I think we can get started. It is 602. So hello and welcome to the first annual Susan Barris MD CME events for Brain Tumor Symposium. It’s really an exciting way to kick off the brain Tumor Awareness Month of May. And, of course, we could not have done tonight. I might as well just start by thanking Renee, got it for her unbelievable organization of the evening, so thank you. Immediately to her to my panelists who are here, of course, who will introduce as they start their talks and to Chris Cassano,
who is the President of Connecticut
Brain Tumor Alliance, who has been a huge supporter of brain tumor patients throughout the state of Connecticut of our work here at Smilow. And it’s really great to partner in this event tonight, so Chris, if you want to say a few words, sure, thank you. Doctor Moliterno and. Other panelists and when they bring us together and at first doctors to see parents for the first annual Susie Breast Symposium, I’m looking forward to being
part of this night and, you know, sharing are more about our organization with all the branches are pasted family stuff, but again, we’re excited.

We’re happy we want to be a part of your journey with you and just know that we’re here. We understand it, and that we’re a phone call or email away so.

We’re all patients and survivors, caregivers, we’ve been in your shoes. We understand it, and that we’re a phone call or email away so.

We’re just really excited to be partnering with GAIL on this presentation, and you know, you’re in your head, so thank you very much looking forward to it.

Terrific, thank you again for being here.
Alright so we will start the evening.

I'm going to start off by sharing my screen.

Can you see my screen? Yeah, OK. Alright.

One second hold on.

Started at the wrong part of the talk.

So again, thank you for being here.

I want to tell you a little bit about the person who this is named after Doctor Susan Baras.

She is a patient of mine,

a patient of Nicks and Justin incredible person and survivor. I met her.

It'll be 3 1/2 years ago soon knock Wood,

which Susie makes me do an an.

I do anyway but she had had
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,
that there could be more aggressive ways to treat glioblastoma even if it involved the motor strip.

So thankfully she was referred to me. We performed an awake craniotomy. She did beautifully and achieved a gross total resection and she went home two days after surgery.

This picture taken at the path of hope of the Connecticut, Connecticut Brain Tumor Alliance a few weeks later as Susie after she ran, not the 5K that it was supposed to be, but the 5K twice so she ran the 10K just a couple of weeks after her awake craniotomy.
So she’s an incredible person.

They featured her recently on the cover of medicine at Yale.

As she says herself, she was never very philanthropic person.

But having a brain tumor really made her become one and she recognized the excellence in care that she received at Yale and that she continues to receive it.

Yale, she wanted to make sure that other people could have the same type of care that she did and so we formed this Susan Baras MD fund for the male brain tumor surgery program.

It’s going to fund seminars such as
00:04:43.653 --> 00:04:45.870 this for education and collaboration.

00:04:45.870 --> 00:04:48.495 The community and to enhance patient care throughout the state of Connecticut.

00:04:50.590 --> 00:04:52.158 pretty excited.

Yesterday was a press release, a children’s book that I wrote.

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

00:05:02.770 --> 00:05:04.246 Parker’s water to ride, which was part of a new series.

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

00:05:07.090 --> 00:05:09.448 We published it through the children’s Brain Tumor Foundation illustrations.

00:05:11.020 --> 00:05:12.560 I had initially done,
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.
And I, I think you know, this will be the beginning of a really nice series of seminars and lectures to come. So for me as a neurosurgeon, what I was going to focus on, which is what my practices is primary brain tumor, surgical strategies and give that overview. And then we’ll segue into neuron koleji radiation oncology and then supportive care. So what we do here at Yale is really in terms of our brain tumor practice. We have the highest volume of brain tumor patients in the state of Connecticut, and we perform the most brain
tumor surgeries as well.

We're fortunate to have so many partners in the community, and I'm really proud of the fact that a large part of my practice in particular comes from other neurosurgeons in the community. Other physicians in the community, and across different system hospitals. Which I think really goes to the fact that we're all here to help patients and we're all here to make sure that they receive the best possible care.

As a result, the cases that we see and that we take care of tend to be more complex cases,
and so gliomas and eloquent cortex similar to Susie’s tumor as well as skull based tumors and more aggressive meningiomas, which I’ll talk a little bit about. We’re fortunate that every tumor that we biopsy respect at Yale undergoes full exome sequencing and I am the director of the Multidisciplinary Tumor Board and the Precision Brain Tumor Board. And each week we discuss all of our patients and really rely on the precision report for making targeted, ANAN more precision care decisions. This is just a sampling of cases.
that I do pretty routinely.

My fellow had pulled my more recent cases and so again, you know, glioblastomas here. I don’t know if you can see my mouse or not and it can you see? Good. And snuggly blastoma again in the motor area. Some big CP angle tumors. Other nasty glioblastomas. Really aggressive meningiomas here where we then reconstruct the orbit. Additional again, so annoyed wing meningiomas. Brain stem tumors. This patient down here had been operated on several other by
several other neurosurgeons and then sought care here and again. Just just a rough example of what we see and do on a pretty regular basis. The goals are primary brain tumor surgery are really quite simple. Of course, one is to establish a diagnosis to help guide further. Therapy is, but really it’s important. A lot of times to respect as much tumor as possible to maintain or improve quality of life. We also know that that it has a huge impact in the overall
survival and progression free survival across various tumors.

And then I'll talk about a little bit as well.

And then, as Nick will will discuss, it's really important for clinical trial enrollment as well.

Because of course, we all know for for some of the tumors the treatment does not stop at just surgery alone.

One thing that I think we have become really known for is how do we? How are we able to remove tumors that are otherwise deemed inoperable like Susie's an?
I think there’s a few reasons as to why one has sub specialized expertise and so all we do day in and day out is brain tumor surgery. I don’t do any other type of surgery except for microvascular decompression which is a type of skull based surgery but beyond that, everything I do is focused on brain tumor surgery and I think there’s something to be said for doing that literally every single day. What’s more is that we’re subspecialized even based on the type of tumor,
and so for primary brain tumors, which is my focus, Joe Pete Mayer, who’s in the picture with me, has since retired and blend to my, has really stepped in and and has also been doing a lot of primary brain tumor surgeries. But Veronica Chang, as you can see, there is the leader of our meta static program and she focuses on static program and she focuses on metastatic brain tumor surgery. And so I think that that really adds a lot of value because we’re treating the patient. For the the overall cancer or
the overall Uncle logic problem. There's other types of things in terms of the resources and infrastructure that's really important to making neurosurgery successful, and so it's standard. You know, everyone has GPS systems. I also tend to use an ultrasound, which gives real time feedback, and you can see there is a picture of me there using the ultrasound, there's a really large meningioma and there's the middle cerebral artery that's black running through it, so having that frame of
reference is always important.

And then the intra operative MRI.

So we’re the only center in the in the state that has an intra operative MRI really. Actually quite helpful,

Actually quite helpful, and I’ll show an example as to why even when we do these these surgeries day in and day out,

we also have hybrid intra operative angio suite capability is if we need to embolize a tumor and then I think what really goes back to the sub
specialized expertise is the ability to do more sophisticated microsurgery. And I’ll show an example. Those as well, so frequently doing functional mapping, motor mapping, language mapping during awake craniotomy, for instance with Susie allowed us to safely remove as much tumor as possible while maintaining the function of the brain. And that’s the goal in those surgeries. This was a slide that I was given by Bob Carter who’s the chair of mass general.
and I think this is a really interesting and good.

Example, this basically shows that patient mortality is lowest for cranial surgery among surgeons who perform cranial surgery the most and more regularly, and I think that really does hold true, particularly for more complex brain tumor surgeries, and certainly having a high volume of cases and doing these surgeries day in and day out, I think really does. Influence outcomes.

This was a patient I shared with Nick and I think this is a good example.
00:12:40.378 --> 00:12:43.393 of of why it’s so important to be collaborative and to be collaborative with other people in the
Community to ensure that patients really receive the best care possible. And so when he presented he was 63 and had an expressive aphasia and so the top left you can see here this was his preoperative scan that was done in December 2018 and you can see the tumor here. Left sided GBM underneath the language area so obviously explaining his aphasia. This is his post OP CIT and although it’s not an MRI you can make out...
that there’s still a fair amount of tumor even after what was said to be a resection. This is his scan in January, so a few weeks later and you can see that the tumor that we see here is very similar to what you see in the initial preoperative. Scan and unfortunately I see patients like this often an where they’ve undergone a quote, unquote open biopsy, or they pad, you know, limited reception, and that, really, you know,
is a shame because there are opportunities to be more aggressive in others hands. So Nick actually saw the patient and noticed how aphasic he was and thought. Well, maybe he could have more of a reception. Performed so he sent him to me and a few days later had another functional MRI which allows us to see the function of the brain and so Broca’s area can’t see it in this picture. But it was just overlying over here, and then the arcuate fasciculi. You’re starting to see there. I was able to do an awake craniotomy on him,
which I'll show you an example of an
then this is his post opera section,
and of course, having the tumor
which I'll show some examples of.
This is a short video, but I think. Few minutes, not all that short, but I think a really good example
of what an awake craniotomy is
and how we are able to to really
push the extent of resection.
To a Fox 61 exclusive now it’s a nightmare
scenario when undergoing surgery.
Waking up in the middle of the
procedure and knowing what’s going on.
But in some cases that can be a lifesaver, lifesaver and necessary. We're going to explain that in a moment, but first we want to introduce you to a man named Andy. Andy is a husband and father of two kids and a nurse. Another interesting fact about him, he's also a professionally trained singer. He's even performed with his church choir at Carnegie Hall, but Andy felt his entire life come to a halt. When he was diagnosed with brain cancer, he needed surgery to remove as much of a tumor as possible. That tumor in the part of his
brain that controls speech.

And, yes, singing.

That’s where a special surgery comes in.

Surgeons at Yale, New Haven Smilow Cancer Hospital have perfected a procedure called in awake craniotomy.

They invited us into the operating room and we did not hesitate to see this incredible procedure first hand.

I think you’re right.

In an operating room at Yale, New Haven Hospital. Doctors are working to remove it.

Tumor from the brain of a 31 year old man named Andy. He is a singer.
Yeah a husband and father of two.

Surgeries waking up in the middle of the operation would be a disaster.

Today an anesthesiologist doing his best to make sure Andy does just that.

Any Stacy surgeons have drilled through his skull and have already begun to remove part of a tumor. Located on the left side of his temporal lobe, the area which controls language.

Medical staff puts a microphone on it if not for our cameras it so the entire room, including the operating surgeon,
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. I
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.
Has mastered multi-tasking, operating and listening.

Great Doctor Moliterno and her team worked diligently to remove as much of the tumor as possible, which he can’t see are critical microscopic language fibers which are splayed over the tumor. The best way to try to remove as much tumor and preserve his language is to do it with him away. Get too close to those critical fibers. You’ll know it. What do you do in a chair? Problem. I don’t know.
Little bit of confusion, so that’s a great way to me to tell me to, even though there might be a little bit of tumor there, the risk and benefit of removing that tumor and having him not speak for the rest of his life. Tells you exactly what the right decision is. If he was asleep, I would have had no idea as Doctor, Marla Turner continues operating in a safer spot and he surprises us when this happens. He does in the middle of surgery. Andy, a classically trained singer, shares his talent.

You wanna half hours
into the procedure dramal Aterno decides it’s time to wrap up. The surgeons are done with the first part of the surgery. So what’s happening as they’re bringing in an hour? I machine and they’re going to look at the work that they did and see how much of the tumor they were able to remove. Orange window and are able to sit with Doctor Maternal. She analyzes her work. The before here is the tumor answer. You don’t have to go back in. Him being awake allowed us to get that outcome and preserve his function.
00:19:22.890 --> 00:19:25.081 Now Andy was back home with his
family two days after surgery,
NOTE Confidence: 0.8078372
00:19:25.081 --> 00:19:27.029 five days after the surgery,
NOTE Confidence: 0.8078372
00:19:27.030 --> 00:19:28.760 he was able to sing at his son’s baptism.
NOTE Confidence: 0.8078372
00:19:28.760 --> 00:19:31.856 He’s also saying again with his
church choir and the Yale Camerata,
NOTE Confidence: 0.8078372
00:19:31.860 --> 00:19:33.786 which is a professional choir.
NOTE Confidence: 0.8078372
00:19:33.786 --> 00:19:35.999 Just a couple of weeks ago and he is
undergoing chemotherapy and radiation.
NOTE Confidence: 0.8078372
00:19:36.000 --> 00:19:37.730 But he does say he’s feeling
good and of course, warm wishes.
NOTE Confidence: 0.8078372
00:19:37.730 --> 00:19:40.250 Kim is equal fast.
NOTE Confidence: 0.8078372
00:19:40.250 --> 00:19:42.208 Not every patient needs to be awake
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 reception.
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 --> 00:20:28.888 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
single day removing tumors, brain tumors,

So this is the beauty of the intra

There's a little bit of residual tumor,

a little bit there that really just got

tucked underneath the brain and hidden.

And this is our intra operative

MRI that runs back and forth

between two of our operating rooms.

So I went back while he was on

the table and didn’t take much

much time at all and was able to

achieve a gross total resection.

He had, you know,

an MGM T unmethylated tumor.
Pretty poor in terms of prognosis you would think. He went on to be managed by. You are comparing ofner oncology Ann and underwent stupid therapy and then ended up getting enrolled in one of our own homegrown novel clinical trials that Ranjeet Bindra had developed. He progressed, he was enrolled in another clinical trial and then went on to bevacizumab and then progressed about four years after surgery, 3 1/2 years after surgery on Bevis is in math.
It was held that you can see.

Here is his recurrence and I took him back for surgery. This time I did a wider resection and what’s nice is as I had mentioned.

We performed whole exome sequencing on every patient and so here what you can see basically is he has a hyper mutated phenotype and we know that these tumors can be more susceptible and more amenable to treatment with immune mediated checkpoint inhibitors.

So post operatively, he was put on niveau. He progressed despite Niveau an Avastin, an I really respected him I in 2019 and you can see him there with Monica Lawrence,
00:22:25.930 --> 00:22:28.618 one of our outstanding or oncology piece.
00:22:28.620 --> 00:22:31.308 So he's currently doing well on deficits.
00:22:31.310 --> 00:22:36.679 Maben Niveau 7 1/2 years after his
00:22:36.680 --> 00:22:40.090 I trying to sit here and say that all of
00:22:40.183 --> 00:22:43.599 our GBM patients are living 7 1/2 years.
00:22:43.600 --> 00:22:47.440 I certainly wish that
00:22:47.440 --> 00:22:48.194 I am.
00:22:48.194 --> 00:22:50.456 Hopefully that will be the case,
00:22:50.460 --> 00:22:52.707 but I do know that if he
00:22:52.707 --> 00:22:54.750 had stopped at that biopsy,
00:22:54.750 --> 00:22:56.898 he definitely would not be here.
00:22:56.900 --> 00:22:59.000 7 1/2 years later and so
00:22:59.000 --> 00:23:00.400 really being aggressive with
00:23:00.400 --> 00:23:02.307
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.
He had complications with stroke and MI, and then intractable seizures and weaknesses. So when he presented to me in 2019, he had this tumor and he was in a wheelchair. His weakness improved and his seizures improved as well. But the question is, could this have been better predicted and managed differently the first time? And this is where our work behind the scenes is really important. Even within neurosurgery, Moroccan ALS lab, and others, as well as others,
have really understood what the somatic genomic landscape of approximately 80% of grade one meningioma czar and more recently we have correlated this with outcomes. I won’t go into the details now, but would be happy to do so in a talk in the future, but basically there’s six subgroups of meningiomas based on their genomic driver mutation, and this was published in Science in 2013. When I was a fellow at Memorial Sloan Kettering, I did work that really understood that more aggressive meningiomas
could present Dinovo or they could progress from low grade to high grade, much like gliomas. Marotte also looked at that from a more basic science perspective and Anne found the mechanisms to explain that usually these tumors are NFT mutated, were in Mail, acquire chromosomal instability or smart Bianco mutation, and then become Dinovo atypical meningoas as opposed to the ones that harbor Terr promoter mutations. And progress. What I was alluding to before was
that in a recent publication of ours a few months ago, for the first time we have identified these molecular subgroups of meningiomas to be independent predictor of recurrence, and so we found that there is divergent clinical courses amongst meningiomas. For aggressive subgroups, which are NFT mutated tumors, trap 7 mutated tumors and those that have molecules that are mutated in PR. kinase and hedgehog signaling pathways versus more quiescent types of meningiomas that have
Kayla for polar two ANS mark be one
commutations and so we have even
found that this holds true amongst
grade one meningiomas and so grade
one convexity chip shot meningioma,
like the one that I just described.
Is not necessarily a grade
one benign meningioma,
and so it’s really important for
meningiomas in particular to
realize that they’re not as benign
as everyone thinks of them to be.
So when we go back to this
patient could have that.
Could this have been better
predicted and manage the first time? And the answer is yes, and so this is an example of our whole exome sequencing report that we have on each of our patients tumors and what we found. As you can see here is first of all, The Histology with atypical meningioma, but we found that the patient had an NF2 mutation. Ann had chromosomal instability, particularly with the chromosome 1P deletion, suggesting that this was a denovo atypical meningioma, and so this was a typical from the start, and typically we followed...
these patients either closely, very closely, or we radiate up front, which is more more typically what we do. And so again, another example of how really understanding the tumors is important. An back in the Science Paper 2013 and more recent in a publication in Journal of Neurosurgery, we also have shown that these genomic subgroups can be predicted based on intra cranial location. So we use this all the time in our clinics where just understanding where the location is will say yeah,
that’s likely to be this mutated meningioma.

And based on the neuron College paper recently,

summers are going to behave more aggressively and it really does influence how we treat these patients.

Of course, not everything ends with surgery. I wish that it did,

and that you know patients could be cured and move on,

but unfortunately that’s not the case.

And what we deal with,

and so that’s why we have our precision brain tumor treatment program an our tumor board that we need and discuss weekly.
And of course, we could not do what we do without support of our patients. And so Connecticut Brain Tumor Alliance has been amazing supporting. Some of the meningioma research especially all the clinical correlations, research that I just discussed as well as patients themselves. The Love Mark Foundation on TV and Jamie Lovemark dream Love Mark is a PGA golfer. They’ve donated nearly a half $1,000,000 with every penny going to our patients,
and so we can’t thank them enough because it. It really does help in terms of their care. And a special thank you to our primary brain tumor surgery clinical team. So if and when you ever speak to someone from my office, Jillian Bongard, who's all the way to the left, she is one of our APR ends. She’s an absolute superstar. Marcy Diggs, another superstar. Actually, they’re all superstars Kelly Mishad, who is one of our Nurse coordinators Marcia Williams, and then Amorini Pina,
who is our administrative assistant.

We can be reached at anytime and so any questions just feel free
to give us a call or to email me.

Alright, so that is the surgical overview.

Next we have Doctor Nick Bond and who is a new oncologist at Yale.

He has practiced also.

Let me stop sharing.

At Trumbull Smilow.

Anne has been a really good friend of mine and

Ann is really, really good doctor.

Well, thanks for those kind words, Jen and.

Thanks for the opportunity
to participate in this talk.

It’s really been not privilege of mine to be part of the Yale brain tumor team. For the last two and a half years now and work together with such other fine docs, I really feel like we’re making a difference for folks here in Connecticut, so only start sharing my screen here.

I’m going to provide an update in brain tumor management from the neurooncology perspective, and I’ll be specifically focusing on glioblastoma, the most common malignant brain tumor in adults. Do not touch on other brain tumors such
as meningioma in this particular saw.

Here’s my disclosure. Slide.

I participate as Aryel investigator for a Nonprofit organization called Global Coalition for Adaptive Research.

Orji car running a large clinical trial, which I’ll speak on.

Also do consulting for Novocure and Biocept, and I produced this presentation.

So I’m going to start by just touching base on some basic overview information and clear blastoma so I mentioned it’s the most common.
malignant primary brain tumor in adults.

The incidence is around three folks per 100,000 per year, and so we estimate that there’s probably 100 to 150 new cases per year in Connecticut.

So consider brain cancer arising from the cancerous transformation of glial cells, which are normal cells that exist in the brain and help kind of support the brain structure and release hormones that maintain neuron integrity, but these cells generally don’t divide in adults, but they can develop mutations or...
abnormal chromosome numbers that cause them to become cancerous and develop a glioblastoma tumor. And once the tumor has developed, by the time it’s causing symptoms and discovered it is both nodule and also infiltrating cells. So by infiltrating I mean tumor cells that are spreading into the normal tissue of the brain, and so the really the problem of glioblastoma is that while the visible tumor on an MRI can be removed and doctor maternal, so they’re up some really neat
techniques to achieve that.

Now, unfortunately, there will be residual glioblastoma cells that. Exist in the brain and could regrow into new tumors or cause more neurological disability by spreading throughout the brain. So it’s my job as a neuro oncologist to try to provide chemotherapy and other treatments to slow the growth of those tumors cells, or really ideally completely inactivate them. And so again, it’s a disease which can’t be cured by surgery,
but the extensive surgery is critical with complete removal of all the visible tumor. Really providing a much better chance for the patient to be a long term survivor. And following removal of the tumor, common treatment options, or radiation and chemotherapy again, I'll be touching on the chemotherapy and my colleague Doctor Mcgibbon will be touching on the radiation will be touching on the next segment. So it glioblastoma is typically found by causing a first time seizure in an adult. So anyone from.
Kind of adolescents on that has a first time seizure. A common cause of that would be a brain tumor and then specifically glioblastoma. That would lead to imaging such as a CAT scan or MRI showing a mass within the brain tissue. An characteristic findings of this, including a dark middle area of the tumor called the necrosis, is consistent with glioblastoma, so we could know even preoperative that a tumor looks likely to be a glioblastoma, but we need the tumor to be removed and pathology testing to be done to confirm that before proceed.
to further treatment and then beyond seizures other common. Presenting symptoms could be. Visual changes loss of part of the peripheral vision or visual field and then also new onset cognitive impairments. So a common story would be someone that seemed to be developing memory loss or almost dementia like symptoms, symptoms worsening over weeks to a few months that can be due to brain dysfunction from a glioblastoma brain tumor. And so in regards to prognosis. I had mentioned the extensive surgical resection is important,
but another critical factor is simply age, age of a patient and. Studies have indicated that an age of 70 is kind of a cut off benchmark. So if a person is diagnosed young 69 and younger. They may be able to tolerate more intensive treatment, more extensive radiation, higher doses of chemotherapy compared to someone who’s 70 and older, and I like to think of this similar to you know, dosing of Tylenol for Pediatrics versus adults. So you can’t give a child an adult...
00:34:51.432 --> 00:34:53.668 dosage of Tylenol or mot ring.

00:34:53.670 --> 00:34:56.214 You have to base the treatment on the age of the patient and their body size.

00:34:59.240 --> 00:35:01.328 So again, looking at a patient, I'm going to treat someone differently based on their age.

00:35:01.330 --> 00:35:03.390 Their disability of a person could depend on where the tumor is located,

00:35:03.390 --> 00:35:05.450 so ideally the tumor is grown in a place where Jen can completely respect it.

00:35:05.450 --> 00:35:07.320 And then.

00:35:07.320 --> 00:35:09.330 Their disability of a person could depend on where the tumor is located,

00:35:09.330 --> 00:35:11.790 so ideally the tumor is grown in a place where Jen can completely respect it.

00:35:11.790 --> 00:35:14.562 and in these areas only a biopsy can be done,
and so neurological disabilities unfortunately will persist after the diagnosis and be more difficult to treat.

And then there are some molecular factors which are of critical for understanding the prognosis.

2 main factors with glioblastoma are The MGM T status. And IDH, one status MGMT is an enzyme that can repair the damage done to tumor cells by Thomas Ola, my chemotherapy.

And so patients have high amounts of MGMT enzyme within their tumor cells. They’ll be relatively resistant to temodar chemotherapy.
It won’t work as well, and those patients generally have poorer prognosis for long term survival. And so his doctor Will Turner had mentioned we do whole exome sequencing or essentially DNA sequencing of tumor cells after they are removed. To understand what mutations exist in the tumor beyond what their MGM molecular statuses and their IDH one mutation status and we look for mutations which could be targeted by new generation chemotherapy. So in a small percentage of glioblastomas, unfortunately less than 5%.
At this point there do exist mutation and such as B. Raff and NTR K. Fusion, for which new generation chemotherapy exists can cross the blood brain barrier and be effective to treat those tumors and delay progression, sometimes for years. So we want to test every patient for their genomics of their two men to understand if they would have a treatment option for one of these new treatments and further just understanding what is the prognosis of this tumor. And so it now the standard therapies,
which I haven’t unfortunately, are fairly limited. I feel jealous of my medical oncology colleagues who may have a number of treatments, like for example breast cancer has more than 30 approved drugs to treat it, whereas for glioblastomas, unfortunately we only have a few drugs FDA approved for treatment in one device, and so the initial standard of care for glioblastoma was established in 2005, which combines tennis and TMZ chemotherapy.
initial phase of treatment and then monthly maintenance rounds of Tim’s Olamide, and this did provide a few months longer survival on average for patients with a subgroup of patients with the low energy and she enzyme level surviving for longer. Then in 2009. But this is a map or a vast and was approved by the FDA for use in recurrent GBM. This is a drug which will bind to a hormone called veg F and slow down blood vessel growth around tumors and basically starve tumors of oxygen and so by treating a patient with. 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,
it's a device of four arrays which are placed on the scalp creating electrical field, which interferes with the mechanical process of cell division. So as tumor cells attempt to divide from 1 cell into two cells. Applying electrical fields can block that process from happening and cause the cell to ultimately self-destruct and not complete the division process. So Optune is now used for patients following radiation treatment along with Tim’s Ola. My chemotherapy with that M as Olamide damaging the DNA and then the
option device slowing or preventing the cell division process and with that current standard of care, on average we’re looking for about a two years survival time for a newly diagnosed patient. And for patients over 870, they may not be able to tolerate Timmons Olamide or or they may have side effects from these chemotherapies, so their survival on average maybe about one year one you know 1 to 1 1/2 years and then for patients with The MGM T methyl lated status or low levels of The MGM T enzyme.
I'm looking for an average at least three years survival from diagnosis for that patient, so we want more drugs, and we want better options. And we want non toxic drugs. So people can maintain their quality of life while also getting the Disease Control and not having progression. So this is where clinical trials come in. We have the opportunity to participate in a number of clinical trials here at Yale, and I'm going to touch on a few which I am excited about, the first being the GBM agile clinical trial GBM.
Agile is not only a national but an international effort. To treat newly diagnosed and recurrent GBM and the way the study is designed as that is a master protocol that can open up new experience experimental arms for new drugs and new treatments. So currently for clinical trials, one drug would have its own clinical trial and need to recruit half of the patients for the standard of care. Half of the patients for the experimental treatment.
there may be many arms of experimental therapies all referencing one standard. Common standard of care therapy.

And as I showed on the current slide, unfortunately our standard Care isn’t really not acceptable to me and I think that the GBM Agile offers a chance to move new drugs forward or understand if new drugs are effective with exposing less people to the placebo or just the common standard oral treatment.

So currently we have the study opening you’re looking at drug called Regehr Alphanim which inhibits multiple enzymes within a cell.
Responsible for tumor cell growth and regular alphanim is being compared to Tim’s Olamide and maintenance. Newly diagnosed patients and also for recurrent GBM treatment and then two other drugs will be entering into the GBM agile study shortly within the next few weeks here at Yale and those drugs are fellow 83, a drug similar to Tim’s Olamide a drug similar to Tim’s Olamide and Paxil listed, which is another molecular inhibitor blocking a molecule called P I3 trainees, so we’re excited to offer this to patients. We haven’t screening,
only diagnosed patients offer participation in this. And then another line of therapy that we are actively looking into his immunotherapy for glioblastoma treatment and Yale has participated in the initial studies of immunotherapy for treatment, the checkmate studies comparing Opdivo, also known as new volume AB checkpoint inhibitor drug versus standard of care, chemotherapy’s an unfortunately in these studies in the volume app was not proven to. Improve survival for patients or lead to no longer progression
time until progression or maintain.

Maintain health for longer and so.

Really, the drug it seems to be highly effective in some cancer types such as Melanoma and lung cancer, but in affective in glioblastoma an the study was designed really before the study was designed really before there was a basic science understanding of the immune system of the brain. It was just hoped that this this would be a treatment for patients, but we now know that there are some factors in cells within the brain tumor that can block the effect.
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,
which is a new molecule involved in immune system function in the brain. The molecule is actually discovered in the course of research for multiple sclerosis through a research effort headed up here by David Hafler that you’re of the Yellow Neurology Department, and it turns out in patients with multiple sclerosis they have low levels of digit and an overactive immune system in patients with glioblastoma have high levels of digit and a suppressed immune system. So the hope is that by blocking TIGIT we can activate the immune system.
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
to reduce brain swelling, but they can have harmful side effects such as weakening the immune system, causing weight gain, causing fragile skin, and cause immunosuppression so, close management of dexamethasone is key. It’s something I think about every day for most of the patients that I see. Are they on text about the zone? What’s their dose? Can it be reduced? Isn’t necessary and just understanding how to optimize for an individual patient what their best line
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
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
I advise patients to exercise as much as possible. Doctor Paris is an example in my mind of someone who has been able to maintain exercise after diagnosis and truly believe it’s been very helpful for her up to this point.

So I speak with everyone else about exercise and fitness and see if we can optimize that for folks. And then of course also optimizing nutrition and utilizing our nutritionist Rebecca and the tribal office.

Alright, I will wrap up at that point on my talk.
and I think I’ll pass it back to Jenn.

For moderation, yes, and I’m going to pass it right along to Doctor McGibbon, who is also a friend, an A radiation oncologist out of Greenwich primarily.

Yeah, thanks so much introduction we try to share my screen here.

See can see see that OK switch to. Slideshow.

OK look OK.

So yes, thanks again for the introduction, so I have the pleasure of starting work for Yale.

12 years ago, up in the Trumbull area
and First start working with Doctor
NOTE Confidence: 0.7843451
One in there and Doctor Montero.
NOTE Confidence: 0.7843451
And now the medical Director
NOTE Confidence: 0.7843451
for Radiation Oncology,
NOTE Confidence: 0.7843451
Greenwich Hospital and getting to
NOTE Confidence: 0.7843451
extend the smile care down this
NOTE Confidence: 0.7843451
way and actually I have a personal
NOTE Confidence: 0.7843451
connection with Doctor Bear says,
NOTE Confidence: 0.7843451
well, kind of highlights,
NOTE Confidence: 0.7843451
the nice coordination mean the system.
NOTE Confidence: 0.7843451
Are within the system because colleague
NOTE Confidence: 0.7843451
of mine and the radiation side Dr.
NOTE Confidence: 0.7843451
Contesti was actually the 1st to see her,
NOTE Confidence: 0.7843451
but she lived closer to tremble
NOTE Confidence: 0.7843451
and so I got to see her and offer
NOTE Confidence: 0.7843451
that same kind of yield quality of
radiation there and so it’s wonderful
to see her doing doing so well.
Can I just talk through at least some
of the roles of radiation therapy
in the treatment of brain tumors?
I don’t have any disclosures,
so where does radiation therapy fit
in so in benign tumors sometimes will
do so called definitive radiation
as a replacement for surgery,
or as it’s been shown earlier in the talks,
do post operative radiation therapy.
If there’s been left behind or were
worried that it will progress in Casa
problem and more commonly were involved in malignant tumors like the glioblastomas.

Either after a biopsy has been done or after when the more impressive surgeries, like the maximum safe resections like Doctor Moliterno, was highlighting. And of course, we're always collaborating with Neurooncology as well for concurrent chemotherapy and other treatments of that type. For us, the people become familiar with this. If you only see my cursor on the top left is a picture of one of our common. It's called a linear accelerator.
It’s the machine that shoots the X Rays and we have what looks like a black table top here, and patients will lie on that and will create a face mask. And this is just one example of a mask. We have different ones, some have opening some, some do not, but the idea is we’re going to be using radiation for multiple days. We need to make sure the X Rays are hitting the exact same spot each time. And so we need something to hold the head and shoulders in the same position.
To go further from there, you know we need to really customize the X Ray beam so they're only shooting where we want and trying to spare the surrounding tissues. And we do that if it look in where the Red Arrows pointing, that's the head of this machine, and in that there's this object to the right. Scalding multileaf collimator and it's a series of stacked leaves metal leaves that can create any shape that we want within a rectangle, and between creating different shapes with that MLC. 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

88
help get us in position, 
but we don’t rely just on that. 
We go further with imaging to make sure we are right on target before we turn the beam on that day. 
I guess I mean helpful. 
Just go through 2 examples, 
one glioblastoma, 
one meningioma, 
and I think they both really highlight the close collaboration that’s necessary and that we really enjoy in this yell system and a cross between New Haven and the satellite. 
So in this one case, the patient was in with headaches
and difficulty with concentrating.

And an MRI was performed which showed this lesion on the left side.

And you notice that there’s one type of sequence samaritas called T1.

It’s with contrast, reshoot, Diane,

but there’s another type of scenes called T2.

And if you look at the top left

in the top right,

this has taken a similar slice,

but it looks quite different between the two,

and it’s really highlighting the

bulk of the tumor on the left,

but showing some of the fluid dynamics

and swelling around on the right,
which becomes important for us from radiation planning.

And you know what’s the basic algorithm here?

What’s the basic algorithm here?

We want maximum safe surgery.

Then there’s a gap for healing about three to six weeks.

And then we start with Tim’s online telephone line chemotherapy and radiation at the same time.

And then we keep going with the time zone line afterwards, and then possibly do those alternating electrical fields that Hunter Biden was talking about.

So when the patient comes to us,
they’ve already we are established with their performance test is like and some of the special markers like that. MGM T that was mentioned and We see if there are eligible for any clinical trials. And then we get into what style of radiation should we offer? And the standard ratio that we give is 30 treatments. It has an initial phase with slightly bigger fields and a second phase called the Cone down with smaller fields, but it’s 30 individual days done Monday to Friday,
weekends off and at each

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

00:53:04.985 --> 00:53:06.165 And there are some special

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,
they’ve come to us outside.

We get one and we really want to see.

OK, what’s the difference now in the cavity and even see compared to before that you know this has been.

did quite a bit.

There’s a little bit of a white here that’s more postoperative change,

not necessarily cancer left behind and you can see the difference now.

Things look again between the T1 and the T2.

for these left room, just empty 2.

And when it comes to radiation,

the principle is we were going to get a CAT scan.
We're going to overlay the various MRis and so here. We've taken in this blueish color is we've copied in what the tumor looked like before the surgery and now copy it onto the MRI from after surgery. And then we draw in more in the middle here. This pink drawing. What are we concerned about just from the MRI afterwards we combine these things on the right. And then we get to work with our physics crew. And if you kind of adjust your eyes from this is a 3D or 2D representation.
00:54:30.257 --> 00:54:33.039 of a 3D process so you can see here.

00:54:33.040 --> 00:54:35.182 It looks like someone’s face with the

00:54:35.182 --> 00:54:37.812 nose and the eyes and these pink and

00:54:37.812 --> 00:54:40.079 blue is highlighting where the tumor is.

00:54:40.080 --> 00:54:41.790 The red dashed line is simulating

00:54:41.790 --> 00:54:44.240 the Ark as the machine moves around,

00:54:44.240 --> 00:54:46.160 and these yellow little funny rectangles.

00:54:46.160 --> 00:54:47.084 That’s that MLC,

00:54:47.084 --> 00:54:48.316 creating the different shapes

00:54:48.316 --> 00:54:49.680 as it goes around.

00:54:49.680 --> 00:54:51.485 So manipulating all those things

00:54:51.485 --> 00:54:53.290 in the field design process.

00:54:53.290 --> 00:54:54.012 We get.

00:54:54.012 --> 00:54:55.817 This type of dose distribution

00:54:55.817 --> 00:54:57.919 you can see on the right.
So now we’ve taken those drawings. We’ve actually created real dose. We can see that we’re trying to spare the rest of the brain and really concentrate what’s in here, this is a multi day process to get things right between our planning session when we’re ready and as part of the review, we look at something called the dose volume histogram, where every structure go to the next slide. Every structure that we care bout between what’s called the PTV, which is what we’re planning to target.
The optic nerves eyes the Coakley, the brainstem, anything that we care about that’s in there. We can model how much dose is going to it and we have very strict criteria about how much is too much, how much can be repaired and we keep going round and round till we have a plan that meets all the goals while maximizing goes to the tumor. Move on to a meningioma, some enjoy the say. The overall treatment concept here. If we go to the NCCN guidelines. The just read this here, so trim selection should be based on assessment,
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.
Meeting every week.

I’m talking about individual patients.

How can we really get this so it’s customized and we have the best combination?

For us generally, if you know meningiomas coming in and and Doctor Martin give a lot more details, I’m being a little broad here.

if something is small and doesn’t seem regression some progressing, sometimes it can be observed, but usually it’s surgery

and if it turns out to be a grade 1/2, which is the lowest kind of least aggressive.
Then we can sometimes observe sometimes radiation. If it’s great to, or almost definitely doing radiation of his grade 3, or definitely doing it, and occasionally radiation would be a replacement for surgery. But that’s not as common. And in terms of UPS, the technique usually similar to the glioblastoma. It’s a daily treatment for anywhere from 25 to 30 sessions. Sometimes if it’s small enough and we feel more confident that, say, a grade one tumor,
although like Doctor Martin was pointing out, sometimes we're wrong about that. So with very highly selected patients sometimes will do radiosurgery as a single treatment. And here's a nice collaboration example, so we have a 41 year old female who presented with eye symptoms. If you look this MRI, there's clearly something different here. These images always like you're looking from their feet towards their head, so from their feet towards their head, so the left side of your screen is the right side of their body.
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,
and so the question is what to do?
Should we do surgeries to do radiation?
Well, at this point the patient has very serious symptoms. An radiation is not going to reverse the vision symptoms. In that case, it’s radiation for meningioma is excellent at stopping it from growing further, and can sometimes have a little shrinkage over time, but it can’t have a rapid shrinkage. can’t reverse symptoms quickly like she need it,
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.
But you get the sense that there’s a little something left behind ‘cause we’re so close to these special arteries and so on, but it’s been debunked and it’s had a huge impact in her quality of life. So now radiation comes in. How can we help out too? Now stabilize this and and take it to the next level and so on. A very similar process to what I showed in the glioblastoma. There’s a modeling process making a mask. Creating a CAT scan and MRI who create these beams in the center and then we
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 optic nerve coming back.
NOTE Confidence: 0.83236545
00:59:58.475 --> 00:59:59.655 Here's what I here's that optic nerve coming back.
NOTE Confidence: 0.83236545
00:59:59.660 --> 01:00:01.502 So we're we're sculpting dose away from the brain stem back here and optic nerve here so again, having this concentration of dose where we're most worried and then sculpting those away.
NOTE Confidence: 0.83236545
01:00:01.502 --> 01:00:03.622 from the brain stem back here and optic nerve here so again,
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 So we're we're sculpting dose away having this concentration of dose where we're most worried and then sculpting those away.
NOTE Confidence: 0.83236545
01:00:06.642 --> 01:00:08.332 From the areas that are critical, but again an outcome which is really only possible with this
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 really only possible with this
NOTE Confidence: 0.83236545
01:00:14.730 --> 01:00:16.673 and then sculpting those away.
NOTE Confidence: 0.83236545
01:00:16.673 --> 01:00:18.227 From the areas that are critical, but again an outcome which is really only possible with this
NOTE Confidence: 0.83236545
01:00:18.227 --> 01:00:20.299 you know neurosurgeon radiation,
01:00:20.300 --> 01:00:23.828 or in other cases with the neurologist as well.
01:00:25.600 --> 01:00:27.581 I just want to quickly highlight something from one of my colleagues size picture earlier Doctor Bindra and Doctor Schiff.
01:00:32.000 --> 01:00:34.160 Just it’s nice to see within the L system all the things were already mentioned and there’s just a lot of work this homegrown aspect looking at.
01:00:34.160 --> 01:00:36.104 How can we use our resources to develop new new therapeutics or not other people have design things forward?
01:00:42.418 --> 01:00:44.307 We’re innovating, he ran and bring the best for our
patients in this particular trial

is for people with a.

Recurrent type of glioma.

But it's just wonderful to see this
this kind of effort and collaboration.

And that's it for my portion of time.

Thanks so much for including me.

Thanks so much, Bruce.

So will hold all questions to the
end an our last panelist in our last
talk is Brian Jenn who is a licensed
social worker with Smilow as well.

So thank you for having me.

Sorry, a little technical difficulties,
but here I have my screen here.

Can you guys hear me OK?
Thank you. OK so I’m Brian. I’m one of the clinical social workers at Smilow. I work mainly out of the Trumbull office but I also work at the Greenwich Office and it’s my privilege to work with. Doctor Blunden and Doctor McKibben, and my talk is going to be specifically about supporting patients and families through this process and all the different ways we can try to support and help. Through this difficult journey, so I have no disclosures my focus will really be on going.
through the framework and then practical resources and ways that we can support.
So oftentimes when we’re dealing with the tumor or cancer diagnosis, the question is, how do we cope? How do we get through this? How do we make it a little bit easier, a little bit better and the truth of it is it’s a really complex question. It really depends on who’s involved in the family system, what experiences do they bring to the table? What losses or previous diagnosis had they gone through as a family? And also where they are at when diagnosed, it’s an incredibly.
Difficult proposition to sort of bring this all together and really address what is most pressing at any given time. There’s a lot of different processes that have to come together to shape what coping is, so the framework that I use, the model that is most helpful is family systems illness, modeled by John Rowland and he developed it while he was at Yale and then went on to University of Chicago and why this is such a useful way of sort of approaching a family and an individual who.
Is suffering through an illness and specifically like a cancer diagnosis is that it breaks up the dimensions and multiple ways and sort of interweaves it together so at the center of it you have the individual whose life has changed and has been altered in a significant way and then bring that brings with it emotional turmoil at times. There's also changes in terms of what is a person going to process, how are they going to deal with their basic needs. What are the practical concerns that they have and then it alters every
01:04:28.746 --> 01:04:30.558 relationship within their sphere.
01:04:30.560 --> 01:04:32.560 These relationship includes their spouses,
01:04:32.560 --> 01:04:34.072 their children, their work,
01:04:34.072 --> 01:04:35.962 their friendships and also their
01:04:35.962 --> 01:04:37.360 developing new relationships.
01:04:37.360 --> 01:04:40.312 And the most important one is is with
01:04:40.312 --> 01:04:42.554 their medical team and developing
01:04:42.554 --> 01:04:44.939 that collaboration to work together
01:04:44.939 --> 01:04:47.130 to achieve a goal together.
01:04:47.130 --> 01:04:49.146 So it also recognizes that each
01:04:49.146 --> 01:04:51.230 stage and phase is different.
01:04:51.230 --> 01:04:53.834 Often times when I meet with patients,
01:04:53.840 --> 01:04:56.948 it’s not. Always when their first diagnosis.
01:04:56.950 --> 01:04:58.435 Sometimes I’m meeting with somebody
01:04:58.435 --> 01:05:00.918 who’s in a stage of remission and it
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,
but it’s different and that adaption takes a lot of work and there still works to process out what this looks like. How do we find significant meaning during that time? And then this is a process of constant adaption, so there’s transitions. There’s new treatments. There is also endings at times, and all these things need to be addressed and supporting. Supporting both the patient and the family together.
So in the first crisis Phase I wanted to highlight a few of the challenges that come up and in the crisis stage phase you have the need to understand what was going on. What does it mean in terms of my life? What does it mean in terms of the treatment will be receiving? How does it affect what I was doing previously? You know, if you're sending off your kids, your kids off the truck college, how does it look to support them when they're trying to separate in? Differentiate themselves from the family unit at one of the aspects. I really like.
A lot is the third one creating meaning that promotes family mastering and competency, and this is really the narrative that patients and individuals come to in terms of. How I make sense of this and how I transcend beyond it? It is the narrative that incorporate family histories of my parents were extremely resilient and my dad never complained and he always got up for work. These are the things we can tap in the inherent straight strength of family systems and individuals that are there.
And also there’s a grief process that comes up and grieving for the family identity before this disorder. Often times I’ve heard. You know, spouses share how they’re feeling angry at. Just watching another family, going to a diner because it’s so normal. It’s so routine, this is something that needs its place. It needs time to be fully felt and healed. And of course, establishing a relationship with your health care providers and developing that trust and collaborative process. The chronic phase.
It's a little bit different. You know. It's you found a place of stability, but you know, I've heard patients really describe sort of living with anticipatory loss and uncertainty. I've had people say, you know I've returned to normal. It's it's completely. I'm baking and gardening and it feels great, but at times I feel really insecure and it's really hard when you have those two incongruent emotional
states at one time and making sense of that and being open to each place.

And validating is tremendous Lee difficult to do also within the family system?

You know, developing open communication lines really sharing the burden amongst the whole family unit and supporting each other is a key process.

And and extending on into grief is is sort of acceptance.

You know, the grief process hasn’t stages.

It has all its difficult emotions that can come up and it.

But one of the things it leads
to is a degree of acceptance. A degree of acceptance of where the new normal is, where people are at, and you know where they can do what they can do from there and how they can empower themselves. So there is another stage of transitions. Anytime there’s a change anytime the family system needs to find equilibrium needs to redefine hoping goals, and sometimes that includes an ending phased in which you know individuals and families have to identify an unfinished business. What’s really important to accomplish and
then really maximizing the quality of life,
the meaning, the purpose, and you know,
bringing that time together to its.
To it, to maximize the goodness that
can come from spending time together.
So this is one of the frameworks that
helps me sort of support patients and
recognize what is important in a given time,
and it’s really excellent in terms of
recognizing the whole picture of the patient.
You know, their history,
their family history,
the multi generational stories
that are shared among them that
have helped them through this.
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
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
that we have to be as a medical team. Very mindful of those goals of what a good life looks like. You know, I've heard Doctor Blondin mentioned you know such and such is going to wedding. I'm going to hold off on the treatment for this week and they're going to have fun and and that's vital. This is why we go through all these hardships is to enjoy life. So you know pulling it back to sort of what we do and then in the crisis stage, this is often one of the things that we will help support patients with. This is the practical service. How am I going to pay my bills?
But you know, can I return to work?
What are the things that are going to be helpful in this time?
And these are things that social work entail quick.
There's a number of resources that I will share at the end and turn websites that you can find out more information about how to navigate this process.
Because you know they didn't teach us this in school.
This is kind of just thrust upon us,
and so one of the things that we can try to help with is get you the resources of how to apply for disability,
if that’s an option that when people want to pursue how to maintain your health insurance, maybe you know Medicaid is an option. How do we access the. Oh, sorry, the marketplace to find an insurance that fits. So all these sort of things that are basic to our well being and living our life. We will support people with. There was also grants that people can access to help out with basic needs. Paying for utilities, maybe a rent, maybe a mortgage payment. All these sort of things you know,
laying the foundation to getting through this process. The emotional challenges and, you know, one of the things that were shared with me so succinctly is, you know, a patient said to me. It’s the brain. It’s kind of who we are and this was into in regards to the terror that they felt in terms of the changes. The fear of loss. I have had a individual share with me, recognizing that she had lost the ability to sign her name, the ability to sign her name,
and that’s so fundamentally us. And so this is a very unique challenge to brain tumors and brain cancers that it’s really how we define ourselves. It’s our function, it’s our balance, it’s our eyesight. It’s driving it. Independence, and this is a profound in terms of how it affects our life and how it shapes our lives. So often times when I’m sitting with people, there’s two different processes that I sort of flesh out with them, and one is a degree of trauma that it’s going to trigger.
Our anxiety are survival mechanisms, I tell family members. And when I first meet them, are you a little more irritable with each other and they’re like yes, and it’s that’s normal because it’s part of our flight fight or flight mechanism. And then knowing that and being. Cognizant of that you know helps us sort of be a little bit more gentle to ourselves that you know that we recognize we’re a little bit under stress and this is natural. A lot of my job is normalizing these emotions that it feels so
intense in the very beginning and then giving tools like meditation, prayer in itself is a way of staying present, you know, and having people access the things that make them feel better. The other emotional process that I tend to see is a grief one and that comes with any limitations. Anytime we have obstacle or wall. We triggered the grief process and that can roll into all past losses, and so this is when I oftentimes they really identify and really stress because it’s not linear. It’s not even logical at times,
but it’s just the power of those emotions in the expression that need to be had. And healing grief is just very simple. It’s feeling the emotions and then reconnecting life and the good ways that really pull you through. So I also want to address the caregivers because. Their job is is vital and these are things that I always share. You’re doing a superb, wonderful job caring for the people you love, and oftentimes it doesn’t feel that way. And the problem is, the game is rigged. You’re balancing two moral
virtues together of caring for yourself,

NOTE Confidence: 0.85824853

caring for the person you love,

NOTE Confidence: 0.85824853

and there’s never enough hours in the day.

NOTE Confidence: 0.85824853

So I just want to tell you,

NOTE Confidence: 0.85824853

doing a superb job and a wonderful job,

NOTE Confidence: 0.85824853

the other part of that is that

NOTE Confidence: 0.85824853

guilt is a school for self care.

NOTE Confidence: 0.85824853

So if you’re feeling guilty that

NOTE Confidence: 0.85824853

you can’t do something and you’re

NOTE Confidence: 0.85824853

just a little bit tired.

NOTE Confidence: 0.85824853

It’s really your body saying

NOTE Confidence: 0.85824853

I want to and I’m willing,

NOTE Confidence: 0.85824853

but I need to take care of this so it’s

NOTE Confidence: 0.85824853

OK to care for yourself to slow down.

NOTE Confidence: 0.85824853

Take a time,

NOTE Confidence: 0.85824853

take a time to walk and maybe go
to a movie or talk to a friend
because you’re self care is modeling
within your family system of how
to prioritize your well being.
How to nurture yourself and if
that energy gets rippled out
to all the people in your family.
So just in terms of ending the.
The talk I really wanted to address,
sort of the unsung gifts of cancer,
and this is science.
Certain things that have been shared
with me that have really made an
impact in terms of the wisdom that
can come from a cancer diagnosis.
The fact that individuals will share, like you know, I, I quit my job and it was the best thing I ever done did in my life and I really prospered in terms of the things I loved and that sort of being true to their authentic self and listening to what’s most important to them. There’s a real clarity that comes from a really. Major diagnosis like this and also the fact that our attitude is profoundly important. So we’re not diminishing the emotional impact in the difficulties that arise, but. We have the capacity sort of transcending those difficulties and those obstacles,
and that's one of the things that you know social work wants to help with. Counseling can help with our spiritual practice can help with and to really tap into that as a resource and a tool to getting through difficulty. So I'm going to run through a number of resources we have at smilow. Most importantly, we have the brain tumor Support Group, which is up and running through Stephanie. I saw that mentioned in the chat and I really, highly recommend support groups. It's a great way to breakdown feelings.
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
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
my purpose through this?

What is my new life look like?

And it’s done through seven week

individual sessions and eight week groups.

That palliative care has it.

There’s a number of social workers that are.

Trained in it,

and so you can just ask your team

and they can do a referral.

We have nutrition as Doctor

Blunden mentioned.

We have integrated medicine who

have wonderful guided meditations.

The Covid we did have massage

therapy at times,
and different classes that you can attend in person like Gentle Yoga.

They’re doing a little more remote.

There is also art therapy.

We also have a referral to pack, which is parenting at a challenging time.

You know, for individuals with children of any age we have a module that helps people figure out communication tenants how to maintain open communication, what emotions to sort of look for and describe and reach for in their children.

And just sort of just ways of creating a normal structure to support people through a difficult time.
Also palliative care is another wonderful referral. They have a holistic practice and they have a very large team that people can have access to. Community resources, so the connected Brain Tumor Alliance has education advocacy they have they support groups as well. There's An's place who have individual and group counseling. Cancer Care has online kids hugs is for kids, parents and their children. The American Cancer Society has a number of information transportation.
they did have before COVID.

And then there’s a number of other ones cancer in careers, which helps with employment and legal support and then of course, financial grants to help people meet needs during their treatment.

There’s a Connecticut Cancer Foundation, Lovemark Foundation and cancer care and long term care options through the state of Connecticut.

Sometimes when individuals need extra support at home.
These are the programs that are available.
The one thing I wanted to point out was that if people under age 64 there is not a lot of great resources, the wait list for that is four to five years. So if anyone is interested in talking about finding more information they can contact me. And also I would also recommend if we could call your representative and advocate that’s kind of unacceptable. If that if people need help that we should have that. So I want to thank you and I had to give a special thank you to my wife.
who kept the house is quiet as I’ve ever heard it with our three little boys. So it was a little leery for a little bit, but thank you for the time. Thank you so much, Brian. I know I have my almost 6 year old son who I know is gonna race in here any minute so I can feel the stress and understand. But that was a really beautiful talk and Ann. Thank you so much for summarizing all of those resources. That’s incredibly helpful, so really appreciate that. And yeah, Jillian had mentioned in the chat and of course you mentioned the brain Tumor Support Group is really useful.
Really helpful.

And now you know is occurring through zoom.

So we can have all of our patients and really very remotely participate,

and that’s open to everyone in anyone.

So I think what we can now do in the interest of time and children

who are going to lose it.

Perhaps we can switch to some questions so we have some in the chat box.

I’m never very good at.

And so I’ll start at the beginning.

Yes, it is possible to get the recording of this session and Renee had
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
NOTE Confidence: 0.84093803
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
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.
Can you discuss the options for clinical trials that might be available? Please discuss in lay terms.

Nick, do you know you’ve already, I think elaborated some, but.

Yeah thanks. I mean, generally speaking in terms of clinical trials.

There are individual factors for each trial regarding a person’s eligibility, so it may be the type of tumor that they have. Even within glioblastoma Fedsmith later on, not related, and then there’s certain time points at which folks can enter clinical trials.
So one time point is generally after surgery before radiation, and then a second time point is at times when recurrence or relapse happens in the future. A few ways to find out about clinical trials are number one. Ask your doctor. They'll be aware of the clinical trials open at their institution. For example here at Yale. I'm aware of all the trials that we have open and the investigators for the site will be the different docs in the practice. So at Yale is myself Doctor Romero, Doctor Barrington. Dr.
Corbin then looking more broadly, your doctor probably will have a sense of other clinical trials open and a way to kind of search for yourself. Or do you own research is to go to websiteclinicaltrials.gov and within that there's a on the landing page. There is a field that you can enter. Search being for glioblastoma and then filter by the state that you live in your age. you live in your age. What type of trial you would be interested in and look that way another way that you could search for clinical trials.
01:23:50.540 --> 01:23:52.652 Just do the national Brain Tumor
Society website whichisbraintumor.org.
NOTE Confidence: 0.89355797
01:23:52.652 --> 01:23:53.708 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
easier for less tech savvy folks
NOTE Confidence: 0.89355797
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
excellence for different clinical trials.
NOTE Confidence: 0.77353203
01:24:11.360 --> 01:24:14.267 And I do know that Yale has the
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
come and go as they fill up their recruitment goal for patients. And we’re always looking to expand the number of trials that we offer here and bring that to fruition for the state. Great, and along those lines you can always reach out to us for second opinions with regards to clinical trials and care. Alright, are there any additional trials for Optune device in GBM Nick? So there is a device trial for newly diagnosed patients. It’s open at Hartford Hospital and in smaller hospitals around the US and in this study there comparing two groups,
the first group being patients who will receive Optune device after radiation is finished in the standard fashion. That’s the kind of the control group and the experimental group starts Optune device when they start radiation therapy, with the theory being that starting up sooner could be beneficial, and there may be some interaction between electrical fields and radiation that that could be more beneficial killing tumor cells so that study is currently open for enrollment in Hartford I believe, and I and other places,
and I'm looking forward to seeing the results.
The results of that study, probably in a couple of years off into the future.
Next question from email. We have some concerns regarding the covid vaccines for brain tumor patients in active treatment, particularly on the clinical trial with Tim is Olumide. How will we know if the code vaccine is effectively brain? Can’t is affecting brain cancer patients negatively?
01:26:11.750 --> 01:26:13.440 Or if it is ineffective
01:26:13.440 --> 01:26:14.792 for brain tumor patients,
01:26:14.800 --> 01:26:16.490 is just being studied currently?
01:26:16.490 --> 01:26:19.164 Or is the data specific to this
demographic not being collected at all?
01:26:21.620 --> 01:26:23.040 Are there any symptoms that
cancer patients and treatment
01:26:23.040 --> 01:26:24.176 should watch out for with the
01:26:24.176 --> 01:26:25.664 first or second vaccine shot?
01:26:25.664 --> 01:26:26.819 I'd be happy to weigh in on that huge.
01:26:30.230 --> 01:26:32.489 Generally speaking,
01:26:32.490 --> 01:26:34.330 I've had a number of patients of mine
01:26:34.330 --> 01:26:36.246 asked me about the Covid vaccine and.
01:26:38.920 --> 01:26:39.542 Generally speaking,
01:26:39.542 --> 01:26:41.097 and pretty much essentially in
every persons case I recommend,
01:26:41.097 --> 01:26:42.619 they would proceed with the covid vaccine.
To protect themselves against Covid's very serious illness, I've lost patients of mine and friends of mine to Covid as I'm sure, pretty probably everyone on the call has over half a million Americans have died from Covid and the vaccines have been proven safe and effective to reduce severe Covid essentially eliminate the chance of severe Covid, so there appears to be no. Real changing of a person's body or biology that would impact GBM in any way, either positive or negative, with the Covid vaccine.
Some folks do get a reaction as they are like immune system becomes immunized by the vaccine is my. Reports I’m hearing or generally it’s after the shot within 24 to 48 hours lasting for a short period of time. Generally that’s the 24 hours of just feeling something like fatigue or minor fever, and these can be treated with over the counter medications like Tylenol or Mot ring. And then you know that’s it, and you will no longer be at risk of getting secret Cove.
It’s so I can recommend everyone I meet.

Please proceed with getting your covid vaccine and that’s how we crush Covid.

That’s a whole other weapon alright.

And there’s guidelines now from the CDC in terms of correct. Also, I will point out there was a hold placed on the single shot Johnson and Johnson vaccine after there were a small number of cases, a few cases reported of a possible association with blood clotting, something called cerebral venous sign from Sinus Trumbo, and so out of several million.
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 --> 01:28:55.132 The Pfizer and Moderna brand vaccines
NOTE Confidence: 0.8234188
01:28:55.132 --> 01:28:58.170 both don’t have any known Association
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: 0.8234188
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
unmethylated. Sure, so we now know there are two main subtypes of glioblastoma methylated and unmethylated, and that refers to the status of the gene for the MGMT enzyme and. When the gene is methylated within the DNA, the gene is turned off and those patients don’t have the gene active and so they don’t have much of the MGMT enzyme. An unmethylated gene is active. Unmethylated has high levels of the enzyme, and teniposide is less effective, so it ends all of my damages.
DNA as its mechanism of action.

MGMT enzyme reverses the damage,

so it is old.

Might still has some effectiveness

and unmethylated patients,

but it’s less than methylated and so we believe that just

metallated patients in general or more.

Susceptible to the benefits of

radiation and chemo therapies,

and that may be why the prognosis is better.

And then there may be other

biological factors that just make.

Methylate is subtype patients

better responders to therapy,

and they may do better,
and these are still kind of being worked out.

Great in the interest of time.

Will take a few more,

one here asking to provide insight

of my experience of affectedness

of five Ala in extent perception,

overall survival of tumors as

compared to intra operative MRI.

In my personal experience I really use

an rely on the Inter operative MRI.

That’s just my strategy and

seems to work the best for me.

Man we do review.

We do first of all manage a

very large database that has all of
our patients and outcomes that we follow which we continually analyze, and it does support the use of our current strategies. So we have been satisfied with that. Next one, enjoy the presentations. I’ve recently joined the staff at Rutgers in New Brunswick after 16 years in Kansas City. Looking forward to connecting professionally with you as well. Sorry, that was just to the panelists. We look forward to connecting with you as well. That was the last one. And someone just to thank you, so you’re welcome.
I just want to again thank Chris Cassano from Connecticut Brain Tumor Alliance Renee Gaudet, who thankfully organized all of this and put this together. She always does such an outstanding job, and then my Co. Panelist, Nick Blonde and Bruce Mcgibbon, and Brian Gin for really their outstanding talks. All in honor of Doctor Susie Baras, who is an amazing person, continuing to be treated for glioblastoma and really giving back and making sure that patients can
receive the same level of care that.

She has so we look forward to more of these seminars in the future.

And if there's any more comments from my panelists.

I'll turn it over to you guys before we say goodnight.

Just that want to echo what you said?

Thank you for the help in organizing and thanks everyone for joining and pleasure to be here this evening.

Come to our tumor support groups.

Email us if you have any questions or want any additional opinions or conversations.

Brain tumor surgery at yale.edu.
Happy to connect you. Alright.

Thank you, have a good night.

Did everyone thanks?