a number of patients of mine  
NOTE Confidence: 0.7914201

01:26:34.330 --> 01:26:36.246 asked me about the Covid vaccine and.  
NOTE Confidence: 0.83330405

01:26:38.920 --> 01:26:39.542 Generally speaking,  
NOTE Confidence: 0.83330405

01:26:39.542 --> 01:26:41.097 and pretty much essentially in  
NOTE Confidence: 0.83330405

01:26:41.097 --> 01:26:42.619 every persons case I recommend,  
NOTE Confidence: 0.83330405

01:26:42.620 --> 01:26:45.329 they would proceed with the covid vaccine.

NOTE Confidence: 0.83330405

01:26:45.330 --> 01:26:46.742 To protect themselves against

NOTE Confidence: 0.83330405

01:26:46.742 --> 01:26:48.507 Covid covid's very serious illness,

NOTE Confidence: 0.83330405

01:26:48.510 --> 01:26:51.030 I've losted patients of mine and friends

NOTE Confidence: 0.83330405

01:26:51.030 --> 01:26:53.780 of mine to covid as I'm, I'm sure,

NOTE Confidence: 0.83330405

01:26:53.780 --> 01:26:55.820 pretty probably everyone on the call

NOTE Confidence: 0.83330405

01:26:55.820 --> 01:26:57.880 has over half a million Americans

NOTE Confidence: 0.83330405

01:26:57.880 --> 01:27:00.289 have died from covid and the vaccines

NOTE Confidence: 0.83330405

01:27:00.289 --> 01:27:02.551 have been proven safe and effective

NOTE Confidence: 0.83330405

01:27:02.551 --> 01:27:04.394 to reduce severe covid essentially

NOTE Confidence: 0.83330405

01:27:04.394 --> 01:27:06.506 eliminate the chance of severe covid,

NOTE Confidence: 0.83330405

01:27:06.510 --> 01:27:09.978 so there appears to be no.

NOTE Confidence: 0.83330405

01:27:09.980 --> 01:27:13.214 Real changing of a person's body or

NOTE Confidence: 0.83330405

01:27:13.214 --> 01:27:16.579 biology that would impact GBM in any way,

NOTE Confidence: 0.83330405

01:27:16.580 --> 01:27:18.340 either positive or negative,

NOTE Confidence: 0.83330405

01:27:18.340 --> 01:27:20.100 with the covid vaccine.

NOTE Confidence: 0.83330405

01:27:20.100 --> 01:27:23.047 Some folks do get a reaction as  
NOTE Confidence: 0.83330405

01:27:23.047 --> 01:27:26.068 they are like immune system becomes  
NOTE Confidence: 0.83330405

01:27:26.068 --> 01:27:29.380 immunized by the vaccine is my.  
NOTE Confidence: 0.83330405

01:27:29.380 --> 01:27:31.540 Reports I'm hearing or generally it's  
NOTE Confidence: 0.83330405

01:27:31.540 --> 01:27:34.117 after the shot within 24 to 48 hours  
NOTE Confidence: 0.83330405

01:27:34.117 --> 01:27:36.100 lasting for a short period of time.  
NOTE Confidence: 0.83330405

01:27:36.100 --> 01:27:37.700 Generally that's the 24 hours  
NOTE Confidence: 0.83330405

01:27:37.700 --> 01:27:39.300 of just feeling something like  
NOTE Confidence: 0.83330405

01:27:39.353 --> 01:27:40.577 fatigue or minor fever,  
NOTE Confidence: 0.83330405

01:27:40.580 --> 01:27:42.566 and these can be treated with  
NOTE Confidence: 0.83330405

01:27:42.566 --> 01:27:43.890 over the counter medications  
NOTE Confidence: 0.83330405

01:27:43.951 --> 01:27:45.376 like Tylenol or Mot ring.  
NOTE Confidence: 0.83330405

01:27:45.380 --> 01:27:47.300 And then you know that's it,  
NOTE Confidence: 0.83330405

01:27:47.300 --> 01:27:48.875 then you you've been vaccinated  
NOTE Confidence: 0.83330405

01:27:48.875 --> 01:27:51.472 and and you will no longer be at  
NOTE Confidence: 0.83330405

01:27:51.472 --> 01:27:53.057 risk of getting secret Cove.

NOTE Confidence: 0.83330405

01:27:53.060 --> 01:27:55.620 It's so I can recommend everyone I meet.

NOTE Confidence: 0.83330405

01:27:55.620 --> 01:27:57.546 Please proceed with getting your covid

NOTE Confidence: 0.83330405

01:27:57.546 --> 01:27:59.779 vaccine and that's how will crush Covid.

NOTE Confidence: 0.7997054

01:28:01.420 --> 01:28:04.450 That's a whole other weapon alright.

NOTE Confidence: 0.7997054

01:28:04.450 --> 01:28:05.878 And there's guidelines now

NOTE Confidence: 0.7997054

01:28:05.878 --> 01:28:08.020 from the CDC in terms of

NOTE Confidence: 0.8234188

01:28:08.020 --> 01:28:10.267 correct. Also, I will point out there

NOTE Confidence: 0.8234188

01:28:10.267 --> 01:28:13.275 was a hold placed on the single shot

NOTE Confidence: 0.8234188

01:28:13.275 --> 01:28:15.250 Johnson and Johnson vaccine after

NOTE Confidence: 0.8234188

01:28:15.317 --> 01:28:17.655 there were a small number of cases,

NOTE Confidence: 0.8234188

01:28:17.660 --> 01:28:19.998 a few cases reported of a possible

NOTE Confidence: 0.8234188

01:28:19.998 --> 01:28:21.590 Association with blood clotting,

NOTE Confidence: 0.8234188

01:28:21.590 --> 01:28:22.658 something called cerebral

NOTE Confidence: 0.8234188

01:28:22.658 --> 01:28:24.438 venous sign from Sinus Trumbo,

NOTE Confidence: 0.8234188

01:28:24.440 --> 01:28:27.135 SIS and so out of several million

NOTE Confidence: 0.8234188

01:28:27.135 --> 01:28:30.140 doses of the vaccine given just a.  
NOTE Confidence: 0.8234188

01:28:30.140 --> 01:28:32.606 Few folks had developed the thrombosis,  
NOTE Confidence: 0.8234188

01:28:32.610 --> 01:28:34.695 so it's still somewhat unclear  
NOTE Confidence: 0.8234188

01:28:34.695 --> 01:28:37.662 if there is a even an actual  
NOTE Confidence: 0.8234188

01:28:37.662 --> 01:28:40.026 relation of of that or not.  
NOTE Confidence: 0.8234188

01:28:40.030 --> 01:28:42.655 But with a person with any increased  
NOTE Confidence: 0.8234188

01:28:42.655 --> 01:28:44.761 risk factors of getting deep  
NOTE Confidence: 0.8234188

01:28:44.761 --> 01:28:47.026 vein thrombosis or blood clots,  
NOTE Confidence: 0.8234188

01:28:47.030 --> 01:28:50.326 the other two vaccines available in the US.  
NOTE Confidence: 0.8234188

01:28:50.330 --> 01:28:52.646 The Pfizer and Moderna brand vaccines  
NOTE Confidence: 0.8234188

01:28:52.646 --> 01:28:55.132 both don't have any known Association  
NOTE Confidence: 0.8234188

01:28:55.132 --> 01:28:58.170 with blood clots and could be something  
NOTE Confidence: 0.8234188

01:28:58.170 --> 01:29:01.247 that's definitely reasonable for a person to.  
NOTE Confidence: 0.8234188

01:29:01.250 --> 01:29:03.800 Receive alright  
NOTE Confidence: 0.8943112

01:29:03.800 --> 01:29:08.758 a few more here. Can you elaborate Nick?  
NOTE Confidence: 0.8943112

01:29:08.758 --> 01:29:12.028 Just real quick, maybe Methley did versus

NOTE Confidence: 0.79012245

01:29:12.030 --> 01:29:12.802 unmethylated. Sure,

NOTE Confidence: 0.79012245

01:29:12.802 --> 01:29:15.504 so we now know there are two

NOTE Confidence: 0.79012245

01:29:15.504 --> 01:29:17.680 main subtypes of glioblastoma

NOTE Confidence: 0.79012245

01:29:17.680 --> 01:29:19.968 methylated and unmethylated,

NOTE Confidence: 0.79012245

01:29:19.970 --> 01:29:23.379 and that refers to the status of

NOTE Confidence: 0.79012245

01:29:23.379 --> 01:29:27.117 the gene for the MGMT enzyme and.

NOTE Confidence: 0.79012245

01:29:27.120 --> 01:29:29.904 When the gene is methylated within the DNA,

NOTE Confidence: 0.79012245

01:29:29.910 --> 01:29:33.334 the gene is turned off and those patients

NOTE Confidence: 0.79012245

01:29:33.334 --> 01:29:36.173 don't have the gene active and so

NOTE Confidence: 0.79012245

01:29:36.173 --> 01:29:39.468 they don't have much of the MGMT enzyme.

NOTE Confidence: 0.79012245

01:29:39.470 --> 01:29:41.666 An unmethylated gene is active.

NOTE Confidence: 0.79012245

01:29:41.670 --> 01:29:42.768 It's turned on.

NOTE Confidence: 0.79012245

01:29:42.768 --> 01:29:45.330 Unmethylated has high levels of the enzyme,

NOTE Confidence: 0.79012245

01:29:45.330 --> 01:29:47.520 and temozolamide is less effective,

NOTE Confidence: 0.79012245

01:29:47.520 --> 01:29:49.683 so it ends all of my damages

NOTE Confidence: 0.79012245

01:29:49.683 --> 01:29:52.280 DNA as its mechanism of action.  
NOTE Confidence: 0.79012245

01:29:52.280 --> 01:29:54.110 MGMT enzyme reverses the damage,  
NOTE Confidence: 0.79012245

01:29:54.110 --> 01:29:55.326 so 10 is old.  
NOTE Confidence: 0.79012245

01:29:55.326 --> 01:29:56.846 Might still has some effectiveness  
NOTE Confidence: 0.79012245

01:29:56.846 --> 01:29:58.500 and unmethylated patients,  
NOTE Confidence: 0.79012245

01:29:58.500 --> 01:30:00.660 but it's it's less than methyl  
NOTE Confidence: 0.79012245

01:30:00.660 --> 01:30:03.671 lated and so we believe that just  
NOTE Confidence: 0.79012245

01:30:03.671 --> 01:30:06.647 metallated patients in general or more.  
NOTE Confidence: 0.79012245

01:30:06.650 --> 01:30:08.430 Susceptible to the benefits of  
NOTE Confidence: 0.79012245

01:30:08.430 --> 01:30:09.854 radiation and chemo therapies,  
NOTE Confidence: 0.79012245

01:30:09.860 --> 01:30:13.073 and that may be why the prognosis is better.  
NOTE Confidence: 0.79012245

01:30:13.080 --> 01:30:15.600 And then there may be other  
NOTE Confidence: 0.79012245

01:30:15.600 --> 01:30:17.740 biological factors that just make.  
NOTE Confidence: 0.79012245

01:30:17.740 --> 01:30:19.488 Methylate is subtype patients  
NOTE Confidence: 0.79012245

01:30:19.488 --> 01:30:21.236 better responders to therapy,  
NOTE Confidence: 0.79012245

01:30:21.240 --> 01:30:23.420 and they may do better,

NOTE Confidence: 0.79012245

01:30:23.420 --> 01:30:27.344 and these are still kind of being worked out.

NOTE Confidence: 0.8169612

01:30:28.990 --> 01:30:31.666 Great in the interest of time.

NOTE Confidence: 0.8169612

01:30:31.670 --> 01:30:33.910 Will take a few more,

NOTE Confidence: 0.8169612

01:30:33.910 --> 01:30:36.346 one here asking to provide insight

NOTE Confidence: 0.8169612

01:30:36.346 --> 01:30:38.543 of my experience of affectedness

NOTE Confidence: 0.8169612

01:30:38.543 --> 01:30:41.507 of five Ala in extent perception,

NOTE Confidence: 0.8169612

01:30:41.510 --> 01:30:43.745 overall survival of tumors as

NOTE Confidence: 0.8169612

01:30:43.745 --> 01:30:45.980 compared to intra operative MRI.

NOTE Confidence: 0.8169612

01:30:45.980 --> 01:30:48.871 In my personal experience I really use

NOTE Confidence: 0.8169612

01:30:48.871 --> 01:30:52.227 an rely on the Inter operative MRI.

NOTE Confidence: 0.8169612

01:30:52.230 --> 01:30:54.540 That's just my strategy and

NOTE Confidence: 0.8169612

01:30:54.540 --> 01:30:57.600 seems to work the best for me.

NOTE Confidence: 0.8169612

01:30:57.600 --> 01:30:58.916 Man we do review.

NOTE Confidence: 0.8169612

01:30:58.916 --> 01:31:01.791 We we do first of all manage a

NOTE Confidence: 0.8169612

01:31:01.791 --> 01:31:04.626 very large database that has all of

NOTE Confidence: 0.8169612

01:31:04.626 --> 01:31:07.907 our patients and outcomes that we  
NOTE Confidence: 0.8169612

01:31:07.907 --> 01:31:10.692 follow which we continually analyze,  
NOTE Confidence: 0.8169612

01:31:10.700 --> 01:31:12.944 and it does support the use  
NOTE Confidence: 0.8169612

01:31:12.944 --> 01:31:15.440 of of our current strategies.  
NOTE Confidence: 0.8169612

01:31:15.440 --> 01:31:20.326 So we have been satisfied with that.  
NOTE Confidence: 0.8169612

01:31:20.330 --> 01:31:22.030 Next one, enjoy the presentations.  
NOTE Confidence: 0.8169612

01:31:22.030 --> 01:31:23.800 I've recently joined the staff  
NOTE Confidence: 0.8169612

01:31:23.800 --> 01:31:25.941 at Rutgers in New Brunswick after  
NOTE Confidence: 0.8169612

01:31:25.941 --> 01:31:27.466 16 years in Kansas City.  
NOTE Confidence: 0.8169612

01:31:27.470 --> 01:31:28.830 Looking forward to connecting  
NOTE Confidence: 0.8169612

01:31:28.830 --> 01:31:29.850 professionally with us.  
NOTE Confidence: 0.8169612

01:31:29.850 --> 01:31:32.230 Sorry, that was just to the panelists.  
NOTE Confidence: 0.8169612

01:31:32.230 --> 01:31:35.176 We look forward to connecting with  
NOTE Confidence: 0.8169612

01:31:35.176 --> 01:31:39.840 you as well. That was the last one.  
NOTE Confidence: 0.8169612

01:31:39.840 --> 01:31:41.178 And someone just to thank you,  
NOTE Confidence: 0.8169612

01:31:41.180 --> 01:31:43.499 so you're welcome.

NOTE Confidence: 0.8169612

01:31:43.500 --> 01:31:46.111 I just want to again thank Chris

NOTE Confidence: 0.8169612

01:31:46.111 --> 01:31:47.740 Cassano from Connecticut Brain

NOTE Confidence: 0.8169612

01:31:47.740 --> 01:31:49.520 Tumor Alliance Renee Gaudet,

NOTE Confidence: 0.8169612

01:31:49.520 --> 01:31:51.124 who thankfully organized all

NOTE Confidence: 0.8169612

01:31:51.124 --> 01:31:53.530 of this and put this together.

NOTE Confidence: 0.8169612

01:31:53.530 --> 01:31:56.330 She always does such an outstanding job,

NOTE Confidence: 0.8169612

01:31:56.330 --> 01:31:57.938 and then my Co.

NOTE Confidence: 0.8169612

01:31:57.938 --> 01:32:00.340 Panelist, Nick Blonde and Bruce McGibbon,

NOTE Confidence: 0.8169612

01:32:00.340 --> 01:32:02.345 and Brian Gin for really

NOTE Confidence: 0.8169612

01:32:02.345 --> 01:32:03.548 their outstanding talks.

NOTE Confidence: 0.8169612

01:32:03.550 --> 01:32:06.357 All in honor of Doctor Susie Baras,

NOTE Confidence: 0.8169612

01:32:06.360 --> 01:32:08.360 who is an amazing person,

NOTE Confidence: 0.8169612

01:32:08.360 --> 01:32:10.910 continuing to be treated for for

NOTE Confidence: 0.8169612

01:32:10.910 --> 01:32:13.094 glioblastoma and and really giving

NOTE Confidence: 0.8169612

01:32:13.094 --> 01:32:15.922 back and making sure that patients can

NOTE Confidence: 0.8169612

01:32:15.922 --> 01:32:18.507 receive the same level of care that.  
NOTE Confidence: 0.8169612

01:32:18.510 --> 01:32:21.062 She has so we look forward to more  
NOTE Confidence: 0.8169612

01:32:21.062 --> 01:32:23.488 of these seminars in the future.  
NOTE Confidence: 0.8169612

01:32:23.490 --> 01:32:26.088 And if there's any more comments  
NOTE Confidence: 0.8169612

01:32:26.088 --> 01:32:27.387 from my panelists.  
NOTE Confidence: 0.8169612

01:32:27.390 --> 01:32:28.755 I'll turn it over to you guys  
NOTE Confidence: 0.8169612

01:32:28.755 --> 01:32:29.840 before we say goodnight.  
NOTE Confidence: 0.82497567

01:32:33.020 --> 01:32:35.194 Just that want to echo what you said?  
NOTE Confidence: 0.82497567

01:32:35.200 --> 01:32:37.104 Thank you for the help in organizing  
NOTE Confidence: 0.82497567

01:32:37.104 --> 01:32:38.770 and thanks everyone for joining and  
NOTE Confidence: 0.82497567

01:32:38.770 --> 01:32:40.360 pleasure to be here this evening.  
NOTE Confidence: 0.85076165

01:32:41.880 --> 01:32:44.196 Come to our tumor support groups.  
NOTE Confidence: 0.85076165

01:32:44.200 --> 01:32:45.970 Email us if you have any  
NOTE Confidence: 0.85076165

01:32:45.970 --> 01:32:47.815 questions or want any additional  
NOTE Confidence: 0.85076165

01:32:47.815 --> 01:32:49.597 opinions or conversations.  
NOTE Confidence: 0.85076165

01:32:49.600 --> 01:32:51.530 Brain tumor surgery at yale.edu.

NOTE Confidence: 0.85076165

01:32:51.530 --> 01:32:54.890 Happy to connect you. Alright.

NOTE Confidence: 0.85076165

01:32:54.890 --> 01:32:56.576 Thank you, have a good night.

NOTE Confidence: 0.7003849

01:32:58.910 --> 01:33:02.166 Did everyone thanks?