WEBVTT

NOTE duration:"00:20:56"

NOTE recognizability:0.892

NOTE language:en-us

NOTE Confidence: 0.963981047142857

00:00:00.000 --> 00:00:04.879 OK. The time is now. Why wait?

NOTE Confidence: 0.963981047142857

00:00:04.880 --> 00:00:06.280 These are my disclosures.

NOTE Confidence: 0.964866538571428

00:00:09.160 --> 00:00:12.716 So let me ask you a question.

NOTE Confidence: 0.964866538571428

00:00:12.720 --> 00:00:14.040 Why are we all here today?

NOTE Confidence: 0.80521114

00:00:16.320 --> 00:00:18.960 Whether you're a scientist,

NOTE Confidence: 0.80521114

00:00:18.960 --> 00:00:22.596 a physician, a provider, a trainee,

NOTE Confidence: 0.80521114

00:00:22.600 --> 00:00:24.964 we're all here with one common

NOTE Confidence: 0.80521114

00:00:24.964 --> 00:00:27.976 goal and that is to help our

NOTE Confidence: 0.80521114

00:00:27.976 --> 00:00:29.720 patients lead healthier lives.

NOTE Confidence: 0.80521114

00:00:29.720 --> 00:00:32.120 And within the context of obesity,

NOTE Confidence: 0.80521114

00:00:32.120 --> 00:00:34.240 that's why we're here today.

NOTE Confidence: 0.80521114

00:00:34.240 --> 00:00:36.760 And let's think about the fact that

NOTE Confidence: 0.80521114

00:00:36.760 --> 00:00:39.999 if we can effectively treat obesity,

NOTE Confidence: 0.80521114

00:00:40.000 --> 00:00:43.606 we can treat, mitigate and potentially

NOTE Confidence: 0.80521114

00:00:43.606 --> 00:00:46.960 prevent hundreds of other diseases.

NOTE Confidence: 0.80521114

00:00:46.960 --> 00:00:49.570 And so here we are in

NOTE Confidence: 0.80521114

00:00:49.570 --> 00:00:50.875 this transformative time,

NOTE Confidence: 0.80521114

00:00:50.880 --> 00:00:53.502 a time that is transformational because

NOTE Confidence: 0.80521114

00:00:53.502 --> 00:00:56.900 of the introduction of these new highly

NOTE Confidence: 0.80521114

00:00:56.900 --> 00:00:58.996 effective anti obesity medications.

NOTE Confidence: 0.80521114

00:00:59.000 --> 00:01:01.536 And I would argue that this is a

NOTE Confidence: 0.80521114

00:01:01.536 --> 00:01:04.070 moment in medical history akin to

NOTE Confidence: 0.80521114

00:01:04.070 --> 00:01:06.794 discoveries such as the discovery of

NOTE Confidence: 0.80521114

00:01:06.870 --> 00:01:11.680 insulin or the discovery of penicillin.

NOTE Confidence: 0.80521114

00:01:11.680 --> 00:01:13.740 Honestly treating this one disease

NOTE Confidence: 0.80521114

00:01:13.740 --> 00:01:16.526 can change the face of medicine and

NOTE Confidence: 0.80521114

00:01:16.526 --> 00:01:19.126 all of you here in this room and

NOTE Confidence: 0.80521114

00:01:19.205 --> 00:01:21.515 online are part of that history.

NOTE Confidence: 0.80521114

00:01:21.520 --> 00:01:24.000 So to illustrate this transformation,

NOTE Confidence: 0.80521114

00:01:24.000 --> 00:01:26.079 I'm going to show you two patients,

NOTE Confidence: 0.80521114

00:01:26.080 --> 00:01:29.314 one treated with the older anti obesity

NOTE Confidence: 0.80521114

00:01:29.314 --> 00:01:31.798 medications and one with the new.

NOTE Confidence: 0.80521114

00:01:31.800 --> 00:01:33.728 So this is an 18 year old who

NOTE Confidence: 0.80521114

00:01:33.728 --> 00:01:35.317 I saw her BMI was 57.

NOTE Confidence: 0.80521114

00:01:35.320 --> 00:01:37.900 She already had obesity related diseases

NOTE Confidence: 0.80521114

00:01:37.900 --> 00:01:40.120 and had considered bariatric surgery

NOTE Confidence: 0.80521114

00:01:40.120 --> 00:01:42.120 but had encountered some barriers.

NOTE Confidence: 0.80521114

00:01:42.120 --> 00:01:44.520 She came to me to see other options.

NOTE Confidence: 0.80521114

00:01:44.520 --> 00:01:46.424 So what did I do over the next

NOTE Confidence: 0.80521114

00:01:46.424 --> 00:01:47.639 three to four years?

NOTE Confidence: 0.80521114

00:01:47.640 --> 00:01:50.178 Well, I used four different medications

NOTE Confidence: 0.80521114

00:01:50.178 --> 00:01:52.720 and her response was remarkable.

NOTE Confidence: 0.80521114

00:01:52.720 --> 00:01:54.832 She lost nearly 140 lbs over

NOTE Confidence: 0.80521114

00:01:54.832 --> 00:01:56.760 those three to four years,

NOTE Confidence: 0.80521114

00:01:56.760 --> 00:01:58.960 with her BMI decreasing to

NOTE Confidence: 0.80521114

00:01:58.960 --> 00:02:01.160 31 and her A1C normalizing.

NOTE Confidence: 0.80521114

00:02:01.160 --> 00:02:03.035 And so with these previous

NOTE Confidence: 0.80521114

00:02:03.035 --> 00:02:04.160 medications for agents,

NOTE Confidence: 0.80521114

00:02:04.160 --> 00:02:05.840 45% total body weight loss.

NOTE Confidence: 0.80521114

00:02:05.840 --> 00:02:07.268 This was possible.

NOTE Confidence: 0.80521114

00:02:07.268 --> 00:02:10.600 Now let's look at our next patient,

NOTE Confidence: 0.80521114

00:02:10.600 --> 00:02:12.826 a 49 year old who came to

NOTE Confidence: 0.80521114

00:02:12.826 --> 00:02:15.157 see me when her BMI was 34.

NOTE Confidence: 0.80521114

00:02:15.160 --> 00:02:18.016 She had successfully lost weight multiple

NOTE Confidence: 0.80521114

00:02:18.016 --> 00:02:21.052 times in her life and had regained it,

NOTE Confidence: 0.80521114

00:02:21.052 --> 00:02:23.160 so losing weight was not the issue,

NOTE Confidence: 0.80521114

00:02:23.160 --> 00:02:25.240 It's maintaining that weight reduction.

NOTE Confidence: 0.80521114

00:02:25.240 --> 00:02:28.194 She also had some obesity related diseases.

NOTE Confidence: 0.80521114

00:02:28.200 --> 00:02:29.760 So what did she do?

NOTE Confidence: 0.80521114

00:02:29.760 --> 00:02:30.166 Well,

NOTE Confidence: 0.80521114

00:02:30.166 --> 00:02:33.008 we enrolled her in our surmount one

NOTE Confidence: 0.80521114

00:02:33.008 --> 00:02:35.768 trial with tirzepatide and this is what

NOTE Confidence: 0.80521114

00:02:35.768 --> 00:02:37.600 happened over the course of the year.

NOTE Confidence: 0.949531638

00:02:41.600 --> 00:02:44.640 She lost over 90 lbs,

NOTE Confidence: 0.949531638

00:02:44.640 --> 00:02:48.525 nearly £100 in the course of this

NOTE Confidence: 0.949531638

00:02:48.525 --> 00:02:50.415 trial and completely transformed

NOTE Confidence: 0.949531638

00:02:50.415 --> 00:02:52.640 her health and her life.

NOTE Confidence: 0.949531638

00:02:52.640 --> 00:02:54.612 So next generation medications,

NOTE Confidence: 0.949531638

00:02:54.612 --> 00:02:56.202 one agent maybe 45%.

NOTE Confidence: 0.949531638

00:02:56.202 --> 00:02:58.309 Of course she was a super responder

NOTE Confidence: 0.949531638

00:02:58.309 --> 00:03:00.519 but this is what we're talking about

NOTE Confidence: 0.949531638

00:03:00.519 --> 00:03:02.840 when we talk about these new agents.

NOTE Confidence: 0.949531638

00:03:02.840 --> 00:03:05.038 So we're clearly at this watershed brought

NOTE Confidence: 0.949531638

00:03:05.038 --> 00:03:07.983 on by the introduction of these highly

NOTE Confidence: 0.949531638

00:03:07.983 --> 00:03:09.919 effective anti obesity medications.

NOTE Confidence: 0.949531638

00:03:09.920 --> 00:03:11.786 The older medications it was possible

NOTE Confidence: 0.949531638

00:03:11.786 --> 00:03:13.812 to achieve this type of obesity

NOTE Confidence: 0.949531638

00:03:13.812 --> 00:03:15.632 treatment but now with Somagletite

NOTE Confidence: 0.949531638

00:03:15.632 --> 00:03:17.089 and Tirzepatite really bringing

NOTE Confidence: 0.949531638

00:03:17.089 --> 00:03:18.919 forward the development of all of

NOTE Confidence: 0.949531638

00:03:18.919 --> 00:03:20.544 these new anti obesity medications.

NOTE Confidence: 0.949531638

00:03:20.544 --> 00:03:23.008 Now the ones that we're focusing in

NOTE Confidence: 0.949531638

00:03:23.008 --> 00:03:25.446 on right now are nutrient stimulated

NOTE Confidence: 0.949531638

00:03:25.446 --> 00:03:27.471 hormone based therapies or Nushes.

NOTE Confidence: 0.949531638

00:03:27.480 --> 00:03:29.888 But please know this is only one class

NOTE Confidence: 0.949531638

00:03:29.888 --> 00:03:31.800 of medications for obesity treatment.

NOTE Confidence: 0.949531638

00:03:31.800 --> 00:03:34.010 There's active and receptor inhibitors

NOTE Confidence: 0.949531638

00:03:34.010 --> 00:03:36.220 that can potentially increase lean

NOTE Confidence: 0.949531638

00:03:36.282 --> 00:03:38.157 mass while decreasing fat mass.

NOTE Confidence: 0.949531638

00:03:38.160 --> 00:03:39.972 There's an MC4 agonist for monogenic

NOTE Confidence: 0.949531638

00:03:39.972 --> 00:03:41.618 obesity and there are many

NOTE Confidence: 0.949531638

00:03:41.618 --> 00:03:43.158 other mechanisms being explored.

NOTE Confidence: 0.949531638

00:03:43.160 --> 00:03:46.040 So this is just one class.

NOTE Confidence: 0.949531638

00:03:46.040 --> 00:03:47.318 So in terms of these nutrients,

NOTE Confidence: 0.949531638

00:03:47.320 --> 00:03:49.240 stimulated hormones, what are they?

NOTE Confidence: 0.949531638

00:03:49.240 --> 00:03:49.555 Well,

NOTE Confidence: 0.949531638

00:03:49.555 --> 00:03:51.130 they're hormones that are stimulated

NOTE Confidence: 0.949531638

00:03:51.130 --> 00:03:53.246 when we eat food and they signal

NOTE Confidence: 0.949531638

00:03:53.246 --> 00:03:55.115 to various tissues in our body and

NOTE Confidence: 0.949531638

00:03:55.170 --> 00:03:57.040 our brain about energy homeostasis,

NOTE Confidence: 0.949531638

00:03:57.040 --> 00:03:59.164 about satiety and potentially

NOTE Confidence: 0.949531638

00:03:59.164 --> 00:04:00.757 about energy expenditure.

NOTE Confidence: 0.949531638

00:04:00.760 --> 00:04:00.989 Now,

NOTE Confidence: 0.949531638

00:04:00.989 --> 00:04:02.363 the one that we're the most

NOTE Confidence: 0.949531638

00:04:02.363 --> 00:04:03.479 familiar with is GLP one,

NOTE Confidence: 0.949531638

00:04:03.480 --> 00:04:04.905 because GLP one receptor agonists

NOTE Confidence: 0.949531638

00:04:04.905 --> 00:04:06.713 have been used for the treatment

NOTE Confidence: 0.949531638

00:04:06.713 --> 00:04:08.675 of diabetes for nearly two decades.

NOTE Confidence: 0.949531638

00:04:08.680 --> 00:04:10.600 But there are so many others,

NOTE Confidence: 0.949531638

00:04:10.600 --> 00:04:11.480 *** Oxintomodulin,

NOTE Confidence: 0.949531638

00:04:11.480 --> 00:04:14.120 Amylin and right now what's being

NOTE Confidence: 0.949531638

00:04:14.120 --> 00:04:16.760 explored are dual and triple agonists.

NOTE Confidence: 0.949531638

00:04:16.760 --> 00:04:18.992 But please know that there are

NOTE Confidence: 0.949531638

00:04:18.992 --> 00:04:20.840 monotherapies in development as well,

NOTE Confidence: 0.949531638

00:04:20.840 --> 00:04:23.198 for example with PYY and Amylin.

NOTE Confidence: 0.949531638

00:04:23.200 --> 00:04:24.838 And this is just the beginning

NOTE Confidence: 0.949531638

00:04:24.838 --> 00:04:26.680 for this class of medications.

NOTE Confidence: 0.949531638

00:04:26.680 --> 00:04:28.960 So this is a slide that I update

NOTE Confidence: 0.949531638

00:04:28.960 --> 00:04:30.663 almost daily because of the

NOTE Confidence: 0.949531638

00:04:30.663 --> 00:04:32.438 frenetic pace of development of

NOTE Confidence: 0.949531638

00:04:32.438 --> 00:04:34.798 these new anti obesity medications.

NOTE Confidence: 0.949531638

00:04:34.800 --> 00:04:36.450 And I'm just highly highlighting

NOTE Confidence: 0.949531638

00:04:36.450 --> 00:04:38.854 for you here those in phase two

NOTE Confidence: 0.949531638

00:04:38.854 --> 00:04:40.896 and three of development And so

NOTE Confidence: 0.949531638

00:04:40.896 --> 00:04:42.864 we have all these new medications

NOTE Confidence: 0.949531638

00:04:42.864 --> 00:04:45.120 we need to study them and that

NOTE Confidence: 0.949531638

00:04:45.120 --> 00:04:46.720 was the impetus for Huawei,

NOTE Confidence: 0.949531638

00:04:46.720 --> 00:04:48.450 the Yale Obesity Research Center

NOTE Confidence: 0.949531638

00:04:48.450 --> 00:04:50.180 really at its inception to

NOTE Confidence: 0.949531638

00:04:50.248 --> 00:04:52.343 focus on investigation of these

NOTE Confidence: 0.949531638

00:04:52.343 --> 00:04:53.600 anti obesity medications,

NOTE Confidence: 0.949531638

00:04:53.600 --> 00:04:55.340 looking at clinical obesity

NOTE Confidence: 0.949531638

00:04:55.340 --> 00:04:57.080 research in three areas.

NOTE Confidence: 0.949531638

00:04:57.080 --> 00:04:58.277 So clinical Physiology,

NOTE Confidence: 0.949531638

00:04:58.277 --> 00:05:00.671 So not just looking at whether

NOTE Confidence: 0.949531638

00:05:00.671 --> 00:05:03.039 or how these medications work,

NOTE Confidence: 0.949531638

00:05:03.040 --> 00:05:05.782 but also using the medications as

NOTE Confidence: 0.949531638

00:05:05.782 --> 00:05:09.184 probes to better understand obesity,

NOTE Confidence: 0.949531638

00:05:09.184 --> 00:05:09.920 pathophysiology,

NOTE Confidence: 0.949531638

00:05:09.920 --> 00:05:12.080 clinical trials to understand if these

NOTE Confidence: 0.949531638

00:05:12.080 --> 00:05:14.717 medications are safe and effective and if so,

NOTE Confidence: 0.949531638

00:05:14.720 --> 00:05:15.312 for whom.

NOTE Confidence: 0.949531638

00:05:15.312 --> 00:05:16.200 And of course,

NOTE Confidence: 0.949531638

00:05:16.200 --> 00:05:16.872 patient outcomes,

NOTE Confidence: 0.949531638

00:05:16.872 --> 00:05:19.224 because we need to know how these

NOTE Confidence: 0.949531638

00:05:19.224 --> 00:05:20.838 medications work in the real world.

NOTE Confidence: 0.949531638

00:05:20.840 --> 00:05:21.560 Now additionally,

NOTE Confidence: 0.949531638

00:05:21.560 --> 00:05:24.080 there are 4 themes within Y Wait

NOTE Confidence: 0.949531638

00:05:24.080 --> 00:05:25.864 collaboration with translational and

NOTE Confidence: 0.949531638

00:05:25.864 --> 00:05:27.576 basic science, because of course,

NOTE Confidence: 0.949531638

00:05:27.576 --> 00:05:29.208 we'd have none of these medications

NOTE Confidence: 0.949531638

00:05:29.208 --> 00:05:31.197 if it wasn't for our basic colleagues,

NOTE Confidence: 0.949531638

00:05:31.200 --> 00:05:34.560 mentorship of investigators and physicians,

NOTE Confidence: 0.949531638

00:05:34.560 --> 00:05:36.960 scientists again, to take this forward,

NOTE Confidence: 0.949531638

00:05:36.960 --> 00:05:39.256 This is going to take many generations

NOTE Confidence: 0.949531638

00:05:39.256 --> 00:05:41.611 to figure out education of academic

NOTE Confidence: 0.949531638

00:05:41.611 --> 00:05:43.439 leaders in obesity medicine,

NOTE Confidence: 0.949531638

00:05:43.440 --> 00:05:45.070 really educating in terms of

NOTE Confidence: 0.949531638

00:05:45.070 --> 00:05:46.700 the biology of obesity and

NOTE Confidence: 0.908545749333333

00:05:46.763 --> 00:05:48.838 understanding obesity is a disease.

NOTE Confidence: 0.908545749333333

00:05:48.840 --> 00:05:50.598 And then integration with clinical care,

NOTE Confidence: 0.908545749333333

00:05:50.600 --> 00:05:52.595 which we're going to hear about today.

NOTE Confidence: 0.908545749333333

00:05:52.600 --> 00:05:54.967 And for all this we really need to build

NOTE Confidence: 0.908545749333333

00:05:54.967 --> 00:05:56.576 community which is a really important

NOTE Confidence: 0.908545749333333

00:05:56.576 --> 00:05:58.868 facet for all of this and there's amazing

NOTE Confidence: 0.908545749333333

00:05:58.868 --> 00:06:00.764 research already ongoing at Yale and

NOTE Confidence: 0.908545749333333

00:06:00.764 --> 00:06:03.198 how do we help bring this together.

NOTE Confidence: 0.908545749333333

00:06:03.200 --> 00:06:05.350 So there's many researchers looking

NOTE Confidence: 0.908545749333333

00:06:05.350 --> 00:06:07.500 at obesity and obesity treatment

NOTE Confidence: 0.908545749333333

00:06:07.565 --> 00:06:08.639 and Sonia Caprio,

NOTE Confidence: 0.908545749333333

00:06:08.640 --> 00:06:09.760 I'm going to highlight some,

NOTE Confidence: 0.908545749333333

00:06:09.760 --> 00:06:11.440 some several of them for you here.

NOTE Confidence: 0.908545749333333

00:06:11.440 --> 00:06:13.624 So Sonia Caprio has been leading the

NOTE Confidence: 0.908545749333333

00:06:13.624 --> 00:06:15.688 charge in terms of pediatric obesity

NOTE Confidence: 0.908545749333333

00:06:15.688 --> 00:06:18.166 research for decades now and now she's

NOTE Confidence: 0.908545749333333

00:06:18.233 --> 00:06:20.609 embarking on looking at some magnetite

NOTE Confidence: 0.908545749333333

00:06:20.609 --> 00:06:22.465 specifically for youth with obesity

NOTE Confidence: 0.908545749333333

00:06:22.465 --> 00:06:24.585 and pre diabetes as well as type 2

NOTE Confidence: 0.908545749333333

00:06:24.585 --> 00:06:26.612 and Maffold and she just started

NOTE Confidence: 0.908545749333333

00:06:26.612 --> 00:06:28.720 enrolling this summer for this study.

NOTE Confidence: 0.908545749333333

00:06:28.720 --> 00:06:31.036 So we anxiously await those results.

NOTE Confidence: 0.908545749333333

00:06:31.040 --> 00:06:33.075 There are many other physician

NOTE Confidence: 0.908545749333333

00:06:33.075 --> 00:06:35.110 investigators in pediatric obesity and

NOTE Confidence: 0.908545749333333

00:06:35.177 --> 00:06:37.599 you'll hear from Michelle Van name today.

NOTE Confidence: 0.908545749333333

00:06:37.600 --> 00:06:39.690 What about bariatric surgery and

NOTE Confidence: 0.908545749333333

00:06:39.690 --> 00:06:41.362 using these medications before

NOTE Confidence: 0.908545749333333

00:06:41.362 --> 00:06:43.232 and after surgical interventions?

NOTE Confidence: 0.908545749333333

00:06:43.232 --> 00:06:44.840 Willpower at Yale,

NOTE Confidence: 0.908545749333333

00:06:44.840 --> 00:06:46.891 led by Carlos Grillo has been looking

NOTE Confidence: 0.908545749333333

00:06:46.891 --> 00:06:49.047 at binge eating and more recently

NOTE Confidence: 0.908545749333333

00:06:49.047 --> 00:06:50.663 looking at naltrexone bupropion

NOTE Confidence: 0.908545749333333

00:06:50.663 --> 00:06:52.736 after bariatric surgery to look at

NOTE Confidence: 0.908545749333333

00:06:52.736 --> 00:06:54.598 whether it can impact loss of control

NOTE Confidence: 0.908545749333333

00:06:54.600 --> 00:06:56.916 eating as well as weight regain.

NOTE Confidence: 0.908545749333333

00:06:56.920 --> 00:06:59.952 And it's great because the power at Yale

NOTE Confidence: 0.908545749333333

00:06:59.952 --> 00:07:02.076 partners with clinician educators to

NOTE Confidence: 0.908545749333333

00:07:02.076 --> 00:07:05.079 involve them in this type of research.

NOTE Confidence: 0.908545749333333

00:07:05.080 --> 00:07:07.750 The adolescent bariatric surgery program

NOTE Confidence: 0.908545749333333

00:07:07.750 --> 00:07:10.420 incredibly robust and now prospectively

NOTE Confidence: 0.908545749333333

00:07:10.492 --> 00:07:12.952 looking at mitigating weight regain with

NOTE Confidence: 0.908545749333333

00:07:12.952 --> 00:07:15.192 somagletite in their young patients.

NOTE Confidence: 0.908545749333333

00:07:15.200 --> 00:07:17.300 And then John Morton partnering

NOTE Confidence: 0.908545749333333

00:07:17.300 --> 00:07:19.400 with the Yale Specialty Pharmacy,

NOTE Confidence: 0.908545749333333

00:07:19.400 --> 00:07:22.555 looking at implementing medication pathways

NOTE Confidence: 0.908545749333333

00:07:22.555 --> 00:07:26.253 before and after surgery at the Yale

NOTE Confidence: 0.908545749333333

00:07:26.253 --> 00:07:28.599 Stress Center directed by Rigita Sinha,

NOTE Confidence: 0.908545749333333

00:07:28.600 --> 00:07:30.532 who I've just had the incredible pleasure

NOTE Confidence: 0.908545749333333

00:07:30.532 --> 00:07:32.280 of working with for so many years,

NOTE Confidence: 0.908545749333333

00:07:32.280 --> 00:07:34.560 first as a mentor, now as a collaborator.

NOTE Confidence: 0.908545749333333

00:07:34.560 --> 00:07:37.240 We have an RO one looking at somagletite,

NOTE Confidence: 0.908545749333333

00:07:37.240 --> 00:07:39.180 basically the impact of Somagletite

NOTE Confidence: 0.908545749333333

00:07:39.180 --> 00:07:41.120 on metabolic and stress responses,

NOTE Confidence: 0.908545749333333

00:07:41.120 --> 00:07:42.419 predicting weight outcomes,

NOTE Confidence: 0.908545749333333

00:07:42.419 --> 00:07:44.139 looking at craving, hunger,

NOTE Confidence: 0.908545749333333

00:07:44.139 --> 00:07:46.234 food consumption and of course

NOTE Confidence: 0.908545749333333

00:07:46.234 --> 00:07:48.799 we're doing an observed eating task.

NOTE Confidence: 0.908545749333333

00:07:48.800 --> 00:07:51.056 And this type of study that is so

NOTE Confidence: 0.908545749333333

00:07:51.056 --> 00:07:52.599 involved really requires A-Team.

NOTE Confidence: 0.908545749333333

00:07:52.600 --> 00:07:54.118 And at the Yale Stress Center,

NOTE Confidence: 0.908545749333333

00:07:54.120 --> 00:07:57.152 we're doing this study as well as several

NOTE Confidence: 0.908545749333333

00:07:57.152 --> 00:07:59.400 others looking at obesity treatment.

NOTE Confidence: 0.908545749333333

00:07:59.400 --> 00:08:01.128 Now obesity is a neuro metabolic

NOTE Confidence: 0.908545749333333

00:08:01.128 --> 00:08:02.686 disease and this is actually

NOTE Confidence: 0.908545749333333

00:08:02.686 --> 00:08:04.396 where I started my research.

NOTE Confidence: 0.908545749333333

00:08:04.400 --> 00:08:06.128 And now the question is how can we

NOTE Confidence: 0.908545749333333

00:08:06.128 --> 00:08:07.942 begin to look at this in terms of

NOTE Confidence: 0.908545749333333

00:08:07.942 --> 00:08:09.440 the impact of these medications and

NOTE Confidence: 0.908545749333333

00:08:09.440 --> 00:08:11.393 how they are working in the brain?

NOTE Confidence: 0.908545749333333

00:08:11.400 --> 00:08:13.255 There's some pilot studies and

NOTE Confidence: 0.908545749333333

00:08:13.255 --> 00:08:15.360 smaller studies, some of which we did,

NOTE Confidence: 0.908545749333333

00:08:15.360 --> 00:08:17.760 but there's an incredible powerhouse of

NOTE Confidence: 0.908545749333333

00:08:17.760 --> 00:08:20.355 investigators at the Yale MRC and the

NOTE Confidence: 0.908545749333333

00:08:20.355 --> 00:08:22.511 Pet Center where we can really utilize

NOTE Confidence: 0.908545749333333

00:08:22.576 --> 00:08:24.916 these tools to better understand this.

NOTE Confidence: 0.908545749333333

00:08:24.920 --> 00:08:26.240 And you're going to hear from

NOTE Confidence: 0.908545749333333

00:08:26.240 --> 00:08:27.400 one of these investigators today,

NOTE Confidence: 0.908545749333333

00:08:27.400 --> 00:08:29.920 Murray Cirilli.

NOTE Confidence: 0.908545749333333

00:08:29.920 --> 00:08:31.224 Now what about cancer?

NOTE Confidence: 0.908545749333333

00:08:31.224 --> 00:08:33.550 So cancer is another area that we

NOTE Confidence: 0.908545749333333

00:08:33.550 --> 00:08:35.699 are fast moving into looking at the

NOTE Confidence: 0.908545749333333

00:08:35.699 --> 00:08:37.428 primary and secondary prevention

NOTE Confidence: 0.908545749333333

00:08:37.428 --> 00:08:39.520 with anti obesity medications.

NOTE Confidence: 0.908545749333333

00:08:39.520 --> 00:08:41.415 There are thirteen types of

NOTE Confidence: 0.908545749333333

00:08:41.415 --> 00:08:43.310 obesity related cancers and one

NOTE Confidence: 0.908545749333333

00:08:43.382 --> 00:08:45.118 of them endometrial cancer,

NOTE Confidence: 0.908545749333333

00:08:45.120 --> 00:08:47.340 There's a sevenfold increase if

NOTE Confidence: 0.908545749333333

00:08:47.340 --> 00:08:49.116 somebody has severe obesity.

NOTE Confidence: 0.8711443725

00:08:49.120 --> 00:08:51.160 And Claire Flannery has been looking

NOTE Confidence: 0.8711443725

00:08:51.160 --> 00:08:53.428 at this since fellowship when she

NOTE Confidence: 0.8711443725

00:08:53.428 --> 00:08:55.413 had a patient with endometrial

NOTE Confidence: 0.8711443725

00:08:55.413 --> 00:08:56.917 hyperplasia who is very young.

NOTE Confidence: 0.8711443725

00:08:56.920 --> 00:08:58.762 And now she's moving forward with

NOTE Confidence: 0.8711443725

00:08:58.762 --> 00:09:00.470 her research looking at obesity

NOTE Confidence: 0.8711443725

00:09:00.470 --> 00:09:02.170 driven endometrial hyperplasia to

NOTE Confidence: 0.8711443725

00:09:02.170 --> 00:09:04.295 potentially use these medications and

NOTE Confidence: 0.8711443725

00:09:04.354 --> 00:09:06.238 look at outcomes in those patients.

NOTE Confidence: 0.8711443725

00:09:06.240 --> 00:09:09.457 She's partnering with Sonia Caprio with

NOTE Confidence: 0.8711443725

00:09:09.457 --> 00:09:11.959 the patients that Sonia so eloquently

NOTE Confidence: 0.8711443725

00:09:11.959 --> 00:09:14.072 or elegantly phenotyped when they

NOTE Confidence: 0.8711443725

00:09:14.072 --> 00:09:16.616 were children looking at the Yale

NOTE Confidence: 0.8711443725

00:09:16.616 --> 00:09:18.820 longitudinal reproductive and obesity cohort.

NOTE Confidence: 0.8711443725

00:09:18.820 --> 00:09:20.155 There are many,

NOTE Confidence: 0.8711443725

00:09:20.160 --> 00:09:22.662 many other avenues to take with

NOTE Confidence: 0.8711443725

00:09:22.662 --> 00:09:24.432 these obesity related cancers and

NOTE Confidence: 0.8711443725

00:09:24.432 --> 00:09:26.840 we look forward to that as well.

NOTE Confidence: 0.8711443725

00:09:26.840 --> 00:09:28.370 Now what about health outcomes

NOTE Confidence: 0.8711443725

00:09:28.370 --> 00:09:29.594 and anti obesity medication.

NOTE Confidence: 0.8711443725

00:09:29.600 --> 00:09:31.525 So you're going to hear an entire

NOTE Confidence: 0.8711443725

00:09:31.525 --> 00:09:33.560 talk about this from Harlan Krumholtz.

NOTE Confidence: 0.8711443725

00:09:33.560 --> 00:09:33.888 Today.

NOTE Confidence: 0.8711443725

00:09:33.888 --> 00:09:35.856 It's so important to look at

NOTE Confidence: 0.8711443725

00:09:35.856 --> 00:09:37.360 different populations, for example,

NOTE Confidence: 0.8711443725

00:09:37.360 --> 00:09:39.040 outcomes in older individuals,

NOTE Confidence: 0.8711443725

00:09:39.040 --> 00:09:41.248 cardiovascular outcomes and beyond.

NOTE Confidence: 0.8711443725

00:09:41.248 --> 00:09:44.560 Now moving into the clinical space,

NOTE Confidence: 0.8711443725

00:09:44.560 --> 00:09:46.416 so you're going to hear a talk about

NOTE Confidence: 0.8711443725

00:09:46.416 --> 00:09:48.078 this not particular to obesity,

NOTE Confidence: 0.8711443725

00:09:48.080 --> 00:09:49.504 but the overall system.

NOTE Confidence: 0.8711443725

00:09:49.504 --> 00:09:52.057 But how can we begin to engage

NOTE Confidence: 0.8711443725

00:09:52.057 --> 00:09:54.559 patients to be partners in studies

NOTE Confidence: 0.8711443725

00:09:54.559 --> 00:09:56.732 with us and invite them to,

NOTE Confidence: 0.8711443725

00:09:56.732 --> 00:09:58.397 to engage in our protocols.

NOTE Confidence: 0.8711443725

00:09:58.400 --> 00:10:00.520 This of course, will take all of us,

NOTE Confidence: 0.8711443725

00:10:00.520 --> 00:10:01.400 the whole team of us,

NOTE Confidence: 0.8711443725

00:10:01.400 --> 00:10:01.798 clinicians,

NOTE Confidence: 0.8711443725

00:10:01.798 --> 00:10:02.196 scientists,

NOTE Confidence: 0.8711443725

00:10:02.196 --> 00:10:04.186 everyone within our programs that

NOTE Confidence: 0.8711443725

00:10:04.186 --> 00:10:06.380 are existing such as the pediatric

NOTE Confidence: 0.8711443725

00:10:06.380 --> 00:10:07.945 program and newer programs like

NOTE Confidence: 0.8711443725

00:10:07.945 --> 00:10:09.800 the Center for Weight management.

NOTE Confidence: 0.8711443725

00:10:09.800 --> 00:10:12.275 I'd also like to highlight that at 8 Devine,

NOTE Confidence: 0.8711443725

00:10:12.280 --> 00:10:14.904 we do have research space and that is

NOTE Confidence: 0.8711443725

00:10:14.904 --> 00:10:18.077 being led by Boo Boo Benini and Diana Rivera.

NOTE Confidence: 0.8711443725

00:10:18.080 --> 00:10:19.238 And and again,

NOTE Confidence: 0.8711443725

00:10:19.238 --> 00:10:21.168 there's so many other opportunities

NOTE Confidence: 0.8711443725

00:10:21.168 --> 00:10:22.959 within the clinical space.

NOTE Confidence: 0.8711443725

00:10:22.960 --> 00:10:24.000 And so here we are.

NOTE Confidence: 0.8711443725

00:10:24.000 --> 00:10:24.762 Why wait?

NOTE Confidence: 0.8711443725

00:10:24.762 --> 00:10:27.429 These are our goals and now into

NOTE Confidence: 0.8711443725

00:10:27.429 --> 00:10:28.640 our workshop.

NOTE Confidence: 0.8711443725

00:10:28.640 --> 00:10:30.832 So we really intend today to take you

NOTE Confidence: 0.8711443725

00:10:30.832 --> 00:10:33.117 from the bench to bedside and beyond.

NOTE Confidence: 0.8711443725

00:10:33.120 --> 00:10:34.840 And so we should do this in order.

NOTE Confidence: 0.8711443725

00:10:34.840 --> 00:10:36.597 But since I'm standing here right now,

NOTE Confidence: 0.8711443725

00:10:36.600 --> 00:10:38.959 I'm going to address briefly some of

NOTE Confidence: 0.8711443725

00:10:38.959 --> 00:10:40.999 the clinical trials that we've done.

NOTE Confidence: 0.8711443725

00:10:41.000 --> 00:10:42.848 Then you're going to hear two

NOTE Confidence: 0.8711443725

00:10:42.848 --> 00:10:44.856 talks that focus on Physiology,

NOTE Confidence: 0.8711443725

00:10:44.856 --> 00:10:46.976 basic Physiology of obesity and

NOTE Confidence: 0.8711443725

00:10:46.976 --> 00:10:49.520 then two clinical Physiology talks.

NOTE Confidence: 0.8711443725

00:10:49.520 --> 00:10:51.644 Then you'll hear a talk about

NOTE Confidence: 0.8711443725

00:10:51.644 --> 00:10:53.572 patient outcomes or health outcomes

NOTE Confidence: 0.8711443725

00:10:53.572 --> 00:10:55.787 and then integration with clinical

NOTE Confidence: 0.8711443725

00:10:55.787 --> 00:10:57.559 care from Doctor McGovern.

NOTE Confidence: 0.8711443725

00:10:57.560 --> 00:10:57.855 OK.

NOTE Confidence: 0.8711443725

00:10:57.855 --> 00:10:59.330 So let's start with clinical

NOTE Confidence: 0.8711443725

00:10:59.330 --> 00:11:01.368 trials and I'm going to start this

NOTE Confidence: 0.8711443725

00:11:01.368 --> 00:11:03.237 section by giving a big thank you,

NOTE Confidence: 0.8711443725

00:11:03.240 --> 00:11:05.025 a huge thank you to YCCI because

NOTE Confidence: 0.8711443725

00:11:05.025 --> 00:11:06.758 all of our clinical trials have

NOTE Confidence: 0.8711443725

00:11:06.758 --> 00:11:08.872 been done at the CSRU with the

NOTE Confidence: 0.8711443725

00:11:08.938 --> 00:11:10.688 staff who's sitting right here

NOTE Confidence: 0.8711443725

00:11:10.688 --> 00:11:12.845 supporting us through all of these

NOTE Confidence: 0.8711443725

00:11:12.845 --> 00:11:15.275 trials and especially Margo and Kim,

NOTE Confidence: 0.8711443725

00:11:15.280 --> 00:11:16.640 who are the research coordinators

NOTE Confidence: 0.8711443725

00:11:16.640 --> 00:11:18.319 that I work with that truly

NOTE Confidence: 0.8711443725

00:11:18.319 --> 00:11:19.639 make all of this possible.

NOTE Confidence: 0.8711443725

00:11:19.640 --> 00:11:20.760 So thank you so much.

NOTE Confidence: 0.8711443725

00:11:20.760 --> 00:11:22.450 We really look forward to

NOTE Confidence: 0.8711443725

00:11:22.450 --> 00:11:24.522 engaging with you and why wait

NOTE Confidence: 0.8711443725

00:11:24.522 --> 00:11:26.394 in in future trials as well.

NOTE Confidence: 0.8711443725

00:11:26.400 --> 00:11:28.992 So here we are in terms of these medications,

NOTE Confidence: 0.8711443725

00:11:29.000 --> 00:11:31.070 let me highlight a few of them and where

NOTE Confidence: 0.8711443725

00:11:31.070 --> 00:11:33.385 we are and how we have participated in

NOTE Confidence: 0.8711443725

00:11:33.385 --> 00:11:35.280 the development of these medications.

NOTE Confidence: 0.8711443725

00:11:35.280 --> 00:11:37.395 So Samaglatide was FDA approved

NOTE Confidence: 0.8711443725

00:11:37.395 --> 00:11:39.892 initially for diabetes and then for

NOTE Confidence: 0.8711443725

00:11:39.892 --> 00:11:42.165 obesity in 2021 and it was really

NOTE Confidence: 0.8711443725

00:11:42.165 --> 00:11:43.810 the first agent that demonstrated

NOTE Confidence: 0.947948543571429

00:11:43.874 --> 00:11:45.638 double digit weight reduction.

NOTE Confidence: 0.947948543571429

00:11:45.640 --> 00:11:48.160 Now we were part of the select

NOTE Confidence: 0.947948543571429

00:11:48.160 --> 00:11:49.644 cardiovascular outcomes trial which

NOTE Confidence: 0.947948543571429

00:11:49.644 --> 00:11:51.996 was the first trial that really looked

NOTE Confidence: 0.947948543571429

00:11:51.996 --> 00:11:54.143 at patients with obesity without type

NOTE Confidence: 0.947948543571429

00:11:54.143 --> 00:11:56.090 2 diabetes over 17,000 participants

NOTE Confidence: 0.947948543571429

00:11:56.090 --> 00:11:58.760 and what was demonstrated was a

NOTE Confidence: 0.947948543571429

00:11:58.760 --> 00:12:01.160 20% reduction in three-point Mace.

NOTE Confidence: 0.947948543571429

00:12:01.160 --> 00:12:03.098 So we've been waiting to see

NOTE Confidence: 0.947948543571429

00:12:03.098 --> 00:12:04.843 does treating obesity with these

NOTE Confidence: 0.947948543571429

00:12:04.843 --> 00:12:06.415 medications improve health outcomes

NOTE Confidence: 0.947948543571429

00:12:06.415 --> 00:12:08.680 and the answer is clearly yes.

NOTE Confidence: 0.947948543571429

00:12:08.680 --> 00:12:10.480 And now we're seeing these outcomes with HEF,

NOTE Confidence: 0.947948543571429

00:12:10.480 --> 00:12:12.315 PEF just released yesterday evidence

NOTE Confidence: 0.947948543571429

00:12:12.315 --> 00:12:14.720 of in terms of kidney benefit.

NOTE Confidence: 0.947948543571429

00:12:14.720 --> 00:12:18.140 So this is all coming full force Now

NOTE Confidence: 0.947948543571429

00:12:18.140 --> 00:12:20.520 we're also part of the step young

NOTE Confidence: 0.947948543571429

00:12:20.520 --> 00:12:22.972 trial looking at children aged 6 and

NOTE Confidence: 0.947948543571429

00:12:22.972 --> 00:12:25.330 above for treatment with somagotite now

NOTE Confidence: 0.947948543571429

00:12:25.400 --> 00:12:27.794 before you think well six years old,

NOTE Confidence: 0.947948543571429

00:12:27.800 --> 00:12:30.352 six years old and weighing 160

NOTE Confidence: 0.947948543571429

00:12:30.352 --> 00:12:32.400 lbs or 70 kilograms.

NOTE Confidence: 0.947948543571429

00:12:32.400 --> 00:12:35.325 So this is severe obesity and we have to

NOTE Confidence: 0.947948543571429

00:12:35.325 --> 00:12:37.957 develop options for these young patients.

NOTE Confidence: 0.947948543571429

00:12:37.960 --> 00:12:39.640 And so we look forward to that trial.

NOTE Confidence: 0.947948543571429

00:12:39.640 --> 00:12:41.728 We're almost fully enrolled at our

NOTE Confidence: 0.947948543571429

00:12:41.728 --> 00:12:43.880 site now In terms of tirzepatide,

NOTE Confidence: 0.947948543571429

00:12:43.880 --> 00:12:45.830 this was originally FDA approved

NOTE Confidence: 0.947948543571429

00:12:45.830 --> 00:12:48.239 for diabetes and then FDA approved

NOTE Confidence: 0.947948543571429

00:12:48.239 --> 00:12:50.815 for obesity in 2023 and we were so

NOTE Confidence: 0.947948543571429

00:12:50.815 --> 00:12:53.440 honored to be a part of that process.

NOTE Confidence: 0.947948543571429

00:12:53.440 --> 00:12:56.968 So I was the lead Pi on the surmount

NOTE Confidence: 0.947948543571429

00:12:56.968 --> 00:12:59.319 1 tirzepatide trial.

NOTE Confidence: 0.947948543571429

00:12:59.320 --> 00:13:00.472 And in this trial,

NOTE Confidence: 0.947948543571429

00:13:00.472 --> 00:13:01.912 we demonstrated that with the

NOTE Confidence: 0.947948543571429

00:13:01.912 --> 00:13:03.280 highest dose of tirzepatide,

NOTE Confidence: 0.947948543571429

00:13:03.280 --> 00:13:05.960 participants on average lost

NOTE Confidence: 0.947948543571429

00:13:05.960 --> 00:13:07.160 22.5% of their body weight,

NOTE Confidence: 0.947948543571429

00:13:07.160 --> 00:13:10.457 which translated to 52 lbs in just

NOTE Confidence: 0.947948543571429

00:13:10.457 --> 00:13:12.990 72 weeks and 40% of individuals

NOTE Confidence: 0.947948543571429

00:13:12.990 --> 00:13:15.475 lost over 1/4 of their body weight.

NOTE Confidence: 0.947948543571429

00:13:15.480 --> 00:13:17.358 So this is really, truly amazing.

NOTE Confidence: 0.947948543571429

00:13:17.360 --> 00:13:19.400 We're moving forward with additional studies.

NOTE Confidence: 0.947948543571429

00:13:19.400 --> 00:13:23.306 Now a cohort here about 40% had pre diabetes.

NOTE Confidence: 0.947948543571429

00:13:23.306 --> 00:13:25.358 So look out for those outcomes

NOTE Confidence: 0.947948543571429

00:13:25.360 --> 00:13:26.800 in the months to come.

NOTE Confidence: 0.947948543571429

00:13:26.800 --> 00:13:28.580 And and we're also moving

NOTE Confidence: 0.947948543571429

00:13:28.580 --> 00:13:30.360 forward with the surmount MMO,

NOTE Confidence: 0.947948543571429

00:13:30.360 --> 00:13:32.550 the cardiovascular outcomes trial and I'm

NOTE Confidence: 0.947948543571429

00:13:32.550 --> 00:13:35.000 on the steering committee for that as well.

NOTE Confidence: 0.947948543571429

00:13:35.000 --> 00:13:37.600 Now what about CAGRI SEMA,

NOTE Confidence: 0.947948543571429

00:13:37.600 --> 00:13:41.068 So this is an Amylin analog with a GL,

NOTE Confidence: 0.947948543571429

00:13:41.068 --> 00:13:43.153 P1 receptor agonist also showing

NOTE Confidence: 0.947948543571429

00:13:43.153 --> 00:13:44.800 impressive weight reduction.

NOTE Confidence: 0.947948543571429

00:13:44.800 --> 00:13:48.424 And I'm on the steering committee for this

NOTE Confidence: 0.947948543571429

00:13:48.424 --> 00:13:50.359 cardiovascular outcomes trial as well.

NOTE Confidence: 0.947948543571429

00:13:50.360 --> 00:13:52.460 What about Glucagon GLP,

NOTE Confidence: 0.947948543571429

00:13:52.460 --> 00:13:54.035 one receptor agonist?

NOTE Confidence: 0.947948543571429

00:13:54.040 --> 00:13:55.680 So there's several in development.

NOTE Confidence: 0.947948543571429

00:13:55.680 --> 00:13:58.718 The one that's farthest along is cerutatide.

NOTE Confidence: 0.947948543571429

00:13:58.720 --> 00:13:59.180 Again,

NOTE Confidence: 0.947948543571429

00:13:59.180 --> 00:14:01.020 impressive weight reduction results

NOTE Confidence: 0.947948543571429

00:14:01.020 --> 00:14:04.067 with this agent and we're also part

NOTE Confidence: 0.947948543571429

00:14:04.067 --> 00:14:07.845 of this phase three trial here now.

NOTE Confidence: 0.947948543571429

00:14:07.845 --> 00:14:10.400 Next we have a triple hormone receptor

NOTE Confidence: 0.947948543571429

00:14:10.400 --> 00:14:13.552 agonist and I'm going to spend a few

NOTE Confidence: 0.947948543571429

00:14:13.552 --> 00:14:15.120 slides speaking about retitrutide.

NOTE Confidence: 0.947948543571429

00:14:15.120 --> 00:14:18.279 So I was also the lead Pi on this

NOTE Confidence: 0.947948543571429

00:14:18.279 --> 00:14:21.000 trial and retitrutide is a GIPGL

NOTE Confidence: 0.947948543571429

00:14:21.000 --> 00:14:22.920 P1 Glucagon receptor agonist.

NOTE Confidence: 0.947948543571429

00:14:22.920 --> 00:14:24.960 And we were incredibly impressed

NOTE Confidence: 0.947948543571429

00:14:24.960 --> 00:14:27.515 to see that the weight reduction

NOTE Confidence: 0.947948543571429

00:14:27.515 --> 00:14:30.455 with this agent was 24.2% at just

NOTE Confidence: 0.947948543571429

00:14:30.455 --> 00:14:32.480 eleven months and that translated

NOTE Confidence: 0.947948543571429

00:14:32.480 --> 00:14:34.921 to an average weight reduction

NOTE Confidence: 0.947948543571429

00:14:34.921 --> 00:14:37.516 of £58 in the short time frame.

NOTE Confidence: 0.947948543571429

00:14:37.520 --> 00:14:39.632 And Please note that all the

NOTE Confidence: 0.947948543571429

00:14:39.632 --> 00:14:41.040 participants were still actively

NOTE Confidence: 0.947948543571429

00:14:41.104 --> 00:14:43.204 losing weight at the time that the

NOTE Confidence: 0.947948543571429

00:14:43.204 --> 00:14:44.920 trial product was discontinued.

NOTE Confidence: 0.947948543571429

00:14:44.920 --> 00:14:46.720 So this will have to wait for the

NOTE Confidence: 0.947948543571429

00:14:46.720 --> 00:14:48.476 phase three to see the full efficacy,

NOTE Confidence: 0.947948543571429

00:14:48.480 --> 00:14:51.154 but eleven months this was very impressive.

NOTE Confidence: 0.947948543571429

00:14:51.160 --> 00:14:52.960 Now with this agent and with

NOTE Confidence: 0.947948543571429

00:14:52.960 --> 00:14:54.160 all agents we look

NOTE Confidence: 0.92529825375

00:14:54.226 --> 00:14:56.488 at the the threshold that the

NOTE Confidence: 0.92529825375

00:14:56.488 --> 00:14:57.996 percentage of people reaching

NOTE Confidence: 0.92529825375

00:14:58.060 --> 00:15:00.040 the weight reduction threshold.

NOTE Confidence: 0.92529825375

00:15:00.040 --> 00:15:02.790 So we often use 5% as that threshold

NOTE Confidence: 0.92529825375

00:15:02.790 --> 00:15:04.770 because the FDA uses this in

NOTE Confidence: 0.92529825375

00:15:04.770 --> 00:15:07.188 terms of its decision making of

NOTE Confidence: 0.92529825375

00:15:07.188 --> 00:15:08.800 approval for these medications.

NOTE Confidence: 0.92529825375

00:15:08.800 --> 00:15:10.344 And so with redditruitide,

NOTE Confidence: 0.92529825375

00:15:10.344 --> 00:15:12.274 this triple hormone receptor agonist,

NOTE Confidence: 0.92529825375

00:15:12.280 --> 00:15:15.744 what we saw was that 100% of

NOTE Confidence: 0.92529825375

00:15:15.744 --> 00:15:17.872 individuals taking this medication

NOTE Confidence: 0.92529825375

00:15:17.872 --> 00:15:21.232 lost at least 5% of their body weight.

NOTE Confidence: 0.92529825375

00:15:21.232 --> 00:15:23.426 I don't think I'll probably ever be

NOTE Confidence: 0.92529825375

00:15:23.426 --> 00:15:25.386 able to say that again in clinical

NOTE Confidence: 0.92529825375

00:15:25.386 --> 00:15:27.378 research of any kind, 100% of anything,

NOTE Confidence: 0.92529825375

00:15:27.378 --> 00:15:29.380 but this was a phase two trial

NOTE Confidence: 0.92529825375

00:15:29.448 --> 00:15:31.356 and now we're doing phase three.

NOTE Confidence: 0.92529825375

00:15:31.360 --> 00:15:34.372 Now what about the loftier weight

NOTE Confidence: 0.92529825375

00:15:34.372 --> 00:15:36.268 reduction threshold targets, 10/15/2020?

NOTE Confidence: 0.92529825375

00:15:36.268 --> 00:15:38.596 Five well with the highest dose.

NOTE Confidence: 0.92529825375

00:15:38.600 --> 00:15:41.438 Many individuals also reach this target.

NOTE Confidence: 0.92529825375

00:15:41.440 --> 00:15:43.950 1/4 of participants lost more

NOTE Confidence: 0.92529825375

00:15:43.950 --> 00:15:46.212 than 30% of their body weight,

NOTE Confidence: 0.92529825375

00:15:46.212 --> 00:15:48.600 which is has never been seen before.

NOTE Confidence: 0.92529825375

00:15:48.600 --> 00:15:50.320 And again, this is just in 11 months.

NOTE Confidence: 0.92529825375

00:15:50.320 --> 00:15:53.236 This is not the full efficacy of this agent.

NOTE Confidence: 0.92529825375

00:15:53.240 --> 00:15:54.836 Now if we look at Reditruitite

NOTE Confidence: 0.92529825375

00:15:54.836 --> 00:15:56.400 a little bit more closely,

NOTE Confidence: 0.92529825375

00:15:56.400 --> 00:15:58.476 as with any treatment for obesity,

NOTE Confidence: 0.92529825375

00:15:58.480 --> 00:16:00.100 there's great variability in

NOTE Confidence: 0.92529825375

00:16:00.100 --> 00:16:01.315 terms of response.

NOTE Confidence: 0.92529825375

00:16:01.320 --> 00:16:03.120 So whether it's bariatric surgery,

NOTE Confidence: 0.92529825375

00:16:03.120 --> 00:16:04.473 medications or anything,

NOTE Confidence: 0.92529825375

00:16:04.473 --> 00:16:06.277 you'll have this variability.

NOTE Confidence: 0.92529825375

00:16:06.280 --> 00:16:07.568 And if I can draw your attention

NOTE Confidence: 0.92529825375

00:16:07.568 --> 00:16:08.878 just to the 8 milligram dose,

NOTE Confidence: 0.92529825375

00:16:08.880 --> 00:16:11.840 you can see that some participants lost 10%,

NOTE Confidence: 0.92529825375

00:16:11.840 --> 00:16:14.186 other participants lost more than 45%.

NOTE Confidence: 0.92529825375

00:16:14.186 --> 00:16:15.994 And the question is why do we see

NOTE Confidence: 0.92529825375

00:16:15.994 --> 00:16:17.792 this type of variability And we

NOTE Confidence: 0.92529825375

00:16:17.792 --> 00:16:19.312 have to understand this better.

NOTE Confidence: 0.92529825375

00:16:19.320 --> 00:16:22.000 We genetics is really important to look at.

NOTE Confidence: 0.92529825375

00:16:22.000 --> 00:16:24.040 We also look at clinical factors.

NOTE Confidence: 0.92529825375

00:16:24.040 --> 00:16:26.065 And one of the things that we saw here

NOTE Confidence: 0.92529825375

00:16:26.065 --> 00:16:28.280 was that sex actually made a difference.

NOTE Confidence: 0.92529825375

00:16:28.280 --> 00:16:32.599 So women lost more weight than men,

NOTE Confidence: 0.92529825375

00:16:32.600 --> 00:16:33.716 28.5% at 11 months.

NOTE Confidence: 0.92529825375

00:16:33.716 --> 00:16:36.006 So even looking at those type of factors

NOTE Confidence: 0.92529825375

00:16:36.006 --> 00:16:38.238 and we need to understand why this is,

NOTE Confidence: 0.92529825375

00:16:38.240 --> 00:16:40.599 is it the distribution of the adipose,

NOTE Confidence: 0.92529825375

00:16:40.600 --> 00:16:42.000 the percent of adipose tissue,

NOTE Confidence: 0.92529825375

00:16:42.000 --> 00:16:44.880 What's different about women and men?

NOTE Confidence: 0.92529825375

00:16:44.880 --> 00:16:47.436 And so now we're in phase three and we're

NOTE Confidence: 0.92529825375

00:16:47.436 --> 00:16:49.437 almost fully enrolled here at Yale.

NOTE Confidence: 0.92529825375

00:16:49.440 --> 00:16:51.120 There's oral agents in development.

NOTE Confidence: 0.92529825375

00:16:51.120 --> 00:16:52.160 For the sake of time,

NOTE Confidence: 0.92529825375

00:16:52.160 --> 00:16:53.798 I'm not going to speak about those.

NOTE Confidence: 0.92529825375

00:16:53.800 --> 00:16:55.864 There's also a monthly agent in

NOTE Confidence: 0.92529825375

00:16:55.864 --> 00:16:57.579 development in case your patients

NOTE Confidence: 0.92529825375

00:16:57.579 --> 00:16:59.787 are not able to take a daily oral

NOTE Confidence: 0.92529825375

00:16:59.787 --> 00:17:01.358 or a weekly injectable.

NOTE Confidence: 0.92529825375

00:17:01.360 --> 00:17:02.956 And so with all these medications,

NOTE Confidence: 0.92529825375

00:17:02.960 --> 00:17:05.690 we know now that we can achieve

NOTE Confidence: 0.92529825375

00:17:05.690 --> 00:17:07.256 fifteen 2025% weight reduction,

NOTE Confidence: 0.92529825375

00:17:07.256 --> 00:17:09.216 but we're really moving beyond

NOTE Confidence: 0.92529825375

00:17:09.216 --> 00:17:10.000 weight reduction.

NOTE Confidence: 0.92529825375

00:17:10.000 --> 00:17:11.920 We're treating obesity and what we

NOTE Confidence: 0.92529825375

00:17:11.920 --> 00:17:14.878 want to do is improve health outcomes.

NOTE Confidence: 0.92529825375

00:17:14.880 --> 00:17:16.714 And so when we think about this,

NOTE Confidence: 0.92529825375

00:17:16.720 --> 00:17:18.688 we want to optimize health when

NOTE Confidence: 0.92529825375

00:17:18.688 --> 00:17:19.672 we're treating obesity.

NOTE Confidence: 0.92529825375

00:17:19.680 --> 00:17:20.838 And in order to do that,

NOTE Confidence: 0.92529825375

00:17:20.840 --> 00:17:22.970 we really need to understand the

NOTE Confidence: 0.92529825375

00:17:22.970 --> 00:17:25.744 biology of obesity and how to target

NOTE Confidence: 0.92529825375

00:17:25.744 --> 00:17:27.879 that pathophysiology to really maximize

NOTE Confidence: 0.92529825375

00:17:27.879 --> 00:17:30.478 those health benefits for our patients.

NOTE Confidence: 0.92529825375

00:17:30.480 --> 00:17:31.628 And so with this,

NOTE Confidence: 0.92529825375

00:17:31.628 --> 00:17:33.792 I'm going to come back to our

NOTE Confidence: 0.92529825375

00:17:33.792 --> 00:17:35.815 patient and tell you what happened

NOTE Confidence: 0.92529825375

00:17:35.815 --> 00:17:37.716 with her after the trial.

NOTE Confidence: 0.92529825375

00:17:37.716 --> 00:17:39.776 So as you remember from

NOTE Confidence: 0.92529825375

00:17:39.776 --> 00:17:41.520 the beginning of my talk,

NOTE Confidence: 0.92529825375

00:17:41.520 --> 00:17:43.446 she had lost over 90 lbs

NOTE Confidence: 0.92529825375

00:17:43.446 --> 00:17:45.520 during the course of the trial.

NOTE Confidence: 0.92529825375

00:17:45.520 --> 00:17:47.542 Now the trial ended and there's

NOTE Confidence: 0.92529825375

00:17:47.542 --> 00:17:48.553 a safety period.

NOTE Confidence: 0.963391162666667

00:17:48.560 --> 00:17:51.240 It's about a month And she came to

NOTE Confidence: 0.963391162666667

00:17:51.240 --> 00:17:53.986 see me in clinic at 5 weeks and

NOTE Confidence: 0.963391162666667

00:17:53.986 --> 00:17:56.408 at that time she had already began

NOTE Confidence: 0.963391162666667

00:17:56.408 --> 00:17:58.520 to rapidly regain that weight.

NOTE Confidence: 0.963391162666667

00:17:58.520 --> 00:17:59.996 And So what did we do?

NOTE Confidence: 0.963391162666667

00:18:00.000 --> 00:18:02.275 Well, I started her on some Maglatite

NOTE Confidence: 0.963391162666667

00:18:02.275 --> 00:18:05.079 to try and temper that weight regain,

NOTE Confidence: 0.963391162666667

00:18:05.080 --> 00:18:06.019 which was successful.

NOTE Confidence: 0.963391162666667

00:18:06.019 --> 00:18:08.607 She did slow down in terms of her

NOTE Confidence: 0.963391162666667

00:18:08.607 --> 00:18:10.917 weight regain as we escalated the dose.

NOTE Confidence: 0.963391162666667

00:18:10.920 --> 00:18:12.950 We then added naltrexone bupropion

NOTE Confidence: 0.963391162666667

00:18:12.950 --> 00:18:15.719 to try and bring her back down

NOTE Confidence: 0.963391162666667

00:18:15.720 --> 00:18:18.276 to around a BMI of 2425,

NOTE Confidence: 0.963391162666667

00:18:18.276 --> 00:18:20.652 which again we successfully did and

NOTE Confidence: 0.963391162666667

00:18:20.652 --> 00:18:23.284 she's done so well with this now,

NOTE Confidence: 0.963391162666667

00:18:23.284 --> 00:18:26.560 right now, just as of a few days ago.

NOTE Confidence: 0.963391162666667

00:18:26.560 --> 00:18:28.756 Tirzepatide is available to her now.

NOTE Confidence: 0.963391162666667

00:18:28.760 --> 00:18:30.465 So we're switching the Samaglatite

NOTE Confidence: 0.963391162666667

00:18:30.465 --> 00:18:32.504 for tirzepatite and we'll see if

NOTE Confidence: 0.963391162666667

00:18:32.504 --> 00:18:34.443 we'll be able to stop the naltrexone

NOTE Confidence: 0.963391162666667

00:18:34.443 --> 00:18:36.117 bupropion as well and switch her

NOTE Confidence: 0.963391162666667

00:18:36.117 --> 00:18:38.170 back to what was effective for her.

NOTE Confidence: 0.963391162666667

00:18:38.170 --> 00:18:40.870 And what I'd like to highlight

NOTE Confidence: 0.963391162666667

00:18:40.870 --> 00:18:44.160 here right now is this is a patient

NOTE Confidence: 0.963391162666667

00:18:44.160 --> 00:18:45.640 case on a slide,

NOTE Confidence: 0.963391162666667

00:18:45.640 --> 00:18:49.320 but these are our patients and

NOTE Confidence: 0.963391162666667

00:18:49.320 --> 00:18:52.528 this patient is here sitting in

NOTE Confidence: 0.963391162666667

00:18:52.528 --> 00:18:54.638 the room with you today.

NOTE Confidence: 0.963391162666667

00:18:54.640 --> 00:18:57.152 And she has graciously agreed to stand up

NOTE Confidence: 0.963391162666667

00:18:57.152 --> 00:18:59.959 when we give her a big round of applause.

NOTE Confidence: 0.955020304

00:19:06.770 --> 00:19:08.500 So thank you so much, Lena.

NOTE Confidence: 0.955020304

00:19:08.500 --> 00:19:11.562 And I don't hear people were asking

NOTE Confidence: 0.955020304

00:19:11.562 --> 00:19:15.952 me if I was so. So I'm happy.

NOTE Confidence: 0.955020304

00:19:15.952 --> 00:19:18.167 Yes. So thank you so much, Lena.

NOTE Confidence: 0.955020304

00:19:18.167 --> 00:19:20.463 And thank you to all of you for

NOTE Confidence: 0.955020304

00:19:20.463 --> 00:19:22.798 your attention in this first talk.

NOTE Confidence: 0.955020304

00:19:22.800 --> 00:19:24.865 And and we welcome you to check

NOTE Confidence: 0.955020304

00:19:24.865 --> 00:19:26.439 out our website at Y Wait,

NOTE Confidence: 0.955020304

00:19:26.440 --> 00:19:28.240 which Lena made for us.

NOTE Confidence: 0.955020304

00:19:28.240 --> 00:19:29.440 So thank you so much.

NOTE Confidence: 0.896553686666667

00:19:35.770 --> 00:19:37.954 And we have a couple of minutes

NOTE Confidence: 0.896553686666667

00:19:37.954 --> 00:19:39.616 for questions before we move on

NOTE Confidence: 0.896553686666667

00:19:39.616 --> 00:19:41.530 to to the the stars of our show,

NOTE Confidence: 0.896553686666667

00:19:41.530 --> 00:19:43.570 our speakers. Any questions?

NOTE Confidence: 0.7100763

00:19:47.600 --> 00:19:48.120 Oh yes.

NOTE Confidence: 0.592732306

00:19:51.480 --> 00:19:54.280 So what is the goal of these seven trees?

NOTE Confidence: 0.592732306

00:19:54.280 --> 00:19:56.074 It's like maybe it's a lot of late time,

NOTE Confidence: 0.592732306

00:19:56.080 --> 00:20:03.040 but those like mall or is it going to like?

NOTE Confidence: 0.592732306

00:20:03.040 --> 00:20:04.200 Yeah. So that's a really,

NOTE Confidence: 0.592732306

00:20:04.200 --> 00:20:05.935 really great question and we're

NOTE Confidence: 0.592732306

00:20:05.935 --> 00:20:07.960 actually trying to figure that out.

NOTE Confidence: 0.592732306

00:20:07.960 --> 00:20:09.680 Obesity is a chronic disease.

NOTE Confidence: 0.592732306

00:20:09.680 --> 00:20:11.312 So what we believe is that

NOTE Confidence: 0.592732306

00:20:11.312 --> 00:20:12.400 chronic treatment is needed.

NOTE Confidence: 0.592732306

00:20:12.400 --> 00:20:14.236 Now whether it's with that agent,

NOTE Confidence: 0.592732306

00:20:14.240 --> 00:20:16.256 whether it's with a lower dose or a

NOTE Confidence: 0.592732306

00:20:16.256 --> 00:20:17.573 different medication, we don't know.

NOTE Confidence: 0.592732306

00:20:17.573 --> 00:20:19.199 As you can see from the,

NOTE Confidence: 0.592732306

00:20:19.200 --> 00:20:21.000 you know, from Lena's case,

NOTE Confidence: 0.592732306

00:20:21.000 --> 00:20:23.366 there is variability and we can add

NOTE Confidence: 0.592732306

00:20:23.366 --> 00:20:24.999 in different medications over time,

NOTE Confidence: 0.592732306

00:20:25.000 --> 00:20:25.888 but we don't know.

NOTE Confidence: 0.592732306

00:20:25.888 --> 00:20:27.987 We do think that just as there's variability

NOTE Confidence: 0.592732306

00:20:27.987 --> 00:20:30.479 in terms of response to these medications,

NOTE Confidence: 0.592732306

00:20:30.480 --> 00:20:31.485 there's also variability

NOTE Confidence: 0.592732306

00:20:31.485 --> 00:20:33.160 in terms of weight regain.

NOTE Confidence: 0.592732306

00:20:33.160 --> 00:20:34.640 Some people very quickly gain

NOTE Confidence: 0.592732306

00:20:34.640 --> 00:20:36.472 back all the weight and others

NOTE Confidence: 0.592732306

00:20:36.472 --> 00:20:38.200 gain back less of the weight.

NOTE Confidence: 0.592732306

00:20:38.200 --> 00:20:39.160 But on average,

NOTE Confidence: 0.592732306

00:20:39.160 --> 00:20:40.760 most people regain the weight.

NOTE Confidence: 0.592732306

00:20:40.760 --> 00:20:41.440 And again,

NOTE Confidence: 0.592732306

00:20:41.440 --> 00:20:43.480 it's because we're trying to reset

NOTE Confidence: 0.592732306

00:20:43.480 --> 00:20:45.558 a defended fat mass or set point,

NOTE Confidence: 0.592732306

00:20:45.560 --> 00:20:47.300 and that's what we're doing when

NOTE Confidence: 0.592732306

00:20:47.300 --> 00:20:48.755 we're treating obesity rather than

NOTE Confidence: 0.592732306

00:20:48.755 --> 00:20:50.237 treating for weight loss per SE.

NOTE Confidence: 0.592732306

00:20:50.240 --> 00:20:51.750 That's a byproduct of what

NOTE Confidence: 0.592732306

00:20:51.750 --> 00:20:52.958 we're trying to do.

NOTE Confidence: 0.592732306

00:20:52.960 --> 00:20:54.550 And I think you're going to

NOTE Confidence: 0.592732306

00:20:54.550 --> 00:20:56.000 hear more about that today.