So in terms of imaging, obviously mammography and ultrasound tend to be our main modalities and that is what we do at the shoreline MRI. We, you know for good quality MRI it requires a special breast coil as well as the higher magnets. The 3T magnet is what we prefer to perform our MRI on. So that’s why we only perform those down in New Haven or at Park Ave. So we’re not currently doing MRI.
patients do need to go downtown for that.

You know, I just want to talk a little bit about the 3D mammography because we, you know we've been using this for more than a decade now and it has really improved our outcomes.

Yale was one of the five original beta sites for the development of this technology.

So we're quite proud of it and this led to the FDA approval in 2011.

So we have a long history of it at Yale and after FDA approval.

We were the first in Connecticut to obtain a commercial unit and the actual 13th unit in the whole United States.

So we've had it for a long time.
We’ve always offered it to all patients at no cost and it’s really permitted us to have a really invaluable research database that we have been able to publish and do a lot of good studies with.

So basically you know a lot of these studies have shown, I think you know very well that the 3D mammography is advantageous over treating mammography.

Multiple sites now throughout the world, in North America, Europe, Asia have repeatedly shown that
It results in lower recall rates and increased cancer detection, particularly for invasive cancers. And for those of you who might not have seen how it works, you can see here’s the 2D portion of the screening mammogram. And in the tomosynthesis, you can see the images moving here. We look at these in one millimeter slices through the breast and the cancers really can pop out beautifully that otherwise would have been hiding. So it’s easy to understand how we can find more cancers, reduce the recalls for false positives,
prove the outcomes for patients.

All right.

Here’s just another example of a patient.

This is, it’s the screening mammogram and there’s a questionable asymmetry in the breast and that’s on the 2D portion when you look at the 3D.

Not only does it tell us exactly where it is in the breast, it’s actually down here on the 2D.

We might have thought it was up there, but it’s down there.

So we’re able to accurately localize lesions and we’re able
to characterize them better.

You see on the 2D that could easily have been missed,

whereas here we exquisitely see the detail of the speculations.

So we’re able to localize, characterize and then honestly patients go directly to ultrasound from this,

a lot of the diagnostic workup additional views.

Are not necessary anymore.

We can find things with ultrasound.

So this is what we do.

We do a lot of this at the shoreline,

lot of ultrasound guided biopsies because the majority of lesions other
than true calcification lesions

Just a note about tissue density

The sensitivity of mammography is obviously related to tissue density.

It’s an important aspect of interpreting a mammogram.

While the sensitivity is very very high in fatty breast,

it obviously is reduced even with the 3D mammography in denser tissue.

So as you’re probably well aware,

we were the first state in the nation to.
Uh, it’s today density notification law.

So this took effect in October of 2009 and women are informed of their breast density and since that time many women with breasts, with dense breasts have opted to undergo supplemental screening particularly with ultrasound just something that we developed it at Yale.

This is through our visage, our pack system and this is now FDA approved and this just.
breast density is a little bit of a subjective.

It, you know, like classification, this makes it a little bit more objective.

We get a density reading which is just an output on our workstations giving the breast density with the confidence. So it’s a nice tool that we’ve developed.

I mentioned the mobile van before is one of our sites and just to mention it again because this does visit the shoreline, you know four to five times a month.
You may see it up in the parking lot taking up valuable parking spaces, but nonetheless it is good for our patients. We do screening on the van with the course 3D mammography and breast ultrasound. So this fan which has been on the road for about 2 years now has both a mammography unit and an ultrasound separate. Sweets and while we’ve had a van for 35 some years in in New Haven at Yale, this is the first time we’ve had mammography and ultrasound on the van. So certainly those women with dense tissue that really need the screening ultrasound as well can.
be well accommodated on the van.

And here’s a case that was done on the van.

Patient with dense tissue had her mammography and her ultrasound and actually had multiple cancers in her breast.

Interventional procedures.

Like I said, we perform. About two to three per day at the shoreline and patients love it.

Again, that is just something that is an extra piece of equipment.
So we’re doing those downtown right now, but maybe in the future we will when we have a little bit more resources at the shoreline ultrasound biopsies though again the majority of patients can undergo ultrasound biopsies, which is preferable modality, we also can localize.

Patients for surgery using mammographic or sonographic guidance.

We have dedicated breast imaging nurses now and this is that they’re invaluable and always one is always at the shoreline. So these these nurses help us with our procedures, patient care, communication, pathology,
follow up and then data entry.
So it's really they're, they're wonderful.
Here's just an example.
Again, Doctor Zaneski is going to talk more
about the surgery side of things, you know.
Diagnosed the patients, we image them, we work them up,
we do the biopsies and then many of them
are able to have surgery at the shoreline
at which is just wonderful for them.
We can do wire localizations
This is done on the day of surgery
and something that we've been
doing for the last few years is a
radio frequency tag localization.

The advantage of this is it could be inserted a few days or weeks before surgery and then the patient. Need to go directly to surgery on that day and so that facilitates scheduling.

Here's an example of a shoreline patient. Here is her screening mammogram. Obvious lesion in the breast. She goes directly to ultrasound, doesn’t need any extra views. Mammographic views. Ultrasound shows a highly suspicious mask. We then do a core biopsy and leave a marker. She comes back for a localization on the day of surgery and her specimen shows
the lesion and the tag all removed. Very convenient for patients and they love it. Just in the next. The very shortly hopefully few months we are going to be starting construction and we will have expansion of our breast imaging services at Yale, which at the shoreline which is much needed, which will have an additional 3D mammography and ultrasound units. So this is going to help with patient scheduling and also in terms of the, the physical layout, we’re going to have a direct connection with the breast surgery suite.
So that permits patients to go back and forth. Because I’m happy to go out in the hallway, so it’s really a very comprehensive. Services and wonderful for patients, they love it and I think with this expansion we’ll be able to offer even more. More, get more patients in and offer more patients to be seen at the shoreline. Just a shout out to the wonderful technologists at the shoreline who take really good care of patients. So thank you very much. Hopefully that was helpful. Thank you so much Leanne and we have
patients who specifically reach out to have you and doctor Butler?
Do their mammograms and overwhelmingly their experience in the breast imaging suite and Guildford?
Is is incredibly positive and patient centered so.
Thank you for all you do.
Next up, we’re going to introduce doctor Greg Zaneski, my partner and a member of our team, I’m thrilled to call him.
My partner and a member of our team, doctors and Esky joined Yale School of Medicine in 2019, he’s an assistant professor.
Surgical oncology and cares for women with benign and malignant breast disease and also men with breast related issues. His clinical practice location is predominantly at the Shoreline Medical Center in Guilford, but he also has a clinic weekly and some IT operating room time at the New Haven site. He received his medical degree from the State University of New York at Stony Brook and completed a fellowship in surgical oncology at the University of Pittsburgh. And he’s going to be giving us updates and breast cancer surgery. Thank you,
00:10:08.776 --> 00:10:09.139 Greg.

00:10:17.020 --> 00:10:20.430 Good. Thank you, Rachel. Look at the share my screen.

00:10:24.780 --> 00:10:25.370 OK.

00:10:28.710 --> 00:10:31.430 Thank you very much Rachel and thank you everybody for attending.

00:10:33.797 --> 00:10:35.525 on a rainy night.

00:10:35.530 --> 00:10:37.874 But my goal is tonight is to talk about breast surgery you know here at Guildford and also you know how we integrate it throughout the system here at Smilow.

00:10:37.874 --> 00:10:39.852 about breast surgery you know here at Guildford and also you know how we integrate it throughout the system here at Smilow.

00:10:39.852 --> 00:10:41.838 at Shoreline and as Doctor Philpotts, describe very well the

00:10:41.909 --> 00:10:44.450 how we integrate it throughout the system here at Smilow.

00:10:44.450 --> 00:10:45.970 the system here at Smilow.

00:10:48.350 --> 00:10:51.325 So here’s our grant institution here at Shoreline and as Doctor Philpotts.
00:10:56.222 --> 00:10:58.362 amount of breast imaging that’s done
NOTE Confidence: 0.846369253846154
00:10:58.362 --> 00:11:00.480 here and also the various findings.
NOTE Confidence: 0.846369253846154
00:11:00.480 --> 00:11:02.454 You know that we can come
NOTE Confidence: 0.846369253846154
00:11:02.454 --> 00:11:03.770 across not all malignant,
NOTE Confidence: 0.846369253846154
00:11:03.770 --> 00:11:06.422 sometimes benign or needing close follow
NOTE Confidence: 0.846369253846154
00:11:06.422 --> 00:11:09.693 up and surgery is an important component
NOTE Confidence: 0.846369253846154
00:11:09.693 --> 00:11:13.004 for helping integrate that at times and
NOTE Confidence: 0.846369253846154
00:11:13.083 --> 00:11:15.790 of course our multidisciplinary team
NOTE Confidence: 0.846369253846154
00:11:15.790 --> 00:11:19.126 which will be talked about further.
NOTE Confidence: 0.846369253846154
00:11:19.130 --> 00:11:21.770 So this is a picture of our surgical
NOTE Confidence: 0.846369253846154
00:11:21.770 --> 00:11:24.470 clinic and you know I think a lot of
NOTE Confidence: 0.846369253846154
00:11:24.470 --> 00:11:26.929 times with the with surgery we think
NOTE Confidence: 0.846369253846154
00:11:26.929 --> 00:11:29.245 about that it’s a for malignancy.
NOTE Confidence: 0.846369253846154
00:11:29.250 --> 00:11:31.707 But I think a big part of our day
NOTE Confidence: 0.846369253846154
00:11:31.707 --> 00:11:34.046 including our nurse practitioners here at
NOTE Confidence: 0.846369253846154
00:11:34.046 --> 00:11:36.620 Guildford is things like benign disease.
We can't see your slides.

No, no. Sorry about that.

Sorry, sorry about that.

Can you try again?

Yeah, let me. Escape, yeah.

Yeah, share.

Is that better?

Can you see that?

Do you want to send them to me and I can share them from my computer? Sorry about that.

OK. So I got them. Greg,

why don’t you go ahead and keep talking and I’ll pull them up here.

Sorry about that. I don’t
00:13:09.210 --> 00:13:10.560 know why it’s not sharing.
NOTE Confidence: 0.81109915
00:13:22.570 --> 00:13:24.640 Alright, I think maybe now
NOTE Confidence: 0.665459663333333
00:13:24.810 --> 00:13:26.220 we can. Now
NOTE Confidence: 0.91216684
00:13:26.230 --> 00:13:27.058 we can see it.
NOTE Confidence: 0.64943756
00:13:27.640 --> 00:13:28.868 Sorry about that everybody.
NOTE Confidence: 0.642499095
00:13:30.320 --> 00:13:32.528 Right. Yeah. So you know again
NOTE Confidence: 0.88231521944445
00:13:32.540 --> 00:13:34.430 this is the clinic and you know
NOTE Confidence: 0.88231521944445
00:13:34.430 --> 00:13:36.760 what we see with our nurse
NOTE Confidence: 0.88231521944445
00:13:36.760 --> 00:13:38.208 practitioners or or things,
NOTE Confidence: 0.88231521944445
00:13:38.210 --> 00:13:40.278 you know benign disease,
NOTE Confidence: 0.88231521944445
00:13:40.278 --> 00:13:43.380 you know palpable masses that patients
NOTE Confidence: 0.88231521944445
00:13:43.465 --> 00:13:46.748 may feel or if various imaging findings,
NOTE Confidence: 0.88231521944445
00:13:46.750 --> 00:13:49.466 you know things that require a close
NOTE Confidence: 0.88231521944445
00:13:49.466 --> 00:13:51.893 interval follow up will work with
NOTE Confidence: 0.88231521944445
00:13:51.893 --> 00:13:53.868 radiology to follow those patients
NOTE Confidence: 0.88231521944445
00:13:53.868 --> 00:13:56.467 or the wealth of biopsies can often
22
be benign and how do you interpret

them as your primary care or OBGYN.

Positions you know what is a

papilloma need or what type of

follow up a library card inside you.

We're very happy to see those patients

and you know talk about the different

management surgical options or even

screening strategies and of course

breast malignancy of course which you

know breast surgeons are are both kind

of associated with clinical trials.

We enroll patients in our various

surgical clinical trials and even.

Follow those patients up and
coordinate the necessary imaging regarding the clinical trial protocol.

And you know with the cooperation of radiology, we're able to offer surveillance, clinical exams for instance you know women who have undergone breast cancer surgery, radiation therapy, and then it's time for annual follow-up how much imaging is needed and we're happy to see our patients for clinical exam and coordinate the follow-up mammogram on the same day.

A good portion of my clinic today was seeing some of our patients who
00:15:08.977 --> 00:15:10.790 are one year follow up with same day.

00:15:10.790 --> 00:15:13.471 Imaging and patients seem to be very

00:15:13.471 --> 00:15:15.761 happy to bundle those visits and

00:15:15.761 --> 00:15:18.681 make one trip to see the search and

00:15:18.681 --> 00:15:20.889 then the radiologists on one

00:15:20.889 --> 00:15:23.604 day take less time off from work,

00:15:23.604 --> 00:15:26.010 family and all the other busy

00:15:26.092 --> 00:15:27.330 things and also.

00:15:30.130 --> 00:15:32.241 OK. Yeah. Yeah, we can’t.

00:15:32.241 --> 00:15:34.040 We are stuck on the title slide.

00:15:36.370 --> 00:15:40.159 OK. Real connectivity that.

00:15:43.170 --> 00:15:44.349 Are they advancing now?

00:15:49.360 --> 00:15:51.538 You see surgical clinic slide?

00:15:51.540 --> 00:15:54.594 No, no, I’ll try and pull them

00:15:54.594 --> 00:15:56.690 up here, Greg. Thank you.

25
00:16:00.310 --> 00:16:01.750 I’ll stop sharing.
NOTE Confidence: 0.783316
00:16:11.510 --> 00:16:13.710 Apologies to the audience. Thank you
NOTE Confidence: 0.78811116
00:16:13.720 --> 00:16:15.070 for your patience.
NOTE Confidence: 0.90931463
00:16:16.900 --> 00:16:17.310 Yeah.
NOTE Confidence: 0.845175955714286
00:16:18.680 --> 00:16:21.228 And it’s not stopping the sharing either.
NOTE Confidence: 0.920403788333333
00:16:31.350 --> 00:16:33.420 Well, in the interest of time, why don’t
NOTE Confidence: 0.900537588
00:16:33.430 --> 00:16:35.650 we move forward with medical oncology
NOTE Confidence: 0.900537588
00:16:35.650 --> 00:16:38.236 and then we’ll come back or Doctor
NOTE Confidence: 0.900537588
00:16:38.236 --> 00:16:40.300 Butler from plastic surgery and we
NOTE Confidence: 0.900537588
00:16:40.300 --> 00:16:42.992 can come back to your slides when we
NOTE Confidence: 0.900537588
00:16:42.992 --> 00:16:45.278 get the technical issues worked out.
NOTE Confidence: 0.900537588
00:16:45.278 --> 00:16:48.950 Doctor Butler, Are you ready and loaded?
NOTE Confidence: 0.7968582225
00:16:50.580 --> 00:16:52.676 So I’m going to share my screen too.
NOTE Confidence: 0.7968582225
00:16:52.680 --> 00:16:54.588 Don’t have the same challenge, but I’m ready.
NOTE Confidence: 0.906935142
00:16:54.920 --> 00:16:56.640 I’m gonna introduce Doctor Butler.
NOTE Confidence: 0.906935142
00:16:56.640 --> 00:16:59.238 He’s an associate professor of surgery
in plastics and reconstructive surgery,
and he’s the inaugural Yale Department of Surgery vice Chair of Diversity, Equity and Inclusion.
He’s board certified both by the American Board of Surgery and the American Board of Plastic Surgery and a Fellow of the American College of Surgeons and his clinical interests are in breast reconstruction and body contouring after bariatric surgery.
Reductions left scars and aesthetic surgery, and we’re thrilled to have him on our Yale team.
So take it away, Paris,
thank you very much for the kind introduction.

I'm going to share my screen.

Maybe, Rachel. Just give me a thumbs up if you can see my screen when the time comes.

Excellent. Looks great, wonderful.

So thanks for allowing me to join you this evening.

I have most recently been recruited to Yale plastic surgery from the University of Pennsylvania.

I've been on faculty here for a little over five months, kind of hard to believe and really fortunate to join an outstanding group.
We are growing our division rather significantly. We have six plastic surgeons amongst our faculty. We have a faculty of 12 now, which is rapidly grown in the last four or five years. Our chief is Bo Pomahac, so all six of these. Individuals perform plastic and reconstructive surgery on breast in one way, shape or form. The majority of us do reconstructive surgery as well on breast and I
would say that is all about 50% of my practice in particular.

So we have Obama hawk who is our division chief.

We have doctor Hari, Ayala myself here, Doctor Melissa Mastriani, Dr Peck and Doctor Vasquez, myself, doctor Pomahac, Dr Ayala and Doctor Peck will be at. Shoreline facilities more times than not.

So we are delighted to care for this, for this Community and this patient for this Community and this patient population over the next I would say.

It’s really difficult to give an
overview of plastic and reconstructive surgery in in eight to 10 minutes,
but I’m going to do my best to kind of keep it there.
So as it pertains to the goal of a breast reconstruction,
as many of you all know it’s to to restore breast appearance and clothes.
We say as we’re setting expectations with our patients and we don’t try to oversell what our capacity is,
but we also try to provide a nice light at the end of the tunnel as it pertains to.
the duration of the completion of their oncologic care. So in my opinion, I think we can do better than just getting them to appear normal in clothes. I think we can get them to restore their breast appearance in a bathing suit. However, we do let them know once that bathing suit is removed and underwear is removed that they will see their scars and such how often is it performed. So if you look at the national data about 65% of the time.
formal breast reconstruction is performed in post mastectomy patients. So that equates to about 138,000 breast reconstruction procedures that are performed annually. This is data from 2020 and the numbers continue to just go up, which I obviously is a plastic surgeon. Unfortunately though, this varies according to age, race, ethnicity and insurance status. While I was at the University of Pennsylvania, we actually looked at who was
getting breast reconstruction
to determine what the rates were
and also to determine if there
are any patient populations that
were not getting breast
reconstruction at the same rate as others.
And what we identified when we looked
at national data over a 6 year period,
there are two subsets of the Community
don’t get breast reconstruction
at the same rate as others.
Those are more. Seasoned ladies,
no one likes to be called old.
So our ladies over 45 and then unfortunately
our ladies of color and namely our
African American and our Latino women.

And then when we look at insurance status, probably not a surprise that uninsured women would not receive breast reconstruction at the same rate as others.

But we’ve also identified the fact that unfortunately, women who have public insurance don’t receive breast reconstruction at the rate as those that have private insurance.

This is a soft spot for me because I do a lot of disparity research and scholastic effort,
and something that needs to be addressed kind of nationwide. I’m going to do my best here at Yale University to help push that envelope and push that needle forward. So what is the best timing for reconstruction? Pretty much anytime, Immediate or delayed, or typically both an option. There’s been good, really good literature out there describing the fact that when a woman wakes up from a mastectomy and has the semblance of a breast mount it, it can be helpful emotionally, socially, psychologically.
And even functionally, I would say it’s probably strong language to say that it is gold standard to have it done immediately, but it is more common occurrence for us to now do it in an immediate setting rather than a delayed setting. That being said, we can offer and do offer breast reconstruction in a delayed setting, so anytime after that initial mastectomy. Who’s the candidate? I would say the vast majority of patients. So any woman who has had or
00:22:25.288 --> 00:22:27.130 is going to have a mastectomy, 
NOTE Confidence: 0.855091302857143
00:22:27.130 --> 00:22:28.948 there’s really no specific age limit. 
NOTE Confidence: 0.855091302857143
00:22:28.950 --> 00:22:30.732 Women over 60 are welcome to 
NOTE Confidence: 0.855091302857143
00:22:30.732 --> 00:22:32.579 inquire and I recommend to my 
NOTE Confidence: 0.855091302857143
00:22:32.579 --> 00:22:34.084 breast surgeons that any woman, 
NOTE Confidence: 0.855091302857143
00:22:34.090 --> 00:22:36.298 regardless or agnostic of of age, 
NOTE Confidence: 0.855091302857143
00:22:36.300 --> 00:22:36.622 race, 
NOTE Confidence: 0.855091302857143
00:22:36.622 --> 00:22:36.944 ethnicity, 
NOTE Confidence: 0.855091302857143
00:22:36.944 --> 00:22:39.198 have an appointment or consultation with one 
NOTE Confidence: 0.855091302857143
NOTE Confidence: 0.855091302857143
00:22:41.690 --> 00:22:42.743 Breast reconstruction is 
NOTE Confidence: 0.855091302857143
00:22:42.743 --> 00:22:43.796 covered by insurance. 
NOTE Confidence: 0.855091302857143
00:22:43.800 --> 00:22:45.544 I get this question all the time when 
NOTE Confidence: 0.855091302857143
00:22:45.544 --> 00:22:47.608 I’m out in the community talking about 
NOTE Confidence: 0.855091302857143
00:22:47.608 --> 00:22:49.552 breast reconstruction and doing my best 
NOTE Confidence: 0.855091302857143
00:22:49.552 --> 00:22:51.127 to enhance breast health literacy.
Our country did a wonderful thing. In the late 90s, our legislators in DC passed the Women’s Health and Cancer Rights Act of 98, which mandated that insurance companies, if a woman has medical insurance, cover breast reconstruction. For the duration of their life, and that also includes a balancing operation on say,
the contralateral side.

Patient suffers from a left sided cancer, has a left sided mastectomy. We do reconstruction on the left side. Their insurance company is mandated for me to also perform a balance and procedure on that opposite side. So as breast reconstruction safe, this has come under a bit of attack of late, particularly as it pertains to implant based reconstruction. So before I get to that, I just want to comment that brush reconstruction does not make the breast cancer recur at any higher rate. We’ve looked at this over and over and
00:23:48.764 --> 00:23:50.496 over again and there’s no heightened rates of recurrence in patients who’ve had reconstruction versus those that opted to not have reconstruction or were not healthy enough for reconstruction.

00:23:52.375 --> 00:23:54.015 Higher complication rates are noted in smokers, obesity and diabetics.

00:23:54.015 --> 00:23:56.394 Sometimes we can optimize patients prior to surgery, other times we cannot.

00:23:58.230 --> 00:24:00.030 We just have to let them know once again what the expectations are and it sometimes does limit the options.

00:24:00.030 --> 00:24:01.773 Silicone implants have been proven to
be safe and reconstruction patients,

even if they rupture,

don’t cause additional harm.

So about six years ago,

there was a lot of conversation about

this association of anaplastic large

cell lymphoma with textured implants.

The FDA has identified a risk of

about one in 30,000 women who had

risk of suffering

anaplastic large cell lymphoma.

The rates when you look more broadly,

it’s like being less than being

struck by lightning.

That being said,

I do.
Address this with my patients at time of consultation and we actually now give them paperwork and have them sign an affidavit with an understanding that this association has been made. Most recently there’s been conversation about an association with a rare type of skin cancer, squamous cell skin cancer associated with the capsule that can develop around the implant. There have been 15 reported cases worldwide. This has been in the news in the last four to six weeks and the FDA made it. A statement.
This is a statement from Bonita Ashar, the director of the Office of Surgical Infection Control Devices for the FDA, that right now we do not have enough information to say whether breast implants cause these cancers or if any types of implants pose higher risks than others. So the reason for the louder part of that statement is because the anaplastic large cell lymphoma has been associated with textured implants and not smooth implants. Thankfully, I really did not put in many textured implants,
have only put in smooth implants, but this skin cancer. Association has been identified both in smooth implants as well as textured implants and once again we need to do additional studies and additional surveillance. So what are the methods of reconstruction? Once again, it would take 2 hours to go over our methods of breast reconstruction, but I kind of separate them. And then three buckets. First and foremost, I’d like to consider what we do as,
as breast reconstructive surgeons,
NOTE Confidence: 0.729710134
So we offer aesthetic flat closures because
NOTE Confidence: 0.729710134
Not everyone wants breast reconstruction.
NOTE Confidence: 0.729710134
Not everyone is healthy enough
NOTE Confidence: 0.729710134
for breast reconstruction.
NOTE Confidence: 0.729710134
So we offer these services to our
NOTE Confidence: 0.729710134
surgical oncology colleagues.
NOTE Confidence: 0.729710134
Breast oncology colleagues,
NOTE Confidence: 0.729710134
as it pertains to mastectomy closures,
NOTE Confidence: 0.729710134
then there's implant based reconstruction
NOTE Confidence: 0.729710134
and then autologous reconstruction.
NOTE Confidence: 0.729710134
So aesthetic cloud closures
NOTE Confidence: 0.729710134
are also becoming more common.
NOTE Confidence: 0.729710134
This is an article from the Annals
NOTE Confidence: 0.729710134
of Surgical Oncology in 2020 which
00:26:47.958 --> 00:26:49.926 documented the fact that there was
some women that were pretty upset
00:26:51.873 --> 00:26:54.575 with the fact that 22 / 22% of the
women that were surveyed did not
00:26:56.450 --> 00:26:58.922 have this offer to them as an option.
00:26:59.264 --> 00:27:01.936 they went on to identify the fact that
74% of the women that did have a flag.
00:27:03.580 --> 00:27:03.905 Sure.
00:27:05.860 --> 00:27:08.212 So this you know plastic surgeons we like
formal breast reconstruction,
00:27:10.750 --> 00:27:12.060 Rather recently operated on who
00:27:13.816 --> 00:27:15.010 decided that she did not want
she wanted to be closed flat.

Our incision patterns are changed over time.

There was more of an oblique incision initially and then we went to more of a horizontal.

And now I kind of prefer this incision that mimics the inframammary fold and we’ve gotten good results with it.

Women are able to be fitted with external prosthesis if they want. It also avoids any of the extra skin and intertrigo.

That can happen after mastectomy, particularly in large breasted women.

So when it comes to our methods of
of formal breast reconstruction,
reconstructing a breast mound 75% of the time in this country it’s performed via the use of an implant typically in two stage fashion with a tissue expander placed slowly inflated over multiple weeks to months and then a permanent implant placed. And then 25% of the time we’re using an autologous technique, so using tissue from another part of the body to recreate, reconstruct and recreated. I would say at Yale this number

49
is not necessarily reflective.

I would say that we do probably more 40 to 50% autologous and about 50 to 60% implant based.

This is very, we’re fortunate that the vast majority of us here have a background in microsurgical reconstruction which allows us to carry out this additional technique and provide this additional option for these patients.

So the realities of implant based reconstruction for the most part it’s for small to moderate breast sizes kind of aided, we’re limited in the size of implants.

There is a large implant
trial that is ongoing. So we may have some additional options for our larger breasted women or women that desire to reach a larger size. It’s a shorter operative procedure about 2 hours, shorter hospitalization one to two days and once again as I said typically requires 2 procedures that expand or. Followed by a permanent implant. Implant replacement is recommended by all three of the big implant manufacturers to happen at the 10 to 15 year Mark. And then it’s not ideal for
patients that need radiation therapy

which once again could be another hour long conversation.

And then for the most part for unilateral operation,

the patient must have an understanding that they should consider a balancing procedure on the other side.

Realities of flat based reconstruction.

Once again we love, show and tell. This is the woman that I did,

as in a delayed fashion, we usually kind of steer women in this direction if they are have a larger BMI or a larger body habitus.

The operative procedure is longer,
it’s longer and it’s more difficult on the patient, at least up front. It also requires a longer hospitalization, usually three to four days. There is a risk of hernia or bulge. I don’t oversell this, I inform patient. It’s about the five to 10% risk of a hernia and then flat death is about 2% where that and at microsurgical anastomosis doesn’t work that’s about 2% nationwide. It’s not for smokers, not for super obese, not for those that have severe
comorbidities and then they also must know that this is typically not just a one and done either more times than option.

If you look at the literature I touch up operation either one or two maybe sometimes three is required in order to get them to do a result that they’re pleased with and we are also satisfied with.

So what about lumpectomy patients, I’ve been really pushing and doctor Greeno can attest to this.

I think there’s an operation out there called Uncle Plastic breast, reduction surgery where a patient who has a small cancer and a larger...
breast that are very toxic breast
and get the benefits of a breast
reduction or a breast lift at the
time of their cancer resection.
This is the silver lining for
many of our ladies.
I do a lot of breast reduction
surgery and being able to.
I really think it’s the both
the best of both worlds.
Patients obviously will still necessitate
radiation therapy more times than
not because this is a component of
their breast conservation therapy.
So this is a patient who had large breast,
she had always wanted a breast reduction.
We were able to do an uncle
plastic reconstruction.
This is actually after her.
Radiation as well and
she's healed beautifully.
She's got just a still a little
bit of skin darkening but was
ecstatic with her result.
Here's another young lady.
She had a cancer on the left side.
Lots of tosis.

Had always wanted a breast lift, thought she would be vain by setting it,

So we did a breast lift and and lumpectomy at the same time.

And she was also quite pleased.

The breasts just keep getting larger.

And my slideshow here’s a woman who was actually turned down for breast reductions previously developed.

And then finally a much more seasoned lady,

I had a breast surgeon that that sent
this patient to me said I don’t think there’s anything we really can do. And the radiation oncologist, we’re concerned about radiating such a large entatic breast causing lymphedema in the breast and we were able to give her this result. So in short and in summary, there are many options and I believe that all patients should be offered a consultation with a plastic surgeon. To just discuss those reconstructive options, I’m a big proponent of shared decision making. I don’t push patients in any direction. I kind of provide them the menu and...
then we have a good conversation about what’s going to be best for them. And then as I mentioned before, the method and timing of the procedure is one that should fulfill the patients needs and lifestyle. So with that I will stop sharing. Thank you all very much.

Yeah. Thank you so much, Doctor Butler, and we’re so lucky to have you at Yale. Paris has a national reputation in oncplastic reconstruction and many of our patients have thought about breast reduction or lift their whole life. And the ability to have it covered by...
insurance or the inability to pay cash has prohibited them from moving forward. So when they come to us with a cancer, it’s an opportunity to both improve. and also make it easier for their downstream treatment with lower risk of lymphedema. As you mentioned, we’re going to ship back to Doctor Zaneski. I think we’ve resolved our technical issues. So Eliza is going to load up his slides and we look forward to hearing about breast cancer surgery. OK. Alright, great. Thank you. Yes. And you’ll be advancing them. Uh, thank you so much.
You have advanced to the next slide.

Great. And again, one more.

Perfect. Yeah.

We got stuff at the surgical clinic.


So, so this is, you know, an operating room here at Shoreline.

Detailed view,

you can see the operating room table and anesthesia station in the very far back.

In the back right is our intraoperative facts atron where we take specimen

In the back right is our intraoperative facts atron where we take specimen radiographs and of course of

the instrument table and

the operations that we do here you

NOTE Confidence: 0.746751922

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778

NOTE Confidence: 0.805293687777778
Know surgical excision, biopsy, you know things like atypia, some women choose to have fibroadenomas removed. These are benign tumors and so all can be done here with with the localization as doctor Philpotts. Breast conservation to classical lumpectomy, the big departure from radical mastectomy decades ago that we’re performing hopefully over 70% of the time for early stage breast cancer. Radiological localization, Doctor Phil Potsin over that with wire localization and tag localization.
00:35:22.480 --> 00:35:24.916 I’ll show some images as well.

00:35:24.920 --> 00:35:27.520 Localization can be same day,

00:35:27.520 --> 00:35:29.592 you know bundled with you want Academy

00:35:29.592 --> 00:35:31.992 or we have the option to localize

00:35:31.992 --> 00:35:33.802 the small tumors and radiology.

00:35:33.810 --> 00:35:35.987 Sleep on a separate day and then

00:35:35.987 --> 00:35:38.603 do the going back to me as a first

00:35:38.603 --> 00:35:40.788 case early in the in the morning.

00:35:40.790 --> 00:35:41.896 Axillary surgery,

00:35:41.896 --> 00:35:44.661 things like Sentinel lymph node

00:35:44.661 --> 00:35:46.837 biopsy routinely performed here

00:35:46.837 --> 00:35:48.585 actually lymph node dissection

00:35:48.585 --> 00:35:51.368 or a lymph node excision biopsy

00:35:51.368 --> 00:35:53.988 to help our hematologists and

00:35:53.988 --> 00:35:56.084 oncologists with lymphoma diagnosis

NOTE Confidence: 0.805293687777778
were often involved in that.

And as we go forward,

we’ll be introducing mastectomy.

Under the directorship of

Doctor Greenup at Shoreline,

Same Day mastectomies,

possibly in the near future,

mastectomies with immediate breast

reconstruction, implant based,

possibly same day discharge.

It was working on that in New Haven.

That’s a new addition to

the Department of Surgery.

And maybe even overnight stay

at Shoreline one day.

So all these things are are being
thought about and discussed to bring more complex breast and reconstruction surgery out to the community and closer to the patient’s home that the next slide please. Yeah. This is again some of the localization. I can see the two wires there. That’s a bracketed lumpectomy. And then the other image is what we call our tag localization, which can be placed prior to the day of surgery. And again, these are utilized to find small tumors within the breast that are not palpable. Next slide. There’s a picture of a
00:37:13.600 --> 00:37:14.960 Sentinel lymph node biopsy.
NOTE Confidence: 0.812327905555556
00:37:14.960 --> 00:37:17.767 I can see the tiny blue dye.
NOTE Confidence: 0.812327905555556
00:37:17.770 --> 00:37:20.600 We can do intraoperative injection
NOTE Confidence: 0.812327905555556
00:37:20.600 --> 00:37:24.359 of the radioisotope or the blue dye.
NOTE Confidence: 0.812327905555556
00:37:24.360 --> 00:37:26.929 These are two markers that are injected
NOTE Confidence: 0.812327905555556
00:37:26.929 --> 00:37:29.305 into the breast to help identify
NOTE Confidence: 0.812327905555556
00:37:29.305 --> 00:37:31.310 the Sentinel lymph node biopsy.
NOTE Confidence: 0.812327905555556
00:37:31.310 --> 00:37:35.478 And that's part of a routine staging process.
NOTE Confidence: 0.812327905555556
00:37:35.480 --> 00:37:37.538 And as we are moving forward,
NOTE Confidence: 0.812327905555556
00:37:37.540 --> 00:37:39.565 there's a new initiative called
NOTE Confidence: 0.812327905555556
00:37:39.565 --> 00:37:41.185 the Choosing wisely initiative.
NOTE Confidence: 0.812327905555556
00:37:41.190 --> 00:37:43.428 Businesses from the Society of Surgical
NOTE Confidence: 0.812327905555556
00:37:43.428 --> 00:37:45.671 Oncology and the American Board of
NOTE Confidence: 0.812327905555556
00:37:45.671 --> 00:37:47.391 Internal Medicine where maybe we
NOTE Confidence: 0.812327905555556
00:37:47.391 --> 00:37:49.839 can deescalate and not have to do or
NOTE Confidence: 0.812327905555556
00:37:49.839 --> 00:37:51.579 routinely do a Sentinel lymph node
00:37:51.579 --> 00:37:55.080 biopsy for our women who are 70 and above.

00:37:55.080 --> 00:37:57.740 Early stage breast cancer with favorable biologic markers,

00:37:59.340 --> 00:38:01.312 meaning estrogen receptor positive,

00:38:01.312 --> 00:38:03.777 her two negative patients are taking to this very strongly when we discuss this because what it’s able to do is reduce the amount of side effects when the even though it’s low risk with Sentinel and biopsy,

00:38:08.786 --> 00:38:11.194 to do is reduce the amount of side effects when the even though it’s

00:38:11.200 --> 00:38:13.384 effects when the even though it’s

00:38:13.384 --> 00:38:15.619 low risk with Sentinel and biopsy,

00:38:15.620 --> 00:38:17.396 we’re able to lower that even

00:38:17.396 --> 00:38:19.209 further by not removing lymph nodes

00:38:19.209 --> 00:38:21.204 and also a range of motion issues.

00:38:21.210 --> 00:38:23.500 So that’s been a new,

00:38:23.500 --> 00:38:25.320 a new approach in surgical.

NOTE Confidence: 0.812327905555556
College over the last four to five years.

And the next slide please.

And the specimen radiograph again, you know, focusing on the instrument. Uh, the machine in the back, the machine in the back, right when we do the lower back we were able to do. Immediate specimen radiograph.

This is very good for confirming your removal of the tumor of the biopsy clip, but it also helps with with helps us with margin status. You know one of the big things with successful oncologic surgery is negative margins for invasive cancers 2 Senate, 2 millimeters or greater for ductal
carcinoma in situ only lobectomies and we're able to gain more a lot of information with the intraoperative specimen radiograph to look at the margins. To see as a surgeon, you know are things looking very good on that radio graph and to take shave margins at that time of surgery and thereby reduce the risk of second operations for margin resection. You know our goal is to keep that and never we can never achieve 0, but we want to find a very nice range where it’s not too high, not too well,
so we can have good cosmetic outcome, good oncologic outcomes and that machine is very important.

Next slide please.

Go back one here, back one more. There we are. Yeah.

So again, this is a special radiograph. The larger one is A tag, a lumpectomy and to the lymph node. You know the tiny lymph node with the biopsy clip in it here at Yale over routinely put a biopsy clip after a lymph node has been radiologically biopsied. And we can confirm retrieval of that in the operating room to
help with our accuracy and false negative rates with Sentinel.

You know biopsy.

Next slide please.

And with regard to clinical trials at the shoreline and in our clinics, we’re able to offer you two trials, surgical trials.

The alliance A 011202 was open here and is now reached the coral and we’ll be awaiting those results in about 5 years.

And we’ve had patients who’ve enrolled and able to do their files with us at Shoreline and we’re actively recruiting within the comet trial.
You know, we’re asking ourselves. Finally, believe it or not is aggressive treatment as you know, are invasive cancer type treatments necessary for precancerous disease, ductal carcinoma inside you and this is a randomized trial looking at, believe it or not, possibly omitting surgery, ductal carcinoma inside you and this is a randomized trial looking at, possibly omitting surgery, randomizing women with favorable DCIS, meaning a low risk to surgery or no possibly omitting surgery, randomizing women with favorable DCIS, meaning a low risk to surgery or no possibly omitting surgery, surgery with the options of some of the other adjuvant therapies. Um, so we’ve recruited patients at Shoreline already in our actively recruiting in this,
00:41:32.850 --> 00:41:35.251 this trial to answer some of these

00:41:35.251 --> 00:41:37.445 pending questions of how aggressively do

00:41:37.445 --> 00:41:41.450 we need to treat ductal carcinoma in situ.

00:41:41.450 --> 00:41:42.248 Next slide please.

00:41:44.620 --> 00:41:46.800 And comprehensive care, you know,

00:41:46.800 --> 00:41:49.134 a lot of our discussions when

00:41:49.134 --> 00:41:51.669 patients come in with newly diagnosed

00:41:51.669 --> 00:41:54.369 breast cancer or even high risk

00:41:54.369 --> 00:41:56.800 things like genetic counseling,

00:41:56.800 --> 00:42:00.314 risk stratifying by the various risk models,

00:42:00.320 --> 00:42:02.546 the Gale model, the Tyra Cusick model,

00:42:02.550 --> 00:42:04.734 we routinely do that in our

00:42:04.734 --> 00:42:06.190 clinics with appropriate referrals

00:42:06.249 --> 00:42:08.009 due to our genetic counselors.

00:42:08.010 --> 00:42:10.038 They’re not on site at Shoreline,
but certainly by zoom can do referrals.

Um, social work we have on site social workers who help us uh routinely and we're very grateful to their help our outpatient oncology rehabilitation services, OK, not on site, but again a quick phone call to the director Scott Kaposa who is always willing to see our patients promptly and streamline them for various post surgical issues or even non post surgical issues, things like lymphedema. Um or postmastectomy, pain, all of those different things. Uh, nutrition consultation,
again, within the system, we're able to access that at Smilo as well as smoking cessation. Patients have been very receptive to these consultations and part of our comprehensive care model. Next slide please. That concludes my discussion. Like to thank everybody for their time. The Breast Center number is there and there's my e-mail. You know, certainly I encourage anybody to e-mail me directly and certainly will provide my cell phone number because a lot of the most difficult
discussions I think in the primary care may very well be what do you do with some of the radiologic findings? We're happy to help integrate and answer those. Those questions, uh what types of follow-up screening strategies for high risk. Um, you know all of those different things. So always happy to help problem solve and would really encourage anyone to primary care OBGYN setting to certainly send an e-mail how can we help you remember sure surgery at shoreline for breast cancer, you know from Yale started in 2020 that was our first breast surgery there.
Breast conservation so alive.
Of changing quickly um.
And we would like to certainly get
your feedback on how we can help you
navigate your patients view benign disease,
high risk as well as malignancy.
And there’s a shout out to Doctor Horowitz who started the clinic here several years ago with Doctor Kiley and it’s a torture carrying and we’ve since her retirement we’ve added breast surgery and even expanding to reconstruction under the directorship of Doctor. Or Salvador.
Great things there.
And that’s Elizabeth, our nurse practitioner, uh Renee, one of our assistants, and Sherry, one of our nurses and coordinators.
Again, feel free to always send an e-mail and happy to help in any way.
Thank you. Thank you so much, Greg.
And I think the community had big concerns that we would not be able to fill doctor Horowitz’s tremendous role in caring for our breast cancer patients. Those are big shoes to fill, but we’re doing our best to keep up.
So we all prioritize access and a high quality patient centered care and we're here to help anytime.

It's a pleasure to introduce the next speaker known her for some time. Sarah Mcgillion is an associate professor of medicine, medical Oncology and chief ambulatory officer for Smilow Cancer Hospital. She cares for patients with breast cancer in New Haven and more recently we are so happy to have her in Guilford. She's also involved in education of students, residents and fellows here.
at Yale outside the clinic.
NOTE Confidence: 0.90889765
She’s involved with cancer outcomes,
NOTE Confidence: 0.90889765
public policy and effective veness research,
NOTE Confidence: 0.90889765
which is called Copper Center
NOTE Confidence: 0.90889765
at Yale Cancer Center,
NOTE Confidence: 0.90889765
with a specific interest in
NOTE Confidence: 0.90889765
chemotherapy regimens used in the
NOTE Confidence: 0.90889765
treatment of breast cancer and how
NOTE Confidence: 0.90889765
they are used in clinical practice.
NOTE Confidence: 0.90889765
So welcome, Sarah.
NOTE Confidence: 0.90889765
Thank you for joining us today.
NOTE Confidence: 0.69482982625
Thanks, waji.
NOTE Confidence: 0.69482982625
So welcome everybody like Doctor Butler.
NOTE Confidence: 0.69482982625
I think that this is clearly a topic
NOTE Confidence: 0.69482982625
that fits very nicely into 10 minutes.
NOTE Confidence: 0.69482982625
Describe my job in 10 minutes,
no problem. As what you said, I do see patients at the Guildford location one day a week. I'm also in New Haven one day a week. But what we're really what I really want to get across is anything we can do in New Haven, we can also do in Guildford and.

I love working in Guildford. I love the parking situation. Air rights is my worst nightmare.

But I love the the group that we have out here and I love my colleagues in Guildford. So with the few small exceptions of a couple of clinical trials.
that really have very high level needs and rapid turnaround,
we can do just about anything in Guildford that we can do in New Haven.
What I really want to get across.
If you have a patient who’s been diagnosed with breast cancer,
she’s in for a ride, but she is also in for a ride.
So if a patient has breast cancer,
there’s a multidisciplinary team consisting of a medical oncologist,
a radiation oncologist, a surgeon and those three different disciplines work closely with
00:47:30.502 --> 00:47:32.879 our diagnostic imagers as doctor
00:47:32.879 --> 00:47:35.084 Philpotts has described to get
00:47:35.084 --> 00:47:37.440 appropriate imaging right off the bat.
00:47:37.440 --> 00:47:40.236 W e also have social work, physical therapy.
00:47:40.236 --> 00:47:41.592 Nutrition, genetics,
00:47:41.592 --> 00:47:44.304 fertility and reproductive endocrinology,
00:47:44.310 --> 00:47:46.634 all prior to the patient who might
00:47:46.634 --> 00:47:48.777 then have to undergo chemotherapy
00:47:48.777 --> 00:47:50.388 prior to surgery.
00:47:50.390 --> 00:47:53.470 Each of those little dots is a treatment.
00:47:53.470 --> 00:47:55.689 Then the patient might have surgery with
00:47:55.689 --> 00:47:57.705 a breast surgeon and a reconstructive
00:47:57.705 --> 00:47:59.709 surgeon as as doctor Zaneski and
00:47:59.709 --> 00:48:01.328 Doctor Butler have described.
00:48:01.330 --> 00:48:03.448 They might continue on getting more
83
chemotherapy or more anti cancer therapy prior to then getting radiation, which could be up to 30 or even more. With nutrition, physical therapy all along the way and then once the definitive treatment is finished, there’s continued follow-up visits, mammograms, bone density studies, infusions, physical therapy and the list goes on and on. So this is not one stop shopping, this really requires a closely knit group of clinicians who are working together to provide the best care.
So just a little bit more about multidisciplinary care in the actual treatment of breast cancer itself. The goal of breast surgery is to remove the known cancer, obtain negative margins, evaluate the lymph nodes, and removed the involved lymph nodes. Surgery alone can be curative. However, the goal of radiation, as I like to describe it in clinic, is to deliver radiation on top of that, and I don’t want to steal Doctor Higgins’s Thunder.
00:49:04.270 --> 00:49:06.270 is to mop up any microscopic disease in
the breast and the regional lymph nodes,
and this is generally administered
after lumpectomy and can be recommended
even after a mastectomy and this.
The goal of radiation is to reduce local
recurrence. So then you might say,
well surgery, radiation,
well after surgery, radiation,
breast is all clean.
Why do you need a medical oncologist?
Well, we have a different goal
in medical oncology and our goal
is to mop up the microscopically
undetectable disease systemically.
And our goal is to reduce the risk
of distant recurrence to reduce
the likelihood that a patient dies of metastatic breast cancer.

Umm. Nope. I’m going to do a little more animation. This is what happens when you oops, when you copy forward animated things. So how do we decide who gets what medical treatment? It’s a really complicated story. It takes into account patient characteristics, their age, their medical comorbidities, their own personal preferences. It takes into account tumor stage, which is tumor size, nodal status.
and the presence or absence of metastatic disease and tumor characteristics such as grade hormone, receptor status. Her two status. And I know that these may not be quite familiar. Concepts, but they the goal of this slide is to just demonstrate that it’s not one-size-fits-all for all patients. And based on that combination we then choose a systemic therapy. I want to review really quickly staging. you know it’s it’s funny everybody comes into clinic and they that this is their number one question,
NOTE Confidence: 0.4904061
00:50:38.290 --> 00:50:40.170 what’s my stage because apparently
NOTE Confidence: 0.4904061
00:50:40.170 --> 00:50:42.050 that’s the most common question
NOTE Confidence: 0.4904061
00:50:42.110 --> 00:50:44.162 that they are asked upon revealing
NOTE Confidence: 0.4904061
00:50:44.162 --> 00:50:45.924 a breast cancer diagnosis stage
NOTE Confidence: 0.4904061
00:50:45.924 --> 00:50:48.288 is more than just the tumor,
NOTE Confidence: 0.4904061
00:50:48.290 --> 00:50:50.678 the nodal status and the presence
NOTE Confidence: 0.4904061
00:50:50.678 --> 00:50:52.270 or absence of metastases.
NOTE Confidence: 0.4904061
00:50:52.270 --> 00:50:54.286 More recently we started in
NOTE Confidence: 0.4904061
00:50:54.286 --> 00:50:56.526 incorporating some of these other.
NOTE Confidence: 0.4904061
00:50:56.530 --> 00:50:58.903 Features of of a breast cancer such
NOTE Confidence: 0.4904061
00:50:58.903 --> 00:51:01.159 as the grade, the estrogen receptor,
NOTE Confidence: 0.4904061
00:51:01.159 --> 00:51:03.637 the progesterone receptor and her two
NOTE Confidence: 0.4904061
00:51:03.637 --> 00:51:06.277 to come up with a more prognostic
NOTE Confidence: 0.4904061
00:51:06.277 --> 00:51:08.771 stage that’s really more aligned with
NOTE Confidence: 0.4904061
00:51:08.771 --> 00:51:10.735 the patient’s overall prognosis.
NOTE Confidence: 0.4904061
So you might say, OK, well what does all that mean? Well grade is a measure of how aggressive the cancer appears under the microscope as described by our pathology colleagues. And in general, the higher the grade, the more aggressive we have to be to prevent a systemic recurrence. Then we get on to the estrogen and progesterone receptors. These are nuclear based hormone receptors. They and the kind of quick and dirty way of thinking about these is if the cancer expressed...
estrogen or progesterone receptors, it's fueled by hormones and so hormone deprivation or interference with that receptor and ligand interaction can be a therapeutic option and we have medications that do just that. Her two is a member of the EGFR family of cell surface receptors, and it can be overexpressed in some cancers. Her two positive or her overexpressing cancers are often poorly differentiated and require chemotherapy and really aggressive and intense therapy.
We also have gene expression profiles at our disposal that can help determine whether or not a patient needs chemotherapy. One such example is the Oncotype DX, which is a 21 cancer related gene expression panel that spits out a number on a scale of zero to 100. The higher the number, the higher the risk of the recurrence and if that number is over 25 in general chemotherapy is going to be discussed. It’s a kind of a quick and dirty way of thinking about what’s the underlying biology of the cancer.
we take a lot of things into consideration.

We take into account medical history and the presence or absence of heart disease, diabetes, osteoporosis, prior venous thromboembolism, autoimmune disease and then importantly, and we haven’t mentioned this much, but we take into account family history, there are a lot of different genetic syndromes associated with breast cancer and the presence or absence of a genetic predisposition. May impact not only local therapy, but it’s becoming increasingly used to determine what systemic
00:53:30.140 --> 00:53:32.360 therapies might be used.
NOTE Confidence: 0.859969678888889
00:53:32.360 --> 00:53:33.812 So I’ll quiz you all on
NOTE Confidence: 0.859969678888889
00:53:33.812 --> 00:53:35.200 this a little bit later.
NOTE Confidence: 0.859969678888889
00:53:35.200 --> 00:53:36.805 These are all the chemotherapy
NOTE Confidence: 0.859969678888889
00:53:36.805 --> 00:53:37.447 regimens actually.
NOTE Confidence: 0.859969678888889
00:53:37.450 --> 00:53:38.248 These are not all of them,
NOTE Confidence: 0.859969678888889
00:53:38.250 --> 00:53:39.920 these are some of them,
NOTE Confidence: 0.859969678888889
00:53:39.920 --> 00:53:41.250 but they’re complicated and they
NOTE Confidence: 0.859969678888889
00:53:41.250 --> 00:53:42.580 all have different side effects.
NOTE Confidence: 0.859969678888889
00:53:42.580 --> 00:53:43.680 They all have different schedules,
NOTE Confidence: 0.859969678888889
00:53:43.680 --> 00:53:45.140 they all have different needs,
NOTE Confidence: 0.859969678888889
00:53:45.140 --> 00:53:48.980 different central access requirements,
NOTE Confidence: 0.859969678888889
00:53:48.980 --> 00:53:50.900 different durations.
NOTE Confidence: 0.859969678888889
00:53:50.900 --> 00:53:52.262 It’s because of this that doctors
NOTE Confidence: 0.859969678888889
00:53:52.262 --> 00:53:53.738 are here and I have a job.
NOTE Confidence: 0.859969678888889
00:53:53.740 --> 00:53:58.420 So, so not to not to make light of this,
but it’s complicated and different regimens are used for different. Different settings. We use a lot of different chemotherapy drugs. Here are some common ones and some of the more long-term side effects that can happen. These are really potent drugs that do kill cancer, and it’s great that they kill cancer, but they can cause other problems as well, namely cardiomyopathy with some of the anthracyclines, neuropathy with some of the taxanes, and hypersensitivity.
00:54:27.235 --> 00:54:29.055 reactions across the board.
NOTE Confidence: 0.8808648844
00:54:31.700 --> 00:54:33.228 Just really quickly, we,
NOTE Confidence: 0.8808648844
00:54:33.228 --> 00:54:34.756 the multidisciplinary treatment of
NOTE Confidence: 0.8808648844
00:54:34.756 --> 00:54:36.687 breast cancer does require conversations
NOTE Confidence: 0.8808648844
00:54:36.687 --> 00:54:38.913 for a number of different clinical
NOTE Confidence: 0.8808648844
00:54:38.913 --> 00:54:40.980 scenarios where we have to decide, well,
NOTE Confidence: 0.8808648844
00:54:40.980 --> 00:54:43.260 who’s going first, surgery going first?
NOTE Confidence: 0.8808648844
00:54:43.260 --> 00:54:45.198 Is chemotherapy going first? Are we,
NOTE Confidence: 0.8808648844
00:54:45.200 --> 00:54:48.296 are we thinking about other strategies?
NOTE Confidence: 0.8808648844
00:54:48.300 --> 00:54:50.432 And there are different
NOTE Confidence: 0.8808648844
00:54:50.432 --> 00:54:52.564 rationales for doing either.
NOTE Confidence: 0.8808648844
00:54:52.570 --> 00:54:54.295 It’s called adjuvant systemic therapy
NOTE Confidence: 0.8808648844
00:54:54.295 --> 00:54:56.906 when surgery is 1st and it’s called
NOTE Confidence: 0.8808648844
00:54:56.906 --> 00:54:58.966 neoadjuvant when chemotherapy is first.
NOTE Confidence: 0.8808648844
00:54:58.970 --> 00:55:00.257 So if you ever see that in a note,
NOTE Confidence: 0.8808648844
00:55:00.260 --> 00:55:01.884 that’s kind of all that that’s describing.
But this really does require close communication, particularly between the surgeon and the medical oncologist, but often requires the radiation input as well as the reconstructive surgery input to plan down the line once chemotherapy is complete. And then moving on into the more chronic phase of cancer of many cancer treatments, we use a lot of anti estrogen therapy, namely tamoxifen or other aromatase inhibitors which work by preventing the peripheral aromatization of steroids into estrogen.
And they work in different ways. They have pretty nasty potential side effects. Tamoxifen can cause vasomotor symptoms like hot flashes. There's a small risk of blood clots and uterine cancer, although it may be helpful for osteoporosis. Aromatase inhibitors, on the other hand, can cause more of a second menopause in postmenopausal women with a persistent or even more pronounced low estrogen state, and can cause vasomotor symptoms, accelerated bone loss,
and and even increased cholesterol.

Once we’ve completed the definitive treatment or in and are into the surveillance phase,

we do history and physicals one to four times per year.

We do periodic screenings for family history.

We manage some of the acute and chronic toxicities of our cancer treatments.

Patients get annual mammograms.

I think it’s important to note that we’re not doing routine surveillance imaging in the absence of clinical signs and symptoms that suggest recurrence.

However,

there may be a.
A low threshold to image in the setting of symptoms that meet what I like to call the three P’s symptoms that are perplexing, persistent or progressive. And that’s where patients with a history of cancer may end up getting more scans as a result of. Unfortunately about 15% of the time are are curative treatments aren’t effective or patients present with metastatic breast cancer. The most common sites of breast
cancer metastases are bone, liver, lung, with brain being a distant fourth. Although on average the life expectancy after a diagnosis of breast cancer is about two years, this is a huge spectrum with patients that could live for even decades depending on some of their disease burden, their performance status, what type of breast cancer they have, and then the response that their cancer has to treatment. I wanted just to mention that this
an area that breast cancer and breast oncology is an area of a lot of research with lots of novel drugs that are all at our beckon call and all of which can be either administered IV IM subcutaneously or or orally with new targeted agents such as CDK 46 inhibitors, PARP inhibitors, PI3 kinase inhibitors and antibody drug. Projects, and I’m not gonna bore you with all of the mechanisms of all of those things, but they are new and exciting, keeping people with metastatic breast cancer alive for longer, to enjoy more quality life with their loved ones.
That is all that I have.
Thank you very much for the opportunity.
I'll turn it back over to I think Doctor Zahir.
Thank you, Sarah. That was wonderful.
That was an excellent review of what we do in 10 minutes and I completely agree with you.
We try to do what we are doing in New Haven and and even more because of the very people that are presenting here tonight.
So before I go on to the last speaker
of the evening, I just want to mention if you have any questions,
please be prepared to ask.
And don’t be afraid to ask.

103
and write them down.

Also, there’s a choice to do that.

So the next speaker is really a pleasure
to introduce Doctor Susan Higgins,
who I have known for forever,
She’s a professor of therapeutic radiology and of obstetrics,
She also serves as a. Last year of Wellness and engagement
Last year of Wellness and engagement
for therapeutic radiology and she is
a medical director for the radiation
Oncology at Shoreline Medical Center.
She completed her residency in
therapeutic radiology at Yale and
Great for Yale and all of us that she decided to stay here. She for nearly 25 years has dedicated herself as an educator, mentor, researcher and above all a dedicated clinician at Yale. It's really a pleasure to work with her. We all, the all the patients as well as the staff at at the shoreline are so grateful that she’s here with us and takes care of our patients. Thank you.

So then you’re muted.
01:00:15.410 --> 01:00:16.554 Yep. Thank you Angie.

NOTE Confidence: 0.8753506 01:00:16.554 --> 01:00:18.270 I’m going to share my screen

NOTE Confidence: 0.8753506 01:00:18.270 --> 01:00:21.210 and hopefully let me get to.

NOTE Confidence: 0.83398247 01:00:23.540 --> 01:00:25.640 Let’s see if I can get this

NOTE Confidence: 0.83398247 01:00:25.640 --> 01:00:29.030 to show the slideshow. OK.

NOTE Confidence: 0.83398247 01:00:29.030 --> 01:00:30.694 Hold on one second. OK.

NOTE Confidence: 0.83398247 01:00:30.694 --> 01:00:31.590 Can everybody see that?

NOTE Confidence: 0.928922105 01:00:33.820 --> 01:00:35.172 So one of the things I wanted to

NOTE Confidence: 0.928922105 01:00:35.172 --> 01:00:36.549 do was just a little bit of a,

NOTE Confidence: 0.928922105 01:00:36.550 --> 01:00:39.374 a little bit of a historic overview before

NOTE Confidence: 0.928922105 01:00:39.374 --> 01:00:42.607 I talk about radiation and and basically.

NOTE Confidence: 0.928922105 01:00:42.610 --> 01:00:44.374 It continues on some of the themes

NOTE Confidence: 0.928922105 01:00:44.374 --> 01:00:46.068 that others have talked about here.

NOTE Confidence: 0.928922105 01:00:46.070 --> 01:00:47.684 But in terms of the regional

NOTE Confidence: 0.928922105 01:00:47.684 --> 01:00:49.310 oncology services and the shoreline,

NOTE Confidence: 0.928922105 01:00:49.310 --> 01:00:51.608 you know we started the Shoreline
Medical Center actually it’s now about 18 years ago and it was one of the first places where we were able to get Yale medical Oncology, radiation oncology and diagnostic imaging under the same roof. And I think we all had you know great hopes for the shoreline that are all now sort of coming true. So it’s it’s a really exciting time to be here.
but then we in 2019 here,
well in the near term we had this
smile all of course expansion
of our Cancer Center downtown
with the Smilow Cancer Center.
And then in 2019,
the investment in our infrastructure here
with the renovation and expansion of
all of our oncology and imaging services,
including upgrades that gave
us a beautiful surgical center.
With more accommodations for our
breast surgeons including our
plastic surgeons and more space for
our medical oncology colleagues.
And I think that you know we continue
to build the team and build the services.
And what we’re seeing now in 2022 as my colleagues have spoken about is that we really have a truly comprehensive multidisciplinary oncology Center for breast care here and we are happy to see you know in our. Our catchment area is expanding. And you know, we’re just very happy to serve the community and I think that as you know, we continue to to grow. We’re seeing a lot of gratitude from the patients and it’s just a great place to work and a great place to Park,
right, Sarah?

Not only a great place to work but a great place to Park.

But anyway, so I just wanted to you know just I think if I get one point across is we’re happy to see your patients, we love working here and you know it’s one stop shopping for patients with breast cancer and it’s sort of a dream come true for a lot of us.

So basically with regard to radiation therapy. To do a little bit of an overview, uh, people know a little less about radiation than they do about some of the other oncologic disciplines.
So I’ll just start with like a little tiny intro of radiation 101, then talk about radiation therapy and the multidisciplinary treatment of breast cancer, both for breast conservation and patients who have had a mastectomy. And one of the technical advances that I wanted to talk about today is one of our, our projects that we began a few years ago that’s at all of our sites. That has really changed what we do with regard to treatment and that’s the deep inspiration breath hold technique.
I thought it would be helpful to speak about some of the things that we do for our patients with metastatic disease because as our systemic therapies are getting better, we as radiation oncologists are being called upon to help with the sites of sanctuary sites like the CNS and some extracranial sites have been static disease. So, you know, for five decades now, radiation therapy has been an essential part of the oncologic triad of oncologic treatments and about 50% of people who have cancer...
01:04:03.640 --> 01:04:05.040 receive radiation therapy during
01:04:05.096 --> 01:04:06.786 their course of their illness.
01:04:09.230 --> 01:04:11.610 And it’s radiation is a key component
01:04:11.610 --> 01:04:13.730 of curative breast cancer treatment,
01:04:13.730 --> 01:04:15.795 both in breast conservation therapy
01:04:15.795 --> 01:04:17.860 where patients who receive lumpectomy
01:04:17.921 --> 01:04:19.787 in general with a few exceptions,
01:04:19.790 --> 01:04:21.764 but most patients who get a lumpectomy.
01:04:21.770 --> 01:04:23.970 It’s followed by as as
01:04:23.970 --> 01:04:25.730 Doctor McCallion pointed out,
01:04:25.730 --> 01:04:27.470 we are the cleanup crew radiation
01:04:27.470 --> 01:04:29.211 therapies used to take care of
01:04:29.211 --> 01:04:30.531 microscopic cells that might be
01:04:30.531 --> 01:04:32.853 left in the breast or nodes and
01:04:32.853 --> 01:04:34.329 following mastectomy select patients,
not all, but many patients received postmastectomy radiation therapy. To reduce the risk of local recurrence, radiation has been shown to be really safe and effective, and it can reduce the risk of local and regional recurrences by 50 to 70%. And in certain patient subsets, radiation therapy is associated with an increase in survival. In general, um, this very basic radiobiology. It’s ionizing radiation causes damage to cellular DNA and in malignant cells. They are not able to repair this DNA.
damages and they cannot reproduce in normal cells.

There’s also damage to the DNA, but it’s normal cells are better able to repair this type of DNA damage.

And radiation therapy is delivered with the linear accelerator. We have two bays downstairs in our department, we’d say emits high energy photon beams and we target the breast and regional nodes.

And what you see here is just a schematic of a patient on the treatment table getting what we would call breast tangents.
And in the upper right hand corner, you can see that we’re targeting the breast and we basically have a tangential field that comes across the chest wall and you can see that sometimes we have a little bit of underlying. Along in the field and we’re going to talk about that in a minute. But basically, as Doctor Magellan referred to, we do daily treatments and it’s delivered over the course of three to six weeks, so there is some time involved. Treatment again is directed at the breast or chest wall with or without the regional nodes.
And the way it’s done is in terms of the just logistics, patients come in for something called the simulation, which is a CAT scan and they’re immobilized in the position that we’re going to use for treatment. And basically it’s shown here they’re on a slant board. The arms are over the head because we need to have the arms out of the way when we treat the breast and the nose with fields that are directed and those at the chest. And what we get is a CT scan that
01:06:38.910 --> 01:06:40.618 shows us the patient’s entire,
NOTE Confidence: 0.766930606666667
01:06:40.620 --> 01:06:41.104 you know,
NOTE Confidence: 0.766930606666667
01:06:41.104 --> 01:06:43.685 body and we can do sort of a 3D
NOTE Confidence: 0.766930606666667
01:06:43.685 --> 01:06:46.108 reconstruction. Of their body.
NOTE Confidence: 0.766930606666667
01:06:46.110 --> 01:06:48.616 And the doctor then goes to the
NOTE Confidence: 0.766930606666667
01:06:48.616 --> 01:06:51.162 computer and we use that CT data
NOTE Confidence: 0.766930606666667
01:06:51.162 --> 01:06:52.206 set to contour.
NOTE Confidence: 0.766930606666667
01:06:52.210 --> 01:06:54.172 We will contour out the targets
NOTE Confidence: 0.766930606666667
01:06:54.172 --> 01:06:56.586 which are the breast and the nodes
NOTE Confidence: 0.766930606666667
01:06:56.586 --> 01:06:58.316 and then the physician prescribes
NOTE Confidence: 0.766930606666667
01:06:58.316 --> 01:07:00.459 the the dose to those targets.
NOTE Confidence: 0.766930606666667
01:07:00.460 --> 01:07:02.700 Then then our sophisticated
NOTE Confidence: 0.766930606666667
01:07:02.700 --> 01:07:04.380 treatment planning system
NOTE Confidence: 0.808383406
01:07:04.380 --> 01:07:05.630 comes up with what we
NOTE Confidence: 0.808383406
01:07:05.630 --> 01:07:06.880 call a 3D conformal plan.
NOTE Confidence: 0.808383406
01:07:06.880 --> 01:07:09.124 It’s a basically the optimal beam
arrangement and the beam strength
and beam shape to maximize the dose
to the targets which breast in nodes
and minimize the dose to the organs
at risk like the lung and heart.
So this is sort of a what a
this actually comes right off of
our treatment planning system.
This is what you would see when
you do that 3D conformal treatment
in the upper left hand corner.
I don’t know if you could see
my can you see my pointer here?
Probably not, but in the upper,
you can’t good in the upper left hand corner.
01:07:39.410 --> 01:07:40.364 Thank you, Sarah.
NOTE Confidence: 0.808383406
01:07:40.364 --> 01:07:42.590 You can see there are two tangential
NOTE Confidence: 0.808383406
01:07:42.650 --> 01:07:44.558 fields and there’s a green that
NOTE Confidence: 0.808383406
01:07:44.558 --> 01:07:46.949 represents the dose to the breast tissue.
NOTE Confidence: 0.808383406
01:07:46.950 --> 01:07:48.646 So this would be a right breast cancer,
NOTE Confidence: 0.808383406
01:07:48.650 --> 01:07:50.484 a beam would be coming this way
NOTE Confidence: 0.808383406
01:07:50.484 --> 01:07:51.270 from the right,
NOTE Confidence: 0.808383406
01:07:51.270 --> 01:07:54.110 a beam from the left and then a
NOTE Confidence: 0.808383406
01:07:54.110 --> 01:07:56.610 single field that’s pointed at the
NOTE Confidence: 0.808383406
NOTE Confidence: 0.808383406
01:07:58.350 --> 01:08:00.526 But this would be a typical sort of
NOTE Confidence: 0.808383406
01:08:00.526 --> 01:08:01.947 dose distribution and this is the,
NOTE Confidence: 0.808383406
01:08:01.950 --> 01:08:04.820 this is what the physician basically is.
NOTE Confidence: 0.808383406
01:08:04.820 --> 01:08:07.548 Is going to you know devise in order
NOTE Confidence: 0.808383406
01:08:07.548 --> 01:08:10.438 to treat that patients breast cancer.
NOTE Confidence: 0.808383406
01:08:10.440 --> 01:08:13.024 I’m a have one sort of schematic here
just to show you again this is a cross section of a patient’s heart. In Gray’s lungs in black, the actual treatment fields for a right breast cancer, one would be the lateral field, one would be a medial field and the beams basically treat the breast and just some of the underlying lung. For postmastectomy radiation, it’s very similar sort of theme. But in this case, we’re treating the chest wall or a reconstructed breast, whether that’s an implant or a deep flap and the regional notes.
So again, you can see on the patient that the regional notes up above in the clavicle area and under the arm are being treated along with the chest wall. And not everyone who has a mastectomy needs postmastectomy radiation. We often have lots of discussions with patients about whether they fall into the category that is high risk and that usually includes patients with positive nodes, AT3 or larger tumor or a positive margin. So what has happened over the years is that our technical advances have basically been aimed at making this a safer treatment, and that means...
maximizing the dose of the target,

minimizing the dose to the underlying organs and for left press treatment,

the underlying organs that we’re trying to spare a lung and heart.

So one of the new things we’ve been able to do in the last few years is to address this with the deep inspiration breath hold.

Technique.

But let me just show you what the challenge is from an anatomic standpoint.

I think was just showing you that the tangent fields that we’re trying to use are coming across the chest wall.
and you’re trying to treat the green, which is the breast tissue without encountering too much lung, which is black and heart circled here in red. But the problem is, in many ladies, the heart and lung are immediately adjacent to our target. In the past, we could adjust the beams, we could change the strength of the beam, we could shape the beam, but we couldn’t change the anatomy. So we do now have a technique to do that and it’s called the deep inspiration breath hole technique.
And it's there are two things we need to do this we have to use in surface imaging system. Uh, a specific surface imaging system that I'll show you in a minute, and a special gated treatment delivery system. So the surface imaging system is a new technology that allows us to map out and actually in real time put a surface map on a patient. Using a light system, there are three cameras and we're able to check a patient’s
position prior to treatment. And see if they’re in the correct position. By looking at the overlay of a pre sort of pre recorded or pre obtained body contour and basically when blue and green coincide they’re in the exact right position. Every part of their body is within a few millimeters on you know where it should be, but if you see red or yellow that means that body part is in or out of the plane of the field and basically that allows us to maneuver them in the exact position prior to treatment, which is really important again when we’re trying to.
Deliver with, you know, sub millimeter to millimeter accuracy. The other thing this does is allows us to track in real time these cameras are on in real time and giving constant feedback so that as a patient’s chest wall changes in the motion of the chest as the chest wall moves, we are all we are able to track the chest wall. And that allows us to perform what we call gated treatments. So when the patient is breathing we can choose when to deliver radiation and when to have the
radiation beam stopped and we call those gated treatments.

So it actually all starts when we simulate the patient. So when they come in for simulation.

But when they come in, there’s a camera here that actually starts to collect this data on their surface of the patient, collects the surface image and we pick up a spot for tracking their chest wall motion.

And who so once we picked that spot? We then have the patient start
breathing and where this is what

we’re seeing in the control room,

the patients actually in,

let’s imagine this patients in the simulator.

And we’re tracking this position on

their chest. They have these goggles on.

We asked them to basically,

this is their baseline breath

and then we ask them to inhale.

You’ll see they’ll hold their

breath and then we exhale and

the baseline breathing inhale.

What we’re trying to do is figure

out exactly what position can they

sort of reproducibly obtain with,
you know, expanding their chest. In other words, what’s their kind of comfortable breath hold volume? And it’s really cool because what was really interesting about this is we thought, this is going to be too much for patients. It’s going to make them really nervous. But what was really cool about it was it gave them something to do. And the Goggles Act sort of like A to insulate them from other, like, distractors. And it actually helped a lot of our patients feel more comfortable.
And I think people like to participate in their care. You know, people like say, oh, what can I do to help myself? And when we tell them this is something you could do and you can’t do it wrong, they like that. So when we do the simulation and you look at. The comparison will do basically a simulation. We’ll look at it in free breathing, and we’ll look at what their chest looks like in breath. Hold on the left. You can see this patient in free breathing.
The chest is right up against, I'm sorry, the heart is right up against the chest wall.
You could see the heart sitting on the diaphragm on the right when they expand. The heart that creates a little space between the heart and the chest wall.
So diaphragm drops and the heart moves down and away from the chest wall.
Now when we go to do our planning, So diaphragm drops and the heart moves down and away from the chest wall.
So now when we go to do our planning.
So Step 2, So Step 2, as you did your simulation, now you want to go back and do your treatment plan.
And on the left you could see free breathing.
The chest is sort of collapsed. And there's the line. That little green line is where we'd like to put the edge of our tangent field. You could see it's right near, actually right near the left anterior descending artery. But when the patient on the breath hold, this is the same patient on the right and breath hold. We've moved the chest on the contents of the chest such that the heart is now moved away from the field and a smaller portion of
the lung is now being radiated.

So actually you know it was really a game changer because now you know your sort of therapeutic ratio, your risk benefit is really changed because you’ve been able to change the internal organs.

And then finally, when they get on the treatment machine, you have to have what’s called a gated delivery system.

So now we’ve set up the plan.

They know what to do with the goggles, but when you actually deliver radiation, you have to have a system that basically will only give the
01:15:26.565 --> 01:15:28.375 radiation when they’re in the

01:15:28.375 --> 01:15:30.042 exact correct breath hold position.

01:15:30.042 --> 01:15:32.490 And I tell them you can’t do it wrong

01:15:32.552 --> 01:15:34.869 because they all get nervous about that.

01:15:34.870 --> 01:15:36.872 But basically we have three cameras in

01:15:36.872 --> 01:15:39.156 the room and the three cameras again

01:15:39.156 --> 01:15:41.660 are tracking the patient’s chest wall motion.

01:15:41.660 --> 01:15:45.520 the patient has their goggles in the goggles,

01:15:45.520 --> 01:15:47.080 they see this little green box

01:15:47.080 --> 01:15:48.989 and the orange is like sort of a,

01:15:48.990 --> 01:15:50.486 a vertical line that goes up and down.

01:15:50.490 --> 01:15:52.380 And this biofeedback allows them

01:15:52.380 --> 01:15:54.674 to position their chest in exactly

01:15:54.674 --> 01:15:56.672 the right spot and when they’re
in that spot

and their chest wall is expanded.

The beam goes on,

and treatments delivered in 20 seconds,

three seconds at a time and when

they exhale the beam goes off.

So this is a way that you know

again with this system that we use

we can significantly reduce the

towards the heart and lung.

And again it was a real game changer because this is an actually this is

being used with lymphomas and other thoracic malignancies because now

using breath hold we can actually

change their anatomy to suit what
we need to do for the malignancy. And then just two final things I wanted to speak about. Now that we have such great systemic therapies, we are seeing that we're using more and more radiation therapy and a stereotactic fashion to deliver radiation. In higher doses to more targeted sites so that we can optimize the control of both intracranial and extracranial metastatic disease. For intracranial metastatic disease, we have the only gamma knife stereotactic radiosurgery unit in the state.
We have a huge gamma knife program. It's very active. I don't know how many thousands of patients they see a year, but it's safe to say the gamma knife is pretty much running almost all the time.

Now we also have a new program with Doctor Ann, which is the Spine SRS program and that program with Doctor Mandel is getting very active.

And I'll just give the little background in why we do spine radiosurgery in a minute, but we also have the ability to do body radio surgery and that would
01:17:36.651 --> 01:17:39.042 be for sites that again someone
NOTE Confidence: 0.817686503461538
01:17:39.042 --> 01:17:40.854 has a long disease free interval,
NOTE Confidence: 0.817686503461538
01:17:40.860 --> 01:17:42.743 something comes up in a site that
NOTE Confidence: 0.817686503461538
01:17:42.743 --> 01:17:45.326 we feel might be the only site or a
NOTE Confidence: 0.817686503461538
01:17:45.326 --> 01:17:47.076 limited site of extracranial metastatic
NOTE Confidence: 0.817686503461538
01:17:47.076 --> 01:17:50.500 disease. We can also do body SRS.
NOTE Confidence: 0.817686503461538
01:17:50.500 --> 01:17:53.302 So any type of stereotactic radiosurgery
NOTE Confidence: 0.817686503461538
01:17:53.302 --> 01:17:55.840 requires a very highly precise,
NOTE Confidence: 0.817686503461538
01:17:55.840 --> 01:17:58.008 precise treatment and a
NOTE Confidence: 0.817686503461538
01:17:58.008 --> 01:17:59.634 lot of immobilization.
NOTE Confidence: 0.817686503461538
01:17:59.640 --> 01:18:00.820 But the advantage there is
NOTE Confidence: 0.817686503461538
01:18:00.820 --> 01:18:02.360 that you can treat a large,
NOTE Confidence: 0.817686503461538
01:18:02.360 --> 01:18:04.435 a small target with extremely
NOTE Confidence: 0.817686503461538
01:18:04.435 --> 01:18:06.980 high doses and very high dose,
NOTE Confidence: 0.817686503461538
01:18:06.980 --> 01:18:08.212 steep falloff of dose.
NOTE Confidence: 0.817686503461538
So very little dose to the surrounding tissue and it’s typically done in a single fraction. This is actually being used very frequently for lung cancers. Now for early stage lung cancer, the benefit from metastases is that you can get more durable local control and again in select patients. As they spoke about with the spine SBRT program, the spine SBRT, here’s just a schematic that shows how precise it is. You can see that you can take this very high dose curve which is red and wrap a very high dose around the vertebral body while avoiding the spinal canal.
canal, spinal cord and that dose can be adjusted within again a few millimeters. It’s a very precise treatment. It requires milligrams, etcetera, but very helpful for various patient populations. Spinus PR T is being used for people with oligo metastatic disease, especially if it’s a new diagnosis. Some people have a limited metastatic lesion after a long interval. Or for people who have previously radiated spine metastases, we’ve done maybe external beam,
and then they have a recurrence, which is unusual, but maybe a recurrence a few years later. We can give this and spare the spinal cord and treat the vertebral body. And finally, just our gamma knife program and especially in this era of very effective targeted therapies, we still have the brain is still a sanctuary site. We are still dealing with people who have uncontrolled or come to us with uncontrolled intracranial disease. And with our gamma knife program, we’re able to deliver very high doses of...
radiation to multiple brain metastases.

It’s a single treatment session.

People go home.

I know that Doctor Bindra says his famous,

his favorite call is like the people who say,

Oh yeah,

I just went golfing like the guys like

24 hours out and he gives him a follow

up call and the guy was out golfing.

It’s a very,

very beneficial,

very effective treatment and gives more

durable local control for brain medicine,

significant decrease in morbidity
when compared with our standard whole brain radiation therapy.

And you know, Doctor Chang and my other colleagues are just always available and a doctor is here and I work really closely with them. And and Doctor McGauley and we we can get those patients to the gamma knife people to the spine radio surgeons and anything they need at any time. So we we have a very like hand in

globe type of relationship with them.

So basically radiation therapy to summarize is an essential part of the multidisciplinary.

Treatment for breast cancer,
it’s very safe and effective and

you know I think the DBH is making

it even more safe and effective and

it reduces the risk of local and

regional recurrence by 50 to 70%.

And you know what’s really I think

going to help in the future with

quality of life for patients,

especially for gamma knife is the

use of these stereotactic procedures

to control local regional
disease and metastatic disease.

Thank you very much.

Thank you Susan for a very you

know good comprehensive review,
NOTE Confidence: 0.807927305
NOTE Confidence: 0.807927305
01:21:31.780 --> 01:21:33.784 The the biggest thing is availability
NOTE Confidence: 0.807927305
01:21:33.784 --> 01:21:35.977 of all the providers and really the
NOTE Confidence: 0.807927305
01:21:35.977 --> 01:21:38.191 great thing that I can call you and
NOTE Confidence: 0.807927305
01:21:38.191 --> 01:21:39.985 get the person in fairly quickly
NOTE Confidence: 0.807927305
01:21:39.985 --> 01:21:42.198 within the same day or sometimes
NOTE Confidence: 0.807927305
01:21:42.198 --> 01:21:44.814 within 24 hours and that’s wonderful.
NOTE Confidence: 0.807927305
01:21:44.820 --> 01:21:46.682 So thank you very much for everybody
NOTE Confidence: 0.807927305
01:21:46.682 --> 01:21:48.781 to join us today and I just
NOTE Confidence: 0.807927305
01:21:48.781 --> 01:21:50.456 was hoping we would have some
NOTE Confidence: 0.807927305
01:21:50.456 --> 01:21:51.948 questions from the audience.
NOTE Confidence: 0.863517245
01:21:51.948 --> 01:21:55.570 I had. I don’t see any.
NOTE Confidence: 0.863517245
01:21:55.570 --> 01:21:57.640 No, there is one question here.
NOTE Confidence: 0.890116198
01:21:57.710 --> 01:21:59.418 I’m going to stop sharing. There we go.
NOTE Confidence: 0.88826765375
01:22:01.930 --> 01:22:03.274 I don’t know how do they ask
01:22:03.274 --> 01:22:04.130 questions, I'm not sure.
NOTE Confidence: 0.898097536363636
01:22:05.820 --> 01:22:06.980 I'm looking at the question
NOTE Confidence: 0.898097536363636
01:22:06.980 --> 01:22:08.440 answer in the in the chat,
NOTE Confidence: 0.898097536363636
01:22:08.440 --> 01:22:12.238 but I don't see any so.
NOTE Confidence: 0.898097536363636
01:22:12.240 --> 01:22:14.337 So I may ask one question of all the,
NOTE Confidence: 0.898097536363636
01:22:14.340 --> 01:22:16.140 you know, all the speakers
NOTE Confidence: 0.898097536363636
NOTE Confidence: 0.898097536363636
01:22:17.940 --> 01:22:20.916 Umm, it's a very simple question.
NOTE Confidence: 0.898097536363636
01:22:20.920 --> 01:22:22.915 What do you think is the most
NOTE Confidence: 0.898097536363636
NOTE Confidence: 0.898097536363636
01:22:24.355 --> 01:22:26.451 over the past year and it can be
NOTE Confidence: 0.898097536363636
01:22:26.514 --> 01:22:28.348 one or two sentences and we can
NOTE Confidence: 0.898097536363636
01:22:28.348 --> 01:22:30.199 finish up this meeting this evening.
NOTE Confidence: 0.898097536363636
NOTE Confidence: 0.750245201666667
01:22:32.740 --> 01:22:34.996 So in in breast medical oncology,
I think the biggest breakthrough was the use of an antibody drug conjugate, which is kind of like a very directed heat seeking missile toward the her two protein which is effective in not just people who have truly hurt to overexpressing cancers, but lots of different other kinds that have very low levels of expression. Kind of revolutionary in the treatment of metastatic disease waji. I would point out that there is a question that asks about the best way to initiate a referral to the breast team. OK. We are happy to take referrals.
through any referrals to breast surgery can be breast surgery. Guildford can be breast surgery New Haven. And a part of our process is to try to make sure that we're accommodating where the patient’s coming from. So that if the patient is located on the shoreline, we really try to get them into the shoreline because there’s no reason for them to shut down and tolerate the air rights garage. And you know, if there’s ever any question, you’re welcome to call us. Any one of us call me especially.
if you want to. I mean,

I will get the person in right away.

All of the providers here.

I know, I know they can,

they can make space.

I happen to know that people sit in

the queue for our referrals for less

so we usually make those

appointments within one business day.

So Leanne, what do you want to tell

us about the latest development

in radiology over the past year,

there have been many.

In the past year.

Not really sure if there’s anything

really in the in the past year.
I mean there are things artificial intelligence is obviously taking off in breast imaging. It’s a challenging area though compared to other areas of radiology. Mammography is just really one of the hardest things. But I think we’ll see that coming very shortly and that should help us some you know hopefully improve our accuracy and reduce again a lot of false positives. I think that’s that’s where I see it, it helping a lot. I can’t share any more slides.
01:24:47.700 --> 01:24:48.375 on Thomas synthesis,
NOTE Confidence: 0.9131738125
01:24:48.380 --> 01:24:50.228 but we’re going to be presenting
NOTE Confidence: 0.9131738125
01:24:50.228 --> 01:24:51.467 data next month looking,
NOTE Confidence: 0.9131738125
01:24:51.467 --> 01:24:52.081 you know,
NOTE Confidence: 0.9131738125
01:24:52.081 --> 01:24:54.230 we’ve been doing it for 10 years
NOTE Confidence: 0.9131738125
01:24:54.292 --> 01:24:56.189 and looking at all of our cancers
NOTE Confidence: 0.9131738125
01:24:56.189 --> 01:24:57.848 on detected with Thomas synthesis
NOTE Confidence: 0.9131738125
01:24:57.848 --> 01:25:02.076 and comparing it with the 2D
NOTE Confidence: 0.9131738125
01:24:59.994 --> 01:25:02.076 mammography and we are finding a
NOTE Confidence: 0.9131738125
01:25:02.076 --> 01:25:04.000 difference in the advanced cancers,
NOTE Confidence: 0.9131738125
01:25:04.000 --> 01:25:09.140 significantly fewer advanced cancers, so.
NOTE Confidence: 0.9131738125
01:25:09.140 --> 01:25:10.388 You know,
NOTE Confidence: 0.9131738125
01:25:10.388 --> 01:25:12.614 that’s it’s encouraging you know,
NOTE Confidence: 0.9131738125
01:25:12.614 --> 01:25:13.499 because we just don’t want
NOTE Confidence: 0.9131738125
01:25:13.499 --> 01:25:14.360 to find more cancers,
NOTE Confidence: 0.9131738125
01:25:14.360 --> 01:25:16.448 we want to find the bad cancers and we’re
finding the bad cancers at a lower stage.

So really feel good about that.

definitely tomosynthesis is here to stay,
there’s no doubt about that.

But yeah,

I think AI is going to be the next big thing.

Any of the other speakers,

Paris or Greg, Susan,

I would say in the plastic and reconstructive surgery space.

The medical devices, the prosthesis,

the implants they get better and better.

We’re on our fifth generation of
Implants at this point in time and they increasingly get more sturdy. I have been in practice long enough. So president plants of silicone breast implants have been out for well over 50 years. And that first generation and even second generation when they ruptured it was a nightmare to remove them and I've had to do more than my fair share. This fifth generation they call them cohesive, stable. So you can imagine a gummy bear, if you cut a gummy bear in half, nothing leaks out.
That’s what all of these new devices are like, which is beneficial in many ways. One is they tended to have better durability. The second is that they tend to have longer and better projection for a longer period of time. So I would say and over the course of the year this most recent generations kind of come out and really has become very popular. Great.

Greg, yeah, absolutely. You know,
01:26:47.180 --> 01:26:48.545 you know through residency and
NOTE Confidence: 0.800407766666667
01:26:48.545 --> 01:26:50.738 fellowship I think and also the the
NOTE Confidence: 0.800407766666667
01:26:50.740 --> 01:26:53.040 menu clinical trials we see at breast.
NOTE Confidence: 0.800407766666667
01:26:53.040 --> 01:26:55.501 I think I think what I've seen the
NOTE Confidence: 0.800407766666667
01:26:55.501 --> 01:26:57.583 most is the patients now inactive
NOTE Confidence: 0.783563756
01:26:57.600 --> 01:27:00.610 participant. Yeah, they now
NOTE Confidence: 0.889677626428572
01:27:00.620 --> 01:27:02.924 have a big voice in terms of how
NOTE Confidence: 0.889677626428572
01:27:02.924 --> 01:27:04.597 much imaging they want to do,
NOTE Confidence: 0.889677626428572
01:27:04.600 --> 01:27:06.672 how much treatment they want to do.
NOTE Confidence: 0.889677626428572
01:27:06.680 --> 01:27:11.529 With the help of medical oncology
NOTE Confidence: 0.889677626428572
01:27:11.529 --> 01:27:15.558 we can reduce your tumor burden and
NOTE Confidence: 0.889677626428572
01:27:15.560 --> 01:27:18.806 give them more surgical options
NOTE Confidence: 0.889677626428572
NOTE Confidence: 0.889677626428572
01:27:20.392 --> 01:27:23.475 You know we're able to give them
NOTE Confidence: 0.889677626428572
01:27:23.482 --> 01:27:26.024 more options and and I think what
NOTE Confidence: 0.889677626428572
01:27:26.032 --> 01:27:28.536 we're going to see more and more
more options of de escalation.

You know as we’re accumulating more trials we’re finding that maybe less axillary lymph node dissections and surgeries, maybe patients are going to be doing just as well. We have a lot of trials that have met accuro and are going to be releasing their, you know their data in five years and I think it’s nice to see For themselves and and they’ve really been an active participant and you know it’s nice to see physicians.
who have had an open year and a lot of our conversations are really geared toward them and and we're happy to provide all those different operations different options. So it's really been enlightening.

I would say that the thing I've seen over the last few years that's been gratifying on a personal level and I think my colleagues are, we're just enjoying working with our plastics colleagues and making sort of this I think multidisciplinary efforts of knowing when and how to
kind of coordinate the radiation with regard to all the different reconstruction techniques has been really gratifying and as they check. Says the techniques change. We like to learn how to change with them. So I think that, you know, radiation therapy in the post mastectomy setting has gotten more and more complex, but in a good way because I think that. Our group, you know, we all have very good communication and we’re able to sort of preempt a lot of the issues that I think maybe in the beginning of many years ago when we
01:29:00.505 --> 01:29:02.600 people started doing plastics procedures,
NOTE Confidence: 0.866679508888889
01:29:02.600 --> 01:29:03.800 we didn’t know all the questions
NOTE Confidence: 0.866679508888889
01:29:03.800 --> 01:29:04.600 to ask up front.
NOTE Confidence: 0.866679508888889
01:29:04.600 --> 01:29:07.352 But now I think we have a really
NOTE Confidence: 0.866679508888889
01:29:07.352 --> 01:29:08.990 great workflow for communicating
NOTE Confidence: 0.866679508888889
01:29:08.990 --> 01:29:11.140 with their colleagues and patients
NOTE Confidence: 0.866679508888889
01:29:11.140 --> 01:29:13.528 get really good oncologic as well
NOTE Confidence: 0.866679508888889
01:29:13.528 --> 01:29:15.353 as plastics outcomes because we’re
NOTE Confidence: 0.866679508888889
01:29:15.353 --> 01:29:17.703 all sort of on the same page and
NOTE Confidence: 0.866679508888889
01:29:17.703 --> 01:29:18.794 speaking the same language.
NOTE Confidence: 0.866679508888889
01:29:18.794 --> 01:29:20.378 So I think our patients really
NOTE Confidence: 0.866679508888889
NOTE Confidence: 0.866679508888889
01:29:21.170 --> 01:29:23.834 I think all of us have a lot of
NOTE Confidence: 0.866679508888889
01:29:23.834 --> 01:29:25.064 sort of satisfaction from that
NOTE Confidence: 0.866679508888889
01:29:25.064 --> 01:29:26.721 part of our job and it continues
NOTE Confidence: 0.866679508888889
Thank you. Thank you very much.

I think we are just about to overtime and I really greatly appreciate all of you for joining us and really appreciate for what you do every day.

Have a great night.

Thanks very much. Thank you. Take care.