WEBVTT

NOTE duration:"01:20:20"

NOTE language:en-us

NOTE Confidence: 0.836859365789474

 $00:00:00.000 \dashrightarrow 00:00:02.790$ GAIL breast cancer CME series.

NOTE Confidence: 0.836859365789474

00:00:02.790 --> 00:00:06.320 Really excited and fortunate to have

NOTE Confidence: 0.836859365789474

 $00:00:06.320 \longrightarrow 00:00:10.220$ three phenomenal speakers in our medical

NOTE Confidence: 0.836859365789474

 $00{:}00{:}10.220 \dashrightarrow 00{:}00{:}12.855$ on cology colleagues in this session.

NOTE Confidence: 0.836859365789474

00:00:12.855 --> 00:00:15.525 We're going to first start off

NOTE Confidence: 0.836859365789474

00:00:15.525 --> 00:00:17.831 with Doctor Maryam Lustberg,

NOTE Confidence: 0.836859365789474

 $00:00:17.831 \rightarrow 00:00:22.388$ who is our incoming breast program director,

NOTE Confidence: 0.836859365789474

00:00:22.390 --> 00:00:23.338 packing her bags,

NOTE Confidence: 0.836859365789474

 $00:00:23.338 \dashrightarrow 00:00:26.184$ and on our way from Ohio State to Yale

NOTE Confidence: 0.836859365789474

 $00{:}00{:}26.184 \dashrightarrow 00{:}00{:}28.448$ in the in the next couple of weeks,

NOTE Confidence: 0.836859365789474

 $00:00:28.450 \rightarrow 00:00:30.786$ she's going to be talking about a really,

NOTE Confidence: 0.836859365789474

 $00:00:30.790 \longrightarrow 00:00:32.934$ really interesting area area

NOTE Confidence: 0.836859365789474

00:00:32.934 --> 00:00:35.078 just so much excitement,

NOTE Confidence: 0.836859365789474

 $00:00:35.080 \rightarrow 00:00:38.216$ change and controversy on when do we

- NOTE Confidence: 0.836859365789474
- $00{:}00{:}38.216 \dashrightarrow 00{:}00{:}41.182$ dees calate and when do we escalate
- NOTE Confidence: 0.836859365789474
- $00:00:41.182 \longrightarrow 00:00:43.238$ for breast oncology therapies?
- NOTE Confidence: 0.836859365789474
- $00:00:43.240 \longrightarrow 00:00:44.868$ Then we'll go to.
- NOTE Confidence: 0.836859365789474
- $00:00:44.868 \longrightarrow 00:00:46.089$ Doctor Michael D.
- NOTE Confidence: 0.836859365789474
- 00:00:46.090 --> 00:00:48.280 Geovanna is going to be discussing
- NOTE Confidence: 0.836859365789474
- $00:00:48.280 \longrightarrow 00:00:49.740$ recent advances in systemic
- NOTE Confidence: 0.836859365789474
- $00:00:49.799 \longrightarrow 00:00:51.327$ therapy for breast cancer,
- NOTE Confidence: 0.836859365789474
- $00:00:51.330 \rightarrow 00:00:53.688$ and you know each year whether it's at ASCO,
- NOTE Confidence: 0.836859365789474
- $00{:}00{:}53.690 \dashrightarrow 00{:}00{:}55.242$ ESMO or San Antonio.
- NOTE Confidence: 0.836859365789474
- 00:00:55.242 --> 00:00:57.182 There's so many really exciting
- NOTE Confidence: 0.836859365789474
- $00:00:57.190 \rightarrow 00:00:59.625$ developments in drug therapy that
- NOTE Confidence: 0.836859365789474
- $00{:}00{:}59.625 \dashrightarrow 00{:}01{:}03.247$ come out and it'll be great to to
- NOTE Confidence: 0.836859365789474
- $00:01:03.247 \longrightarrow 00:01:05.569$ hear about those and certainly last
- NOTE Confidence: 0.836859365789474
- $00{:}01{:}05{.}569 \dashrightarrow 00{:}01{:}08{.}848$ but not least is Doctor Andrea Silber
- NOTE Confidence: 0.836859365789474
- $00{:}01{:}08{.}848 \dashrightarrow 00{:}01{:}11{.}310$ discussing really super important topic
- NOTE Confidence: 0.836859365789474

 $00:01:11.310 \longrightarrow 00:01:14.395$ of breast cancer epidemiology in 2021.

NOTE Confidence: 0.836859365789474

00:01:14.395 --> 00:01:15.765 Risk factors,

NOTE Confidence: 0.836859365789474

 $00:01:15.765 \rightarrow 00:01:19.190$ and specifically in our vulnerable

NOTE Confidence: 0.836859365789474

 $00:01:19.190 \longrightarrow 00:01:19.875$ population.

NOTE Confidence: 0.836859365789474

 $00{:}01{:}19.880 \dashrightarrow 00{:}01{:}21.924$ We're going to leave some time at

NOTE Confidence: 0.836859365789474

 $00:01:21.924 \dashrightarrow 00:01:24.258$ the end to answer any questions,

NOTE Confidence: 0.836859365789474

 $00:01:24.260 \longrightarrow 00:01:26.871$ but please feel free to put in

NOTE Confidence: 0.836859365789474

 $00{:}01{:}26.871 \dashrightarrow 00{:}01{:}29.076$ questions either into the chat box

NOTE Confidence: 0.836859365789474

 $00:01:29.076 \longrightarrow 00:01:31.435$ or to the question and answer box.

NOTE Confidence: 0.836859365789474

 $00:01:31.440 \rightarrow 00:01:33.648$ It will try to answer some of those

NOTE Confidence: 0.836859365789474

 $00{:}01{:}33.648 \dashrightarrow 00{:}01{:}35.810$ in real time and then at the end

NOTE Confidence: 0.836859365789474

 $00{:}01{:}35{.}810 \dashrightarrow 00{:}01{:}38{.}310$ leave time for some discussion

NOTE Confidence: 0.836859365789474

 $00:01:38.310 \rightarrow 00:01:40.810$ with our three esteemed colleagues.

NOTE Confidence: 0.836859365789474

 $00:01:40.810 \longrightarrow 00:01:41.764$ And with that,

NOTE Confidence: 0.836859365789474

 $00:01:41.764 \longrightarrow 00:01:43.672$ I'd like to turn the podium

NOTE Confidence: 0.836859365789474

00:01:43.672 --> 00:01:45.720 over to Doctor Doctor, Maryam,

- NOTE Confidence: 0.836859365789474
- 00:01:45.720 --> 00:01:46.720 Lustberg, Deescalation,
- NOTE Confidence: 0.836859365789474
- $00:01:46.720 \longrightarrow 00:01:49.720$ and escalation of breast cancer therapy.
- NOTE Confidence: 0.836859365789474
- 00:01:49.720 --> 00:01:50.472 Current status.
- NOTE Confidence: 0.836859365789474
- $00{:}01{:}50{.}472 \dashrightarrow 00{:}01{:}51{.}976$ Thank you doctor Lester.
- NOTE Confidence: 0.848286186923077
- $00{:}01{:}53.020 \dashrightarrow 00{:}01{:}55.988$ Thank you Doctor Gosain and thank you
- NOTE Confidence: 0.848286186923077
- $00{:}01{:}55{.}988 \dashrightarrow 00{:}01{:}58{.}680$ to the participants for joining today.
- NOTE Confidence: 0.848286186923077
- 00:01:58.680 --> 00:02:01.302 I'll start with sharing with you
- NOTE Confidence: 0.848286186923077
- $00:02:01.302 \rightarrow 00:02:03.727$ patient perspectives on the escalation
- NOTE Confidence: 0.848286186923077
- $00:02:03.727 \rightarrow 00:02:06.119$ of medical oncology therapies.
- NOTE Confidence: 0.848286186923077
- $00:02:06.120 \rightarrow 00:02:09.102$ This was a recent publication where
- NOTE Confidence: 0.848286186923077
- $00:02:09.102 \longrightarrow 00:02:12.116$ patients and advocates were engaged on
- NOTE Confidence: 0.848286186923077
- 00:02:12.116 --> 00:02:14.954 what they thought about the escalation NOTE Confidence: 0.848286186923077
- $00{:}02{:}14.954 \dashrightarrow 00{:}02{:}18.617$ trials and what were their some of their
- NOTE Confidence: 0.848286186923077
- $00{:}02{:}18.617 \dashrightarrow 00{:}02{:}21.130$ perceived barriers and facilitators.
- NOTE Confidence: 0.848286186923077
- $00:02:21.130 \longrightarrow 00:02:23.890$ And in these discussions,
- NOTE Confidence: 0.848286186923077

 $00:02:23.890 \longrightarrow 00:02:26.458$ it's interesting that up too close

NOTE Confidence: 0.848286186923077

 $00{:}02{:}26.458 \dashrightarrow 00{:}02{:}29.050$ to half of patients expressed.

NOTE Confidence: 0.848286186923077

00:02:29.050 --> 00:02:31.375 Some unwillingness to participate in NOTE Confidence: 0.848286186923077

 $00{:}02{:}31{.}375 \dashrightarrow 00{:}02{:}33{.}700$ a dees calation medical oncology trial

NOTE Confidence: 0.848286186923077

00:02:33.765 --> 00:02:36.404 and some of it was actually centered NOTE Confidence: 0.848286186923077

 $00:02:36.404 \rightarrow 00:02:38.304$ around terminology they actually did NOTE Confidence: 0.848286186923077

 $00:02:38.304 \dashrightarrow 00:02:40.768$ not like the term dees calation and the NOTE Confidence: 0.848286186923077

 $00{:}02{:}40.768 \dashrightarrow 00{:}02{:}43.480$ most preferred terminology was actually

NOTE Confidence: 0.848286186923077

00:02:43.480 --> 00:02:46.430 the lowest effective chemotherapy goes.

NOTE Confidence: 0.848286186923077

00:02:46.430 --> 00:02:49.566 Listed here are some of the facilitators NOTE Confidence: 0.848286186923077

 $00:02:49.566 \rightarrow 00:02:51.971$ that patients expressed and a lot

NOTE Confidence: 0.848286186923077

 $00:02:51.971 \dashrightarrow 00:02:53.945$ of this centered around the hope

NOTE Confidence: 0.848286186923077

 $00:02:53.945 \longrightarrow 00:02:55.868$ that dees calated therapy would

NOTE Confidence: 0.848286186923077

00:02:55.868 --> 00:02:58.403 have less physical side effects,

NOTE Confidence: 0.848286186923077

00:02:58.410 --> 00:03:00.750 less impact on day-to-day life,

NOTE Confidence: 0.848286186923077

 $00:03:00.750 \longrightarrow 00:03:03.648$ and less out of pocket expenses.

 $00:03:03.650 \rightarrow 00:03:05.828$ The biggest barriers were related to

NOTE Confidence: 0.848286186923077

 $00:03:05.828 \rightarrow 00:03:08.369$ fear that the cancer would come back,

NOTE Confidence: 0.848286186923077

 $00{:}03{:}08{.}370 \dashrightarrow 00{:}03{:}09{.}666$ or that they would have decision,

NOTE Confidence: 0.848286186923077

 $00:03:09.670 \longrightarrow 00:03:11.362$ regret, and so this.

NOTE Confidence: 0.848286186923077

 $00:03:11.362 \rightarrow 00:03:13.900$ These data highlight the importance of

NOTE Confidence: 0.848286186923077

 $00:03:13.972 \dashrightarrow 00:03:16.837$ good patient and provider communication.

NOTE Confidence: 0.848286186923077

 $00:03:16.840 \longrightarrow 00:03:19.220$ Other standards continue to change,

NOTE Confidence: 0.848286186923077

 $00:03:19.220 \longrightarrow 00:03:20.717$ and breast cancer,

NOTE Confidence: 0.848286186923077

 $00:03:20.717 \rightarrow 00:03:23.711$ and as we have mounting evidence

NOTE Confidence: 0.848286186923077

 $00:03:23.711 \longrightarrow 00:03:26.940$ for better deescalated therapies.

NOTE Confidence: 0.848286186923077

00:03:26.940 --> 00:03:30.786 Thankfully, due to ongoing clinical trials,

NOTE Confidence: 0.848286186923077

 $00:03:30.790 \dashrightarrow 00:03:33.526$ so I will highlight in the next few

NOTE Confidence: 0.848286186923077

 $00{:}03{:}33.526 \dashrightarrow 00{:}03{:}36.246$ slides some of the the the the the

NOTE Confidence: 0.848286186923077

 $00{:}03{:}36{.}246 \dashrightarrow 00{:}03{:}38{.}197$ latest advances in the escalation

NOTE Confidence: 0.848286186923077

00:03:38.197 - 00:03:39.889 in medical oncology.

00:03:39.890 $\operatorname{-->}$ 00:03:41.810 There are so many that I won't be

NOTE Confidence: 0.848286186923077

 $00{:}03{:}41.810 \dashrightarrow 00{:}03{:}43.930$ able to highlight all of them but

NOTE Confidence: 0.848286186923077

 $00:03:43.930 \longrightarrow 00:03:46.380$ to to recap our goals and medical

NOTE Confidence: 0.848286186923077

 $00:03:46.380 \rightarrow 00:03:48.210$ oncology and the escalation.

NOTE Confidence: 0.848286186923077

 $00{:}03{:}48{.}210 \dashrightarrow 00{:}03{:}50{.}045$ The calls aren't you reduced

NOTE Confidence: 0.848286186923077

00:03:50.045 --> 00:03:51.880 chemotherapy use while still having

NOTE Confidence: 0.848286186923077

 $00:03:51.942 \longrightarrow 00:03:53.550$ the most effective regiment.

NOTE Confidence: 0.848286186923077

 $00:03:53.550 \rightarrow 00:03:55.482$ Making regiments better tolerated,

NOTE Confidence: 0.848286186923077

 $00{:}03{:}55{.}482 \dashrightarrow 00{:}03{:}58{.}380$ both acute and long term stamping

NOTE Confidence: 0.848286186923077

 $00:03:58.456 \longrightarrow 00:04:00.928$ therapies that are not shown to

NOTE Confidence: 0.848286186923077

 $00{:}04{:}00{.}928$ --> $00{:}04{:}03{.}198$ be effective in reducing costs.

NOTE Confidence: 0.848286186923077

 $00{:}04{:}03.200 \dashrightarrow 00{:}04{:}05.786$ So starting with your positive disease.

NOTE Confidence: 0.848286186923077

 $00{:}04{:}05{.}790 \dashrightarrow 00{:}04{:}08{.}942$ Most of you are familiar with the Taylor

NOTE Confidence: 0.848286186923077

 $00:04:08.942 \dashrightarrow 00:04:12.310$ R ask RX perspective study using the

NOTE Confidence: 0.848286186923077

 $00:04:12.310 \rightarrow 00:04:15.920$ 21 gene expression assay or Oncotype DX.

NOTE Confidence: 0.848286186923077

 $00:04:15.920 \rightarrow 00:04:19.898$ Which should that?

- NOTE Confidence: 0.848286186923077
- $00:04:19.900 \rightarrow 00:04:23.218$ Most patients with low required scores.
- NOTE Confidence: 0.848286186923077
- $00:04:23.220 \longrightarrow 00:04:25.590$ There really was no improvement in
- NOTE Confidence: 0.848286186923077
- $00:04:25.590 \rightarrow 00:04:28.035$ outcomes by the addition of chemotherapy
- NOTE Confidence: 0.848286186923077
- 00:04:28.035 00:04:30.800 to standard of care and open therapy,
- NOTE Confidence: 0.848286186923077
- $00:04:30.800 \longrightarrow 00:04:33.758$ and this has of course changed
- NOTE Confidence: 0.848286186923077
- $00{:}04{:}33.758 \dashrightarrow 00{:}04{:}37.746$ our standard of care care and has
- NOTE Confidence: 0.848286186923077
- $00:04:37.746 \longrightarrow 00:04:39.660$ significantly reduced chemotherapy
- NOTE Confidence: 0.848286186923077
- $00:04:39.660 \dashrightarrow 00:04:43.669$ use in ER positive breast cancer.
- NOTE Confidence: 0.848286186923077
- $00:04:43.670 \longrightarrow 00:04:46.001$ Going on to just kind of delving
- NOTE Confidence: 0.848286186923077
- 00:04:46.001 00:04:48.380 into the data a little bit more,
- NOTE Confidence: 0.848286186923077
- $00:04:48.380 \longrightarrow 00:04:52.055$ the benefits of D escalation in the
- NOTE Confidence: 0.848286186923077
- $00:04:52.055 \rightarrow 00:04:55.572$ younger cohort where a little less clear
- NOTE Confidence: 0.848286186923077
- $00:04:55.572 \rightarrow 00:04:59.459$ based on the Taylor Taylor RX study Hall,
- NOTE Confidence: 0.848286186923077
- $00{:}04{:}59{.}460 \dashrightarrow 00{:}05{:}04{.}095$ and I think we can see here in those.
- NOTE Confidence: 0.848286186923077
- $00{:}05{:}04{.}100 \dashrightarrow 00{:}05{:}07{.}580$ In those patients who are 50 or younger
- NOTE Confidence: 0.848286186923077

 $00:05:07.580 \longrightarrow 00:05:10.927$ between the required scores of 16 to 25.

NOTE Confidence: 0.848286186923077

 $00{:}05{:}10{.}930 \dashrightarrow 00{:}05{:}13{.}086$ What the data was showing is that

NOTE Confidence: 0.848286186923077

 $00{:}05{:}13.086 \dashrightarrow 00{:}05{:}15.933$ there was a lower at that rate do

NOTE Confidence: 0.848286186923077

 $00:05:15.933 \rightarrow 00:05:17.884$ too with chemotherapy when it,

NOTE Confidence: 0.848286186923077

 $00:05:17.884 \rightarrow 00:05:19.994$ when it preceded undergone therapy.

NOTE Confidence: 0.848286186923077

 $00{:}05{:}20{.}000 \dashrightarrow 00{:}05{:}23{.}640$ So is this what is what is leading

NOTE Confidence: 0.848286186923077

 $00{:}05{:}23.640 \dashrightarrow 00{:}05{:}25.915$ to this better outcome and this is

NOTE Confidence: 0.848286186923077

00:05:25.915 --> 00:05:27.550 continues to be widely debated.

NOTE Confidence: 0.848286186923077

 $00{:}05{:}27.550 \dashrightarrow 00{:}05{:}29.194$ Is it ovarian suppression,

NOTE Confidence: 0.848286186923077

 $00:05:29.194 \rightarrow 00:05:30.427$ effect of chemotherapy,

NOTE Confidence: 0.848286186923077

 $00:05:30.430 \longrightarrow 00:05:33.802$ or is it actually the cytotoxic

NOTE Confidence: 0.848286186923077

 $00:05:33.802 \rightarrow 00:05:35.488$ effects of chemotherapy,

NOTE Confidence: 0.848286186923077

 $00:05:35.490 \dashrightarrow 00:05:39.158$ and several models have been proposed and

NOTE Confidence: 0.86163117

 $00:05:39.160 \longrightarrow 00:05:40.984$ several perspective studies are.

NOTE Confidence: 0.86163117

 $00{:}05{:}40{.}984 \dashrightarrow 00{:}05{:}43{.}720$ And to answer this question and

NOTE Confidence: 0.86163117

 $00:05:43.791 \rightarrow 00:05:46.027$ different medical on cologists have

- NOTE Confidence: 0.86163117
- $00:05:46.027 \longrightarrow 00:05:48.842$ very strong opinions about this

 $00{:}05{:}48.842 \dashrightarrow 00{:}05{:}52.238$ that I'm sure you've heard about.

NOTE Confidence: 0.86163117

 $00{:}05{:}52{.}240 \dashrightarrow 00{:}05{:}54{.}040$ So what about the escalation

NOTE Confidence: 0.86163117

 $00:05:54.040 \longrightarrow 00:05:55.480$ in ER positive node,

NOTE Confidence: 0.86163117

 $00{:}05{:}55{.}480 \dashrightarrow 00{:}05{:}58{.}075$ positive disease and there is

NOTE Confidence: 0.86163117

00:05:58.075 --> 00:06:01.175 on your study was reported out

NOTE Confidence: 0.86163117

 $00:06:01.175 \longrightarrow 00:06:03.635$ in in the last San Antonio.

NOTE Confidence: 0.86163117

 $00:06:03.640 \rightarrow 00:06:07.384$ And as you can see in this schema,

NOTE Confidence: 0.86163117

 $00{:}06{:}07{.}390 \dashrightarrow 00{:}06{:}09{.}724$ those patients with up to three

NOTE Confidence: 0.86163117

 $00:06:09.724 \dashrightarrow 00:06:12.080$ positive nodes with the crime scores

NOTE Confidence: 0.86163117

 $00:06:12.080 \dashrightarrow 00:06:14.968$ of 0 to 25 were randomized to standard

NOTE Confidence: 0.86163117

 $00{:}06{:}15{.}043 \dashrightarrow 00{:}06{:}17{.}238$ of care which was chemotherapy.

NOTE Confidence: 0.86163117

00:06:17.240 --> 00:06:19.700 Plus under compare P versus

NOTE Confidence: 0.86163117

 $00{:}06{:}19.700 \dashrightarrow 00{:}06{:}21.176$ Anderson the rapy alone.

NOTE Confidence: 0.86163117

 $00:06:21.180 \longrightarrow 00:06:22.752$ Those with high recurrence

00:06:22.752 --> 00:06:24.717 scores actually came up study.

NOTE Confidence: 0.86163117

 $00{:}06{:}24.720 \dashrightarrow 00{:}06{:}27.670$ Receive standard of care chemotherapy.

NOTE Confidence: 0.86163117

 $00:06:27.670 \dashrightarrow 00:06:30.376$ Close to 5000 patients were enrolled.

NOTE Confidence: 0.86163117

 $00:06:30.380 \longrightarrow 00:06:31.820$ And as you can see,

NOTE Confidence: 0.86163117

 $00{:}06{:}31.820 \dashrightarrow 00{:}06{:}34.370$ there was no significant difference in

NOTE Confidence: 0.86163117

 $00{:}06{:}34{.}370 \dashrightarrow 00{:}06{:}36{.}560$ invasive disease free survival with

NOTE Confidence: 0.86163117

 $00:06:36.560 \rightarrow 00:06:38.260$ additional chemotherapy for those

NOTE Confidence: 0.86163117

 $00:06:38.260 \rightarrow 00:06:40.820$ with requests for between zero to 25.

NOTE Confidence: 0.86163117

 $00{:}06{:}40.820 \dashrightarrow 00{:}06{:}43.424$ After immediate follow up of five years,

NOTE Confidence: 0.86163117

 $00:06:43.430 \rightarrow 00:06:48.590$ so this is obviously practice changing and.

NOTE Confidence: 0.86163117

 $00{:}06{:}48{.}590 \dashrightarrow 00{:}06{:}51{.}313$ A wonderful set of data for us

NOTE Confidence: 0.86163117

 $00{:}06{:}51{.}313 \dashrightarrow 00{:}06{:}54{.}294$ to reassure our patients with not

NOTE Confidence: 0.86163117

 $00{:}06{:}54.294 \dashrightarrow 00{:}06{:}56.590$ positive disease with favorable

NOTE Confidence: 0.86163117

 $00{:}06{:}56{.}590 \dashrightarrow 00{:}06{:}58{.}808$ features on gentleman profiling.

NOTE Confidence: 0.86163117

 $00:06:58.808 \dashrightarrow 00:07:03.080$ But again, similar to the Taylor RX study,

NOTE Confidence: 0.86163117

 $00:07:03.080 \rightarrow 00:07:06.328$ how we approach the younger cohort of

- NOTE Confidence: 0.86163117
- $00{:}07{:}06{.}328 \dashrightarrow 00{:}07{:}09{.}927$ patients is a little less clear in

 $00{:}07{:}09{.}927 \dashrightarrow 00{:}07{:}13.269$ the in the study that premenopausal

NOTE Confidence: 0.86163117

 $00:07:13.269 \rightarrow 00:07:15.903$ cohort appeared to have significant

NOTE Confidence: 0.86163117

 $00{:}07{:}15{.}903 \dashrightarrow 00{:}07{:}17{.}795$ difference in outcomes when

NOTE Confidence: 0.86163117

 $00:07:17.795 \longrightarrow 00:07:19.214$ chemotherapy was used.

NOTE Confidence: 0.86163117

 $00{:}07{:}19{.}220 \dashrightarrow 00{:}07{:}22{.}532$ And again whether this was due to the

NOTE Confidence: 0.86163117

 $00:07:22.532 \rightarrow 00:07:25.307$ chemotherapy affect or to the effect

NOTE Confidence: 0.86163117

 $00:07:25.307 \rightarrow 00:07:27.647$ of ovarian suppression from chemotherapy.

NOTE Confidence: 0.86163117

 $00{:}07{:}27.650 \dashrightarrow 00{:}07{:}29.888$ These data are not going to

NOTE Confidence: 0.86163117

 $00:07:29.888 \dashrightarrow 00:07:31.380$ answer that specific question.

NOTE Confidence: 0.86163117

00:07:31.380 --> 00:07:31.691 Although,

NOTE Confidence: 0.86163117

 $00:07:31.691 \rightarrow 00:07:32.002$ interestingly,

NOTE Confidence: 0.86163117

 $00:07:32.002 \longrightarrow 00:07:33.868$ when we actually look at the

NOTE Confidence: 0.86163117

 $00:07:33.868 \dashrightarrow 00:07:35.428$ type of endocrine the rapy that

NOTE Confidence: 0.86163117

 $00:07:35.428 \longrightarrow 00:07:36.893$ was used in this study,

 $00:07:36.900 \rightarrow 00:07:39.126$ only 16% and then they can therapy,

NOTE Confidence: 0.86163117

 $00:07:39.130 \longrightarrow 00:07:40.270$ arm actually had a variance.

NOTE Confidence: 0.86163117

 $00:07:40.270 \longrightarrow 00:07:42.019$ Regression therapy administered

NOTE Confidence: 0.86163117

 $00:07:42.019 \longrightarrow 00:07:45.519$ and only 3% in the chemotherapy

NOTE Confidence: 0.86163117

 $00{:}07{:}45{.}519$ --> $00{:}07{:}48{.}434$ arm had a variance oppression.

NOTE Confidence: 0.86163117

 $00{:}07{:}48{.}440 \dashrightarrow 00{:}07{:}50{.}735$ Straight so so where do we go from here?

NOTE Confidence: 0.86163117

 $00{:}07{:}50{.}740 \dashrightarrow 00{:}07{:}52{.}798$ How do we synthesize these data

NOTE Confidence: 0.86163117

 $00:07:52.798 \longrightarrow 00:07:54.170$ and how do we?

NOTE Confidence: 0.86163117

00:07:54.170 --> 00:07:56.792 How do we approach that younger

NOTE Confidence: 0.86163117

 $00:07:56.792 \rightarrow 00:07:59.240$ patients with no positive disease?

NOTE Confidence: 0.86163117

00:07:59.240 --> 00:08:01.790 And I think the data are

NOTE Confidence: 0.86163117

 $00:08:01.790 \longrightarrow 00:08:03.065$ continuing to evolve,

NOTE Confidence: 0.86163117

 $00{:}08{:}03{.}070 \dashrightarrow 00{:}08{:}05{.}200$ and it's important to also highlight

NOTE Confidence: 0.86163117

 $00:08:05.200 \dashrightarrow 00:08:07.058$ some new data that represented

NOTE Confidence: 0.86163117

 $00{:}08{:}07{.}058 \dashrightarrow 00{:}08{:}09{.}302$ also in the last time Junior

NOTE Confidence: 0.86163117

00:08:09.302 --> 00:08:11.460 breast meeting by Nadia Harbucks,

- NOTE Confidence: 0.86163117
- 00:08:11.460 --> 00:08:13.230 Group of the ADAPT Study.
- NOTE Confidence: 0.86163117
- 00:08:13.230 --> 00:08:17.780 And here they use dynamic K 67
- NOTE Confidence: 0.86163117
- $00:08:17.780 \rightarrow 00:08:20.280$ monitoring where those who actually
- NOTE Confidence: 0.86163117
- 00:08:20.377 $\operatorname{-->}$ 00:08:23.576 had favorable K 67 numbers after three
- NOTE Confidence: 0.86163117
- 00:08:23.576 --> 00:08:26.880 to four weeks of endocrine therapy,
- NOTE Confidence: 0.86163117
- $00:08:26.880 \longrightarrow 00:08:28.116$ regardless of their age,
- NOTE Confidence: 0.86163117
- $00:08:28.116 \longrightarrow 00:08:29.970$ even if they had low low
- NOTE Confidence: 0.86163117
- 00:08:30.042 --> 00:08:31.368 nodal disease burden.
- NOTE Confidence: 0.86163117
- $00:08:31.370 \dashrightarrow 00:08:34.730$ Actually did fine without chemotherapy.
- NOTE Confidence: 0.86163117
- $00:08:34.730 \longrightarrow 00:08:35.342$ So so.
- NOTE Confidence: 0.86163117
- $00:08:35.342 \longrightarrow 00:08:37.484$ So there's this kind of adds to
- NOTE Confidence: 0.86163117
- $00{:}08{:}37{.}484 \dashrightarrow 00{:}08{:}40{.}686$ the body of data of if we have
- NOTE Confidence: 0.86163117
- $00{:}08{:}40.686 \dashrightarrow 00{:}08{:}41.892$ better biological predictors
- NOTE Confidence: 0.86163117
- $00{:}08{:}41{.}965 \dashrightarrow 00{:}08{:}44{.}226$ to be able to better pluck out,
- NOTE Confidence: 0.86163117
- $00{:}08{:}44{.}230 \dashrightarrow 00{:}08{:}45{.}935$ patients were at higher risk
- NOTE Confidence: 0.86163117

00:08:45.935 --> 00:08:46.958 versus lower risk,

NOTE Confidence: 0.86163117

 $00:08:46.960 \dashrightarrow 00:08:50.140$ can be better tailor our the rapies

NOTE Confidence: 0.86163117

 $00:08:50.140 \longrightarrow 00:08:52.284$ in this endocrine responsive

NOTE Confidence: 0.86163117

 $00:08:52.284 \longrightarrow 00:08:55.500$ group that had this lower post

NOTE Confidence: 0.86163117

00:08:55.599 --> 00:08:58.847 Ki 67 levels after a short pre

NOTE Confidence: 0.86163117

00:08:58.847 --> 00:09:01.188 operative in the rapy at the data

NOTE Confidence: 0.86163117

 $00{:}09{:}01{.}188 \dashrightarrow 00{:}09{:}03{.}400$ I just showed you in the previous

NOTE Confidence: 0.86163117

 $00:09:03.472 \rightarrow 00:09:05.788$ slide tend to do relatively well.

NOTE Confidence: 0.86163117

00:09:05.790 --> 00:09:06.741 Start a push.

NOTE Confidence: 0.86163117

00:09:06.741 --> 00:09:08.960 I I did a nice job summarizing

NOTE Confidence: 0.86163117

 $00{:}09{:}09{.}036 \dashrightarrow 00{:}09{:}11.328$ these data as a discussion in

NOTE Confidence: 0.86163117

00:09:11.328 --> 00:09:12.856 the last thing Antonio,

NOTE Confidence: 0.86163117

00:09:12.860 --> 00:09:14.384 and as I mentioned,

NOTE Confidence: 0.86163117

 $00:09:14.384 \rightarrow 00:09:16.670$ these data are continuing to evolve.

NOTE Confidence: 0.876628236470588

 $00{:}09{:}16.670 \dashrightarrow 00{:}09{:}19.570$ What we know for sure is that we do need

NOTE Confidence: 0.876628236470588

 $00:09:19.651 \rightarrow 00:09:22.556$ to take into account on anatomical risk,

- NOTE Confidence: 0.876628236470588
- $00:09:22.560 \longrightarrow 00:09:24.840$ use some type of baseline
- NOTE Confidence: 0.876628236470588
- 00:09:24.840 --> 00:09:26.208 gene expression profiling,
- NOTE Confidence: 0.876628236470588
- $00:09:26.210 \rightarrow 00:09:27.730$ whether it's Uncle Type DX,
- NOTE Confidence: 0.876628236470588
- $00{:}09{:}27.730 \dashrightarrow 00{:}09{:}30.094$ mamma print and then whether we should
- NOTE Confidence: 0.876628236470588
- $00:09:30.094 \rightarrow 00:09:33.283$ also use some type of endocrine therapy
- NOTE Confidence: 0.876628236470588
- 00:09:33.283 --> 00:09:35.838 response guided measurements I think.
- NOTE Confidence: 0.876628236470588
- $00:09:35.840 \longrightarrow 00:09:38.792$ It remains to still be determined
- NOTE Confidence: 0.876628236470588
- $00:09:38.792 \dashrightarrow 00:09:41.869$ whether this is additive or superior.
- NOTE Confidence: 0.876628236470588
- 00:09:41.870 --> 00:09:43.918 I don't think we can say for sure,
- NOTE Confidence: 0.876628236470588
- $00:09:43.920 \dashrightarrow 00:09:46.808$ but but the data are continuing to evolve
- NOTE Confidence: 0.876628236470588
- 00:09:46.808 --> 00:09:48.958 pretty rapidly in the in this space,
- NOTE Confidence: 0.876628236470588
- $00{:}09{:}48.960 \dashrightarrow 00{:}09{:}50.646$ and I'm sure I'm giving this
- NOTE Confidence: 0.876628236470588
- $00{:}09{:}50{.}646 \dashrightarrow 00{:}09{:}51{.}770$ talk in two years.
- NOTE Confidence: 0.876628236470588
- $00{:}09{:}51.770 \dashrightarrow 00{:}09{:}54.605$ Will have additional data to share with
- NOTE Confidence: 0.876628236470588
- $00{:}09{:}54.605 \dashrightarrow 00{:}09{:}57.320$ you moving on to her two positive disease,
- NOTE Confidence: 0.876628236470588

 $00:09:57.320 \rightarrow 00:09:59.742$ a huge area of the escalation strategy

NOTE Confidence: 0.876628236470588

 $00{:}09{:}59{.}742 \dashrightarrow 00{:}10{:}02{.}097$ has been with the use of anther

NOTE Confidence: 0.876628236470588

 $00:10:02.097 \longrightarrow 00:10:04.525$ site plans since her to direct the

NOTE Confidence: 0.876628236470588

 $00:10:04.525 \rightarrow 00:10:06.330$ therapies carried cardio toxicity risk.

NOTE Confidence: 0.876628236470588

 $00:10:06.330 \longrightarrow 00:10:08.600$ And as you enter cyclins,

NOTE Confidence: 0.876628236470588

 $00{:}10{:}08.600 \dashrightarrow 00{:}10{:}11.150$ there has been continued effort

NOTE Confidence: 0.876628236470588

 $00:10:11.150 \rightarrow 00:10:14.719$ looking at whether we can safely

NOTE Confidence: 0.876628236470588

00:10:14.719 -> 00:10:17.472 eliminate anthracyclines in in

NOTE Confidence: 0.876628236470588

 $00{:}10{:}17{.}472 \dashrightarrow 00{:}10{:}19{.}276$ her two positive the rapies.

NOTE Confidence: 0.876628236470588

 $00:10:19.280 \longrightarrow 00:10:22.763$ So this was one of the first studies that

NOTE Confidence: 0.876628236470588

 $00:10:22.763 \rightarrow 00:10:27.792$ showed that where non after after cycling,

NOTE Confidence: 0.876628236470588

00:10:27.792 --> 00:10:30.960 taxane plus Carbo regiment less stressed

NOTE Confidence: 0.876628236470588

00:10:31.046 --> 00:10:33.806 him out was compared to two AC TH.

NOTE Confidence: 0.876628236470588

 $00{:}10{:}33.810 \dashrightarrow 00{:}10{:}35.994$ And other numerically the numbers favor

NOTE Confidence: 0.876628236470588

 $00:10:35.994 \rightarrow 00:10:38.347$ that the answer cycling regimen there

NOTE Confidence: 0.876628236470588

 $00:10:38.347 \rightarrow 00:10:40.427$ was actually no statistical difference

 $00:10:40.427 \rightarrow 00:10:42.609$ in outcomes between the two groups,

NOTE Confidence: 0.876628236470588

 $00:10:42.610 \rightarrow 00:10:46.060$ but certainly higher toxicity with

NOTE Confidence: 0.876628236470588

 $00:10:46.060 \rightarrow 00:10:49.920$ increased cardiac toxicity as well as.

NOTE Confidence: 0.876628236470588

00:10:49.920 --> 00:10:53.330 Secondary malignancies with anthracite news.

NOTE Confidence: 0.876628236470588

 $00{:}10{:}53{.}330 \dashrightarrow 00{:}10{:}55{.}635$ But this numerical difference still

NOTE Confidence: 0.876628236470588

 $00:10:55.635 \rightarrow 00:10:57.940$ was unsettling for some oncologists,

NOTE Confidence: 0.876628236470588

 $00:10:57.940 \rightarrow 00:11:00.946$ and I think many of us had continued to

NOTE Confidence: 0.876628236470588

 $00:11:00.946 \rightarrow 00:11:04.310$ use anthracite playing for very high risk.

NOTE Confidence: 0.876628236470588

00:11:04.310 --> 00:11:06.818 Her two positive disease and inflammatory

NOTE Confidence: 0.876628236470588

 $00{:}11{:}06.818 \dashrightarrow 00{:}11{:}09.340$ breast cancer and said that the

NOTE Confidence: 0.876628236470588

 $00:11:09.340 \rightarrow 00:11:11.300$ after cycling news has persisted.

NOTE Confidence: 0.876628236470588

 $00{:}11{:}11{.}300 \dashrightarrow 00{:}11{:}13{.}407$ But just in the last month the

NOTE Confidence: 0.876628236470588

 $00{:}11{:}13{.}407 \dashrightarrow 00{:}11{:}15{.}265$ results of the perspective train

NOTE Confidence: 0.876628236470588

 $00:11:15.265 \longrightarrow 00:11:17.465$ two study were reported out.

NOTE Confidence: 0.876628236470588

 $00{:}11{:}17{.}470 \dashrightarrow 00{:}11{:}19{.}078$ This was originally presented

- 00:11:19.078 --> 00:11:20.686 in the last ASKO,
- NOTE Confidence: 0.876628236470588
- 00:11:20.690 --> 00:11:22.955 where a more modern regiment
- NOTE Confidence: 0.876628236470588
- $00:11:22.955 \rightarrow 00:11:25.690$ including for choosing map was used.
- NOTE Confidence: 0.876628236470588
- 00:11:25.690 --> 00:11:27.140 And as you can see,
- NOTE Confidence: 0.876628236470588
- $00:11:27.140 \longrightarrow 00:11:28.560$ there is absolutely no difference
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}28{.}560 \dashrightarrow 00{:}11{:}30{.}287$ between the upper side pain and
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}30{.}287 \dashrightarrow 00{:}11{:}31{.}847$ not after cycling group and no
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}31{.}847 \dashrightarrow 00{:}11{:}33{.}100$ difference in overall survival.
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}33{.}100 \dashrightarrow 00{:}11{:}35{.}530$ So I think additional reassuring
- NOTE Confidence: 0.876628236470588
- $00:11:35.530 \longrightarrow 00:11:38.447$ data that answer cycling is can
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}38{.}447 \dashrightarrow 00{:}11{:}40{.}829$ be dees calated and in the majority
- NOTE Confidence: 0.876628236470588
- 00:11:40.829 --> 00:11:43.650 of our for two positive cases,
- NOTE Confidence: 0.876628236470588
- $00{:}11{:}43.650 \dashrightarrow 00{:}11{:}45.594$ what about staging won her two
- NOTE Confidence: 0.876628236470588
- $00:11:45.594 \rightarrow 00:11:46.566$ positive breast cancer?
- NOTE Confidence: 0.876628236470588
- 00:11:46.570 --> 00:11:49.634 Obviously you know we used to use multi
- NOTE Confidence: 0.876628236470588
- $00:11:49.634 \rightarrow 00:11:52.149$ pomp chemotherapy for these tumors as well,

 $00:11:52.150 \rightarrow 00:11:55.480$ But what if we use less than the APITI study,

NOTE Confidence: 0.876628236470588

 $00:11:55.480 \rightarrow 00:11:57.825$ set the standard that using single agent

NOTE Confidence: 0.876628236470588

 $00:11:57.825 \rightarrow 00:12:00.170$ taxing question has chosen not followed by.

NOTE Confidence: 0.876628236470588

 $00:12:00.170 \longrightarrow 00:12:03.194$ He requested to not lead to

NOTE Confidence: 0.876628236470588

 $00:12:03.194 \rightarrow 00:12:05.210$ very highly effective outcomes,

NOTE Confidence: 0.876628236470588

 $00{:}12{:}05{.}210 \dashrightarrow 00{:}12{:}08{.}252$ and it was certainly better tolerated

NOTE Confidence: 0.876628236470588

 $00:12:08.252 \rightarrow 00:12:11.399$ than multi agent chemotherapy so so so

NOTE Confidence: 0.876628236470588

 $00:12:11.399 \rightarrow 00:12:13.835$ it was a very reassuring results that

NOTE Confidence: 0.876628236470588

 $00{:}12{:}13{.}912 \dashrightarrow 00{:}12{:}17{.}088$ continue to to persist as the data mature.

NOTE Confidence: 0.876628236470588

 $00{:}12{:}17.090 \dashrightarrow 00{:}12{:}19.256$ Can we further dees calate this therapy

NOTE Confidence: 0.876628236470588

 $00:12:19.256 \rightarrow 00:12:21.920$ and this was the attempt trial looking

NOTE Confidence: 0.876628236470588

 $00{:}12{:}21{.}920 \dashrightarrow 00{:}12{:}24{.}702$ at what if we substituted the taxing

NOTE Confidence: 0.876628236470588

 $00:12:24.702 \rightarrow 00:12:28.110$ percept in ARM with TDM one which tends

NOTE Confidence: 0.876628236470588

 $00{:}12{:}28.205 \dashrightarrow 00{:}12{:}31.614$ to be better tolerated in some respects.

NOTE Confidence: 0.876628236470588

 $00:12:31.620 \longrightarrow 00:12:33.664$ I can have a little less neuropathy,

 $00:12:33.670 \longrightarrow 00:12:34.573$ not hair loss,

NOTE Confidence: 0.876628236470588

 $00:12:34.573 \rightarrow 00:12:37.084$ and that time study showed that there was

NOTE Confidence: 0.876628236470588

 $00:12:37.084 \rightarrow 00:12:39.464$ some similar efficacy between the two arms.

NOTE Confidence: 0.910635278

 $00{:}12{:}39{.}470 \dashrightarrow 00{:}12{:}42{.}398$ However, to the surprise of some of the

NOTE Confidence: 0.910635278

 $00:12:42.398 \longrightarrow 00:12:44.958$ people who are looking at the data,

NOTE Confidence: 0.910635278

 $00:12:44.960 \longrightarrow 00:12:46.790$ it was not necessarily better

NOTE Confidence: 0.910635278

 $00:12:46.790 \longrightarrow 00:12:49.012$ tolerated and there was actually higher

NOTE Confidence: 0.910635278

 $00{:}12{:}49{.}012$ --> $00{:}12{:}51{.}636$ discontinuation rates in the TV on one arm.

NOTE Confidence: 0.910635278

 $00:12:51.640 \longrightarrow 00:12:53.410$ Which had led to the next,

NOTE Confidence: 0.910635278

 $00:12:53.410 \longrightarrow 00:12:56.428$ the escalation trial design account too,

NOTE Confidence: 0.910635278

 $00{:}12{:}56{.}430 \dashrightarrow 00{:}12{:}59{.}510$ which is looking at a shorter to UTM one arm,

NOTE Confidence: 0.910635278

 $00:12:59.510 \longrightarrow 00:13:01.174$ not a whole year.

NOTE Confidence: 0.910635278

 $00:13:01.174 \rightarrow 00:13:03.670$ And this is still in development,

NOTE Confidence: 0.910635278

 $00:13:03.670 \rightarrow 00:13:06.160$ but certainly highlights for you another.

NOTE Confidence: 0.910635278

 $00:13:06.160 \longrightarrow 00:13:08.760$ Further attempt at Deescalating stage

NOTE Confidence: 0.910635278

 $00:13:08.760 \rightarrow 00:13:11.360$ one her two positive chemotherapy.

- NOTE Confidence: 0.910635278
- $00:13:11.360 \rightarrow 00:13:13.208$ Many of you are familiar with the
- NOTE Confidence: 0.910635278
- 00:13:13.208 --> 00:13:15.137 Compass study an I would like to
- NOTE Confidence: 0.910635278
- $00:13:15.137 \rightarrow 00:13:16.487$ just highlight that it's it's.
- NOTE Confidence: 0.910635278
- $00:13:16.490 \longrightarrow 00:13:18.398$ It's a nice combination of both
- NOTE Confidence: 0.910635278
- $00:13:18.398 \longrightarrow 00:13:19.034$ the escalation,
- NOTE Confidence: 0.910635278
- $00:13:19.040 \longrightarrow 00:13:21.495$ an escalation of therapy where
- NOTE Confidence: 0.910635278
- $00:13:21.495 \dashrightarrow 00:13:23.459$ D escalating carboplatinum and.
- NOTE Confidence: 0.910635278
- $00{:}13{:}23.460 \dashrightarrow 00{:}13{:}26.267$ After cycling, but at the same time,
- NOTE Confidence: 0.910635278
- $00{:}13{:}26{.}270 \dashrightarrow 00{:}13{:}28{.}926$ given that we know that her two positive
- NOTE Confidence: 0.910635278
- 00:13:28.926 --> 00:13:31.486 disease is at higher risk of CNS
- NOTE Confidence: 0.910635278
- 00:13:31.486 --> 00:13:33.900 relapse for patients with residual disease,
- NOTE Confidence: 0.910635278
- $00{:}13{:}33{.}900 \dashrightarrow 00{:}13{:}35{.}846$ there is an opportunity to build on
- NOTE Confidence: 0.910635278
- $00{:}13{:}35{.}846 \dashrightarrow 00{:}13{:}38{.}309$ the data of the Katherine study and
- NOTE Confidence: 0.910635278
- $00{:}13{:}38{.}309 \dashrightarrow 00{:}13{:}40{.}264$ essentially add a small molecule
- NOTE Confidence: 0.910635278
- $00:13:40.264 \longrightarrow 00:13:42.135$ inhibitor to catch them which has
- NOTE Confidence: 0.910635278

 $00:13:42.135 \rightarrow 00:13:44.308$ been shown to have great CNS activity

NOTE Confidence: 0.910635278

 $00{:}13{:}44{.}308 \dashrightarrow 00{:}13{:}46{.}926$ that will show in a little bit.

NOTE Confidence: 0.910635278

00:13:46.930 --> 00:13:48.570 And we always need chemotherapy

NOTE Confidence: 0.910635278

 $00{:}13{:}48{.}570 \dashrightarrow 00{:}13{:}50{.}210$ for her two positive disease.

NOTE Confidence: 0.910635278

 $00:13:50.210 \longrightarrow 00:13:52.535$ This area is rapidly changing

NOTE Confidence: 0.910635278

 $00:13:52.535 \longrightarrow 00:13:53.930$ and very exciting.

NOTE Confidence: 0.910635278

 $00{:}13{:}53{.}930 \dashrightarrow 00{:}13{:}56{.}625$ I think there is an opportunity to

NOTE Confidence: 0.910635278

 $00:13:56.625 \rightarrow 00:13:58.759$ potentially look at imaging biomarkers

NOTE Confidence: 0.910635278

 $00{:}13{:}58{.}759 \dashrightarrow 00{:}14{:}01{.}459$ to identify patients who who are

NOTE Confidence: 0.910635278

 $00:14:01.459 \rightarrow 00:14:04.030$ more likely to achieve PCR without

NOTE Confidence: 0.910635278

 $00{:}14{:}04{.}030 \dashrightarrow 00{:}14{:}06{.}906$ chemotherapy with just the use of dual.

NOTE Confidence: 0.910635278

 $00{:}14{:}06{.}906 \dashrightarrow 00{:}14{:}08{.}810$ Her two targeted the rapy.

NOTE Confidence: 0.910635278

 $00:14:08.810 \longrightarrow 00:14:11.345$ So this was recently reported

NOTE Confidence: 0.910635278

00:14:11.345 --> 00:14:14.091 by Rosen Connelly and this this

NOTE Confidence: 0.910635278

 $00{:}14{:}14{.}091 \dashrightarrow 00{:}14{:}17{.}200$ approach using PET imaging as a as a.

NOTE Confidence: 0.910635278

00:14:17.200 --> 00:14:19.165 Biomarker for picking the patients

- NOTE Confidence: 0.910635278
- $00{:}14{:}19{.}165 \dashrightarrow 00{:}14{:}21{.}602$ that can have a dees calated approach

 $00:14:21.602 \rightarrow 00:14:24.002$ is actually going to be prospectively

NOTE Confidence: 0.910635278

 $00:14:24.002 \rightarrow 00:14:26.004$ evaluated in any thoughts that

NOTE Confidence: 0.910635278

 $00:14:26.004 \rightarrow 00:14:27.108$ they coming up.

NOTE Confidence: 0.910635278

 $00{:}14{:}27{.}110 \dashrightarrow 00{:}14{:}29{.}903$ Keep an eye out on another presentation

NOTE Confidence: 0.910635278

00:14:29.903 --> 00:14:32.200 from Nadia hard working Group.

NOTE Confidence: 0.910635278

 $00:14:32.200 \rightarrow 00:14:35.455$ Looking also at chemotherapy for you edge

NOTE Confidence: 0.910635278

 $00:14:35.455 \rightarrow 00:14:38.740$ events coming up in the upcoming ASCO.

NOTE Confidence: 0.910635278

 $00:14:38.740 \rightarrow 00:14:41.309$ Moving on to triple negative breast cancer.

NOTE Confidence: 0.910635278

00:14:41.310 --> 00:14:41.699 Certainly,

NOTE Confidence: 0.910635278

 $00:14:41.699 \rightarrow 00:14:43.644$ given the more aggressive phenotype

NOTE Confidence: 0.910635278

 $00{:}14{:}43.644 \dashrightarrow 00{:}14{:}45.200$ of triple negative disease,

NOTE Confidence: 0.910635278

 $00:14:45.200 \longrightarrow 00:14:46.825$ we've been much more cautious

NOTE Confidence: 0.910635278

 $00{:}14{:}46.825 \dashrightarrow 00{:}14{:}48.450$ about the escalating the rapies in

NOTE Confidence: 0.910635278

 $00{:}14{:}48{.}509 \dashrightarrow 00{:}14{:}50{.}057$ triple negative breast cancer,

00:14:50.060 --> 00:14:51.900 but I would be remiss if I didn't

NOTE Confidence: 0.910635278

 $00{:}14{:}51{.}900 \dashrightarrow 00{:}14{:}53{.}386$ mention that there's a body of

NOTE Confidence: 0.910635278

 $00:14:53.386 \longrightarrow 00:14:54.606$ work with tumor in simple,

NOTE Confidence: 0.910635278

 $00:14:54.610 \longrightarrow 00:14:56.982$ implicating lymphocytes as a

NOTE Confidence: 0.910635278

 $00:14:56.982 \rightarrow 00:14:59.354$ measure of good prognosis,

NOTE Confidence: 0.910635278

 $00:14:59.360 \longrightarrow 00:15:00.900$ and this is something that

NOTE Confidence: 0.910635278

 $00:15:00.900 \longrightarrow 00:15:02.440$ can lead to potentially DFD.

NOTE Confidence: 0.910635278

 $00:15:02.440 \rightarrow 00:15:04.816$ Escalated immunotherapy based treatments,

NOTE Confidence: 0.910635278

 $00{:}15{:}04.816$ --> $00{:}15{:}07.786$ or even elimination or chemotherapy.

NOTE Confidence: 0.910635278

 $00:15:07.790 \longrightarrow 00:15:10.256$ I will highlight one such study.

NOTE Confidence: 0.910635278

 $00:15:10.260 \longrightarrow 00:15:11.769$ Where stage one,

NOTE Confidence: 0.910635278

 $00:15:11.769 \rightarrow 00:15:14.284$ triple negative breast cancers with

NOTE Confidence: 0.910635278

 $00{:}15{:}14.284 \dashrightarrow 00{:}15{:}17.541$ high tells actually did did just as

NOTE Confidence: 0.910635278

 $00:15:17.541 \rightarrow 00:15:19.476$ well with or without chemotherapy.

NOTE Confidence: 0.910635278

00:15:19.480 --> 00:15:20.900 Certainly a lot of ongoing,

NOTE Confidence: 0.910635278

00:15:20.900 --> 00:15:21.250 exciting,

- NOTE Confidence: 0.910635278
- $00:15:21.250 \longrightarrow 00:15:23.000$ effective efforts are going on
- NOTE Confidence: 0.910635278
- $00:15:23.000 \longrightarrow 00:15:25.661$ in the till space before we can
- NOTE Confidence: 0.910635278
- $00:15:25.661 \longrightarrow 00:15:27.253$ safely deescalate therapy and
- NOTE Confidence: 0.910635278
- $00:15:27.253 \rightarrow 00:15:28.940$ triple negative breast cancer.
- NOTE Confidence: 0.910635278
- $00:15:28.940 \longrightarrow 00:15:31.300$ But they are coming.
- NOTE Confidence: 0.910635278
- $00{:}15{:}31{.}300 \dashrightarrow 00{:}15{:}33{.}215$ An exciting abstract and presentation
- NOTE Confidence: 0.910635278
- $00:15:33.215 \rightarrow 00:15:36.053$ will be presented in this year's ASCO
- NOTE Confidence: 0.910635278
- $00{:}15{:}36{.}053 \dashrightarrow 00{:}15{:}38{.}639$ looking at part inhibitor alone as
- NOTE Confidence: 0.910635278
- $00{:}15{:}38{.}639 \dashrightarrow 00{:}15{:}39{.}924$ preoperative neoadjuvant chemotherapy
- NOTE Confidence: 0.910635278
- $00{:}15{:}39{.}924 \dashrightarrow 00{:}15{:}42{.}060$ and BRCA one and two tumors.
- NOTE Confidence: 0.910635278
- $00:15:42.060 \rightarrow 00:15:45.090$ This is without any chemotherapy
- NOTE Confidence: 0.910635278
- $00:15:45.090 \rightarrow 00:15:47.190$ patients with these types of tumors
- NOTE Confidence: 0.910635278
- $00:15:47.190 \rightarrow 00:15:49.410$ actually had pretty high on PCR rates,
- NOTE Confidence: 0.910635278
- $00{:}15{:}49{.}410 \dashrightarrow 00{:}15{:}52{.}248$ so these are exciting data that
- NOTE Confidence: 0.910635278
- $00{:}15{:}52{.}248 \dashrightarrow 00{:}15{:}54{.}612$ will be further represented in
- NOTE Confidence: 0.910635278

 $00:15:54.612 \rightarrow 00:15:56.946$ this coming as still coming up.

NOTE Confidence: 0.847098561428571

 $00{:}15{:}56{.}950 \dashrightarrow 00{:}15{:}59{.}036$ So we talked a lot about Dees calation,

NOTE Confidence: 0.847098561428571

 $00:15:59.040 \longrightarrow 00:15:59.694$ but obviously.

NOTE Confidence: 0.847098561428571

 $00:15:59.694 \rightarrow 00:16:02.310$ We need to just kind of touch on

NOTE Confidence: 0.847098561428571

 $00:16:02.382 \longrightarrow 00:16:04.747$ some of the escalation approaches.

NOTE Confidence: 0.847098561428571

 $00:16:04.750 \rightarrow 00:16:07.165$ Certainly we've made a lot of progress,

NOTE Confidence: 0.847098561428571

 $00{:}16{:}07{.}170 \dashrightarrow 00{:}16{:}09{.}606$ but we still have over 40,000

NOTE Confidence: 0.847098561428571

 $00:16:09.606 \rightarrow 00:16:11.230$ individuals with breast cancer

NOTE Confidence: 0.847098561428571

 $00{:}16{:}11.305 \dashrightarrow 00{:}16{:}13.610$ dying from advanced breast cancer,

NOTE Confidence: 0.847098561428571

 $00:16:13.610 \rightarrow 00:16:17.010$ so it goes without saying that our current

NOTE Confidence: 0.847098561428571

 $00:16:17.010 \rightarrow 00:16:19.518$ strip strategies have significant gaps.

NOTE Confidence: 0.847098561428571

 $00:16:19.520 \rightarrow 00:16:22.640$ So one of the great successes of escalation,

NOTE Confidence: 0.847098561428571

 $00:16:22.640 \longrightarrow 00:16:23.852$ in my opinion,

NOTE Confidence: 0.847098561428571

 $00{:}16{:}23.852 \dashrightarrow 00{:}16{:}26.796$ has been the the introduction of the CD.

NOTE Confidence: 0.847098561428571

 $00{:}16{:}26{.}800 \dashrightarrow 00{:}16{:}30{.}940$ 46 inhibitors 222 minus static breast cancer.

NOTE Confidence: 0.847098561428571

00:16:30.940 - 00:16:33.586 That's, ER, positive that they have led

 $00:16:33.586 \rightarrow 00:16:35.620$ to improved progression free survival.

NOTE Confidence: 0.847098561428571

 $00{:}16{:}35{.}620 \dashrightarrow 00{:}16{:}38{.}230$ Anne continued more and more overall

NOTE Confidence: 0.847098561428571

 $00:16:38.230 \rightarrow 00:16:40.772$ survival data are maturing and will

NOTE Confidence: 0.847098561428571

 $00:16:40.772 \rightarrow 00:16:42.950$ be presented in this year's ASCO,

NOTE Confidence: 0.847098561428571

 $00:16:42.950 \longrightarrow 00:16:46.072$ so you can look at it as

NOTE Confidence: 0.847098561428571

00:16:46.072 --> 00:16:47.410 an escalation approach,

NOTE Confidence: 0.847098561428571

 $00:16:47.410 \longrightarrow 00:16:50.250$ but also dees calation approach because.

NOTE Confidence: 0.847098561428571

 $00:16:50.250 \rightarrow 00:16:53.010$ What the data to show also is at work for

NOTE Confidence: 0.847098561428571

 $00:16:53.083 \rightarrow 00:16:55.820$ a long time to initiation of chemotherapy

NOTE Confidence: 0.847098561428571

 $00:16:55.820 \rightarrow 00:16:58.749$ in patients with metastatic breast cancer.

NOTE Confidence: 0.847098561428571

 $00:16:58.750 \rightarrow 00:17:00.222$ What about escalating argument

NOTE Confidence: 0.847098561428571

 $00:17:00.222 \rightarrow 00:17:02.062$ underground therapy in early stage?

NOTE Confidence: 0.847098561428571

00:17:02.070 --> 00:17:03.160 Breast cancer.

NOTE Confidence: 0.847098561428571

 $00{:}17{:}03.160 \dashrightarrow 00{:}17{:}06.430$ Three studies have been reported out,

NOTE Confidence: 0.847098561428571

 $00{:}17{:}06{.}430 \dashrightarrow 00{:}17{:}09{.}762$ but only monarchy with Emoci club has

 $00:17:09.762 \longrightarrow 00:17:13.427$ been shown to to improve outcomes.

NOTE Confidence: 0.847098561428571

 $00:17:13.430 \longrightarrow 00:17:16.986$ I think the data are still maturing

NOTE Confidence: 0.847098561428571

 $00:17:16.990 \longrightarrow 00:17:20.166$ and I would say we are not ready

NOTE Confidence: 0.847098561428571

 $00:17:20.166 \longrightarrow 00:17:22.250$ too too too too too.

NOTE Confidence: 0.847098561428571

00:17:22.250 --> 00:17:23.738 Add city 46 inhibitors.

NOTE Confidence: 0.847098561428571

 $00:17:23.738 \longrightarrow 00:17:24.854$ Agile and the rapy.

NOTE Confidence: 0.847098561428571

 $00{:}17{:}24.860 \dashrightarrow 00{:}17{:}27.550$ At this point in time.

NOTE Confidence: 0.847098561428571

 $00:17:27.550 \rightarrow 00:17:30.644$ And when you further inspect the data,

NOTE Confidence: 0.847098561428571

 $00:17:30.650 \longrightarrow 00:17:32.210$ that question has been why?

NOTE Confidence: 0.847098561428571

 $00:17:32.210 \rightarrow 00:17:34.826$ Why has Monarch even the only positive study,

NOTE Confidence: 0.847098561428571

 $00:17:34.830 \rightarrow 00:17:39.238$ while Penelope B and Palace were not an?

NOTE Confidence: 0.847098561428571

 $00:17:39.240 \rightarrow 00:17:40.956$ There's a very nice presentation coming

NOTE Confidence: 0.847098561428571

 $00:17:40.956 \longrightarrow 00:17:43.619$ up in the next ******* looking at the

NOTE Confidence: 0.847098561428571

 $00{:}17{:}43.619 \dashrightarrow 00{:}17{:}45.434$ composition of tumors that actually

NOTE Confidence: 0.847098561428571

 $00:17:45.434 \rightarrow 00:17:47.266$ derive benefit and Penelope and they

NOTE Confidence: 0.847098561428571

00:17:47.266 - 00:17:49.570 tend to be of the lumenal before iety,

 $00:17:49.570 \longrightarrow 00:17:51.614$ so I think kind of the biology

NOTE Confidence: 0.847098561428571

 $00:17:51.614 \longrightarrow 00:17:52.490$ of these chambers.

NOTE Confidence: 0.847098561428571

00:17:52.490 --> 00:17:53.990 Whether we can kind of phenotype,

NOTE Confidence: 0.847098561428571

 $00:17:53.990 \rightarrow 00:17:56.020$ the tumors that are more likely to

NOTE Confidence: 0.847098561428571

 $00:17:56.020 \longrightarrow 00:17:57.929$ benefit from agile and taxi for 1600.

NOTE Confidence: 0.847098561428571

00:17:57.930 --> 00:18:00.730 Happy, I think it's the next step.

NOTE Confidence: 0.847098561428571

 $00:18:00.730 \rightarrow 00:18:03.130$ Brain metastases are huge gap and

NOTE Confidence: 0.847098561428571

 $00:18:03.130 \longrightarrow 00:18:06.130$ we need to do better to catnap

NOTE Confidence: 0.847098561428571

 $00{:}18{:}06{.}130 \dashrightarrow 00{:}18{:}08{.}130$ inverted climb with an important

NOTE Confidence: 0.847098561428571

 $00:18:08.130 \longrightarrow 00:18:10.883$ study and as the basis of adjutant

NOTE Confidence: 0.847098561428571

 $00:18:10.883 \dashrightarrow 00:18:13.548$ to catnip that I mentioned in the

NOTE Confidence: 0.847098561428571

 $00{:}18{:}13.548 \dashrightarrow 00{:}18{:}15.726$ in the compass study coming up.

NOTE Confidence: 0.847098561428571

 $00:18:15.730 \longrightarrow 00:18:21.018$ And I will wrap up with escalation of

NOTE Confidence: 0.847098561428571

 $00:18:21.018 \rightarrow 00:18:23.694$ our preoperative chemotherapy regiments

NOTE Confidence: 0.847098561428571

 $00{:}18{:}23.694 \dashrightarrow 00{:}18{:}27.050$ in triple negative breast cancer.

 $00:18:27.050 \longrightarrow 00:18:29.180$ Certainly we have approval for

NOTE Confidence: 0.847098561428571

 $00:18:29.180 \longrightarrow 00:18:30.884$ two checkpoint inhibitors in

NOTE Confidence: 0.847098561428571

 $00:18:30.884 \longrightarrow 00:18:32.669$ the metastatic setting,

NOTE Confidence: 0.847098561428571

 $00:18:32.670 \rightarrow 00:18:34.510$ but what about in the pre operative setting?

NOTE Confidence: 0.847098561428571

 $00{:}18{:}34{.}510 \dashrightarrow 00{:}18{:}34{.}926$ Again,

NOTE Confidence: 0.847098561428571

 $00{:}18{:}34{.}926 \dashrightarrow 00{:}18{:}37{.}422$ Keynote 522 has been in the

NOTE Confidence: 0.847098561428571

 $00:18:37.422 \longrightarrow 00:18:39.909$ news quite a bit recently.

NOTE Confidence: 0.847098561428571

 $00{:}18{:}39{.}910 \dashrightarrow 00{:}18{:}42{.}804$ The patients and in the intervention arm

NOTE Confidence: 0.847098561428571

 $00:18:42.804 \rightarrow 00:18:44.340$ essentially got everything they had,

NOTE Confidence: 0.847098561428571

00:18:44.340 --> 00:18:44.712 carbo,

NOTE Confidence: 0.847098561428571

00:18:44.712 $\operatorname{-->}$ 00:18:47.316 they attacks all they got after cycling

NOTE Confidence: 0.847098561428571

 $00:18:47.316 \longrightarrow 00:18:49.726$ symbolism as well as a year of her

NOTE Confidence: 0.847098561428571

 $00{:}18{:}49.726 \dashrightarrow 00{:}18{:}52.051$ Pember Lizum app after after surgery.

NOTE Confidence: 0.847098561428571

 $00{:}18{:}52{.}051 \dashrightarrow 00{:}18{:}55{.}600$ So the kitchen sink was given and

NOTE Confidence: 0.847098561428571

 $00:18:55.701 \rightarrow 00:18:59.193$ improved PCR rates in the intervention

NOTE Confidence: 0.847098561428571

 $00{:}18{:}59{.}193 \dashrightarrow 00{:}19{:}02{.}470$ arm improved event free survival.

- NOTE Confidence: 0.847098561428571
- $00:19:02.470 \longrightarrow 00:19:03.829$ With these data,
- NOTE Confidence: 0.847098561428571
- $00{:}19{:}03.829 \dashrightarrow 00{:}19{:}08.451$ Merck went to FDA ODAC an ask for approval
- NOTE Confidence: 0.847098561428571
- $00:19:08.451 \rightarrow 00:19:11.826$ of pembrolizumab for pre operative.
- NOTE Confidence: 0.847098561428571
- $00:19:11.830 \rightarrow 00:19:14.670$ Want to get chemotherapy and it was denied.
- NOTE Confidence: 0.847098561428571
- $00:19:14.670 \longrightarrow 00:19:17.118$ Why was it denied?
- NOTE Confidence: 0.847098561428571
- 00:19:17.118 --> 00:19:17.730 Really?
- NOTE Confidence: 0.847098561428571
- $00{:}19{:}17.730 \dashrightarrow 00{:}19{:}20.772$ The the Act committee wanted to
- NOTE Confidence: 0.847098561428571
- $00{:}19{:}20.772 \dashrightarrow 00{:}19{:}24.526$ see results of analysis for an even
- NOTE Confidence: 0.847098561428571
- $00{:}19{:}24.526 \dashrightarrow 00{:}19{:}27.236$ potentially the the final analysis.
- NOTE Confidence: 0.847098561428571
- 00:19:27.240 --> 00:19:28.828 Analysis For results actually
- NOTE Confidence: 0.847098561428571
- 00:19:28.828 --> 00:19:30.416 became available in May,
- NOTE Confidence: 0.875422415833334
- $00:19:30.420 \rightarrow 00:19:32.835$ and they were positive whether they're going
- NOTE Confidence: 0.875422415833334
- $00{:}19{:}32.835 \dashrightarrow 00{:}19{:}36.097$ to go back in after time .4 or wait until
- NOTE Confidence: 0.875422415833334
- $00{:}19{:}36.097 \dashrightarrow 00{:}19{:}38.277$ the final analysis remains to be seen.
- NOTE Confidence: 0.875422415833334
- $00{:}19{:}38{.}280 \dashrightarrow 00{:}19{:}41{.}976$ But generally I think most of us think
- NOTE Confidence: 0.875422415833334

 $00:19:41.976 \rightarrow 00:19:45.260$ that potential approval is getting close.

NOTE Confidence: 0.875422415833334

 $00{:}19{:}45{.}260 \dashrightarrow 00{:}19{:}47{.}384$ I wanted to highlight an important

NOTE Confidence: 0.875422415833334

 $00{:}19{:}47{.}384 \dashrightarrow 00{:}19{:}49{.}444$ abstract that you will hear about

NOTE Confidence: 0.875422415833334

 $00{:}19{:}49{.}444 \dashrightarrow 00{:}19{:}51{.}732$ in the next ASCO coming up with our

NOTE Confidence: 0.875422415833334

00:19:51.798 --> 00:19:54.038 rule of Mob that Jeffrey Nova study,

NOTE Confidence: 0.875422415833334

 $00:19:54.040 \longrightarrow 00:19:56.098$ which did not throw the kitchen

NOTE Confidence: 0.875422415833334

 $00:19:56.098 \longrightarrow 00:19:56.784$ sink applications.

NOTE Confidence: 0.875422415833334

 $00:19:56.790 \longrightarrow 00:19:58.330$ There was no carbo.

NOTE Confidence: 0.875422415833334

 $00:19:58.330 \rightarrow 00:20:00.640$ There wasn't a year of immunotherapy

NOTE Confidence: 0.875422415833334

 $00:20:00.717 \rightarrow 00:20:03.678$ and they still had very remarkable results.

NOTE Confidence: 0.875422415833334

 $00{:}20{:}03.680 \dashrightarrow 00{:}20{:}06.627$ So I think data are mounting that

NOTE Confidence: 0.875422415833334

 $00:20:06.627 \rightarrow 00:20:07.469$ for appropriate.

NOTE Confidence: 0.875422415833334

 $00{:}20{:}07{.}470 \dashrightarrow 00{:}20{:}09{.}600$ We can select the patients most

NOTE Confidence: 0.875422415833334

 $00:20:09.600 \rightarrow 00:20:12.010$ likely to benefit from immunotherapy.

NOTE Confidence: 0.875422415833334

 $00:20:12.010 \rightarrow 00:20:14.515$ This is something that potentially

NOTE Confidence: 0.875422415833334

 $00{:}20{:}14.515 \dashrightarrow 00{:}20{:}16.538$ could help. Our patients.

 $00:20:16.538 \rightarrow 00:20:20.913$ I'm gonna wrap up with a saying that won't

NOTE Confidence: 0.875422415833334

 $00{:}20{:}20{.}913 \dashrightarrow 00{:}20{:}23{.}034$ have time to discuss in great length.

NOTE Confidence: 0.875422415833334

 $00{:}20{:}23.040 \dashrightarrow 00{:}20{:}24.800$ Our escalation strategies and

NOTE Confidence: 0.875422415833334

00:20:24.800 - 00:20:26.120 metastatic breast cancer,

NOTE Confidence: 0.875422415833334

 $00{:}20{:}26{.}120 \dashrightarrow 00{:}20{:}28{.}360$ but a lot of exciting work is going

NOTE Confidence: 0.875422415833334

 $00{:}20{:}28{.}360 \dashrightarrow 00{:}20{:}30{.}855$ on in this area and it will be a

NOTE Confidence: 0.875422415833334

 $00{:}20{:}30.855 \dashrightarrow 00{:}20{:}33.030$ focus of our future discussions.

NOTE Confidence: 0.875422415833334

 $00:20:33.030 \longrightarrow 00:20:34.004$ So in conclusion,

NOTE Confidence: 0.875422415833334

00:20:34.004 --> 00:20:36.386 it's it's about right side therapy,

NOTE Confidence: 0.875422415833334

00:20:36.390 --> 00:20:38.520 not D, escalation or escalation.

NOTE Confidence: 0.875422415833334

 $00:20:38.520 \rightarrow 00:20:40.302$ We have a way to go to achieve this

NOTE Confidence: 0.875422415833334

00:20:40.302 --> 00:20:41.751 for every individual diagnosed

NOTE Confidence: 0.875422415833334

 $00{:}20{:}41.751 \dashrightarrow 00{:}20{:}43.347$ with breast Cancer Research,

NOTE Confidence: 0.875422415833334

 $00:20:43.350 \longrightarrow 00:20:44.238$ patient engagement,

NOTE Confidence: 0.875422415833334

 $00{:}20{:}44{.}238 \dashrightarrow 00{:}20{:}46{.}014$ team science and collaborations

 $00:20:46.014 \longrightarrow 00:20:47.790$ are the path forward.

NOTE Confidence: 0.875422415833334

 $00{:}20{:}47.790 \dashrightarrow 00{:}20{:}49.218$ Thank you so much for your attention.

NOTE Confidence: 0.856699082307692

 $00{:}20{:}50{.}720 \dashrightarrow 00{:}20{:}53{.}114$ Thank you Doctor Lustberg that was

NOTE Confidence: 0.856699082307692

 $00{:}20{:}53.114 \dashrightarrow 00{:}20{:}55.683$ really fantastic and I know I have

NOTE Confidence: 0.856699082307692

 $00{:}20{:}55{.}683 \dashrightarrow 00{:}20{:}58{.}268$ a bunch of questions for you at the

NOTE Confidence: 0.856699082307692

00:20:58.268 --> 00:21:00.308 end and hopefully our audience,

NOTE Confidence: 0.856699082307692

 $00:21:00.310 \longrightarrow 00:21:02.640$ whether they're locally here in

NOTE Confidence: 0.856699082307692

00:21:02.640 --> 00:21:04.038 Connecticut or internationally,

NOTE Confidence: 0.856699082307692

 $00{:}21{:}04{.}040 \dashrightarrow 00{:}21{:}06{.}416$ will put some questions in the

NOTE Confidence: 0.856699082307692

 $00:21:06.416 \rightarrow 00:21:09.407$ question to answer a chat box for you.

NOTE Confidence: 0.856699082307692

 $00:21:09.410 \longrightarrow 00:21:11.036$ Next, we're going to move on

NOTE Confidence: 0.856699082307692

 $00:21:11.036 \longrightarrow 00:21:12.120$ to Doctor Michael D.

NOTE Confidence: 0.856699082307692

00:21:12.120 --> 00:21:14.980 Geovanna and discussing recent advances

NOTE Confidence: 0.856699082307692

 $00{:}21{:}14.980 \dashrightarrow 00{:}21{:}20.000$ of systemic therapy for breast cancer.

NOTE Confidence: 0.856699082307692

00:21:20.000 --> 00:21:21.788 Thank you doctor Cubana.

NOTE Confidence: 0.892945618

 $00:21:56.780 \rightarrow 00:21:58.980$ Sorry for the technical problems,

00:21:58.980 --> 00:22:01.446 thank you for having me and for all of

NOTE Confidence: 0.892945618

 $00{:}22{:}01{.}446 \dashrightarrow 00{:}22{:}04{.}020$ the attendees being on the conference.

NOTE Confidence: 0.892945618

 $00{:}22{:}04.020$ --> $00{:}22{:}06.449$ I will hit some highlights and advances

NOTE Confidence: 0.892945618

 $00:22:06.449 \rightarrow 00:22:09.136$ in therapy for each of the types of

NOTE Confidence: 0.892945618

00:22:09.136 --> 00:22:11.466 breast cancer and I'll start with her

NOTE Confidence: 0.892945618

 $00{:}22{:}11.466 \dashrightarrow 00{:}22{:}13.867$ two positive breast cancer we now have.

NOTE Confidence: 0.892945618

 $00:22:13.870 \rightarrow 00:22:15.960$ Eight different targeted drugs for

NOTE Confidence: 0.892945618

 $00:22:15.960 \rightarrow 00:22:18.550$ treating her two positive breast cancer,

NOTE Confidence: 0.892945618

 $00{:}22{:}18.550 \dashrightarrow 00{:}22{:}20.075$ so it's been wonderful progress

NOTE Confidence: 0.892945618

 $00:22:20.075 \longrightarrow 00:22:22.369$ in this field and of these eight,

NOTE Confidence: 0.892945618

 $00:22:22.370 \rightarrow 00:22:24.578$ there's actually been five new FDA

NOTE Confidence: 0.892945618

 $00{:}22{:}24.578 \dashrightarrow 00{:}22{:}27.109$ approvals in just the last two years.

NOTE Confidence: 0.892945618

 $00{:}22{:}27.110 \dashrightarrow 00{:}22{:}28.790$ Those are the ones that I've

NOTE Confidence: 0.892945618

 $00{:}22{:}28.790 \dashrightarrow 00{:}22{:}29.910$ highlighted in red here,

NOTE Confidence: 0.892945618

 $00{:}22{:}29{.}910 \dashrightarrow 00{:}22{:}32{.}381$ and that does not even include FDA
00:22:32.381 --> 00:22:34.397 approvals for a biosimilars or

NOTE Confidence: 0.892945618

 $00{:}22{:}34{.}397 \dashrightarrow 00{:}22{:}37{.}043$ subq preparations of some of these.

NOTE Confidence: 0.892945618

 $00:22:37.050 \longrightarrow 00:22:39.577$ So the first drug I'll mention is

NOTE Confidence: 0.892945618

00:22:39.577 --> 00:22:42.639 TDM one or trastuzumab in fanzine.

NOTE Confidence: 0.892945618

 $00{:}22{:}42.640 \dashrightarrow 00{:}22{:}44.272$ This was first approved a number

NOTE Confidence: 0.892945618

 $00:22:44.272 \longrightarrow 00:22:45.088$ of years ago,

NOTE Confidence: 0.892945618

 $00:22:45.090 \rightarrow 00:22:47.130$ as per the Amelia trial,

NOTE Confidence: 0.892945618

 $00:22:47.130 \rightarrow 00:22:49.278$ showing that in second line therapy

NOTE Confidence: 0.892945618

 $00{:}22{:}49{.}278 \dashrightarrow 00{:}22{:}52{.}248$ for her two positive metastatic disease TDM,

NOTE Confidence: 0.892945618

 $00:22:52.250 \longrightarrow 00:22:54.754$ one was superior to what was then most

NOTE Confidence: 0.892945618

 $00:22:54.754 \rightarrow 00:22:56.850$ commonly used second line therapy of

NOTE Confidence: 0.892945618

 $00:22:56.850 \rightarrow 00:22:59.505$ lapetina been capeside of been with improved

NOTE Confidence: 0.892945618

00:22:59.505 --> 00:23:01.970 progression free survival response rate,

NOTE Confidence: 0.892945618

 $00:23:01.970 \longrightarrow 00:23:03.110$ and overall survival,

NOTE Confidence: 0.892945618

 $00:23:03.110 \longrightarrow 00:23:05.010$ as well as less toxicity,

NOTE Confidence: 0.892945618

 $00:23:05.010 \rightarrow 00:23:07.544$ and this became the standard second line.

00:23:07.550 --> 00:23:09.720 B for metastatic disease at that time,

NOTE Confidence: 0.892945618

 $00:23:09.720 \longrightarrow 00:23:11.230$ bumping the patent Open Cape,

NOTE Confidence: 0.892945618

 $00:23:11.230 \longrightarrow 00:23:13.900$ cited being to third line and

NOTE Confidence: 0.892945618

 $00:23:13.900 \longrightarrow 00:23:16.050$ then the other really important.

NOTE Confidence: 0.892945618

 $00{:}23{:}16.050 \dashrightarrow 00{:}23{:}18.650$ Recent results using this drug

NOTE Confidence: 0.892945618

 $00{:}23{:}18.650 \dashrightarrow 00{:}23{:}20.594$ were the results of the Catherine

NOTE Confidence: 0.892945618

 $00{:}23{:}20{.}594 \dashrightarrow 00{:}23{:}23{.}003$ trial that looked at this drug in

NOTE Confidence: 0.892945618

 $00:23:23.003 \rightarrow 00:23:24.803$ the post neoadjuvant setting in

NOTE Confidence: 0.892945618

 $00{:}23{:}24.803 \dashrightarrow 00{:}23{:}27.161$ patients who had been treated in

NOTE Confidence: 0.892945618

00:23:27.161 --> 00:23:29.101 the neoadjuvant setting with trust

NOTE Confidence: 0.892945618

00:23:29.101 --> 00:23:31.177 using map based therapy and those

NOTE Confidence: 0.892945618

00:23:31.177 --> 00:23:33.857 who did not achieve a pathological

NOTE Confidence: 0.892945618

 $00{:}23{:}33{.}857 \dashrightarrow 00{:}23{:}36{.}252$ complete response were randomized to NOTE Confidence: 0.892945618

NOTE Connuclice: 0.032345010

 $00:23:36.252 \rightarrow 00:23:38.048$ standard of care which was to complete

NOTE Confidence: 0.892945618

00:23:38.048 --> 00:23:39.840 a year of the trustees and map.

00:23:39.840 --> 00:23:43.386 Or switching to TDM one instead,

NOTE Confidence: 0.892945618

 $00{:}23{:}43{.}390 \dashrightarrow 00{:}23{:}45{.}622$ and there was quite remarkable results

NOTE Confidence: 0.892945618

 $00:23:45.622 \rightarrow 00:23:47.964$ in terms of switching with almost a

NOTE Confidence: 0.892945618

 $00:23:47.964 \longrightarrow 00:23:50.595 50\%$ decrease in disease free survival

NOTE Confidence: 0.892945618

 $00{:}23{:}50{.}595 \dashrightarrow 00{:}23{:}53{.}505$ and freedom from distant response and

NOTE Confidence: 0.892945618

 $00:23:53.505 \rightarrow 00:23:56.349$ overall survival looking promising as well.

NOTE Confidence: 0.892945618

 $00:23:56.350 \longrightarrow 00:23:58.330$ Just in the past month,

NOTE Confidence: 0.892945618

 $00:23:58.330 \rightarrow 00:24:01.734$ published online is an update of

NOTE Confidence: 0.892945618

00:24:01.734 --> 00:24:03.764 the Catherine trial with subgroup

NOTE Confidence: 0.892945618

 $00:24:03.764 \longrightarrow 00:24:06.138$ analysis and I'll just mention a

NOTE Confidence: 0.892945618

00:24:06.138 --> 00:24:08.560 couple of the important follow line

NOTE Confidence: 0.892945618

 $00{:}24{:}08.560 \dashrightarrow 00{:}24{:}10.835$ subgroup analysis from this trial.

NOTE Confidence: 0.892945618

 $00{:}24{:}10{.}840 \dashrightarrow 00{:}24{:}13{.}018$ One is that the improvement with

NOTE Confidence: 0.892945618

00:24:13.018 --> 00:24:15.622 the switch to TDM one came both in

NOTE Confidence: 0.892945618

 $00{:}24{:}15{.}622 \dashrightarrow 00{:}24{:}17{.}610$ patients who were treated with an for

NOTE Confidence: 0.892945618

 $00:24:17.669 \rightarrow 00:24:19.657$ cycling as well as those who were

- NOTE Confidence: 0.892945618
- $00:24:19.657 \longrightarrow 00:24:21.420$ not treated with anthracyclines.
- NOTE Confidence: 0.892945618
- $00{:}24{:}21{.}420 \dashrightarrow 00{:}24{:}24{.}171$ It came even in patients with the
- NOTE Confidence: 0.892945618
- 00:24:24.171 --> 00:24:26.900 very highest risk disease categories.
- NOTE Confidence: 0.892945618
- $00:24:26.900 \rightarrow 00:24:29.120$ The improvement was seen regardless
- NOTE Confidence: 0.892945618
- $00:24:29.120 \longrightarrow 00:24:30.896$ of hormone receptor status,
- NOTE Confidence: 0.892945618
- $00:24:30.900 \longrightarrow 00:24:32.706$ positive or negative,
- NOTE Confidence: 0.892945618
- $00:24:32.706 \longrightarrow 00:24:35.114$ and in this trial,
- NOTE Confidence: 0.892945618
- 00:24:35.120 --> 00:24:38.975 about 70 patients entered initially
- NOTE Confidence: 0.892945618
- 00:24:38.975 --> 00:24:42.830 having clinical stage one disease
- NOTE Confidence: 0.892945618
- $00:24:42.830 \rightarrow 00:24:44.274$ and getting neoadjuvant therapy.
- NOTE Confidence: 0.892945618
- $00{:}24{:}44{.}274 \dashrightarrow 00{:}24{:}46{.}870$ An of those who entered the trial
- NOTE Confidence: 0.892945618
- $00{:}24{:}46.870 \dashrightarrow 00{:}24{:}48.675$ with clinical stage one disease
- NOTE Confidence: 0.892945618
- $00{:}24{:}48.675 \dashrightarrow 00{:}24{:}50.670$ and still had residual disease.
- NOTE Confidence: 0.892945618
- $00{:}24{:}50{.}670 \dashrightarrow 00{:}24{:}52{.}566$ Those who got switched to TDM
- NOTE Confidence: 0.892945618
- $00:24:52.566 \rightarrow 00:24:54.559$ one seemed to have a benefit,
- NOTE Confidence: 0.892945618

 $00:24:54.560 \rightarrow 00:24:56.444$ although it's small numbers and so

NOTE Confidence: 0.892945618

 $00:24:56.444 \rightarrow 00:24:58.390$ we can't really pull statistics.

NOTE Confidence: 0.892945618

 $00{:}24{:}58{.}390 \dashrightarrow 00{:}25{:}01{.}547$ But there were six disease free survival

NOTE Confidence: 0.892945618

 $00:25:01.547 \rightarrow 00:25:05.159$ events in those that continued trastuzumab,

NOTE Confidence: 0.892945618

 $00:25:05.160 \rightarrow 00:25:08.430$ and none in the arm that was switched to TDM.

NOTE Confidence: 0.892945618

 $00:25:08.430 \longrightarrow 00:25:10.650$ One and of these events,

NOTE Confidence: 0.892945618

 $00{:}25{:}10.650 \dashrightarrow 00{:}25{:}12.996$ three of them were non CNS

NOTE Confidence: 0.892945618

00:25:12.996 --> 00:25:13.778 distant recurrences,

NOTE Confidence: 0.836663429090909

00:25:13.780 --> 00:25:15.180 two or CNS recurrences,

NOTE Confidence: 0.836663429090909

 $00{:}25{:}15{.}180 \dashrightarrow 00{:}25{:}17{.}770$ and one was a contralateral breast cancer.

NOTE Confidence: 0.836663429090909

 $00{:}25{:}17.770 \dashrightarrow 00{:}25{:}19.972$ So although small numbers it gives

NOTE Confidence: 0.836663429090909

 $00:25:19.972 \rightarrow 00:25:22.769$ us pause to think about even using

NOTE Confidence: 0.836663429090909

 $00:25:22.769 \rightarrow 00:25:25.271$ this strategy in patients who present

NOTE Confidence: 0.836663429090909

 $00:25:25.271 \rightarrow 00:25:27.669$ with clinical stage one disease,

NOTE Confidence: 0.836663429090909

 $00{:}25{:}27.670 \dashrightarrow 00{:}25{:}29.090$ and that's a controversial area

NOTE Confidence: 0.836663429090909

 $00:25:29.090 \rightarrow 00:25:30.889$ whether to use this strategy or not.

- NOTE Confidence: 0.843883554
- $00{:}25{:}33.650 \dashrightarrow 00{:}25{:}35.396$ But the Catherine trial did set
- NOTE Confidence: 0.843883554
- $00{:}25{:}35{.}396 \dashrightarrow 00{:}25{:}37{.}016$ a new paradigm for treating
- NOTE Confidence: 0.843883554
- 00:25:37.016 -> 00:25:38.600 her two positive disease,
- NOTE Confidence: 0.843883554
- $00:25:38.600 \rightarrow 00:25:41.030$ which is in general we could
- NOTE Confidence: 0.843883554
- $00:25:41.030 \rightarrow 00:25:42.650$ debate stage one disease,
- NOTE Confidence: 0.843883554
- $00{:}25{:}42.650 \dashrightarrow 00{:}25{:}43.950$ but in general patients with
- NOTE Confidence: 0.843883554
- $00:25:43.950 \rightarrow 00:25:44.990$ her two positive disease,
- NOTE Confidence: 0.843883554
- $00:25:44.990 \rightarrow 00:25:47.874$ now we think should get neoadjuvant therapy,
- NOTE Confidence: 0.843883554
- $00{:}25{:}47.880 \dashrightarrow 00{:}25{:}50.247$ because if they get a non path CR we
- NOTE Confidence: 0.843883554
- $00{:}25{:}50{.}247 \dashrightarrow 00{:}25{:}52{.}751$ can improve their long term outcome by
- NOTE Confidence: 0.843883554
- $00{:}25{:}52{.}751 \dashrightarrow 00{:}25{:}55{.}450$ switching to TDM one and this paradigm.
- NOTE Confidence: 0.843883554
- $00{:}25{:}55{.}450 \dashrightarrow 00{:}25{:}57{.}809$ Now we also apply to the triple
- NOTE Confidence: 0.843883554
- $00:25:57.809 \rightarrow 00:25:59.950$ negative subset because the create X
- NOTE Confidence: 0.843883554
- $00{:}25{:}59{.}950 \dashrightarrow 00{:}26{:}02{.}080$ trial showed that in triple negative
- NOTE Confidence: 0.843883554
- 00:26:02.080 --> 00:26:04.097 patients who get neoadjuvant chemo.
- NOTE Confidence: 0.843883554

- $00:26:04.100 \longrightarrow 00:26:04.361$ Therapy.
- NOTE Confidence: 0.843883554
- 00:26:04.361 --> 00:26:06.710 Those who do not get a path CR and
- NOTE Confidence: 0.843883554
- $00{:}26{:}06{.}778 \dashrightarrow 00{:}26{:}08{.}906$ we now have a worse outcome can
- NOTE Confidence: 0.843883554
- $00{:}26{:}08{.}906 \dashrightarrow 00{:}26{:}10{.}683$ have their outcome improved by the
- NOTE Confidence: 0.843883554
- $00{:}26{:}10.683 \dashrightarrow 00{:}26{:}12.785$ use of edge of in Cape cited mean.
- NOTE Confidence: 0.843883554
- $00{:}26{:}12.785 \dashrightarrow 00{:}26{:}14.585$ So I think for both her two positive NOTE Confidence: 0.843883554
- $00:26:14.585 \rightarrow 00:26:16.631$ and triple negative disease we should
- NOTE Confidence: 0.843883554
- $00:26:16.631 \rightarrow 00:26:18.043$ always think about neoadjuvant
- NOTE Confidence: 0.843883554
- $00{:}26{:}18.043 \dashrightarrow 00{:}26{:}19.329$ the rapy For these reasons,
- NOTE Confidence: 0.843883554
- $00:26:19.330 \longrightarrow 00:26:21.040$ because in the post neoadjuvant
- NOTE Confidence: 0.843883554
- $00:26:21.040 \longrightarrow 00:26:23.220$ setting we can improve long term
- NOTE Confidence: 0.843883554
- $00:26:23.220 \rightarrow 00:26:24.438$ outcome by intervening.
- NOTE Confidence: 0.843883554
- $00:26:24.440 \longrightarrow 00:26:26.120$ For those who don't get a path CR.
- NOTE Confidence: 0.812819721818182
- $00:26:28.600 \longrightarrow 00:26:29.644$ The next drug I wanted to
- NOTE Confidence: 0.812819721818182
- $00{:}26{:}29.644 \dashrightarrow 00{:}26{:}30.680$ talk about is to cotton.
- NOTE Confidence: 0.812819721818182
- $00:26:30.680 \longrightarrow 00:26:33.816$ If so, this is a her two

00:26:33.816 --> 00:26:35.160 tyrosine kinase inhibitor.

NOTE Confidence: 0.812819721818182

 $00:26:35.160 \longrightarrow 00:26:36.728$ We now have three.

NOTE Confidence: 0.812819721818182

 $00:26:36.728 \rightarrow 00:26:38.688$ Her two tyrosine kinase inhibitors

NOTE Confidence: 0.812819721818182

 $00:26:38.688 \rightarrow 00:26:41.446$ to choose from and low to captain.

NOTE Confidence: 0.812819721818182

 $00:26:41.446 \longrightarrow 00:26:44.296$ If unlike the other two is highly

NOTE Confidence: 0.812819721818182

 $00:26:44.296 \rightarrow 00:26:47.218$ selective just for her two without

NOTE Confidence: 0.812819721818182

 $00:26:47.218 \longrightarrow 00:26:49.679$ hitting the other members of

NOTE Confidence: 0.812819721818182

 $00:26:49.679 \longrightarrow 00:26:51.974$ the her two receptor family,

NOTE Confidence: 0.812819721818182

 $00{:}26{:}51{.}980 \dashrightarrow 00{:}26{:}53{.}968$ you can see here that there's no

NOTE Confidence: 0.812819721818182

 $00:26:53.968 \longrightarrow 00:26:55.569$ activity against the EGF receptor.

NOTE Confidence: 0.812819721818182

00:26:55.570 - 00:26:58.150 Let Patton in has an Nurettin.

NOTE Confidence: 0.812819721818182

 $00:26:58.150 \longrightarrow 00:27:00.200$ They both have equivalent activity

NOTE Confidence: 0.812819721818182

 $00:27:00.200 \longrightarrow 00:27:02.250$ against the EGF receptor interaction.

NOTE Confidence: 0.812819721818182

 $00{:}27{:}02{.}250 \dashrightarrow 00{:}27{:}03{.}560$ If actually inhibits all of

NOTE Confidence: 0.812819721818182

 $00{:}27{:}03.560 \dashrightarrow 00{:}27{:}04.870$ the receptors in this family.

 $00:27:07.180 \longrightarrow 00:27:11.052$ So the her two climb trial looked

NOTE Confidence: 0.88725716

00:27:11.052 --> 00:27:13.815 at the introduction of Takata nib in

NOTE Confidence: 0.88725716

 $00{:}27{:}13.815$ --> $00{:}27{:}15.815$ the metastatic setting for patients NOTE Confidence: 0.88725716

 $00:27:15.815 \rightarrow 00:27:18.972$ who had prior first line therapy with NOTE Confidence: 0.88725716

 $00{:}27{:}18{.}972 \dashrightarrow 00{:}27{:}21{.}252$ trastuzumab and second line the rapy NOTE Confidence: 0.88725716

 $00{:}27{:}21{.}260$ --> $00{:}27{:}23{.}829$ with TDM one an the really important NOTE Confidence: 0.88725716

 $00{:}27{:}23.829 \dashrightarrow 00{:}27{:}26.475$ part of this trial as Merriam has

NOTE Confidence: 0.88725716

 $00{:}27{:}26.475 \dashrightarrow 00{:}27{:}29.248$ shown you is that this trial welcomed

NOTE Confidence: 0.88725716

00:27:29.248 --> 00:27:31.718 patients with brain metastases and

NOTE Confidence: 0.88725716

 $00{:}27{:}31.718$ --> $00{:}27{:}34.756$ not only treated brain metastases but NOTE Confidence: 0.88725716

 $00:27:34.756 \longrightarrow 00:27:37.396$ even untreated or progressing brain.

NOTE Confidence: 0.88725716

 $00:27:37.400 \longrightarrow 00:27:39.600$ Test icees because the earlier

NOTE Confidence: 0.88725716

 $00:27:39.600 \rightarrow 00:27:42.285$ phase trials with this drug showed

NOTE Confidence: 0.88725716

 $00:27:42.285 \longrightarrow 00:27:44.310$ good activity in the CNS,

NOTE Confidence: 0.88725716

 $00{:}27{:}44{.}310 \dashrightarrow 00{:}27{:}47{.}488$ and so patients in this trial were

NOTE Confidence: 0.88725716

 $00{:}27{:}47{.}488 \dashrightarrow 00{:}27{:}50{.}297$ randomized to the rapy with trastuzumab in

- NOTE Confidence: 0.88725716
- $00:27:50.297 \rightarrow 00:27:54.210$ capeside of being with or without to continu.

 $00:27:54.210 \longrightarrow 00:27:56.142$ And in this trial,

NOTE Confidence: 0.88725716

 $00:27:56.142 \rightarrow 00:27:59.040$ almost half of the patients entered

NOTE Confidence: 0.88725716

 $00{:}27{:}59{.}139 \dashrightarrow 00{:}28{:}01{.}110$ with brain metastases.

NOTE Confidence: 0.88725716

00:28:01.110 --> 00:28:03.100 About 60% of them were

NOTE Confidence: 0.88725716

 $00:28:03.100 \longrightarrow 00:28:04.294$ treated brain metastases,

NOTE Confidence: 0.88725716

 $00{:}28{:}04{.}300 \dashrightarrow 00{:}28{:}07{.}120$ but the rest were untreated

NOTE Confidence: 0.88725716

 $00:28:07.120 \longrightarrow 00:28:09.376$ or treated but progressing.

NOTE Confidence: 0.88725716

 $00{:}28{:}09{.}380 \dashrightarrow 00{:}28{:}12{.}345$ And the overall population showed

NOTE Confidence: 0.88725716

 $00:28:12.345 \longrightarrow 00:28:14.717$ an improvement in progression

NOTE Confidence: 0.88725716

 $00:28:14.717 \longrightarrow 00:28:16.996$ free survival of 2.2 months.

NOTE Confidence: 0.88725716

00:28:16.996 --> 00:28:18.586 An improvement in overall survival

NOTE Confidence: 0.88725716

 $00{:}28{:}18{.}586 \dashrightarrow 00{:}28{:}20{.}369$ of four and a half months.

NOTE Confidence: 0.88725716

 $00{:}28{:}20{.}370 \dashrightarrow 00{:}28{:}22{.}603$ So this was an important trial showing

NOTE Confidence: 0.88725716

 $00:28:22.603 \rightarrow 00:28:24.589$ an improvement in overall survival.

 $00:28:24.590 \longrightarrow 00:28:26.980$ And the response rate nearly

NOTE Confidence: 0.88725716

 $00{:}28{:}26{.}980 \dashrightarrow 00{:}28{:}29{.}302$ doubled from 23% to 41%.

NOTE Confidence: 0.88725716

 $00:28:29.302 \longrightarrow 00:28:31.572$ An in patients with brain

NOTE Confidence: 0.88725716

 $00:28:31.572 \rightarrow 00:28:34.148$ metastases who entered the trial,

NOTE Confidence: 0.88725716

 $00{:}28{:}34{.}150 \dashrightarrow 00{:}28{:}36{.}660$ they achieved the same benefit

NOTE Confidence: 0.88725716

 $00{:}28{:}36{.}660 \dashrightarrow 00{:}28{:}38{.}930$ of a 2.2% month improvement

NOTE Confidence: 0.88725716

 $00:28:38.930 \longrightarrow 00:28:40.610$ in progression free survival.

NOTE Confidence: 0.854608315789474

 $00:28:43.110 \rightarrow 00:28:45.762$ Interestingly, the objective response

NOTE Confidence: 0.854608315789474

00:28:45.762 --> 00:28:49.740 in the brain metastases of patients

NOTE Confidence: 0.854608315789474

00:28:49.833 --> 00:28:53.163 who had active brain metastases by

NOTE Confidence: 0.854608315789474

00:28:53.163 --> 00:28:55.814 resist criteria were 47% versus 20%

NOTE Confidence: 0.854608315789474

00:28:55.814 --> 00:28:58.110 because we know Cape cited being also

NOTE Confidence: 0.854608315789474

 $00{:}28{:}58{.}173 \dashrightarrow 00{:}29{:}00{.}375$ does cross the blood brain barrier.

NOTE Confidence: 0.854608315789474

 $00{:}29{:}00{.}380 \dashrightarrow 00{:}29{:}03{.}080$ So remarkably, almost half of patients

NOTE Confidence: 0.854608315789474

 $00:29:03.080 \longrightarrow 00:29:05.403$ had objective response by recist

NOTE Confidence: 0.854608315789474

 $00{:}29{:}05{.}403 \dashrightarrow 00{:}29{:}07{.}653$ criteria in their brain metastases

- NOTE Confidence: 0.854608315789474
- $00{:}29{:}07.653 \dashrightarrow 00{:}29{:}10.300$ that were active brain metastases.
- NOTE Confidence: 0.854608315789474
- $00:29:10.300 \longrightarrow 00:29:12.298$ So this drug is quite active.
- NOTE Confidence: 0.854608315789474
- $00{:}29{:}12{.}300 \dashrightarrow 00{:}29{:}15{.}387$ In the CNS and this slide shows
- NOTE Confidence: 0.854608315789474
- 00:29:15.387 00:29:16.710 the CNS progression,
- NOTE Confidence: 0.854608315789474
- $00:29:16.710 \longrightarrow 00:29:18.995$ free survival of the patients
- NOTE Confidence: 0.854608315789474
- $00:29:18.995 \longrightarrow 00:29:20.366$ with brain metastases,
- NOTE Confidence: 0.854608315789474
- $00:29:20.370 \longrightarrow 00:29:22.848$ and it improved by nearly six
- NOTE Confidence: 0.854608315789474
- $00:29:22.848 \longrightarrow 00:29:24.654$ months from 4.2 months.
- NOTE Confidence: 0.854608315789474
- $00{:}29{:}24.654 \dashrightarrow 00{:}29{:}27.089$ Median progression free survival to
- NOTE Confidence: 0.854608315789474
- $00:29:27.089 \longrightarrow 00:29:30.070$ almost 10 months and at one year 40%
- NOTE Confidence: 0.854608315789474
- 00:29:30.070 > 00:29:32.170 of the patients had not had brain
- NOTE Confidence: 0.854608315789474
- $00:29:32.170 \longrightarrow 00:29:34.040$ progression in the experimental arm,
- NOTE Confidence: 0.854608315789474
- $00{:}29{:}34.040 \dashrightarrow 00{:}29{:}37.246$ whereas none of the patients in the
- NOTE Confidence: 0.854608315789474
- $00{:}29{:}37{.}246 \dashrightarrow 00{:}29{:}40{.}749$ standard arm still are without progression.
- NOTE Confidence: 0.854608315789474
- $00:29:40.750 \longrightarrow 00:29:42.364$ And this show is in the
- NOTE Confidence: 0.854608315789474

 $00:29:42.364 \rightarrow 00:29:43.440$ patients with brain metastases.

NOTE Confidence: 0.854608315789474

00:29:43.440 --> 00:29:44.820 The overall survival,

NOTE Confidence: 0.854608315789474

00:29:44.820 -> 00:29:47.580 which was improved by six months

NOTE Confidence: 0.854608315789474

 $00:29:47.580 \longrightarrow 00:29:49.919$ from 12 months to 18 months,

NOTE Confidence: 0.854608315789474

 $00:29:49.920 \rightarrow 00:29:52.440$ so really important results in the CNS.

NOTE Confidence: 0.854608315789474

 $00{:}29{:}52{.}440 \dashrightarrow 00{:}29{:}54{.}862$ And because this is such a active

NOTE Confidence: 0.854608315789474

 $00:29:54.862 \rightarrow 00:29:57.380$ drug and with these good results,

NOTE Confidence: 0.854608315789474

 $00:29:57.380 \rightarrow 00:30:00.152$ it's now being tested in the second

NOTE Confidence: 0.854608315789474

 $00{:}30{:}00{.}152 \dashrightarrow 00{:}30{:}03{.}485$ line in the her two climb 02 trial

NOTE Confidence: 0.854608315789474

 $00:30:03.485 \dashrightarrow 00:30:06.160$ which is looking at second line T

NOTE Confidence: 0.854608315789474

00:30:06.160 --> 00:30:08.680 DM one versus T DM 1 + 2 cotton.

NOTE Confidence: 0.819517523

00:30:11.060 --> 00:30:12.674 The next drug I want to

NOTE Confidence: 0.819517523

 $00:30:12.674 \longrightarrow 00:30:13.750$ talk about is trastuzumab.

NOTE Confidence: 0.819517523

 $00:30:13.750 \longrightarrow 00:30:16.276$ Dear XD can this is another

NOTE Confidence: 0.819517523

00:30:16.276 --> 00:30:18.380 antibody drug conjugate like TDM

NOTE Confidence: 0.819517523

 $00:30:18.380 \longrightarrow 00:30:20.795$ one and the table on the right

00:30:20.795 --> 00:30:22.705 compares it to TDM one TDM.

NOTE Confidence: 0.819517523

 $00:30:22.705 \longrightarrow 00:30:24.630$ One has the payload being

NOTE Confidence: 0.819517523

 $00{:}30{:}24.630 \dashrightarrow 00{:}30{:}25.785$ a tubulin inhibitor.

NOTE Confidence: 0.819517523

 $00:30:25.790 \longrightarrow 00:30:27.890$ This drug has a topoisomerase

NOTE Confidence: 0.819517523

 $00{:}30{:}27{.}890 \dashrightarrow 00{:}30{:}30{.}453$ one inhibitor and this drug also

NOTE Confidence: 0.819517523

 $00:30:30.453 \longrightarrow 00:30:33.134$ has what's called a stand by a

NOTE Confidence: 0.819517523

 $00:30:33.134 \rightarrow 00:30:35.264$ by stander effect because when the

NOTE Confidence: 0.819517523

 $00:30:35.264 \longrightarrow 00:30:37.404$ targeted drug when the payload

NOTE Confidence: 0.819517523

 $00:30:37.404 \longrightarrow 00:30:39.565$ is cleared from the antibody,

NOTE Confidence: 0.819517523

 $00:30:39.565 \longrightarrow 00:30:41.305$ it actually can diffuse.

NOTE Confidence: 0.819517523

 $00{:}30{:}41{.}310 \dashrightarrow 00{:}30{:}43{.}638$ Through the membrane of the cell.

NOTE Confidence: 0.819517523

 $00:30:43.640 \longrightarrow 00:30:45.722$ So if there is heterogeneity of

NOTE Confidence: 0.819517523

 $00:30:45.722 \rightarrow 00:30:47.890$ the her two expression in a tumor,

NOTE Confidence: 0.819517523

 $00:30:47.890 \longrightarrow 00:30:49.920$ you can get killing of cells that

NOTE Confidence: 0.819517523

 $00:30:49.920 \dashrightarrow 00:30:51.850$ perhaps have lower levels of her two.

00:30:51.850 -> 00:30:55.590 By this by stander effect.

NOTE Confidence: 0.819517523

 $00{:}30{:}55{.}590 \dashrightarrow 00{:}30{:}57{.}510$ And in phase one trials,

NOTE Confidence: 0.819517523

 $00{:}30{:}57{.}510 \dashrightarrow 00{:}30{:}59{.}742$ this drug was extremely active in

NOTE Confidence: 0.819517523

 $00:30:59.742 \longrightarrow 00:31:01.986$ her two positive breast cancer and

NOTE Confidence: 0.819517523

00:31:01.986 --> 00:31:03.711 her two positive gastric cancer

NOTE Confidence: 0.819517523

 $00{:}31{:}03{.}711 \dashrightarrow 00{:}31{:}05{.}856$ as well as even breast cancers

NOTE Confidence: 0.819517523

 $00:31:05.856 \longrightarrow 00:31:08.271$ that had lower levels of her two.

NOTE Confidence: 0.819517523

 $00:31:08.280 \rightarrow 00:31:10.105$ Perhaps because of this bystander

NOTE Confidence: 0.819517523

 $00{:}31{:}10.105 \dashrightarrow 00{:}31{:}12.374$ effect in cells that had heterogeneous

NOTE Confidence: 0.819517523

 $00{:}31{:}12{.}374 \dashrightarrow 00{:}31{:}14.606$ levels of her two expression and

NOTE Confidence: 0.819517523

00:31:14.606 --> 00:31:17.606 in phase one trials overall 86% of

NOTE Confidence: 0.819517523

 $00:31:17.606 \rightarrow 00:31:20.882$ subjects had at least some tumor shrinkage.

NOTE Confidence: 0.819517523

 $00:31:20.890 \longrightarrow 00:31:22.746$ And so the trial that got this drug,

NOTE Confidence: 0.819517523

 $00:31:22.750 \dashrightarrow 00:31:25.590$ FDA approved was the destiny of 1 trial,

NOTE Confidence: 0.819517523

 $00:31:25.590 \longrightarrow 00:31:27.246$ which was a single arm phase,

NOTE Confidence: 0.819517523

 $00:31:27.250 \longrightarrow 00:31:29.680$ two trial and patients in the

- NOTE Confidence: 0.819517523
- $00:31:29.680 \longrightarrow 00:31:32.116$ metastatic setting had to have prior
- NOTE Confidence: 0.819517523
- $00{:}31{:}32.116$ --> $00{:}31{:}34.692$ trastuzumab an prior TDM one and 2/3
- NOTE Confidence: 0.819517523
- $00{:}31{:}34.692 \dashrightarrow 00{:}31{:}37.648$ of them also had prior per Susan Mab.
- NOTE Confidence: 0.819517523
- $00:31:37.650 \rightarrow 00:31:40.499$ Almost all of them had visceral metastases,
- NOTE Confidence: 0.819517523
- $00{:}31{:}40{.}500 \dashrightarrow 00{:}31{:}42{.}999$ and this was a fairly late line
- NOTE Confidence: 0.819517523
- $00{:}31{:}42.999 \dashrightarrow 00{:}31{:}45.398$ trial with the median number of
- NOTE Confidence: 0.819517523
- $00:31:45.398 \rightarrow 00:31:47.882$ lines of prior therapy being 6.
- NOTE Confidence: 0.819517523
- $00:31:47.890 \longrightarrow 00:31:50.110$ And despite this being a Lateline
- NOTE Confidence: 0.819517523
- 00:31:50.110 --> 00:31:51.220 trial once again,
- NOTE Confidence: 0.819517523
- $00:31:51.220 \longrightarrow 00:31:53.660$ the activity was really dramatic
- NOTE Confidence: 0.819517523
- $00:31:53.660 \rightarrow 00:31:56.100$ with almost all patients having
- NOTE Confidence: 0.819517523
- $00{:}31{:}56{.}177 \dashrightarrow 00{:}31{:}58{.}829$ at least some shrinkage of their
- NOTE Confidence: 0.819517523
- $00:31:58.829 \longrightarrow 00:32:00.597$ tumor by recist criteria,
- NOTE Confidence: 0.819517523
- $00{:}32{:}00{.}600 \dashrightarrow 00{:}32{:}04{.}248$ a 60% confirmed objective response rate,
- NOTE Confidence: 0.819517523
- $00:32:04.250 \longrightarrow 00:32:07.496$ a Disease Control rate of 97%,
- NOTE Confidence: 0.819517523

 $00:32:07.496 \longrightarrow 00:32:11.328$ an 11 out of 168 patients with complete

NOTE Confidence: 0.819517523

 $00{:}32{:}11{.}328 \dashrightarrow 00{:}32{:}13{.}438$ responses in their metastatic disease.

NOTE Confidence: 0.819517523

00:32:13.440 --> 00:32:15.420 So an amazingly active drug,

NOTE Confidence: 0.819517523

 $00:32:15.420 \longrightarrow 00:32:18.668$ even in a very late line setting.

NOTE Confidence: 0.819517523

 $00{:}32{:}18.670 \dashrightarrow 00{:}32{:}20.848$ Excuse me and and despite this

NOTE Confidence: 0.819517523

00:32:20.848 --> 00:32:22.300 being a Lateline setting,

NOTE Confidence: 0.819517523

 $00{:}32{:}22{.}300 \dashrightarrow 00{:}32{:}24{.}740$ these were really durable responses

NOTE Confidence: 0.819517523

 $00{:}32{:}24.740 \dashrightarrow 00{:}32{:}27.752$ as well with their median duration

NOTE Confidence: 0.819517523

 $00{:}32{:}27.752 \dashrightarrow 00{:}32{:}30.680$ of response of almost 15 months

NOTE Confidence: 0.819517523

 $00:32:30.680 \longrightarrow 00:32:33.332$ and overall survival at one year

NOTE Confidence: 0.819517523

 $00:32:33.332 \longrightarrow 00:32:35.741$ still being 86% despite being

NOTE Confidence: 0.819517523

 $00:32:35.741 \longrightarrow 00:32:38.526$ six line therapy on average.

NOTE Confidence: 0.819517523

 $00:32:38.530 \longrightarrow 00:32:40.791$ The one huge caveat with this drug

NOTE Confidence: 0.819517523

 $00:32:40.791 \dashrightarrow 00:32:43.909$ is to watch out for the side effect

NOTE Confidence: 0.819517523

00:32:43.909 - 00:32:45.565 of interstitial lung disease,

NOTE Confidence: 0.819517523

 $00:32:45.570 \longrightarrow 00:32:46.970$ or pneumonitis,

- NOTE Confidence: 0.819517523
- 00:32:46.970 --> 00:32:50.524 which occur din almost 1415% of
- NOTE Confidence: 0.819517523
- $00{:}32{:}50{.}524 \dashrightarrow 00{:}32{:}53{.}654$ patients an in two point 2% of patients.
- NOTE Confidence: 0.819517523
- $00:32:53.654 \rightarrow 00:32:55.814$ It was actually a fatal,
- NOTE Confidence: 0.819517523
- $00:32:55.820 \longrightarrow 00:32:57.626$ so the one caveat with this drug
- NOTE Confidence: 0.819517523
- $00:32:57.626 \longrightarrow 00:32:59.801$ is to be highly vision vigilant
- NOTE Confidence: 0.819517523
- $00:32:59.801 \dashrightarrow 00:33:02.031$ for any respiratory symptoms that
- NOTE Confidence: 0.819517523
- $00:33:02.031 \longrightarrow 00:33:03.750$ could indicate pneumonitis.
- NOTE Confidence: 0.819517523
- $00{:}33{:}03{.}750 \dashrightarrow 00{:}33{:}06{.}039$ And because this drug is so active,
- NOTE Confidence: 0.819517523
- $00{:}33{:}06{.}040 \dashrightarrow 00{:}33{:}08{.}746$ it's being tested in a number
- NOTE Confidence: 0.819517523
- $00:33:08.746 \longrightarrow 00:33:10.550$ of other settings now.
- NOTE Confidence: 0.819517523
- $00{:}33{:}10.550 \dashrightarrow 00{:}33{:}12.410$ We have accelerated approval based
- NOTE Confidence: 0.819517523
- $00{:}33{:}12{.}410 \dashrightarrow 00{:}33{:}14{.}926$ on the single ARM trial that I
- NOTE Confidence: 0.819517523
- $00{:}33{:}14.926 \dashrightarrow 00{:}33{:}16.696$ just showed you the destiny O2
- NOTE Confidence: 0.819517523
- $00{:}33{:}16.696 \dashrightarrow 00{:}33{:}18.699$ trial is the definitive trial.
- NOTE Confidence: 0.819517523
- $00{:}33{:}18.700 \dashrightarrow 00{:}33{:}20.392$ Comparing this drug to treatment of
- NOTE Confidence: 0.819517523

- $00:33:20.392 \rightarrow 00:33:22.550$ physicians choice in a phase three setting.
- NOTE Confidence: 0.819517523
- $00{:}33{:}22{.}550 \dashrightarrow 00{:}33{:}24{.}140$ With these options,
- NOTE Confidence: 0.819517523
- $00:33:24.140 \longrightarrow 00:33:26.790$ the Destiny 03 is comparing
- NOTE Confidence: 0.819517523
- $00:33:26.790 \longrightarrow 00:33:29.404$ this after first line therapy
- NOTE Confidence: 0.819517523
- $00:33:29.404 \longrightarrow 00:33:32.326$ head to head against TDM one.
- NOTE Confidence: 0.819517523
- $00:33:32.330 \longrightarrow 00:33:33.845$ So it's just using web
- NOTE Confidence: 0.819517523
- 00:33:33.845 --> 00:33:35.057 touristy can versus TDM.
- NOTE Confidence: 0.8611110825
- 00:33:35.060 --> 00:33:36.308 One in second line.
- NOTE Confidence: 0.8611110825
- 00:33:36.308 --> 00:33:38.573 The Destiny 04 trial is looking at
- NOTE Confidence: 0.8611110825
- $00:33:38.573 \rightarrow 00:33:40.553$ her two low breast cancer patients
- NOTE Confidence: 0.8611110825
- 00:33:40.553 --> 00:33:42.649 because I showed you in phase one.
- NOTE Confidence: 0.8611110825
- $00:33:42.650 \rightarrow 00:33:44.830$ Trials responses in those patients.
- NOTE Confidence: 0.8611110825
- $00{:}33{:}44{.}830 \dashrightarrow 00{:}33{:}48{.}286$ So this is just using map to uristy can
- NOTE Confidence: 0.8611110825
- $00{:}33{:}48.286 \dashrightarrow 00{:}33{:}50.799$ versus chemotherapy of physicians choice,
- NOTE Confidence: 0.8611110825
- 00:33:50.800 --> 00:33:52.900 and in Destiny 05 it's actually
- NOTE Confidence: 0.8611110825
- 00:33:52.900 > 00:33:55.433 being compared to TDM one in the

 $00:33:55.433 \rightarrow 00:33:57.208$ in the post neoadjuvant setting.

NOTE Confidence: 0.8611110825

00:33:57.210 --> 00:33:58.884 As per the Catherine trial where

NOTE Confidence: 0.8611110825

00:33:58.884 --> 00:34:00.397 patients who get into management

NOTE Confidence: 0.8611110825

 $00{:}34{:}00{.}397 \dashrightarrow 00{:}34{:}02{.}102$ the rapy and have residual disease

NOTE Confidence: 0.8611110825

 $00{:}34{:}02{.}102 \dashrightarrow 00{:}34{:}04{.}026$ will be randomized to TDM one

NOTE Confidence: 0.8611110825

00:34:04.026 --> 00:34:05.538 or try D'souza Mabdi rixty cat.

NOTE Confidence: 0.8611110825

 $00:34:05.540 \longrightarrow 00:34:08.504$ So being tested in all of

NOTE Confidence: 0.8611110825

00:34:08.504 - 00:34:09.986 these different settings.

NOTE Confidence: 0.8611110825

 $00{:}34{:}09{.}990 \dashrightarrow 00{:}34{:}13{.}161$ Another her two targeting drug that was

NOTE Confidence: 0.8611110825

 $00:34:13.161 \rightarrow 00:34:15.769$ just recently approved is margetuximab,

NOTE Confidence: 0.8611110825

 $00{:}34{:}15.770 \dashrightarrow 00{:}34{:}19.417$ and this is actually a derivative of

NOTE Confidence: 0.8611110825

00:34:19.417 --> 00:34:23.134 her of trastuzumab that has the FC

NOTE Confidence: 0.8611110825

00:34:23.134 --> 00:34:25.584 Gamma portion replaced by another

NOTE Confidence: 0.8611110825

 $00{:}34{:}25{.}584 \dashrightarrow 00{:}34{:}28{.}296$ FC Gamma alteration that has a

NOTE Confidence: 0.8611110825

 $00{:}34{:}28.296 \dashrightarrow 00{:}34{:}30.644$ higher affinity for activating FC

 $00:34:30.644 \rightarrow 00:34:33.356$ Gamma receptor and a lower affinity

NOTE Confidence: 0.8611110825

00:34:33.356 --> 00:34:36.200 for inhibitory FC Gamma receptor.

NOTE Confidence: 0.8611110825

 $00{:}34{:}36{.}200 \dashrightarrow 00{:}34{:}38{.}224$ And this is based on the fact that

NOTE Confidence: 0.8611110825

 $00{:}34{:}38{.}224 \dashrightarrow 00{:}34{:}40{.}397$ we know that trastuzumab is not

NOTE Confidence: 0.8611110825

 $00:34:40.397 \rightarrow 00:34:42.402$ only a targeted signal transduction.

NOTE Confidence: 0.8611110825

 $00:34:42.410 \rightarrow 00:34:45.250$ Drug, but it is that immunotherapy as well.

NOTE Confidence: 0.8611110825

 $00:34:45.250 \rightarrow 00:34:47.146$ That does recruit the immune system,

NOTE Confidence: 0.8611110825

 $00:34:47.150 \longrightarrow 00:34:49.642$ and so it was thought by making

NOTE Confidence: 0.8611110825

 $00{:}34{:}49{.}642 \dashrightarrow 00{:}34{:}51{.}625$ transducer maps more able to

NOTE Confidence: 0.8611110825

 $00:34:51.625 \rightarrow 00:34:53.730$ actively recruit the immune system.

NOTE Confidence: 0.8611110825

 $00{:}34{:}53{.}730 \dashrightarrow 00{:}34{:}56{.}238$ It may give it enhanced activity,

NOTE Confidence: 0.8611110825

 $00:34:56.240 \rightarrow 00:34:59.597$ and so this was tested in the Sophia trial,

NOTE Confidence: 0.8611110825

00:34:59.600 - 00:35:02.407 which was a phase three trial of

NOTE Confidence: 0.8611110825

 $00:35:02.407 \longrightarrow 00:35:04.185$ transducer Med chemotherapy versus

NOTE Confidence: 0.8611110825

00:35:04.185 --> 00:35:05.691 margetuximab plus chemotherapy

NOTE Confidence: 0.8611110825

 $00:35:05.691 \rightarrow 00:35:07.699$ in later line therapy,

 $00:35:07.700 \rightarrow 00:35:10.684$ and there was a fairly small positive result.

NOTE Confidence: 0.8611110825

00:35:10.690 --> 00:35:12.608 As you can see here in progression.

NOTE Confidence: 0.8611110825

 $00:35:12.610 \rightarrow 00:35:16.068$ Free survival improving by about two months,

NOTE Confidence: 0.8611110825

 $00:35:16.070 \longrightarrow 00:35:17.550$ so not a huge result,

NOTE Confidence: 0.8611110825

 $00:35:17.550 \dashrightarrow 00:35:20.110$ but enough to get this drug FDA approved.

NOTE Confidence: 0.8611110825

 $00{:}35{:}20{.}110 \dashrightarrow 00{:}35{:}22{.}945$ So it's now part of our armamentarium

NOTE Confidence: 0.8611110825

 $00{:}35{:}22{.}950 \dashrightarrow 00{:}35{:}24{.}792$ and the final her two targeting

NOTE Confidence: 0.8611110825

 $00{:}35{:}24.792 \dashrightarrow 00{:}35{:}26.620$ drug recently approved is narrative,

NOTE Confidence: 0.8611110825

 $00{:}35{:}26.620 \dashrightarrow 00{:}35{:}29.076$ which was tested in the Nala trial and

NOTE Confidence: 0.8611110825

 $00{:}35{:}29{.}076$ --> $00{:}35{:}31{.}989$ this was a trial of Neurontin and Capeside,

NOTE Confidence: 0.8611110825

 $00:35:31.990 \dashrightarrow 00:35:33.958$ it being versus LA patented capeside

NOTE Confidence: 0.8611110825

 $00{:}35{:}33{.}958 \dashrightarrow 00{:}35{:}36{.}312$ of being in patients who had at

NOTE Confidence: 0.8611110825

 $00{:}35{:}36{.}312 \dashrightarrow 00{:}35{:}38{.}280$ least two prior the rapies for their

NOTE Confidence: 0.8611110825

00:35:38.280 --> 00:35:39.929 metastatic her two positive disease

NOTE Confidence: 0.8611110825

 $00{:}35{:}39{.}929 \dashrightarrow 00{:}35{:}42{.}092$ and the new rotten if compared to

 $00{:}35{:}42.092 \dashrightarrow 00{:}35{:}43.926$ La Pata nib did have an improved

NOTE Confidence: 0.8611110825

 $00:35:43.926 \longrightarrow 00:35:44.960$ progression free survival.

NOTE Confidence: 0.8611110825

 $00:35:44.960 \longrightarrow 00:35:45.762$ Overall response,

NOTE Confidence: 0.8611110825

 $00:35:45.762 \rightarrow 00:35:48.970$ and perhaps a little bit in overall survival.

NOTE Confidence: 0.8611110825

 $00{:}35{:}48{.}970 \dashrightarrow 00{:}35{:}52{.}226$ None of these patients had prior to continu,

NOTE Confidence: 0.8611110825

 $00{:}35{:}52{.}230 \dashrightarrow 00{:}35{:}54{.}606$ and so in the era now of using

NOTE Confidence: 0.8611110825

00:35:54.606 --> 00:35:55.200 two continents,

NOTE Confidence: 0.8611110825

 $00:35:55.200 \rightarrow 00:35:57.576$ it will be difficult to know if there really

NOTE Confidence: 0.8611110825

 $00{:}35{:}57{.}576$ --> $00{:}35{:}59{.}978$ is a place for new ratine in metastatic.

NOTE Confidence: 0.8611110825

00:35:59.980 - > 00:36:03.148 Her two positive disease.

NOTE Confidence: 0.8611110825

 $00{:}36{:}03.150 \dashrightarrow 00{:}36{:}03.630$ And so,

NOTE Confidence: 0.8611110825

00:36:03.630 --> 00:36:04.590 as I showed you,

NOTE Confidence: 0.8611110825

 $00:36:04.590 \rightarrow 00:36:07.390$ we now have many drugs to choose from.

NOTE Confidence: 0.8611110825

 $00{:}36{:}07{.}390 \dashrightarrow 00{:}36{:}09{.}770$ An I oppose this as a reasonable

NOTE Confidence: 0.8611110825

 $00:36:09.770 \longrightarrow 00:36:11.613$ order sequence of the rapy that

NOTE Confidence: 0.8611110825

 $00:36:11.613 \rightarrow 00:36:14.231$ we can use for her two positive

- NOTE Confidence: 0.8611110825
- 00:36:14.231 -> 00:36:15.840 metastatic disease patients.

 $00:36:15.840 \longrightarrow 00:36:17.140$ In the first line,

NOTE Confidence: 0.8611110825

00:36:17.140 -> 00:36:18.440 therapy should have pertuzumab,

NOTE Confidence: 0.8611110825

00:36:18.440 --> 00:36:18.950 trastuzumab,

NOTE Confidence: 0.8611110825

 $00{:}36{:}18.950 \dashrightarrow 00{:}36{:}22.010$ and taxane because of the remarkable

NOTE Confidence: 0.8611110825

 $00{:}36{:}22.010 \dashrightarrow 00{:}36{:}23.980$ overall survival benefit seen

NOTE Confidence: 0.8611110825

 $00:36:23.980 \longrightarrow 00:36:25.815$ in the Cleopatra trial TDM,

NOTE Confidence: 0.8611110825

 $00:36:25.820 \longrightarrow 00:36:28.039$ one is still considered the second line

NOTE Confidence: 0.8611110825

 $00{:}36{:}28{.}039 \dashrightarrow 00{:}36{:}30{.}173$ the rapy as per the Amelia trial and

NOTE Confidence: 0.8611110825

 $00:36:30.173 \dashrightarrow 00:36:32.689$ we now can consider a third line the rapy.

NOTE Confidence: 0.8611110825

 $00:36:32.690 \dashrightarrow 00:36:34.622$ Being just do some AB capeside it

NOTE Confidence: 0.8611110825

 $00:36:34.622 \longrightarrow 00:36:36.716$ being into cotton if since we have

NOTE Confidence: 0.8611110825

 $00:36:36.716 \longrightarrow 00:36:38.231$ seen an improvement in overall

NOTE Confidence: 0.8611110825

 $00{:}36{:}38{.}231 \dashrightarrow 00{:}36{:}39{.}913$ survival in the her two climb

NOTE Confidence: 0.8611110825

 $00{:}36{:}39{.}913 \dashrightarrow 00{:}36{:}41{.}238$ study and this is especially

 $00:36:41.240 \rightarrow 00:36:43.196$ of course attractive for patients who

NOTE Confidence: 0.837415576470588

 $00{:}36{:}43.196 \dashrightarrow 00{:}36{:}45.280$ may already have brain metastases from

NOTE Confidence: 0.837415576470588

 $00{:}36{:}45{.}280 \dashrightarrow 00{:}36{:}47{.}430$ their her two positive disease and

NOTE Confidence: 0.837415576470588

 $00:36:47.430 \rightarrow 00:36:49.230$ then perhaps enforced line therapy,

NOTE Confidence: 0.837415576470588

 $00{:}36{:}49{.}230 \dashrightarrow 00{:}36{:}50{.}490$ we could use a trust.

NOTE Confidence: 0.837415576470588

00:36:50.490 --> 00:36:52.094 Susan abjure Exede can,

NOTE Confidence: 0.837415576470588

 $00:36:52.094 \rightarrow 00:36:54.500$ although this may ultimately compete with

NOTE Confidence: 0.837415576470588

 $00{:}36{:}54{.}568 \dashrightarrow 00{:}36{:}57{.}136$ the her two climb regimen for third line

NOTE Confidence: 0.837415576470588

 $00:36:57.136 \longrightarrow 00:36:59.448$ therapy and then in late line therapy,

NOTE Confidence: 0.837415576470588

 $00:36:59.450 \rightarrow 00:37:01.613$ perhaps we might want to use marget uximab

NOTE Confidence: 0.837415576470588

 $00:37:01.613 \longrightarrow 00:37:03.869$ for the slight edge it might have over

NOTE Confidence: 0.837415576470588

 $00:37:03.869 \dashrightarrow 00:37:06.189$ trust using map in the Wave line the rapy.

NOTE Confidence: 0.837415576470588

 $00:37:06.190 \rightarrow 00:37:09.746$ Moving on to triple negative breast cancer.

NOTE Confidence: 0.837415576470588

 $00:37:09.750 \rightarrow 00:37:12.249$ We now have five or six targeted

NOTE Confidence: 0.837415576470588

 $00:37:12.249 \longrightarrow 00:37:14.490$ drugs that are approved for

NOTE Confidence: 0.837415576470588

 $00:37:14.490 \rightarrow 00:37:16.670$ triple negative breast cancer.

 $00{:}37{:}16.670 \dashrightarrow 00{:}37{:}19.928$ We have two park inhibitors are lab rib and

NOTE Confidence: 0.837415576470588

 $00:37:19.928 \rightarrow 00:37:23.448$ no tell is operated as Merriam showed you,

NOTE Confidence: 0.837415576470588

 $00:37:23.450 \rightarrow 00:37:26.126$ we now have two checkpoint inhibitors,

NOTE Confidence: 0.837415576470588

00:37:26.130 --> 00:37:27.954 anti PDL, one drugs at Season

NOTE Confidence: 0.837415576470588

00:37:27.954 --> 00:37:29.759 11 map and Pember Lism AB.

NOTE Confidence: 0.837415576470588

 $00{:}37{:}29.760 \dashrightarrow 00{:}37{:}31.440$ We have an antibody drug conjugate

NOTE Confidence: 0.837415576470588

 $00{:}37{:}31{.}440 \dashrightarrow 00{:}37{:}33{.}418$ and I kind of include carboplatin

NOTE Confidence: 0.837415576470588

 $00:37:33.418 \longrightarrow 00:37:35.800$ as a targeted therapy for triple

NOTE Confidence: 0.837415576470588

 $00{:}37{:}35{.}800 \dashrightarrow 00{:}37{:}37{.}629$ negative breast cancer because if

NOTE Confidence: 0.837415576470588

00:37:37.629 --> 00:37:39.573 you remember from the TNT trial,

NOTE Confidence: 0.837415576470588

00:37:39.580 --> 00:37:42.928 particularly patients who had germline BRCA.

NOTE Confidence: 0.837415576470588

 $00{:}37{:}42.930 \dashrightarrow 00{:}37{:}43.328$ Mutations.

NOTE Confidence: 0.837415576470588

 $00{:}37{:}43.328 \dashrightarrow 00{:}37{:}45.716$ They had a remarkable high response

NOTE Confidence: 0.837415576470588

 $00{:}37{:}45.716$ --> $00{:}37{:}47.733$ rate to single agent carboplatin

NOTE Confidence: 0.837415576470588

 $00{:}37{:}47{.}733 \dashrightarrow 00{:}37{:}50{.}790$ about a 60% response rate for germline

 $00:37:50.790 \longrightarrow 00:37:53.955$ carriers and that is applies to not

NOTE Confidence: 0.837415576470588

 $00{:}37{:}53.955 \dashrightarrow 00{:}37{:}56.445$ only triple negative disease but any

NOTE Confidence: 0.837415576470588

 $00:37:56.445 \dashrightarrow 00:37:59.017$ germ line BRCA mutation carriers.

NOTE Confidence: 0.837415576470588

 $00:37:59.020 \rightarrow 00:38:01.990$ So in terms of immunotherapy,

NOTE Confidence: 0.837415576470588

 $00{:}38{:}01{.}990 \dashrightarrow 00{:}38{:}04{.}630$ we have two positive results in

NOTE Confidence: 0.837415576470588

 $00:38:04.630 \longrightarrow 00:38:05.950$ the metastatic setting.

NOTE Confidence: 0.837415576470588

 $00{:}38{:}05{.}950 \dashrightarrow 00{:}38{:}08{.}092$ I think the results aren't as

NOTE Confidence: 0.837415576470588

 $00:38:08.092 \rightarrow 00:38:09.882$ enormously impressive as they are

NOTE Confidence: 0.837415576470588

 $00{:}38{:}09{.}882 \dashrightarrow 00{:}38{:}11{.}646$ in some other types of cancer,

NOTE Confidence: 0.837415576470588

00:38:11.650 - 00:38:14.630 like Melanoma or lung cancer,

NOTE Confidence: 0.837415576470588

00:38:14.630 - 00:38:16.430 but they are positive results,

NOTE Confidence: 0.837415576470588

 $00{:}38{:}16{.}430 \dashrightarrow 00{:}38{:}18{.}902$ and so we now have these that we

NOTE Confidence: 0.837415576470588

 $00{:}38{:}18{.}902 \dashrightarrow 00{:}38{:}21{.}955$ can use in the IMPASSION 130 trial

NOTE Confidence: 0.837415576470588

00:38:21.955 --> 00:38:24.976 atisa lism AB versus placebo was

NOTE Confidence: 0.837415576470588

 $00:38:24.976 \longrightarrow 00:38:26.960$ added to nab paclitaxel,

NOTE Confidence: 0.837415576470588

 $00:38:26.960 \rightarrow 00:38:30.019$ and in the PDL 1 positive patients.

 $00:38:30.020 \longrightarrow 00:38:32.085$ There was a two to three month

NOTE Confidence: 0.837415576470588

00:38:32.085 --> 00:38:33.749 improvement in progression Free Survival,

NOTE Confidence: 0.837415576470588

00:38:33.750 --> 00:38:36.198 a significant improvement in response rate,

NOTE Confidence: 0.837415576470588

 $00:38:36.200 \longrightarrow 00:38:37.540$ and if this holds up,

NOTE Confidence: 0.837415576470588

 $00:38:37.540 \longrightarrow 00:38:40.255$ but perhaps an impressive improvement

NOTE Confidence: 0.837415576470588

 $00:38:40.255 \rightarrow 00:38:41.884$ in overall survival,

NOTE Confidence: 0.837415576470588

 $00:38:41.890 \longrightarrow 00:38:44.614$ the Keynote 355 was a similar

NOTE Confidence: 0.837415576470588

00:38:44.614 --> 00:38:46.860 trial using Pember Lizum app,

NOTE Confidence: 0.837415576470588

00:38:46.860 -> 00:38:48.655 and the chemotherapy might have

NOTE Confidence: 0.837415576470588

00:38:48.655 - 00:38:51.125 been nap after taxol or path that

NOTE Confidence: 0.837415576470588

 $00:38:51.125 \longrightarrow 00:38:53.253$ axle or gem carbo in first line.

NOTE Confidence: 0.837415576470588

 $00{:}38{:}53{.}260 \dashrightarrow 00{:}38{:}55{.}336$ Setting again and in those with

NOTE Confidence: 0.837415576470588

 $00:38:55.336 \rightarrow 00:38:57.379$ the CPS score greater than 10%,

NOTE Confidence: 0.837415576470588

 $00{:}38{:}57{.}380 \dashrightarrow 00{:}38{:}59{.}535$ an improvement in progression free

NOTE Confidence: 0.837415576470588

 $00{:}38{:}59{.}535 \dashrightarrow 00{:}39{:}01{.}690$ survival of almost four months.

 $00{:}39{:}01{.}690 \dashrightarrow 00{:}39{:}04{.}178$ And so we now have either of these

NOTE Confidence: 0.837415576470588

00:39:04.178 --> 00:39:06.090 drugs at isa lism AB or embolism

NOTE Confidence: 0.837415576470588

00:39:06.090 --> 00:39:08.397 AB for approval for PD L1 positive NOTE Confidence: 0.837415576470588

 $00:39:08.397 \rightarrow 00:39:10.833$ patients by the appropriate assay I

NOTE Confidence: 0.837415576470588

 $00{:}39{:}10.833 \dashrightarrow 00{:}39{:}13.875$ might add in the first line setting

NOTE Confidence: 0.837415576470588

00:39:13.875 --> 00:39:15.655 with these chemotherapy agents

NOTE Confidence: 0.837415576470588

 $00{:}39{:}15.655 \dashrightarrow 00{:}39{:}17.825$ there was another trial looking at

NOTE Confidence: 0.837415576470588

00:39:17.825 - 00:39:20.699 a teasel is a map with paclitaxel,

NOTE Confidence: 0.837415576470588

 $00:39:20.700 \rightarrow 00:39:23.886$ the impassioned 131 and interesting Lee.

NOTE Confidence: 0.837415576470588

 $00{:}39{:}23{.}890 \dashrightarrow 00{:}39{:}25{.}927$ This was a flat out negative trial

NOTE Confidence: 0.837415576470588

 $00:39:25.927 \longrightarrow 00:39:27.670$ with no improvement in progression.

NOTE Confidence: 0.837415576470588

 $00:39:27.670 \longrightarrow 00:39:28.482$ Free survival,

NOTE Confidence: 0.837415576470588

 $00{:}39{:}28.482 \dashrightarrow 00{:}39{:}30.512$ minimal improvement in response rate

NOTE Confidence: 0.837415576470588

 $00:39:30.512 \rightarrow 00:39:32.958$ and no improvement in overall survival.

NOTE Confidence: 0.837415576470588

 $00:39:32.960 \dashrightarrow 00:39:35.402$ And the only difference between this

NOTE Confidence: 0.837415576470588

 $00:39:35.402 \rightarrow 00:39:38.416$ and the 130 child was a nap attack,

- NOTE Confidence: 0.837415576470588
- $00:39:38.420 \longrightarrow 00:39:39.701$ slow versus paclitaxel.
- NOTE Confidence: 0.837415576470588
- $00:39:39.701 \rightarrow 00:39:42.263$ So we don't really understand why
- NOTE Confidence: 0.837415576470588
- $00:39:42.263 \rightarrow 00:39:44.048$ is this one negative?
- NOTE Confidence: 0.837415576470588
- 00:39:44.050 00:39:46.416 Is there a difference in the patient
- NOTE Confidence: 0.837415576470588
- $00:39:46.416 \longrightarrow 00:39:48.040$ population that was enrolled?
- NOTE Confidence: 0.837415576470588
- $00{:}39{:}48.040 \dashrightarrow 00{:}39{:}49.391$ It's hard to see that on the
- NOTE Confidence: 0.837415576470588
- $00:39:49.391 \longrightarrow 00:39:50.520$ surface it was first line.
- NOTE Confidence: 0.837415576470588
- $00:39:50.520 \rightarrow 00:39:51.888$ Triple negative patients.
- NOTE Confidence: 0.837415576470588
- $00:39:51.888 \longrightarrow 00:39:53.712$ Is there truly some
- NOTE Confidence: 0.837415576470588
- $00:39:53.712 \longrightarrow 00:39:55.080$ magical difference between
- NOTE Confidence: 0.76114745375
- $00:39:55.148 \longrightarrow 00:39:57.050$ Napa Taxol and path that axle?
- NOTE Confidence: 0.76114745375
- 00:39:57.050 --> 00:39:58.286 I suspect nabbed paclitaxel
- NOTE Confidence: 0.76114745375
- $00:39:58.286 \rightarrow 00:40:00.140$ does have an edge on Paxil,
- NOTE Confidence: 0.76114745375
- $00:40:00.140 \longrightarrow 00:40:01.814$ but is it really so much of an edge
- NOTE Confidence: 0.76114745375
- $00:40:01.814 \rightarrow 00:40:03.446$ that it would make this difference?
- NOTE Confidence: 0.76114745375

 $00:40:03.450 \longrightarrow 00:40:06.474$ Or is it just chance because the

NOTE Confidence: 0.76114745375

 $00:40:06.474 \longrightarrow 00:40:08.432$ results with immunotherapy are

NOTE Confidence: 0.76114745375

 $00:40:08.432 \longrightarrow 00:40:10.190$ not tremendously impressive?

NOTE Confidence: 0.76114745375

 $00:40:10.190 \longrightarrow 00:40:11.666$ And is it possible that some

NOTE Confidence: 0.76114745375

00:40:11.666 --> 00:40:13.110 private trials might look positive?

NOTE Confidence: 0.76114745375

 $00:40:13.110 \longrightarrow 00:40:15.100$ Some might look at negative?

NOTE Confidence: 0.76114745375

 $00:40:15.100 \longrightarrow 00:40:16.880$ We don't know the answer,

NOTE Confidence: 0.76114745375

 $00:40:16.880 \rightarrow 00:40:19.666$ but for now, if we use atezolizumab,

NOTE Confidence: 0.76114745375

 $00{:}40{:}19.670 \dashrightarrow 00{:}40{:}21.044$ we should use it with nab

NOTE Confidence: 0.76114745375

 $00:40:21.044 \longrightarrow 00:40:22.590$ Papa Taxol and not paclitaxel.

NOTE Confidence: 0.895919262857143

 $00:40:26.260 \longrightarrow 00:40:29.396$ What about the use of immunotherapy in early

NOTE Confidence: 0.895919262857143

 $00:40:29.396 \rightarrow 00:40:32.428$ stages of triple negative breast cancer?

NOTE Confidence: 0.895919262857143

 $00{:}40{:}32{.}430 \dashrightarrow 00{:}40{:}34{.}602$ Miriam mentioned this child,

NOTE Confidence: 0.895919262857143

 $00:40:34.602 \longrightarrow 00:40:37.435$ the keynote 522 trial and the first

NOTE Confidence: 0.895919262857143

00:40:37.435 --> 00:40:38.831 interim analysis was published

NOTE Confidence: 0.895919262857143

00:40:38.831 --> 00:40:40.720 in the New England Journal,

 $00:40:40.720 \longrightarrow 00:40:42.526$ at which point 600 patients were

NOTE Confidence: 0.895919262857143

 $00:40:42.526 \rightarrow 00:40:44.567$ enrolled and it showed an impressive

NOTE Confidence: 0.895919262857143

 $00:40:44.567 \rightarrow 00:40:46.123$ difference in pathological complete

NOTE Confidence: 0.895919262857143

 $00:40:46.123 \longrightarrow 00:40:48.306$ response rate for the addition of

NOTE Confidence: 0.895919262857143

00:40:48.306 --> 00:40:50.308 Pember Lism AB to the kitchen sink,

NOTE Confidence: 0.895919262857143

 $00{:}40{:}50{.}310 \dashrightarrow 00{:}40{:}53{.}834$ as Merriam explained with a 14% improvement

NOTE Confidence: 0.895919262857143

 $00:40:53.834 \rightarrow 00:40:55.994$ in pathologic complete response rate.

NOTE Confidence: 0.895919262857143

 $00{:}40{:}56{.}000 \dashrightarrow 00{:}40{:}58{.}704$ And we do know in this disease that

NOTE Confidence: 0.895919262857143

 $00{:}40{:}58.704 \dashrightarrow 00{:}41{:}00.844$ pathologic complete response is a very

NOTE Confidence: 0.895919262857143

 $00:41:00.844 \rightarrow 00:41:02.944$ strong predictor of long term outcome.

NOTE Confidence: 0.895919262857143

 $00:41:02.950 \longrightarrow 00:41:04.630$ And we know that the FDA in the

NOTE Confidence: 0.895919262857143

 $00{:}41{:}04{.}630 \dashrightarrow 00{:}41{:}06{.}466$ past has said that they would

NOTE Confidence: 0.895919262857143

 $00{:}41{:}06{.}466 \dashrightarrow 00{:}41{:}08{.}171$ consider drug approvals based on

NOTE Confidence: 0.895919262857143

00:41:08.171 --> 00:41:09.563 improvement in pathologic complete

NOTE Confidence: 0.895919262857143

 $00{:}41{:}09{.}563 \dashrightarrow 00{:}41{:}11{.}555$ response for this type of disease.

 $00:41:15.620 \rightarrow 00:41:17.400$ This is not yet approved,

NOTE Confidence: 0.922421592

 $00:41:17.400 \rightarrow 00:41:21.570$ and as Marion mentioned in February,

NOTE Confidence: 0.922421592

 $00:41:21.570 \rightarrow 00:41:23.458$ the pharmaceutical company actually

NOTE Confidence: 0.922421592

 $00{:}41{:}23.458 \dashrightarrow 00{:}41{:}26.290$ asked the FDA to consider accelerated

NOTE Confidence: 0.922421592

 $00{:}41{:}26{.}360 \dashrightarrow 00{:}41{:}28{.}820$ approval based on these early results.

NOTE Confidence: 0.922421592

 $00:41:28.820 \longrightarrow 00:41:30.140$ As she mentioned,

NOTE Confidence: 0.922421592

 $00{:}41{:}30{.}140 \dashrightarrow 00{:}41{:}33{.}220$ there was an ODAC meeting in February

NOTE Confidence: 0.922421592

 $00{:}41{:}33{.}300 \dashrightarrow 00{:}41{:}36{.}464$ and the Odacon the FDA decided at that

NOTE Confidence: 0.922421592

 $00{:}41{:}36{.}464 \dashrightarrow 00{:}41{:}39{.}740$ time not yet to grant accelerated approval.

NOTE Confidence: 0.922421592

 $00{:}41{:}39{.}740 \dashrightarrow 00{:}41{:}42{.}236$ Wanting further follow up and more

NOTE Confidence: 0.922421592

 $00{:}41{:}42.236 \dashrightarrow 00{:}41{:}44.670$ endpoints that were still premature.

NOTE Confidence: 0.922421592

 $00{:}41{:}44.670 \dashrightarrow 00{:}41{:}46.662$ In terms of event free survival

NOTE Confidence: 0.922421592

 $00:41:46.662 \rightarrow 00:41:47.658$ and overall survival,

NOTE Confidence: 0.922421592

 $00:41:47.660 \longrightarrow 00:41:50.060$ and in fact at the time of this

NOTE Confidence: 0.922421592

 $00{:}41{:}50{.}060 \dashrightarrow 00{:}41{:}52{.}377$ meeting the trial was up to over

NOTE Confidence: 0.922421592

 $00{:}41{:}52{.}377 \dashrightarrow 00{:}41{:}54{.}763$ 1100 patients and the path CR rate

- NOTE Confidence: 0.922421592
- $00{:}41{:}54{.}763 \dashrightarrow 00{:}41{:}57{.}108$ delta was a little bit different than
- NOTE Confidence: 0.922421592
- $00:41:57.108 \longrightarrow 00:41:59.286$ it was with the 1st 600 patients.
- NOTE Confidence: 0.922421592
- $00{:}41{:}59{.}290 \dashrightarrow 00{:}42{:}02{.}578$ There was a 7% difference at that time.
- NOTE Confidence: 0.922421592
- 00:42:02.580 --> 00:42:05.450 The P value was still quite good,
- NOTE Confidence: 0.922421592
- $00{:}42{:}05{.}450 \dashrightarrow 00{:}42{:}07{.}880$ but be 'cause the statistics
- NOTE Confidence: 0.922421592
- $00:42:07.880 \longrightarrow 00:42:09.824$ were allowing multiple analysis.
- NOTE Confidence: 0.922421592
- $00:42:09.830 \longrightarrow 00:42:11.846$ Then in order to have a
- NOTE Confidence: 0.922421592
- 00:42:11.846 --> 00:42:12.854 statistical significance though,
- NOTE Confidence: 0.922421592
- $00:42:12.860 \rightarrow 00:42:14.165$ there was very high stringency
- NOTE Confidence: 0.922421592
- $00{:}42{:}14.165 \dashrightarrow 00{:}42{:}16.237$ for what the P value would need to
- NOTE Confidence: 0.922421592
- $00:42:16.237 \longrightarrow 00:42:17.889$ be an it actually didn't hit it.
- NOTE Confidence: 0.922421592
- $00:42:17.890 \longrightarrow 00:42:19.222$ Yet at this point,
- NOTE Confidence: 0.922421592
- $00:42:19.222 \rightarrow 00:42:21.220$ and Merriam showed you that there
- NOTE Confidence: 0.922421592
- $00:42:21.288 \rightarrow 00:42:23.364$ is ongoing analysis and we might
- NOTE Confidence: 0.922421592
- $00:42:23.364 \longrightarrow 00:42:24.748$ hear about this soon.
- NOTE Confidence: 0.922421592

 $00:42:24.750 \longrightarrow 00:42:26.406$ But meanwhile we have to decide

NOTE Confidence: 0.922421592

 $00:42:26.406 \longrightarrow 00:42:29.082$ to do what to do with our triple

NOTE Confidence: 0.922421592

00:42:29.082 --> 00:42:30.586 negative patients who present,

NOTE Confidence: 0.922421592

 $00:42:30.590 \longrightarrow 00:42:33.380$ especially if there are high risk

NOTE Confidence: 0.922421592

 $00{:}42{:}33{.}380 \dashrightarrow 00{:}42{:}35{.}780$ patients and I will tell you

NOTE Confidence: 0.922421592

 $00:42:35.780 \longrightarrow 00:42:37.324$ that for some young,

NOTE Confidence: 0.922421592

 $00:42:37.330 \rightarrow 00:42:39.544$ very high risk multiple node positive

NOTE Confidence: 0.922421592

 $00{:}42{:}39{.}544 \dashrightarrow 00{:}42{:}42{.}248$ patients who I have encountered a since

NOTE Confidence: 0.922421592

00:42:42.248 --> 00:42:44.576 the publication of the first data.

NOTE Confidence: 0.922421592

00:42:44.580 --> 00:42:46.470 I have used this regimen even though

NOTE Confidence: 0.922421592

 $00{:}42{:}46{.}470 \dashrightarrow 00{:}42{:}48{.}807$ it is not FDA approved and we still NOTE Confidence: 0.922421592

00:42:48.807 --> 00:42:50.810 don't know the long term outcome.

NOTE Confidence: 0.922421592

 $00:42:50.810 \longrightarrow 00:42:52.658$ I've had insurance companies

NOTE Confidence: 0.922421592

 $00{:}42{:}52.658 \dashrightarrow 00{:}42{:}54.968$ agree to improve this approved.

NOTE Confidence: 0.922421592

 $00:42:54.970 \longrightarrow 00:42:57.545$ The immunotherapy on the basis

NOTE Confidence: 0.922421592

 $00:42:57.545 \rightarrow 00:43:01.036$ of what data we have so far.

 $00:43:01.040 \longrightarrow 00:43:02.727$ It's not clear that we should all

NOTE Confidence: 0.922421592

 $00{:}43{:}02{.}727 \dashrightarrow 00{:}43{:}04{.}429$ be doing this for every patient,

NOTE Confidence: 0.922421592

 $00:43:04.430 \longrightarrow 00:43:06.368$ but we have to discuss with

NOTE Confidence: 0.922421592

 $00:43:06.368 \rightarrow 00:43:07.900$ the patient sitting before us.

NOTE Confidence: 0.922421592

 $00:43:07.900 \longrightarrow 00:43:08.968$ Whether we do this or not.

NOTE Confidence: 0.922421592

 $00{:}43{:}08{.}970 \dashrightarrow 00{:}43{:}10{.}146$ And I will say that I've done it

NOTE Confidence: 0.922421592

 $00:43:10.146 \longrightarrow 00:43:11.650$ with a couple of patients so far.

NOTE Confidence: 0.864887442857143

 $00:43:13.700 \longrightarrow 00:43:15.578$ We now have an antibody drug

NOTE Confidence: 0.864887442857143

 $00{:}43{:}15.578 \dashrightarrow 00{:}43{:}16.830$ conjugate for treating metastatic

NOTE Confidence: 0.864887442857143

 $00:43:16.884 \rightarrow 00:43:18.400$ triple negative breast cancer.

NOTE Confidence: 0.864887442857143

00:43:18.400 --> 00:43:20.368 That's quite a good active drug.

NOTE Confidence: 0.864887442857143

00:43:20.370 --> 00:43:22.110 It's sacituzumab gobatti can

NOTE Confidence: 0.864887442857143

 $00:43:22.110 \longrightarrow 00:43:24.285$ the antigen is trope too,

NOTE Confidence: 0.864887442857143

 $00{:}43{:}24{.}290 \dashrightarrow 00{:}43{:}27.618$ which is present on many breast cancers and

NOTE Confidence: 0.864887442857143

 $00{:}43{:}27.618$ --> $00{:}43{:}30.918$ the active moiety is a topa one inhibitor.
- 00:43:30.920 --> 00:43:32.860 It's actually SN 38,
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}32{.}860 \dashrightarrow 00{:}43{:}35{.}285$ which is the business molecule,
- NOTE Confidence: 0.864887442857143
- $00:43:35.290 \longrightarrow 00:43:38.176$ the active metabolite of Irene Attican.
- NOTE Confidence: 0.864887442857143
- $00:43:38.180 \longrightarrow 00:43:40.400$ Ann, this was tested in the
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}40{.}400 \dashrightarrow 00{:}43{:}42{.}427$ as cent trial versus treatment of
- NOTE Confidence: 0.864887442857143
- $00:43:42.427 \rightarrow 00:43:44.347$ chemotherapy of physicians choice,
- NOTE Confidence: 0.864887442857143
- 00:43:44.350 00:43:46.010 and this antibody, drug conjugate,
- NOTE Confidence: 0.864887442857143
- $00:43:46.010 \rightarrow 00:43:47.972$ was quite active with an improvement
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}47{.}972 \dashrightarrow 00{:}43{:}49{.}280$ in progression free survival.
- NOTE Confidence: 0.864887442857143
- 00:43:49.280 --> 00:43:51.356 A six month improvement in overall
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}51{.}356 \dashrightarrow 00{:}43{:}52{.}740$ survival and of substantial
- NOTE Confidence: 0.864887442857143
- $00:43:52.804 \rightarrow 00:43:54.649$ improvement in the response rate.
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}54{.}650 \dashrightarrow 00{:}43{:}56{.}426$ So this was approved for triple
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}56{.}426 \dashrightarrow 00{:}43{:}57{.}610$ negative metastatic breast cancer.
- NOTE Confidence: 0.864887442857143
- $00{:}43{:}57.610$ --> $00{:}43{:}59.878$ After two or more prior chemotherapies,
- NOTE Confidence: 0.864887442857143
- 00:43:59.880 --> 00:44:01.590 and it's actually now being tested

 $00:44:01.590 \rightarrow 00:44:03.696$ in hormone receptor positive as well.

NOTE Confidence: 0.864887442857143

 $00{:}44{:}03.696 \dashrightarrow 00{:}44{:}05.112$ We are participating in that trial

NOTE Confidence: 0.864887442857143

 $00{:}44{:}05{.}112 \dashrightarrow 00{:}44{:}06{.}767$ and I've had patients with hormone

NOTE Confidence: 0.864887442857143

 $00:44:06.767 \rightarrow 00:44:08.573$ receptor positive disease in the trial.

NOTE Confidence: 0.864887442857143

 $00:44:08.580 \longrightarrow 00:44:10.940$ Had good responses as well.

NOTE Confidence: 0.864887442857143

 $00:44:10.940 \longrightarrow 00:44:13.656$ We often think of an antibody drug

NOTE Confidence: 0.864887442857143

 $00:44:13.656 \rightarrow 00:44:16.511$ conjugate as a much more tolerable

NOTE Confidence: 0.864887442857143

 $00:44:16.511 \rightarrow 00:44:19.186$ therapy than a naked chemotherapy,

NOTE Confidence: 0.864887442857143

 $00:44:19.190 \longrightarrow 00:44:21.766$ but actually I have to say this

NOTE Confidence: 0.864887442857143

00:44:21.766 --> 00:44:23.825 particular drug does have toxicities

NOTE Confidence: 0.864887442857143

 $00:44:23.825 \rightarrow 00:44:26.477$ that are on par with chemotherapy,

NOTE Confidence: 0.864887442857143

00:44:26.480 --> 00:44:27.492 including neutropenia,

NOTE Confidence: 0.864887442857143

00:44:27.492 --> 00:44:29.010 nausea and vomiting,

NOTE Confidence: 0.864887442857143

00:44:29.010 --> 00:44:31.404 diarrhea, abdominal symptoms,

NOTE Confidence: 0.864887442857143

 $00{:}44{:}31{.}404 \dashrightarrow 00{:}44{:}34{.}812$ complete alopecia, low blood counts,

- $00:44:34.812 \rightarrow 00:44:36.648$ decreased appetite, and rash.
- NOTE Confidence: 0.864887442857143
- $00{:}44{:}36{.}648 \dashrightarrow 00{:}44{:}38{.}218$ So although it's a very
- NOTE Confidence: 0.864887442857143
- 00:44:38.218 --> 00:44:40.019 active drug in a good drug,
- NOTE Confidence: 0.864887442857143
- $00:44:40.020 \rightarrow 00:44:42.029$ it doesn't seem in terms of toxicity.
- NOTE Confidence: 0.864887442857143
- 00:44:42.030 --> 00:44:44.570 Would be a free ride
- NOTE Confidence: 0.864887442857143
- $00:44:44.570 \longrightarrow 00:44:46.094$ compared to chemotherapy.
- NOTE Confidence: 0.864887442857143
- $00:44:46.100 \longrightarrow 00:44:46.949$ And then finally,
- NOTE Confidence: 0.864887442857143
- $00{:}44{:}46{.}949 \dashrightarrow 00{:}44{:}48{.}647$ in the last few minutes I'll
- NOTE Confidence: 0.864887442857143
- 00:44:48.647 --> 00:44:50.800 just a few words about hormone
- NOTE Confidence: 0.864887442857143
- 00:44:50.800 00:44:51.883 receptor positive disease.
- NOTE Confidence: 0.864887442857143
- $00:44:51.890 \rightarrow 00:44:54.890$ We now have five biological agents that we
- NOTE Confidence: 0.864887442857143
- $00:44:54.890 \rightarrow 00:44:57.730$ can combine with our endocrine the rapies.
- NOTE Confidence: 0.864887442857143
- $00:44:57.730 \longrightarrow 00:45:00.555$ The three CDK 46 inhibitors
- NOTE Confidence: 0.864887442857143
- 00:45:00.555 --> 00:45:03.380 everolimus and alkalis sub alkalis,
- NOTE Confidence: 0.864887442857143
- $00:45:03.380 \longrightarrow 00:45:05.552$ is active only in those tumors
- NOTE Confidence: 0.864887442857143
- $00:45:05.552 \rightarrow 00:45:08.528$ that have a PR 3 kinase mutation,

 $00:45:08.530 \longrightarrow 00:45:10.798$ which is about 40% of metastatic

NOTE Confidence: 0.864887442857143

 $00:45:10.798 \longrightarrow 00:45:12.310$ hormone receptor positive breast

NOTE Confidence: 0.864887442857143

 $00{:}45{:}12.377 \dashrightarrow 00{:}45{:}14.937$ cancer in the solar one trial that was

NOTE Confidence: 0.864887442857143

00:45:14.937 --> 00:45:16.689 published almost two years ago now,

NOTE Confidence: 0.864887442857143

 $00{:}45{:}16.690 \dashrightarrow 00{:}45{:}18.090$ which was a randomized phase

NOTE Confidence: 0.864887442857143

 $00{:}45{:}18.090 \dashrightarrow 00{:}45{:}19.490$ three looking at full strength,

NOTE Confidence: 0.864887442857143

 $00:45:19.490 \longrightarrow 00:45:20.866$ with or without alkalis.

NOTE Confidence: 0.864887442857143

 $00:45:20.866 \rightarrow 00:45:22.930$ If there was a significant improvement,

NOTE Confidence: 0.864887442857143

 $00{:}45{:}22{.}930 \dashrightarrow 00{:}45{:}25{.}600$ progression free survival and response rate.

NOTE Confidence: 0.864887442857143

 $00{:}45{:}25{.}600 \dashrightarrow 00{:}45{:}27{.}802$ So this is now considered standard

NOTE Confidence: 0.864887442857143

 $00:45:27.802 \rightarrow 00:45:29.673$ therapy for patients in combination

NOTE Confidence: 0.864887442857143

 $00{:}45{:}29.673 \dashrightarrow 00{:}45{:}31.348$ with focus strength to have

NOTE Confidence: 0.864887442857143

00:45:31.348 --> 00:45:33.330 a PR 3 kinase mutation.

NOTE Confidence: 0.864887442857143

 $00{:}45{:}33{.}330 \dashrightarrow 00{:}45{:}35{.}165$ This can have some substantial

NOTE Confidence: 0.864887442857143

 $00{:}45{:}35{.}165 \dashrightarrow 00{:}45{:}37{.}630$ toxicity as well, including diarrhea.

 $00:45:37.630 \rightarrow 00:45:39.670$ Hyperglycemia that requires

NOTE Confidence: 0.864887442857143

00:45:39.670 --> 00:45:41.030 aggressive management,

NOTE Confidence: 0.864887442857143

 $00:45:41.030 \longrightarrow 00:45:43.802$ an erracht as well that can be

NOTE Confidence: 0.864887442857143

 $00:45:43.802 \rightarrow 00:45:46.449$ prevented by using an antihistamine.

NOTE Confidence: 0.864887442857143

 $00{:}45{:}46{.}450 \dashrightarrow 00{:}45{:}49{.}964$ We have the three CDK 46 inhibitors

NOTE Confidence: 0.864887442857143

 $00:45:49.964 \rightarrow 00:45:53.360$ which have remarkable activity in the NOTE Confidence: 0.864887442857143

00:45:53.360 - 00:45:55.544 metastatic setting in first line,

NOTE Confidence: 0.864887442857143

 $00:45:55.544 \rightarrow 00:45:57.840$ and says the second line nearly doubling

NOTE Confidence: 0.864887442857143

 $00:45:57.901 \rightarrow 00:45:59.866$ response rate and nearly doubling

NOTE Confidence: 0.864887442857143

 $00:45:59.866 \rightarrow 00:46:02.245$ progression free survival and in the

NOTE Confidence: 0.864887442857143

 $00{:}46{:}02{.}245 \dashrightarrow 00{:}46{:}03{.}975$ metastatic setting they really all

NOTE Confidence: 0.864887442857143

 $00{:}46{:}03.975 \dashrightarrow 00{:}46{:}06.202$ seem to have nearly identical activity.

NOTE Confidence: 0.864887442857143

 $00:46:06.202 \longrightarrow 00:46:08.728$ There's maybe a slight edge for

NOTE Confidence: 0.864887442857143

 $00{:}46{:}08.728 \dashrightarrow 00{:}46{:}11.233$ a be maciclib in that it has a little

NOTE Confidence: 0.864887442857143

00:46:11.233 --> 00:46:12.828 bit of single agent activity,

NOTE Confidence: 0.864887442857143

 $00:46:12.830 \longrightarrow 00:46:14.818$ which the other two seem not to,

 $00:46:14.820 \rightarrow 00:46:17.876$ and perhaps some potential to cross the CNS.

NOTE Confidence: 0.864887442857143

00:46:17.880 --> 00:46:20.554 Blood brain barrier and some CNS activity.

NOTE Confidence: 0.864887442857143

 $00:46:20.560 \longrightarrow 00:46:22.975$ But for the most part in the

NOTE Confidence: 0.864887442857143

 $00:46:22.975 \rightarrow 00:46:25.249$ metastatic setting they seem to be

NOTE Confidence: 0.864887442857143

 $00:46:25.249 \rightarrow 00:46:27.199$ extremely active and equally active.

NOTE Confidence: 0.864887442857143

00:46:27.200 --> 00:46:28.664 So as Miriam mentioned,

NOTE Confidence: 0.864887442857143

 $00:46:28.664 \rightarrow 00:46:30.860$ the big question is will these

NOTE Confidence: 0.888861496206897

 $00:46:30.932 \longrightarrow 00:46:33.532$ be able to be moved into the early

NOTE Confidence: 0.888861496206897

 $00{:}46{:}33{.}532 \dashrightarrow 00{:}46{:}35{.}388$ stage setting and she mentioned

NOTE Confidence: 0.888861496206897

 $00:46:35.388 \rightarrow 00:46:37.650$ that we have one positive trial,

NOTE Confidence: 0.888861496206897

 $00:46:37.650 \longrightarrow 00:46:38.775$ the monarchy trial,

NOTE Confidence: 0.888861496206897

 $00:46:38.775 \rightarrow 00:46:41.400$ which looked at very high risk patients

NOTE Confidence: 0.888861496206897

 $00{:}46{:}41{.}467 \dashrightarrow 00{:}46{:}43{.}602$ with four or more nodes positive or

NOTE Confidence: 0.888861496206897

 $00:46:43.602 \longrightarrow 00:46:46.192$ one to three nodes positive and other

NOTE Confidence: 0.888861496206897

00:46:46.192 --> 00:46:48.202 high risk features and enrolled.

 $00:46:48.210 \longrightarrow 00:46:50.478$ Over 5000 patients and looked at

NOTE Confidence: 0.888861496206897

 $00{:}46{:}50{.}478 \dashrightarrow 00{:}46{:}52{.}752$ the use of a bemaciclib for two

NOTE Confidence: 0.888861496206897

 $00:46:52.752 \rightarrow 00:46:55.160$ years with the edge of an enderman

NOTE Confidence: 0.888861496206897

00:46:55.160 - 00:46:57.499 therapy versus not an this at early.

NOTE Confidence: 0.888861496206897

 $00{:}46{:}57{.}500 \dashrightarrow 00{:}47{:}00{.}080$ At about a year and a half follow up as

NOTE Confidence: 0.888861496206897

 $00{:}47{:}00{.}150 \dashrightarrow 00{:}47{:}02{.}769$ seems to be a positive trial so far in

NOTE Confidence: 0.888861496206897

 $00:47:02.769 \longrightarrow 00:47:05.250$ terms of reduction in distant relapse.

NOTE Confidence: 0.888861496206897

 $00{:}47{:}05{.}250 \dashrightarrow 00{:}47{:}07{.}640$ Free survival.

NOTE Confidence: 0.888861496206897

 $00{:}47{:}07.640 \dashrightarrow 00{:}47{:}10.136$ But as far as Marion mentioned,

NOTE Confidence: 0.888861496206897

 $00{:}47{:}10.140 \dashrightarrow 00{:}47{:}12.660$ what we have looking at us in the face

NOTE Confidence: 0.888861496206897

 $00{:}47{:}12.660 \dashrightarrow 00{:}47{:}15.469$ is two other early stage trials with

NOTE Confidence: 0.888861496206897

 $00:47:15.469 \longrightarrow 00:47:17.839$ palbociclib that seemed to be negative

NOTE Confidence: 0.888861496206897

 $00:47:17.839 \rightarrow 00:47:20.240$ and so is there really a difference

NOTE Confidence: 0.888861496206897

 $00:47:20.240 \longrightarrow 00:47:21.940$ between abemaciclib in pablum?

NOTE Confidence: 0.888861496206897

 $00:47:21.940 \longrightarrow 00:47:23.215$ Albo psych lab?

NOTE Confidence: 0.888861496206897

 $00:47:23.220 \longrightarrow 00:47:24.870$ Is there a difference in the

- NOTE Confidence: 0.888861496206897
- $00:47:24.870 \rightarrow 00:47:25.420$ patient population?
- NOTE Confidence: 0.888861496206897
- $00{:}47{:}25{.}420 \dashrightarrow 00{:}47{:}26{.}975$ Is there some other explanation
- NOTE Confidence: 0.888861496206897
- 00:47:26.975 --> 00:47:29.389 and we have an ongoing trial with
- NOTE Confidence: 0.888861496206897
- $00:47:29.389 \rightarrow 00:47:31.369$ Ribociclib which hasn't reported yet.
- NOTE Confidence: 0.888861496206897
- $00:47:31.370 \longrightarrow 00:47:33.250$ Now the interesting thing is,
- NOTE Confidence: 0.888861496206897
- $00{:}47{:}33.250 \dashrightarrow 00{:}47{:}35.025$ these results are reported at
- NOTE Confidence: 0.888861496206897
- $00{:}47{:}35{.}025 \dashrightarrow 00{:}47{:}36{.}800$ different time points and there
- NOTE Confidence: 0.888861496206897
- $00{:}47{:}36.868 \dashrightarrow 00{:}47{:}38.908$ were different treatment durations.
- NOTE Confidence: 0.888861496206897
- 00:47:38.910 --> 00:47:41.796 So in the Penelope B trial,
- NOTE Confidence: 0.888861496206897
- $00:47:41.800 \longrightarrow 00:47:44.884$ which looked at patients who had
- NOTE Confidence: 0.888861496206897
- 00:47:44.884 --> 00:47:47.640 residual disease after neoadjuvant therapy,
- NOTE Confidence: 0.888861496206897
- $00:47:47.640 \longrightarrow 00:47:51.100$ this analysis is out at 43 months.
- NOTE Confidence: 0.888861496206897
- 00:47:51.100 -> 00:47:54.430 And if you looked at the two year mark,
- NOTE Confidence: 0.888861496206897
- 00:47:54.430 --> 00:47:57.232 there was a 4% difference in
- NOTE Confidence: 0.888861496206897
- $00:47:57.232 \longrightarrow 00:47:59.100$ favor of the palbociclib,
- NOTE Confidence: 0.888861496206897

 $00:47:59.100 \rightarrow 00:48:01.634$ but that went down at three years,

NOTE Confidence: 0.888861496206897

 $00:48:01.640 \rightarrow 00:48:03.915$ and at the four year follow-up Timepoint,

NOTE Confidence: 0.888861496206897

 $00:48:03.920 \rightarrow 00:48:06.176$ essentially no difference between the arms.

NOTE Confidence: 0.888861496206897

 $00:48:06.180 \longrightarrow 00:48:07.932$ When we look at the monarchy

NOTE Confidence: 0.888861496206897

 $00{:}48{:}07{.}932 \dashrightarrow 00{:}48{:}08{.}516$ with a bemaciclib,

NOTE Confidence: 0.888861496206897

 $00{:}48{:}08{.}520 \dashrightarrow 00{:}48{:}11{.}400$ which appears to be a positive trial so far.

NOTE Confidence: 0.888861496206897

 $00:48:11.400 \rightarrow 00:48:13.260$ The treatment duration is 2 years,

NOTE Confidence: 0.888861496206897

 $00:48:13.260 \longrightarrow 00:48:15.402$ but the follow up so far is

NOTE Confidence: 0.888861496206897

 $00{:}48{:}15{.}402 \dashrightarrow 00{:}48{:}17{.}847$ only 19 months and so it may be

NOTE Confidence: 0.888861496206897

 $00{:}48{:}17{.}847 \dashrightarrow 00{:}48{:}20{.}089$ that we see some effect of these

NOTE Confidence: 0.888861496206897

 $00:48:20.089 \rightarrow 00:48:22.219$ while the therapy is going on.

NOTE Confidence: 0.888861496206897

 $00:48:22.220 \rightarrow 00:48:25.180$ But once the therapy is completed over time,

NOTE Confidence: 0.888861496206897

 $00:48:25.180 \longrightarrow 00:48:26.424$ the difference between the

NOTE Confidence: 0.888861496206897

 $00:48:26.424 \rightarrow 00:48:27.979$ two arms might go away.

NOTE Confidence: 0.888861496206897

 $00:48:27.980 \longrightarrow 00:48:29.950$ So we need more study,

NOTE Confidence: 0.888861496206897

 $00:48:29.950 \longrightarrow 00:48:31.931$ more follow up and we need to

- NOTE Confidence: 0.888861496206897
- $00:48:31.931 \longrightarrow 00:48:33.870$ see the results of the Natalie
- NOTE Confidence: 0.888861496206897
- $00:48:33.870 \longrightarrow 00:48:35.910$ trial which is using recycled for
- NOTE Confidence: 0.888861496206897
- $00{:}48{:}35{.}910 \dashrightarrow 00{:}48{:}38{.}018$ three years in high risk disease.
- NOTE Confidence: 0.888861496206897
- $00{:}48{:}38{.}020 \dashrightarrow 00{:}48{:}39{.}680$ That's my last slide.
- NOTE Confidence: 0.89656174
- $00:48:40.850 \longrightarrow 00:48:41.898$ One thing I wanted
- NOTE Confidence: 0.877980285789474
- $00:48:41.910 \longrightarrow 00:48:43.688$ to say once again getting back to
- NOTE Confidence: 0.877980285789474
- $00{:}48{:}43.688 \dashrightarrow 00{:}48{:}45.351$ dealing with the person to sitting
- NOTE Confidence: 0.877980285789474
- $00:48:45.351 \longrightarrow 00:48:47.043$ in front of you question arises.
- NOTE Confidence: 0.877980285789474
- $00:48:47.050 \longrightarrow 00:48:49.794$ Should we act on this data with abemaciclib?
- NOTE Confidence: 0.877980285789474
- 00:48:49.800 --> 00:48:51.172 It's not FDA approved.
- NOTE Confidence: 0.877980285789474
- $00:48:51.172 \longrightarrow 00:48:53.576$ We really don't know if this is
- NOTE Confidence: 0.877980285789474
- $00{:}48{:}53{.}576 \dashrightarrow 00{:}48{:}55{.}784$ going to hold up in the long term,
- NOTE Confidence: 0.877980285789474
- $00{:}48{:}55{.}790 \dashrightarrow 00{:}48{:}57{.}914$ but I will tell you that I have brought
- NOTE Confidence: 0.877980285789474
- $00{:}48{:}57{.}914 \dashrightarrow 00{:}48{:}59{.}657$ this up sometimes with patients.
- NOTE Confidence: 0.877980285789474
- 00:48:59.660 --> 00:49:02.748 So I recently had a patient who had
- NOTE Confidence: 0.877980285789474

 $00:49:02.748 \longrightarrow 00:49:05.512$ 12 nodes positive and was starting her

NOTE Confidence: 0.877980285789474

 $00:49:05.512 \rightarrow 00:49:07.216$ regimen therapy and I discussed with

NOTE Confidence: 0.877980285789474

 $00{:}49{:}07{.}216$ --> $00{:}49{:}09{.}319$ her whether to add emoci clip because

NOTE Confidence: 0.877980285789474

 $00:49:09.319 \longrightarrow 00:49:10.949$ it's enormously high risk to have.

NOTE Confidence: 0.877980285789474

 $00{:}49{:}10.950 \dashrightarrow 00{:}49{:}13.365$ Well, no, it's positive and I prescribed

NOTE Confidence: 0.877980285789474

 $00{:}49{:}13.365 \dashrightarrow 00{:}49{:}15.389$ with Emoci clip for this woman.

NOTE Confidence: 0.877980285789474

 $00{:}49{:}15{.}390 \dashrightarrow 00{:}49{:}17{.}838$ It would be covered by her insurance company.

NOTE Confidence: 0.877980285789474

 $00:49:17.840 \rightarrow 00:49:19.456$ Again, we don't know if we should be

NOTE Confidence: 0.877980285789474

 $00{:}49{:}19{.}456 \dashrightarrow 00{:}49{:}21{.}124$ doing this. We sometimes act early.

NOTE Confidence: 0.877980285789474

 $00{:}49{:}21.124 \dashrightarrow 00{:}49{:}23.706$ We may be giving the rapy that has toxicity

NOTE Confidence: 0.877980285789474

 $00:49:23.706 \longrightarrow 00:49:25.883$ that in the long run doesn't help,

NOTE Confidence: 0.877980285789474

 $00{:}49{:}25{.}890 \dashrightarrow 00{:}49{:}28{.}172$ but I consider it in very high

NOTE Confidence: 0.877980285789474

 $00{:}49{:}28{.}172 \dashrightarrow 00{:}49{:}30{.}530$ risk patients based on this data.

NOTE Confidence: 0.877980285789474

 $00:49:30.530 \longrightarrow 00:49:33.241$ So I stuck my neck out in a

NOTE Confidence: 0.877980285789474

 $00:49:33.241 \longrightarrow 00:49:34.680$ couple of areas there,

NOTE Confidence: 0.877980285789474

 $00:49:34.680 \rightarrow 00:49:36.451$ but that's my last slide and I'll

- NOTE Confidence: 0.877980285789474
- 00:49:36.451 > 00:49:38.189 be happy to take any questions
- NOTE Confidence: 0.877980285789474
- $00:49:38.189 \longrightarrow 00:49:40.025$ now or at the discussion time.
- NOTE Confidence: 0.8365242304
- 00:49:42.090 --> 00:49:43.746 Thank you Doctor Digiovanni,
- NOTE Confidence: 0.8365242304
- $00{:}49{:}43.746$ --> $00{:}49{:}46.653$ that was fantastic and there are questions
- NOTE Confidence: 0.8365242304
- $00{:}49{:}46.653 \dashrightarrow 00{:}49{:}49.124$ that are trickling in and they both
- NOTE Confidence: 0.8365242304
- $00{:}49{:}49{.}124 \dashrightarrow 00{:}49{:}51{.}799$ in the chat in question and answer.
- NOTE Confidence: 0.8365242304
- 00:49:51.800 --> 00:49:54.690 Certainly not last and least,
- NOTE Confidence: 0.8365242304
- $00{:}49{:}54{.}690 \dashrightarrow 00{:}49{:}57{.}576$ but we have Professor Andreas Silvers.
- NOTE Confidence: 0.8365242304
- $00{:}49{:}57{.}580 \dashrightarrow 00{:}49{:}59{.}620$ Gonna really give us a exciting
- NOTE Confidence: 0.8365242304
- $00:49:59.620 \longrightarrow 00:50:00.980$ update on breast cancer
- NOTE Confidence: 0.8365242304
- 00:50:01.044 --> 00:50:02.900 epidemiology for risk factors,
- NOTE Confidence: 0.8365242304
- $00:50:02.900 \rightarrow 00:50:06.200$ especially in our vulnerable populations so.
- NOTE Confidence: 0.8365242304
- $00{:}50{:}06{.}200 \dashrightarrow 00{:}50{:}07{.}169$ Thank you, Andrea.
- NOTE Confidence: 0.77995725
- 00:50:14.970 --> 00:50:16.218 You're on mute still.
- NOTE Confidence: 0.916978778571429
- 00:50:19.170 --> 00:50:19.960 Good afternoon,
- NOTE Confidence: 0.916978778571429

 $00:50:19.960 \rightarrow 00:50:21.935$ thank you for that introduction.

NOTE Confidence: 0.916978778571429

 $00{:}50{:}21{.}940 \dashrightarrow 00{:}50{:}24{.}478$ It's my pleasure to present today

NOTE Confidence: 0.916978778571429

00:50:24.478 --> 00:50:27.725 and I will start out by describing

NOTE Confidence: 0.916978778571429

00:50:27.725 - 00:50:30.170 the topography of breast cancer

NOTE Confidence: 0.916978778571429

 $00{:}50{:}30{.}170 \dashrightarrow 00{:}50{:}32{.}695$ in 2021 and I reviewed current

NOTE Confidence: 0.916978778571429

 $00:50:32.695 \rightarrow 00:50:35.180$ epidemiology and how we got here.

NOTE Confidence: 0.631061254

00:50:44.820 --> 00:50:47.630 Sure, but it's not advancing.

NOTE Confidence: 0.803014352

 $00:50:58.350 \rightarrow 00:51:01.510$ It's my conflict of interest.

NOTE Confidence: 0.803014352

 $00{:}51{:}01{.}510$ --> $00{:}51{:}04{.}230$ And as you can see on this slide,

NOTE Confidence: 0.803014352

 $00{:}51{:}04{.}230 \dashrightarrow 00{:}51{:}06{.}565$ breast cancer in the United

NOTE Confidence: 0.803014352

 $00{:}51{:}06{.}565 \dashrightarrow 00{:}51{:}08{.}433$ States is extremely common.

NOTE Confidence: 0.803014352

 $00{:}51{:}08{.}440 \dashrightarrow 00{:}51{:}12{.}176$ It's the most common cancer one season women.

NOTE Confidence: 0.803014352

 $00{:}51{:}12.180 \dashrightarrow 00{:}51{:}14.595$ But it is not the most common

NOTE Confidence: 0.803014352

 $00:51:14.595 \rightarrow 00:51:17.279$ cause of death that is lung cancer.

NOTE Confidence: 0.803014352

 $00{:}51{:}17{.}280 \dashrightarrow 00{:}51{:}20{.}526$ You can compare the results of

NOTE Confidence: 0.803014352

 $00:51:20.526 \rightarrow 00:51:23.281$ deaths that are anticipated in 2021

 $00:51:23.281 \rightarrow 00:51:25.458$ for lung cancer, which is 100 and

NOTE Confidence: 0.867313785555556

 $00:51:27.490 \longrightarrow 00:51:30.670$ 16,660. It's a very common

NOTE Confidence: 0.867313785555556

00:51:30.670 - 00:51:33.214 tumor in elderly women.

NOTE Confidence: 0.867313785555556

 $00:51:33.220 \longrightarrow 00:51:36.514$ 7% of all breast cancers will

NOTE Confidence: 0.867313785555556

 $00:51:36.514 \rightarrow 00:51:40.358$ appear in women over the age of 70.

NOTE Confidence: 0.853695164

 $00{:}51{:}43{.}450 \dashrightarrow 00{:}51{:}45{.}496$ Just want to highlight a little

NOTE Confidence: 0.853695164

 $00{:}51{:}45{.}496 \dashrightarrow 00{:}51{:}47{.}373$ bit that breast cancer is

NOTE Confidence: 0.853695164

 $00:51:47.373 \rightarrow 00:51:49.613$ heterogeneous and there are multiple

NOTE Confidence: 0.853695164

 $00{:}51{:}49{.}613 \dashrightarrow 00{:}51{:}51{.}405$ different tumor subtypes there.

NOTE Confidence: 0.853695164

 $00:51:51.410 \longrightarrow 00:51:53.054$ Subtypes within the subtypes

NOTE Confidence: 0.853695164

 $00{:}51{:}53.054 \dashrightarrow 00{:}51{:}55.740$ such as Lumenal A and luminal B.

NOTE Confidence: 0.853695164

 $00{:}51{:}55{.}740 \dashrightarrow 00{:}51{:}58{.}440$ The significance of this is going

NOTE Confidence: 0.853695164

 $00{:}51{:}58{.}440 \dashrightarrow 00{:}52{:}02{.}166$ to be come clear when we talk about

NOTE Confidence: 0.853695164

 $00:52:02.166 \rightarrow 00:52:05.092$ etiology and prevention and also keep

NOTE Confidence: 0.853695164

 $00{:}52{:}05{.}092 \dashrightarrow 00{:}52{:}07{.}966$ in mind that breast cancer subtypes

 $00:52:07.966 \rightarrow 00:52:10.871$ actually can change in up to 25%

NOTE Confidence: 0.853695164

 $00:52:10.871 \rightarrow 00:52:13.976$ of patients when they metastasize.

NOTE Confidence: 0.853695164

 $00{:}52{:}13{.}980 \dashrightarrow 00{:}52{:}16{.}195$ Their breast cancer has changed

NOTE Confidence: 0.853695164

 $00:52:16.195 \rightarrow 00:52:18.892$ subtype and the most common change

NOTE Confidence: 0.853695164

 $00:52:18.892 \rightarrow 00:52:21.713$ that one sees is going from lumenal,

NOTE Confidence: 0.853695164

 $00:52:21.720 \longrightarrow 00:52:23.500$ a two triple negative.

NOTE Confidence: 0.870443961111111

 $00:52:25.880 \longrightarrow 00:52:28.245$ And here's the breakdown of

NOTE Confidence: 0.870443961111111

 $00:52:28.245 \longrightarrow 00:52:30.137$ breast cancer by subtype,

NOTE Confidence: 0.870443961111111

 $00:52:30.140 \longrightarrow 00:52:34.388$ and you can see that lumenal a specifically,

NOTE Confidence: 0.870443961111111

 $00:52:34.390 \rightarrow 00:52:37.828$ but hormone receptor positive breast cancer,

NOTE Confidence: 0.870443961111111

 $00:52:37.830 \longrightarrow 00:52:39.910$ is the most common type,

NOTE Confidence: 0.870443961111111

 $00:52:39.910 \longrightarrow 00:52:42.900$ regardless of age or race,

NOTE Confidence: 0.87044396111111

 $00{:}52{:}42{.}900 \dashrightarrow 00{:}52{:}45{.}784$ and it's six times more common than

NOTE Confidence: 0.870443961111111

 $00{:}52{:}45{.}784 \dashrightarrow 00{:}52{:}48{.}150$ the triple negative breast cancer.

NOTE Confidence: 0.87256719625

 $00:52:50.320 \rightarrow 00:52:53.448$ Let's move ahead and talk about risk factors.

NOTE Confidence: 0.87256719625

 $00:52:53.450 \rightarrow 00:52:56.360$ I think from my previous slide,

 $00:52:56.360 \longrightarrow 00:52:59.897$ you can tell one of the risk factors is

NOTE Confidence: 0.87256719625

 $00{:}52{:}59{.}897 \dashrightarrow 00{:}53{:}03{.}349$ being female and another is being older,

NOTE Confidence: 0.87256719625

 $00{:}53{:}03{.}350 \dashrightarrow 00{:}53{:}07{.}109$ but those are non modifiable risk factors.

NOTE Confidence: 0.87256719625

 $00:53:07.110 \longrightarrow 00:53:10.362$ Personal history of invasive or non

NOTE Confidence: 0.87256719625

 $00{:}53{:}10{.}362 \dashrightarrow 00{:}53{:}13{.}849$ invasive breast cancer predisposes to both

NOTE Confidence: 0.87256719625

 $00:53:13.849 \rightarrow 00:53:16.325$ contralateral and ipsilateral primaries.

NOTE Confidence: 0.87256719625

 $00{:}53{:}16{.}330 \dashrightarrow 00{:}53{:}19{.}940$ Benign breast disease with a typia.

NOTE Confidence: 0.87256719625

 $00:53:19.940 \longrightarrow 00:53:22.364$ Family history and this is regardless

NOTE Confidence: 0.87256719625

 $00{:}53{:}22{.}364 \dashrightarrow 00{:}53{:}24{.}511$ of whether there's a mutation

NOTE Confidence: 0.87256719625

 $00:53:24.511 \rightarrow 00:53:26.776$ for women with family history.

NOTE Confidence: 0.87256719625

00:53:26.780 --> 00:53:32.107 Only 5 to 6% have identifiable mutations,

NOTE Confidence: 0.87256719625

 $00{:}53{:}32{.}110 \dashrightarrow 00{:}53{:}34{.}840$ and when you look at known

NOTE Confidence: 0.87256719625

 $00{:}53{:}34{.}840 \dashrightarrow 00{:}53{:}37{.}074$ mutations that comprises less than

NOTE Confidence: 0.87256719625

 $00{:}53{:}37{.}074 \dashrightarrow 00{:}53{:}39{.}100$ 10% of all breast cancers.

NOTE Confidence: 0.87256719625

 $00{:}53{:}39{.}100 \dashrightarrow 00{:}53{:}42{.}103$ Breast density I will get into that

 $00:53:42.103 \longrightarrow 00:53:44.700$ a little more later in the talk,

NOTE Confidence: 0.87256719625

 $00{:}53{:}44.700 \dashrightarrow 00{:}53{:}48.102$ but let's talk about increased exposure to

NOTE Confidence: 0.87256719625

 $00:53:48.102 \rightarrow 00:53:50.820$ estrogen throughout the female lifetime,

NOTE Confidence: 0.87256719625

 $00:53:50.820 \longrightarrow 00:53:52.668$ early menses.

NOTE Confidence: 0.87256719625

 $00{:}53{:}52{.}668 \dashrightarrow 00{:}53{:}56{.}535$ Menses now starts below the age

NOTE Confidence: 0.87256719625

 $00{:}53{:}56{.}535 \dashrightarrow 00{:}53{:}58{.}725$ of 11 in the United States.

NOTE Confidence: 0.87256719625

 $00{:}53{:}58{.}730 \dashrightarrow 00{:}54{:}00{.}638$ This was not true.

NOTE Confidence: 0.87256719625

 $00:54:00.638 \rightarrow 00:54:03.462$ A generation ago, delayed childbearing

NOTE Confidence: 0.87256719625

 $00:54:03.462 \longrightarrow 00:54:06.600$ or no lipper hey late menopause.

NOTE Confidence: 0.87256719625

 $00:54:06.600 \rightarrow 00:54:09.976$ Menopause is occurring later now, it said.

NOTE Confidence: 0.87256719625

 $00{:}54{:}09{.}976 \dashrightarrow 00{:}54{:}11{.}468$ Between 50 and 51,

NOTE Confidence: 0.87256719625

00:54:11.470 --> 00:54:12.970 that was not true.

NOTE Confidence: 0.87256719625

00:54:12.970 --> 00:54:14.095 A generation ago,

NOTE Confidence: 0.87256719625

 $00:54:14.100 \rightarrow 00:54:16.445$ exogenous estrogen that has been

NOTE Confidence: 0.87256719625

 $00:54:16.445 \longrightarrow 00:54:19.817$ given to women to help them through

NOTE Confidence: 0.87256719625

 $00:54:19.817 \rightarrow 00:54:22.631$ the menopause and that estrogen is

- NOTE Confidence: 0.87256719625
- $00:54:22.631 \rightarrow 00:54:26.304$ more of a risk when it's combined

 $00{:}54{:}26{.}304 \dashrightarrow 00{:}54{:}28{.}949$ with progestin and previous studies,

NOTE Confidence: 0.87256719625

 $00:54:28.950 \longrightarrow 00:54:31.380$ it looks like the estrogen that's

NOTE Confidence: 0.87256719625

 $00:54:31.380 \longrightarrow 00:54:34.324$ given as a single agent to women

NOTE Confidence: 0.87256719625

 $00{:}54{:}34{.}324 \dashrightarrow 00{:}54{:}36{.}802$ who have had hysterectomies is not

NOTE Confidence: 0.87256719625

00:54:36.802 --> 00:54:40.260 as risky an transgender women.

NOTE Confidence: 0.87256719625

 $00:54:40.260 \longrightarrow 00:54:44.820$ Due to increased exposure of estrogen.

NOTE Confidence: 0.87256719625

 $00:54:44.820 \longrightarrow 00:54:46.900$ Moving along to radiation,

NOTE Confidence: 0.87256719625

 $00:54:46.900 \rightarrow 00:54:48.460$ that's radiation therapy,

NOTE Confidence: 0.87256719625

 $00{:}54{:}48{.}460 \dashrightarrow 00{:}54{:}52{.}114$ which is given to children or mantle

NOTE Confidence: 0.87256719625

00:54:52.114 --> 00:54:54.470 radiation for Hodgkin's disease.

NOTE Confidence: 0.87256719625

 $00{:}54{:}54{.}470 \dashrightarrow 00{:}54{:}57{.}164$ Radiation therapy is the highest risk

NOTE Confidence: 0.87256719625

 $00:54:57.164 \rightarrow 00:54:59.940$ when it's given during adolescence,

NOTE Confidence: 0.87256719625

 $00{:}54{:}59{.}940 \dashrightarrow 00{:}55{:}01{.}672$ between age 10 to.

NOTE Confidence: 0.87256719625

 $00:55:01.672 \longrightarrow 00:55:04.270$ 14 When the breast is most

00:55:04.373 - 00:55:06.589 actively proliferating,

NOTE Confidence: 0.87256719625

 $00{:}55{:}06{.}590 \dashrightarrow 00{:}55{:}09{.}010$ but there's also an increased

NOTE Confidence: 0.87256719625

00:55:09.010 --> 00:55:10.946 risk from radiation exposure,

NOTE Confidence: 0.87256719625

 $00:55:10.950 \longrightarrow 00:55:12.342$ either accidental,

NOTE Confidence: 0.87256719625

 $00:55:12.342 \longrightarrow 00:55:14.430$ such as Chernobyl,

NOTE Confidence: 0.87256719625

 $00:55:14.430 \longrightarrow 00:55:18.080$ or intentional such as warfare,

NOTE Confidence: 0.87256719625

 $00{:}55{:}18.080 \dashrightarrow 00{:}55{:}21.181$ and this also was shown to be

NOTE Confidence: 0.87256719625

 $00{:}55{:}21{.}181 \dashrightarrow 00{:}55{:}23{.}538$ most active for the adolescent

NOTE Confidence: 0.87256719625

00:55:23.538 --> 00:55:27.242 girls and wasn't as seen to be a

NOTE Confidence: 0.87256719625

 $00:55:27.341 \longrightarrow 00:55:30.761$ risk factor after the age of 45.

NOTE Confidence: 0.87256719625

00:55:30.761 --> 00:55:32.083 Drinking alcohol.

NOTE Confidence: 0.87256719625

 $00{:}55{:}32.083 \dashrightarrow 00{:}55{:}36.049$ As little as one alcoholic beverage

NOTE Confidence: 0.87256719625

 $00{:}55{:}36{.}049 \dashrightarrow 00{:}55{:}39{.}969$ per day in several studies has

NOTE Confidence: 0.87256719625

 $00{:}55{:}39{.}969 \dashrightarrow 00{:}55{:}43{.}837$ shown a slightly increased risk of

NOTE Confidence: 0.87256719625

 $00{:}55{:}43.837 \dashrightarrow 00{:}55{:}46.907$ breast cancer and then obesity.

NOTE Confidence: 0.87256719625

 $00:55:46.910 \rightarrow 00:55:50.018$ Just wanted to highlight breast density.

- NOTE Confidence: 0.87256719625
- $00{:}55{:}50{.}020 \dashrightarrow 00{:}55{:}54{.}432$ You can see here that there are some
- NOTE Confidence: 0.87256719625
- $00{:}55{:}54{.}432 \dashrightarrow 00{:}55{:}57{.}156$ women who have extremely dense breasts,
- NOTE Confidence: 0.87256719625
- $00:55:57.160 \longrightarrow 00:56:01.544$ and for those women at level 4 that
- NOTE Confidence: 0.87256719625
- $00:56:01.544 \rightarrow 00:56:04.768$ increases the odds ratio 6 fold.
- NOTE Confidence: 0.87256719625
- $00:56:04.770 \longrightarrow 00:56:10.004$ So that's a very very important risk factor.
- NOTE Confidence: 0.87256719625
- $00{:}56{:}10.004 \dashrightarrow 00{:}56{:}13.352$ So much so that the Christmas
- NOTE Confidence: 0.87256719625
- $00:56:13.352 \rightarrow 00:56:16.417$ study that comes out of Sweden.
- NOTE Confidence: 0.87256719625
- $00:56:16.420 \longrightarrow 00:56:19.255$ Actually use breast density to
- NOTE Confidence: 0.87256719625
- $00{:}56{:}19.255 \dashrightarrow 00{:}56{:}22.090$ enroll women in their chemoprevention
- NOTE Confidence: 0.87256719625
- $00:56:22.183 \rightarrow 00:56:24.019$ trial using tamoxifen.
- NOTE Confidence: 0.7703371866666667
- 00:56:26.980 --> 00:56:30.730 An risk factors vary by subtype.
- NOTE Confidence: 0.7703371866666667
- 00:56:30.730 --> 00:56:32.346 Greater parity was associated
- NOTE Confidence: 0.7703371866666667
- $00{:}56{:}32{.}346 \dashrightarrow 00{:}56{:}34{.}770$ with a lower risk of hormone
- NOTE Confidence: 0.7703371866666667
- $00{:}56{:}34{.}841 \dashrightarrow 00{:}56{:}37{.}069$ receptor positive breast cancer,
- NOTE Confidence: 0.7703371866666667
- $00:56:37.070 \longrightarrow 00:56:40.094$ but it is an increased risk for
- NOTE Confidence: 0.7703371866666667

 $00:56:40.094 \rightarrow 00:56:42.040$ triple negative breast cancer.

NOTE Confidence: 0.7703371866666667

 $00:56:42.040 \rightarrow 00:56:44.656$ Breastfeeding can cut the risk for

NOTE Confidence: 0.7703371866666667

 $00:56:44.656 \rightarrow 00:56:47.170$ triple negative breast cancer by 50%.

NOTE Confidence: 0.7703371866666667

 $00:56:47.170 \longrightarrow 00:56:49.970$ Well, that's not true for

NOTE Confidence: 0.7703371866666667

 $00:56:49.970 \dashrightarrow 00:56:52.210$ receptor positive breast cancer.

NOTE Confidence: 0.872638806363636

 $00{:}56{:}54{.}720 \dashrightarrow 00{:}56{:}57{.}534$ So these two women on the cover

NOTE Confidence: 0.872638806363636

00:56:57.534 --> 00:56:59.210 of Good Housekeeping show.

NOTE Confidence: 0.872638806363636

 $00{:}56{:}59{.}210 \dashrightarrow 00{:}57{:}02{.}594$ How are modern women are more likely to

NOTE Confidence: 0.872638806363636

 $00{:}57{:}02{.}594 \dashrightarrow 00{:}57{:}06{.}155$ have risk factors for hormone receptor

NOTE Confidence: 0.872638806363636

 $00:57:06.155 \rightarrow 00:57:09.435$ positive breast cancer by delaying

NOTE Confidence: 0.872638806363636

 $00:57:09.435 \rightarrow 00:57:11.825$ childbearing having fewer children

NOTE Confidence: 0.872638806363636

 $00:57:11.825 \dashrightarrow 00:57:15.107$ and those things increase the risk.

NOTE Confidence: 0.872638806363636

 $00:57:15.110 \longrightarrow 00:57:16.730$ As a matter of fact,

NOTE Confidence: 0.872638806363636

 $00:57:16.730 \longrightarrow 00:57:20.498$ breast cancer is more common in

NOTE Confidence: 0.872638806363636

 $00:57:20.498 \rightarrow 00:57:23.522$ areas like the I-95 corridor,

NOTE Confidence: 0.872638806363636

 $00:57:23.522 \rightarrow 00:57:25.786$ an in Marin County,

- NOTE Confidence: 0.872638806363636
- $00:57:25.790 \longrightarrow 00:57:27.278$ not due to environment,
- NOTE Confidence: 0.872638806363636
- $00{:}57{:}27{.}278 \dashrightarrow 00{:}57{:}30{.}643$ but due to cluster of risk factor for the
- NOTE Confidence: 0.872638806363636
- $00:57:30.643 \rightarrow 00:57:33.620$ type of women that live in these areas,
- NOTE Confidence: 0.872638806363636
- $00:57:33.620 \longrightarrow 00:57:36.360$ and modern women are taller.
- NOTE Confidence: 0.872638806363636
- 00:57:36.360 --> 00:57:38.355 Bigger also are more likely
- NOTE Confidence: 0.872638806363636
- 00:57:38.355 00:57:41.090 to be diverse in this country,
- NOTE Confidence: 0.872638806363636
- $00{:}57{:}41.090 \dashrightarrow 00{:}57{:}44.384$ and these are reasons to increase
- NOTE Confidence: 0.872638806363636
- $00:57:44.384 \longrightarrow 00:57:47.410$ the risk for breast cancer.
- NOTE Confidence: 0.872638806363636
- $00{:}57{:}47{.}410 \dashrightarrow 00{:}57{:}48{.}855$ Let's move ahead to looking
- NOTE Confidence: 0.872638806363636
- $00:57:48.855 \longrightarrow 00:57:50.750$ at the rest of the world.
- NOTE Confidence: 0.872638806363636
- 00:57:50.750 --> 00:57:55.578 Global incidence is increasing.
- NOTE Confidence: 0.872638806363636
- $00{:}57{:}55{.}580 \dashrightarrow 00{:}57{:}58{.}204$ And you can see that breast cancer is
- NOTE Confidence: 0.872638806363636
- $00{:}57{:}58{.}204 \dashrightarrow 00{:}58{:}00{.}837$ different in different types of countries.
- NOTE Confidence: 0.872638806363636
- $00{:}58{:}00{.}840 \dashrightarrow 00{:}58{:}02{.}484$ In highly developed countries,
- NOTE Confidence: 0.872638806363636
- $00:58:02.484 \rightarrow 00:58:05.477$ most women get breast cancer when they're
- NOTE Confidence: 0.872638806363636

 $00:58:05.477 \dashrightarrow 00:58:07.777$ older and less developed countries.

NOTE Confidence: 0.872638806363636

00:58:07.780 --> 00:58:08.797 That's the reverse,

NOTE Confidence: 0.872638806363636

 $00:58:08.797 \longrightarrow 00:58:11.170$ and it's thought to have to do

NOTE Confidence: 0.872638806363636

 $00:58:11.240 \longrightarrow 00:58:13.048$ with the wealthier countries

NOTE Confidence: 0.872638806363636

00:58:13.048 --> 00:58:15.308 having higher rates of obesity.

NOTE Confidence: 0.872638806363636

00:58:15.310 -> 00:58:16.960 But as you can imagine,

NOTE Confidence: 0.872638806363636

 $00:58:16.960 \longrightarrow 00:58:20.014$ the case fatality rate is lowest

NOTE Confidence: 0.872638806363636

 $00:58:20.014 \rightarrow 00:58:22.050$ in highly developed countries,

NOTE Confidence: 0.872638806363636

 $00{:}58{:}22.050 \dashrightarrow 00{:}58{:}25.587$ and this is even true in our own country.

NOTE Confidence: 0.872638806363636

 $00:58:25.590 \rightarrow 00:58:27.599$ When you look at the case fatality

NOTE Confidence: 0.872638806363636

00:58:27.599 --> 00:58:30.028 rate in a state like Connecticut,

NOTE Confidence: 0.872638806363636

 $00:58:30.030 \longrightarrow 00:58:32.150$ which has the second highest

NOTE Confidence: 0.872638806363636

 $00:58:32.150 \longrightarrow 00:58:33.846$ rate of breast cancer,

NOTE Confidence: 0.872638806363636

 $00:58:33.850 \rightarrow 00:58:38.506$ the case fatality rate is the lowest Ann.

NOTE Confidence: 0.872638806363636

 $00{:}58{:}38{.}510 \dashrightarrow 00{:}58{:}42{.}398$ You compare that to some of our Southern

NOTE Confidence: 0.872638806363636

 $00:58:42.398 \rightarrow 00:58:45.789$ states that may have lower incidence

- NOTE Confidence: 0.872638806363636
- $00:58:45.789 \rightarrow 00:58:48.694$ but higher case fatality rates,
- NOTE Confidence: 0.872638806363636
- $00:58:48.700 \rightarrow 00:58:52.420$ and this may have to do with insurance
- NOTE Confidence: 0.872638806363636
- $00{:}58{:}52{.}420 \dashrightarrow 00{:}58{:}56{.}427$ in these various states in our country.
- NOTE Confidence: 0.872638806363636
- $00:58:56.430 \rightarrow 00:58:58.843$ When we look at the nationality, the
- NOTE Confidence: 0.872638806363636
- $00:58:58.843 \rightarrow 00:59:02.307$ United States doesn't even make the top 15.
- NOTE Confidence: 0.872638806363636
- $00:59:02.310 \longrightarrow 00:59:06.310$ Belgium is the number one.
- NOTE Confidence: 0.872638806363636
- $00:59:06.310 \rightarrow 00:59:09.126$ But when we look at Survival World wide,
- NOTE Confidence: 0.872638806363636
- $00:59:09.130 \longrightarrow 00:59:12.469$ you can see a very different story.
- NOTE Confidence: 0.872638806363636
- $00:59:12.470 \longrightarrow 00:59:15.090$ The five year survival in
- NOTE Confidence: 0.872638806363636
- $00:59:15.090 \longrightarrow 00:59:17.593$ the United States is 95%.
- NOTE Confidence: 0.872638806363636
- $00:59:17.593 \rightarrow 00:59:20.011$ Compare that to what you see
- NOTE Confidence: 0.872638806363636
- $00{:}59{:}20{.}011 \dashrightarrow 00{:}59{:}22{.}379$ in South Africa and Mongolia.
- NOTE Confidence: 0.848581026363636
- $00{:}59{:}24{.}590 \dashrightarrow 00{:}59{:}26{.}906$ And survival rate in the United
- NOTE Confidence: 0.848581026363636
- 00:59:26.906 00:59:29.140 States does vary by subtype.
- NOTE Confidence: 0.848581026363636
- $00:59:29.140 \rightarrow 00:59:33.466$ The hormone receptor positive breast cancers.
- NOTE Confidence: 0.848581026363636

00:59:33.470 --> 00:59:35.996 Looking at the most recent SEER

NOTE Confidence: 0.848581026363636

00:59:35.996 --> 00:59:38.200 data have an excellent prognosis

NOTE Confidence: 0.848581026363636

 $00:59:38.200 \rightarrow 00:59:41.259$ and even the five year survival for

NOTE Confidence: 0.848581026363636

 $00:59:41.259 \rightarrow 00:59:44.143$ the triple negatives when they are

NOTE Confidence: 0.848581026363636

 $00{:}59{:}44{.}143 \dashrightarrow 00{:}59{:}46{.}558$ localized have a better prognosis

NOTE Confidence: 0.848581026363636

 $00{:}59{:}46{.}558 \dashrightarrow 00{:}59{:}49{.}360$ than you see in other countries.

NOTE Confidence: 0.915700154444445

00:59:51.530 --> 00:59:53.466 But survival rates don't

NOTE Confidence: 0.91570015444445

 $00:59:53.466 \longrightarrow 00:59:55.886$ really tell the whole story.

NOTE Confidence: 0.91570015444445

 $00:59:55.890 \rightarrow 00:59:59.614$ First of all, women being diagnosed with

NOTE Confidence: 0.915700154444445

 $00:59:59.614 \rightarrow 01:00:03.518$ breast cancer today may have better outcomes.

NOTE Confidence: 0.91570015444445

 $01{:}00{:}03.520 \dashrightarrow 01{:}00{:}06.544$ We'll see in the most recent SEER data,

NOTE Confidence: 0.91570015444445

 $01{:}00{:}06.550 \dashrightarrow 01{:}00{:}09.150$ but diagnostics and treatments

NOTE Confidence: 0.915700154444445

 $01:00:09.150 \longrightarrow 01:00:11.750$ continue to improve overtime,

NOTE Confidence: 0.915700154444445

 $01{:}00{:}11.750 \dashrightarrow 01{:}00{:}14.683$ and there's good access in highly developed

NOTE Confidence: 0.915700154444445

 $01:00:14.683 \rightarrow 01:00:17.129$ countries and highly developed cities.

NOTE Confidence: 0.91570015444445

 $01:00:17.130 \rightarrow 01:00:20.046$ When you look at some of the SEER data,

 $01:00:20.050 \longrightarrow 01:00:22.425$ but these numbers don't take

NOTE Confidence: 0.915700154444445

 $01:00:22.425 \longrightarrow 01:00:23.850$ everything into account.

NOTE Confidence: 0.91570015444445

01:00:23.850 --> 01:00:25.434 First of all,

NOTE Confidence: 0.91570015444445

 $01:00:25.434 \rightarrow 01:00:28.074$ survival rates for hormone receptor

NOTE Confidence: 0.91570015444445

01:00:28.074 --> 01:00:29.790 positive breast cancer.

NOTE Confidence: 0.91570015444445

 $01:00:29.790 \longrightarrow 01:00:32.710$ 50% of the patients that are going to

NOTE Confidence: 0.91570015444445

 $01{:}00{:}32.710 \dashrightarrow 01{:}00{:}35.338$ relapse will relapse after five years.

NOTE Confidence: 0.91570015444445

 $01:00:35.340 \rightarrow 01:00:38.756$ So the five year survival rate kind of

NOTE Confidence: 0.915700154444445

01:00:38.756 --> 01:00:42.286 skews things and some of the survival rates,

NOTE Confidence: 0.91570015444445

 $01:00:42.290 \longrightarrow 01:00:45.188$ although they may be due to stage,

NOTE Confidence: 0.91570015444445

 $01:00:45.190 \longrightarrow 01:00:48.396$ they may really have to do with

NOTE Confidence: 0.91570015444445

 $01:00:48.396 \longrightarrow 01:00:49.770$ overall health response,

NOTE Confidence: 0.91570015444445

 $01{:}00{:}49.770 \dashrightarrow 01{:}00{:}53.172$ an access to treatment so different

NOTE Confidence: 0.915700154444445

 $01:00:53.172 \rightarrow 01:00:56.529$ subtypes may predict timing of relapse.

NOTE Confidence: 0.91570015444445

 $01{:}00{:}56{.}530 \dashrightarrow 01{:}00{:}59{.}306$ But there are so many other things I'm

 $01:00:59.306 \rightarrow 01:01:02.436$ going to be a little controversial here

NOTE Confidence: 0.915700154444445

 $01{:}01{:}02{.}436 \dashrightarrow 01{:}01{:}05{.}470$ and say geopolitics can determine outcome.

NOTE Confidence: 0.91570015444445

 $01{:}01{:}05{.}470 \dashrightarrow 01{:}01{:}08{.}851$ Look at a situation in Puerto Rico

NOTE Confidence: 0.915700154444445

01:01:08.851 --> 01:01:11.503 during Hurricane Maria where it

NOTE Confidence: 0.91570015444445

 $01:01:11.503 \rightarrow 01:01:14.288$ really decimated their health system.

NOTE Confidence: 0.91570015444445

 $01:01:14.290 \longrightarrow 01:01:16.398$ That does change screening.

NOTE Confidence: 0.915700154444445

 $01:01:16.398 \longrightarrow 01:01:19.033$ It does change treatment and

NOTE Confidence: 0.915700154444445

 $01:01:19.033 \rightarrow 01:01:21.438$ it will change outcome.

NOTE Confidence: 0.91570015444445

01:01:21.440 $\operatorname{-->}$ 01:01:23.592 Let's take geopolitical changes

NOTE Confidence: 0.915700154444445

01:01:23.592 --> 01:01:25.744 in our own country.

NOTE Confidence: 0.91570015444445

 $01{:}01{:}25.750 \dashrightarrow 01{:}01{:}27.760$ Let's look at the pandemic.

NOTE Confidence: 0.91570015444445

01:01:27.760 - 01:01:30.682 For the pandemic may have changed

NOTE Confidence: 0.915700154444445

 $01:01:30.682 \rightarrow 01:01:33.090$ patterns of screening change patterns

NOTE Confidence: 0.91570015444445

 $01{:}01{:}33.090 \dashrightarrow 01{:}01{:}36.106$ of treatment and I hate to say it

NOTE Confidence: 0.915700154444445

 $01:01:36.106 \rightarrow 01:01:39.875$ women have been known to increase their

NOTE Confidence: 0.91570015444445

 $01:01:39.875 \rightarrow 01:01:42.870$ alcohol intake during the pandemic.

01:01:42.870 --> 01:01:47.294 Are we going to see changes in

NOTE Confidence: 0.91570015444445

 $01:01:47.294 \longrightarrow 01:01:50.959$ epidemiology due to the pandemic?

NOTE Confidence: 0.915700154444445

 $01{:}01{:}50.960 \dashrightarrow 01{:}01{:}53.738$ So who are the most vulnerable

NOTE Confidence: 0.91570015444445

 $01:01:53.738 \longrightarrow 01:01:55.590$ that we see now?

NOTE Confidence: 0.91570015444445

01:01:55.590 --> 01:01:59.090 Black women, particularly younger women.

NOTE Confidence: 0.91570015444445

01:01:59.090 --> 01:02:02.324 They are more likely to be diagnosed

NOTE Confidence: 0.91570015444445

 $01:02:02.330 \rightarrow 01:02:04.315$ with triple negative breast cancer

NOTE Confidence: 0.91570015444445

 $01:02:04.315 \rightarrow 01:02:07.090$ and more likely to be diagnosed.

NOTE Confidence: 0.915700154444445

 $01:02:07.090 \longrightarrow 01:02:10.100$ Diagnosed at a younger age.

NOTE Confidence: 0.91570015444445

 $01:02:10.100 \longrightarrow 01:02:12.452$ Blacks are more likely to die

NOTE Confidence: 0.915700154444445

 $01:02:12.452 \longrightarrow 01:02:14.749$ of breast cancer at any age.

NOTE Confidence: 0.91570015444445

 $01{:}02{:}14.750 \dashrightarrow 01{:}02{:}17.090$ They presented a later stage,

NOTE Confidence: 0.915700154444445

 $01{:}02{:}17.090 \dashrightarrow 01{:}02{:}20.420$ but their insurance status is worse

NOTE Confidence: 0.915700154444445

 $01{:}02{:}20{.}420 \dashrightarrow 01{:}02{:}24{.}090$ twice as likely to be uninsured.

NOTE Confidence: 0.91570015444445

 $01:02:24.090 \longrightarrow 01:02:24.536$ Well,

01:02:24.536 --> 01:02:26.320 immigrants from less developed

NOTE Confidence: 0.91570015444445

 $01:02:26.320 \longrightarrow 01:02:28.955$ nations we talked about what you

NOTE Confidence: 0.915700154444445

 $01:02:28.955 \rightarrow 01:02:30.635$ see with global breast cancer

NOTE Confidence: 0.91570015444445

 $01{:}02{:}30.635 \dashrightarrow 01{:}02{:}33.312$ and I'll talk a little bit about

NOTE Confidence: 0.91570015444445

 $01:02:33.312 \longrightarrow 01:02:34.996$ sexual minorities as well.

NOTE Confidence: 0.80241686

 $01{:}02{:}37{.}490 \dashrightarrow 01{:}02{:}40{.}570$ The NCI talks about risks in terms

NOTE Confidence: 0.80241686

01:02:40.570 --> 01:02:43.020 of cancer health disparities,

NOTE Confidence: 0.80241686

 $01:02:43.020 \longrightarrow 01:02:43.950$ and you can see it.

NOTE Confidence: 0.80241686

 $01:02:43.950 \longrightarrow 01:02:46.402$ Top of this slide.

NOTE Confidence: 0.80241686

 $01{:}02{:}46{.}402 \dashrightarrow 01{:}02{:}50{.}794$ Women who are African American have a

NOTE Confidence: 0.80241686

 $01{:}02{:}50{.}794 \dashrightarrow 01{:}02{:}54{.}966$ higher risk of dying from breast cancer,

NOTE Confidence: 0.80241686

 $01:02:54.970 \longrightarrow 01:02:57.406$ but let's get into the various

NOTE Confidence: 0.80241686

 $01:02:57.406 \longrightarrow 01:03:00.261$ groups that are more likely to

NOTE Confidence: 0.80241686

 $01{:}03{:}00{.}261 \dashrightarrow 01{:}03{:}02{.}545$ suffer cancer health disparities,

NOTE Confidence: 0.80241686

 $01:03:02.550 \rightarrow 01:03:05.448$ and I think I'm going to describe for you

NOTE Confidence: 0.80241686

 $01:03:05.448 \rightarrow 01:03:08.494$ how many of these apply to breast cancer.

- NOTE Confidence: 0.80241686
- 01:03:08.500 --> 01:03:11.248 We already talked about women of
- NOTE Confidence: 0.80241686
- 01:03:11.248 --> 01:03:13.820 color and breast cancer outcome,
- NOTE Confidence: 0.80241686
- $01:03:13.820 \rightarrow 01:03:16.585$ and women of different ancestry
- NOTE Confidence: 0.80241686
- $01:03:16.585 \longrightarrow 01:03:18.797$ or recent immigrants made.
- NOTE Confidence: 0.80241686
- $01:03:18.800 \rightarrow 01:03:22.895$ We also have a higher risk of both getting
- NOTE Confidence: 0.80241686
- $01:03:22.895 \rightarrow 01:03:26.978$ breast cancer or particularly their outcomes.
- NOTE Confidence: 0.80241686
- $01:03:26.980 \longrightarrow 01:03:29.780$ Individuals of lower socioeconomic
- NOTE Confidence: 0.80241686
- $01:03:29.780 \longrightarrow 01:03:31.880$ status have decreased.
- NOTE Confidence: 0.80241686
- 01:03:31.880 --> 01:03:33.791 Access to screening,
- NOTE Confidence: 0.80241686
- $01{:}03{:}33{.}791 \dashrightarrow 01{:}03{:}36{.}339$ decreased access to treatment.
- NOTE Confidence: 0.80241686
- $01:03:36.340 \rightarrow 01:03:39.526$ An also may have associated health
- NOTE Confidence: 0.80241686
- $01:03:39.526 \longrightarrow 01:03:42.750$ problems that make treatment problematic.
- NOTE Confidence: 0.80241686
- $01:03:42.750 \rightarrow 01:03:44.822$ Well, individuals with disabilities
- NOTE Confidence: 0.80241686
- $01:03:44.822 \rightarrow 01:03:47.930$ are less likely to get screened,
- NOTE Confidence: 0.80241686
- $01:03:47.930 \longrightarrow 01:03:49.250$ and that's been looked at.
- NOTE Confidence: 0.80241686

01:03:49.250 --> 01:03:52.043 At Mammographic screening

NOTE Confidence: 0.80241686

 $01:03:52.043 \rightarrow 01:03:54.836$ in wheelchair population.

NOTE Confidence: 0.80241686

 $01{:}03{:}54.840 \dashrightarrow 01{:}03{:}55.417$ Again,

NOTE Confidence: 0.80241686

 $01{:}03{:}55{.}417 \dashrightarrow 01{:}03{:}57{.}725$ individuals who have poor

NOTE Confidence: 0.80241686

 $01{:}03{:}57{.}725 \dashrightarrow 01{:}04{:}00{.}610$ insurance coverage are less likely

NOTE Confidence: 0.80241686

 $01:04:00.696 \rightarrow 01:04:03.276$ to get the best possible care.

NOTE Confidence: 0.80241686

 $01{:}04{:}03{.}280 \dashrightarrow 01{:}04{:}05{.}740$ We talked about the rural areas

NOTE Confidence: 0.80241686

 $01:04:05.740 \longrightarrow 01:04:08.930$ in the United States in the South

NOTE Confidence: 0.80241686

01:04:08.930 --> 01:04:11.375 that those patients have worse

NOTE Confidence: 0.80241686

01:04:11.375 --> 01:04:13.567 insurance coverage and are less

NOTE Confidence: 0.80241686

 $01:04:13.567 \longrightarrow 01:04:15.829$ likely to have access to care.

NOTE Confidence: 0.80241686

 $01:04:15.830 \longrightarrow 01:04:17.426$ LGBT population.

NOTE Confidence: 0.80241686

 $01:04:17.426 \longrightarrow 01:04:22.214$ LGBT women are less likely to

NOTE Confidence: 0.80241686

 $01:04:22.214 \longrightarrow 01:04:25.839$ get screened and also have.

NOTE Confidence: 0.80241686

 $01:04:25.840 \longrightarrow 01:04:29.816$ Some of the estrogen during lifetime risk

NOTE Confidence: 0.80241686

 $01:04:29.816 \rightarrow 01:04:33.520$ factors that would increase their risk.

- NOTE Confidence: 0.80241686
- $01:04:33.520 \longrightarrow 01:04:36.760$ We talked about immigrants,

01:04:36.760 --> 01:04:37.570 refugees,

NOTE Confidence: 0.80241686

 $01:04:37.570 \longrightarrow 01:04:41.188$ and the elderly who are more

NOTE Confidence: 0.80241686

 $01:04:41.188 \longrightarrow 01:04:44.590$ likely to get breast cancer.

NOTE Confidence: 0.80241686

 $01{:}04{:}44{.}590 \dashrightarrow 01{:}04{:}46{.}996$ So breast cancer rates are declining

NOTE Confidence: 0.80241686

 $01:04:46.996 \longrightarrow 01:04:50.132$ in our country and this is due to

NOTE Confidence: 0.80241686

 $01{:}04{:}50{.}132 \dashrightarrow 01{:}04{:}52{.}316$ diagnostic advances and some of the

NOTE Confidence: 0.80241686

 $01:04:52.398 \dashrightarrow 01:04:55.387$ things that Mariam and Mike talked about.

NOTE Confidence: 0.80241686

 $01{:}04{:}55{.}390 \dashrightarrow 01{:}04{:}58{.}435$ But risk factors have been identified and

NOTE Confidence: 0.80241686

 $01:04:58.435 \rightarrow 01:05:01.687$ they really vary depending on the subtype.

NOTE Confidence: 0.80241686

 $01{:}05{:}01{.}690 \dashrightarrow 01{:}05{:}03{.}909$ There are certain regions in the world,

NOTE Confidence: 0.80241686

 $01{:}05{:}03{.}910 \dashrightarrow 01{:}05{:}06{.}070$ but in our own country that

NOTE Confidence: 0.80241686

 $01{:}05{:}06.070 \dashrightarrow 01{:}05{:}08.176$ are increased risk for adverse

NOTE Confidence: 0.80241686

 $01{:}05{:}08{.}176 \dashrightarrow 01{:}05{:}10{.}540$ outcomes and special populations.

NOTE Confidence: 0.80241686

 $01{:}05{:}10{.}540 \dashrightarrow 01{:}05{:}14{.}194$ In the United States are disproportionately

 $01{:}05{:}14.194 \dashrightarrow 01{:}05{:}16.630$ vulnerable to adverse outcomes.

NOTE Confidence: 0.80241686

 $01{:}05{:}16.630 \dashrightarrow 01{:}05{:}19.780$ It will require an enormous

NOTE Confidence: 0.80241686

 $01:05:19.780 \longrightarrow 01:05:22.930$ collaborative effort not only on

NOTE Confidence: 0.80241686

01:05:23.035 - 01:05:25.282 the part of the medical community,

NOTE Confidence: 0.80241686

 $01:05:25.282 \longrightarrow 01:05:28.286$ but on the part of all citizens to

NOTE Confidence: 0.80241686

 $01:05:28.286 \rightarrow 01:05:30.596$ transform cancer care for all people.

NOTE Confidence: 0.80241686

01:05:30.600 --> 01:05:33.272 Regardless of their race,

NOTE Confidence: 0.80241686

01:05:33.272 --> 01:05:35.664 ethnicity, immigration status,

NOTE Confidence: 0.80241686

 $01{:}05{:}35{.}664 \dashrightarrow 01{:}05{:}37{.}388$ age, gender,

NOTE Confidence: 0.80241686

01:05:37.388 --> 01:05:41.698 sexual orientation or socioeconomic status,

NOTE Confidence: 0.80241686

 $01:05:41.700 \longrightarrow 01:05:44.040$ one of the biggest risk factors

NOTE Confidence: 0.80241686

 $01:05:44.040 \longrightarrow 01:05:46.092$ for breast cancer is the

NOTE Confidence: 0.80241686

 $01{:}05{:}46.092 \dashrightarrow 01{:}05{:}48.594$ communities that people grew up in.

NOTE Confidence: 0.913730628333333

 $01{:}05{:}50{.}760 \dashrightarrow 01{:}05{:}52{.}638$ And thank you for your attention,

NOTE Confidence: 0.913730628333333

 $01{:}05{:}52{.}640 \dashrightarrow 01{:}05{:}55{.}167$ and I always like to mention those

NOTE Confidence: 0.913730628333333

 $01{:}05{:}55{.}167 \dashrightarrow 01{:}05{:}58{.}096$ that I seen with breast cancer or

- NOTE Confidence: 0.913730628333333
- $01:05:58.096 \dashrightarrow 01:06:00.736$ have been affected by the disease.

 $01:06:03.880 \longrightarrow 01:06:05.506$ Thank you doctor.

NOTE Confidence: 0.82665481

01:06:05.506 --> 01:06:09.176 So that was fantastic and you know,

NOTE Confidence: 0.82665481

 $01:06:09.180 \longrightarrow 01:06:10.614$ thank you for all three of

NOTE Confidence: 0.82665481

 $01:06:10.614 \longrightarrow 01:06:11.880$ our speakers for you know,

NOTE Confidence: 0.82665481

 $01:06:11.880 \longrightarrow 01:06:13.744$ three really phenomenal presentations

NOTE Confidence: 0.82665481

 $01:06:13.744 \longrightarrow 01:06:16.540$ that you know show the breadth

NOTE Confidence: 0.82665481

 $01:06:16.613 \longrightarrow 01:06:18.150$ of the care and services that

NOTE Confidence: 0.82665481

 $01:06:18.150 \longrightarrow 01:06:19.550$ we provide here at Yale.

NOTE Confidence: 0.82665481

01:06:19.550 --> 01:06:20.765 But more importantly,

NOTE Confidence: 0.82665481

 $01{:}06{:}20.765 \dashrightarrow 01{:}06{:}23.195$ you know the the options and

NOTE Confidence: 0.82665481

 $01{:}06{:}23.195 \dashrightarrow 01{:}06{:}25.135$ the rapies that are available to

NOTE Confidence: 0.82665481

 $01{:}06{:}25{.}135 \dashrightarrow 01{:}06{:}27{.}325$ women and some of the challenges

NOTE Confidence: 0.82665481

 $01{:}06{:}27{.}394 \dashrightarrow 01{:}06{:}29{.}338$ that we have moving forward in

NOTE Confidence: 0.82665481

 $01:06:29.338 \rightarrow 01:06:31.802$ terms of not only screening but

 $01:06:31.802 \rightarrow 01:06:34.707$ treatment of our more vulnerable.

NOTE Confidence: 0.82665481

 $01{:}06{:}34{.}710 \dashrightarrow 01{:}06{:}36{.}480$ Populations there were a couple of

NOTE Confidence: 0.82665481

 $01{:}06{:}36{.}480 \dashrightarrow 01{:}06{:}38{.}554$ questions in the chat box and hopefully NOTE Confidence: 0.82665481

 $01{:}06{:}38.554 \dashrightarrow 01{:}06{:}40.507$ others will come in the question

NOTE Confidence: 0.82665481

 $01{:}06{:}40.566 \dashrightarrow 01{:}06{:}42.358$ and answer until we get some more.

NOTE Confidence: 0.82665481

 $01{:}06{:}42.360 \dashrightarrow 01{:}06{:}44.866$ I wanted to start with a question

NOTE Confidence: 0.82665481

 $01{:}06{:}44.866 \dashrightarrow 01{:}06{:}47.216$ to for Doctor Lustberg and the

NOTE Confidence: 0.82665481

01:06:47.216 --> 01:06:49.434 others on D escalation of therapy,

NOTE Confidence: 0.82665481

 $01{:}06{:}49{.}434 \dashrightarrow 01{:}06{:}52{.}671$ and I guess how do you approach that NOTE Confidence: 0.82665481

01:06:52.671 --> 01:06:55.216 question to patients when you're,

NOTE Confidence: 0.82665481

01:06:55.220 --> 01:06:56.844 you know, trying to offer a trial?

NOTE Confidence: 0.82665481

 $01{:}06{:}56.850 \dashrightarrow 01{:}06{:}59.386$ That's going to do less rather than more,

NOTE Confidence: 0.82665481

 $01:06:59.390 \longrightarrow 01:07:00.878$ especially for that anxious

NOTE Confidence: 0.82665481

01:07:00.878 --> 01:07:02.366 patient who's you know,

NOTE Confidence: 0.82665481

 $01:07:02.370 \longrightarrow 01:07:05.359$ main concern is living and survival and.

NOTE Confidence: 0.82665481

 $01{:}07{:}05{.}360 \dashrightarrow 01{:}07{:}08{.}446$ I'm not necessarily trying to sell

- NOTE Confidence: 0.82665481
- $01:07:08.446 \rightarrow 01:07:10.630$ that trial to them on deescalation,

 $01:07:10.630 \longrightarrow 01:07:11.686$ but kind of.

NOTE Confidence: 0.82665481

 $01{:}07{:}11.686 \dashrightarrow 01{:}07{:}14.150$ How do you make them feel comfortable

NOTE Confidence: 0.82665481

 $01:07:14.225 \longrightarrow 01:07:16.410$ moving forward down that route?

NOTE Confidence: 0.82665481

01:07:16.410 --> 01:07:16.620 Yeah,

NOTE Confidence: 0.71441351

 $01{:}07{:}16.630 \dashrightarrow 01{:}07{:}17.874$ that's a great question.

NOTE Confidence: 0.71441351

 $01:07:17.874 \longrightarrow 01:07:19.490$ Doctor goes on, I think.

NOTE Confidence: 0.71441351

 $01:07:19.490 \longrightarrow 01:07:23.520$ I think it takes a lot of open communication,

NOTE Confidence: 0.71441351

 $01:07:23.520 \rightarrow 01:07:26.008$ listening understanding their fears,

NOTE Confidence: 0.71441351

01:07:26.008 --> 01:07:29.623 goals of care, but also spending

NOTE Confidence: 0.71441351

 $01:07:29.623 \longrightarrow 01:07:32.528$ time laying out the rationale.

NOTE Confidence: 0.71441351

 $01{:}07{:}32.530 \dashrightarrow 01{:}07{:}35.258$ I like to say these trials were conceived

NOTE Confidence: 0.71441351

 $01{:}07{:}35{.}258 \dashrightarrow 01{:}07{:}37{.}996$ by the best minds in breast cancer,

NOTE Confidence: 0.71441351

 $01{:}07{:}38.000 \dashrightarrow 01{:}07{:}39.688$ essentially synthesizing all the

NOTE Confidence: 0.71441351

 $01{:}07{:}39.688 \dashrightarrow 01{:}07{:}42.660$ best data that we have to date.
- $01:07:42.660 \rightarrow 01:07:43.785$ And here's why.
- NOTE Confidence: 0.71441351
- 01:07:43.785 --> 01:07:46.041 We're thinking that more is not
- NOTE Confidence: 0.71441351
- $01:07:46.041 \rightarrow 01:07:49.808$ necessarily more so it does take more time.
- NOTE Confidence: 0.71441351
- $01{:}07{:}49.810 \dashrightarrow 01{:}07{:}51.986$ But I think I tend to use that
- NOTE Confidence: 0.71441351
- $01:07:51.986 \rightarrow 01:07:54.430$ as an educational opportunity,
- NOTE Confidence: 0.71441351
- $01:07:54.430 \rightarrow 01:07:57.307$ and certainly if they don't feel comfortable,
- NOTE Confidence: 0.71441351
- $01{:}07{:}57{.}310 \dashrightarrow 01{:}07{:}58{.}834$ that's their choice.
- NOTE Confidence: 0.71441351
- $01:07:58.834 \rightarrow 01:08:00.866$ But I think regardless,
- NOTE Confidence: 0.71441351
- 01:08:00.870 --> 01:08:03.510 I think it opens up the dialogue for
- NOTE Confidence: 0.71441351
- $01{:}08{:}03.510$ --> $01{:}08{:}05.410$ potentially an additional trials down
- NOTE Confidence: 0.71441351
- $01{:}08{:}05{.}410 \dashrightarrow 01{:}08{:}08{.}133$ the road just to get them comfortable
- NOTE Confidence: 0.71441351
- $01{:}08{:}08{.}200 \dashrightarrow 01{:}08{:}10{.}340$ about the clinical trial process,
- NOTE Confidence: 0.71441351
- $01{:}08{:}10.340 \dashrightarrow 01{:}08{:}13.520$ how these concepts are vetted so
- NOTE Confidence: 0.71441351
- $01:08:13.520 \rightarrow 01:08:16.919$ carefully and that we would never.
- NOTE Confidence: 0.71441351
- $01:08:16.920 \rightarrow 01:08:18.264$ Consciously give a therapy
- NOTE Confidence: 0.71441351
- $01:08:18.264 \rightarrow 01:08:20.630$ that is known to be so far.

- NOTE Confidence: 0.56738253
- $01{:}08{:}22{.}430 \dashrightarrow 01{:}08{:}26{.}018$ Angel yeah. In a safer,

 $01:08:26.018 \longrightarrow 01:08:27.050$ vulnerable population.

NOTE Confidence: 0.92762132875

 $01:08:27.050 \longrightarrow 01:08:29.222$ So many women have to work

NOTE Confidence: 0.92762132875

 $01{:}08{:}29{.}222 \dashrightarrow 01{:}08{:}32{.}450$ and have to take care of their

NOTE Confidence: 0.92762132875

 $01:08:32.450 \longrightarrow 01:08:34.136$ families during treatment.

NOTE Confidence: 0.92762132875

 $01{:}08{:}34{.}140 \dashrightarrow 01{:}08{:}36{.}710$ And it's not a choice.

NOTE Confidence: 0.92762132875

01:08:36.710 $\operatorname{-->}$ 01:08:39.769 And if we can de
escalate it can

NOTE Confidence: 0.92762132875

 $01:08:39.769 \rightarrow 01:08:42.393$ be the difference between being

NOTE Confidence: 0.92762132875

 $01:08:42.393 \rightarrow 01:08:45.428$ unemployed and maybe losing housing

NOTE Confidence: 0.92762132875

 $01:08:45.428 \longrightarrow 01:08:48.444$ and losing ability to take care

NOTE Confidence: 0.92762132875

 $01:08:48.444 \longrightarrow 01:08:51.006$ of the rest of their life so

NOTE Confidence: 0.92762132875

 $01{:}08{:}51{.}010 \dashrightarrow 01{:}08{:}54{.}920$ they can be attractive. Slowly.

NOTE Confidence: 0.850641555

 $01{:}08{:}56{.}990 \dashrightarrow 01{:}08{:}59{.}238$ There is a question in the chat box

NOTE Confidence: 0.850641555

 $01{:}08{:}59{.}238 \dashrightarrow 01{:}09{:}01{.}389$ from Carolyn Friedman and maybe Andrew.

NOTE Confidence: 0.850641555

 $01{:}09{:}01{.}390 \dashrightarrow 01{:}09{:}03{.}582$ You want to tackle this first and then

 $01:09:03.582 \rightarrow 01:09:05.848$ the other is why are dense breast

NOTE Confidence: 0.850641555

 $01:09:05.848 \rightarrow 01:09:07.503$ dense breasted women still getting

NOTE Confidence: 0.850641555

 $01:09:07.568 \rightarrow 01:09:09.568$ yearly mammograms and nothing else?

NOTE Confidence: 0.850641555

 $01:09:09.570 \longrightarrow 01:09:11.388$ And maybe a little bit about

NOTE Confidence: 0.850641555

01:09:11.388 --> 01:09:12.600 the difference between kinetic

NOTE Confidence: 0.850641555

 $01:09:12.659 \longrightarrow 01:09:14.099$ and maybe some other states.

NOTE Confidence: 0.874390768

01:09:15.240 --> 01:09:18.607 I'm, well, Connecticut was one of the

NOTE Confidence: 0.874390768

 $01{:}09{:}18.607 \dashrightarrow 01{:}09{:}22.283$ first states to pass a wonderful law

NOTE Confidence: 0.874390768

 $01{:}09{:}22.283 \dashrightarrow 01{:}09{:}24.958$ mandating that women are identified

NOTE Confidence: 0.874390768

01:09:24.958 --> 01:09:28.312 as having dense breasts and making

NOTE Confidence: 0.874390768

01:09:28.312 --> 01:09:31.032 sure that there is insurance

NOTE Confidence: 0.874390768

 $01{:}09{:}31{.}040 \dashrightarrow 01{:}09{:}34{.}224$ coverage for additional testing

NOTE Confidence: 0.874390768

 $01{:}09{:}34{.}224 \dashrightarrow 01{:}09{:}39{.}000$ either an ultrasound or an MRI.

NOTE Confidence: 0.874390768

 $01:09:39.000 \dashrightarrow 01:09:42.024$ An Carolyn, you bring up a great point.

NOTE Confidence: 0.874390768

 $01:09:42.030 \rightarrow 01:09:45.229$ Many states have signed on to this.

NOTE Confidence: 0.874390768

 $01{:}09{:}45{.}230 \dashrightarrow 01{:}09{:}50{.}536$ But not all States and you ask a question.

- NOTE Confidence: 0.874390768
- $01{:}09{:}50{.}536 \dashrightarrow 01{:}09{:}53{.}500$ I think it's a matter of priorities.

01:09:53.500 --> 01:09:56.110 Connecticut has been very good

NOTE Confidence: 0.874390768

 $01:09:56.110 \longrightarrow 01:09:58.198$ in terms of advocacy,

NOTE Confidence: 0.874390768

 $01{:}09{:}58{.}200 \dashrightarrow 01{:}10{:}01{.}242$ and there was a tremendous advocate

NOTE Confidence: 0.874390768

 $01:10:01.242 \longrightarrow 01:10:05.132$ who got this through after her own

NOTE Confidence: 0.874390768

 $01{:}10{:}05{.}132 \dashrightarrow 01{:}10{:}08{.}077$ experience of having a mammographic

NOTE Confidence: 0.874390768

01:10:08.077 --> 01:10:09.890 le undetectable tumor.

NOTE Confidence: 0.874390768

 $01{:}10{:}09.890 \dashrightarrow 01{:}10{:}12.220$ That was an advanced cancer.

NOTE Confidence: 0.788246111666667

 $01{:}10{:}14.620 \dashrightarrow 01{:}10{:}18.406$ Thank you Andrea. A question for.

NOTE Confidence: 0.788246111666667

01:10:18.410 --> 01:10:21.650 Michael, I'm here Chesapeake early on,

NOTE Confidence: 0.788246111666667

 $01:10:21.650 \rightarrow 01:10:24.298$ about two years ago it posed a question

NOTE Confidence: 0.7882461116666667

 $01{:}10{:}24.298 \dashrightarrow 01{:}10{:}26.858$ in an editorial where to platinum

NOTE Confidence: 0.788246111666667

 $01{:}10{:}26.858 \dashrightarrow 01{:}10{:}29.594$ salts it in triple negative breast

NOTE Confidence: 0.788246111666667

 $01{:}10{:}29.669 \dashrightarrow 01{:}10{:}32.169$ cancer in the neoadjuvant setting.

NOTE Confidence: 0.7882461116666667

 $01:10:32.170 \longrightarrow 01:10:33.500$ You know, have things changed,

 $01:10:33.500 \rightarrow 01:10:36.650$ or is it still something that were?

NOTE Confidence: 0.788246111666667

 $01:10:36.650 \rightarrow 01:10:39.422$ You know struggling through case by

NOTE Confidence: 0.7882461116666667

01:10:39.422 --> 01:10:41.868 case and differences maybe between

NOTE Confidence: 0.7882461116666667

01:10:41.868 --> 01:10:45.800 bracca specific T NBC versus sporadic.

NOTE Confidence: 0.858326927333333

 $01:10:46.760 \longrightarrow 01:10:48.713$ It's a good question and we still

NOTE Confidence: 0.858326927333333

 $01:10:48.713 \longrightarrow 01:10:50.560$ do struggle with it an it's we it.

NOTE Confidence: 0.858326927333333

01:10:50.560 --> 01:10:53.038 I think it's fair to say it's

NOTE Confidence: 0.858326927333333

 $01:10:53.038 \longrightarrow 01:10:54.769$ still not standard of care.

NOTE Confidence: 0.858326927333333

01:10:54.770 $\operatorname{-->}$ 01:10:57.010 There are a number of trials that that

NOTE Confidence: 0.858326927333333

 $01:10:57.010 \longrightarrow 01:10:59.266$ have shown that when it's incorporated

NOTE Confidence: 0.858326927333333

01:10:59.266 --> 01:11:00.898 into the neoadjuvant setting,

NOTE Confidence: 0.858326927333333

 $01{:}11{:}00.900 \dashrightarrow 01{:}11{:}02.480$ it improves the pathological

NOTE Confidence: 0.858326927333333

 $01:11:02.480 \longrightarrow 01:11:03.665$ complete response rate.

NOTE Confidence: 0.858326927333333

 $01{:}11{:}03.670 \dashrightarrow 01{:}11{:}06.160$ So if you are of the mind that the goal

NOTE Confidence: 0.858326927333333

01:11:06.233 --> 01:11:08.501 of treating early stage triple negative

NOTE Confidence: 0.858326927333333

 $01:11:08.501 \rightarrow 01:11:11.359$ breast cancer is to maximize the triple,

- NOTE Confidence: 0.858326927333333
- 01:11:11.360 --> 01:11:12.192 the maximized,
- NOTE Confidence: 0.858326927333333
- $01:11:12.192 \longrightarrow 01:11:13.856$ the pathological complete response
- NOTE Confidence: 0.858326927333333
- $01:11:13.856 \longrightarrow 01:11:16.182$ rate because we know those patients
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}16.182 \dashrightarrow 01{:}11{:}17.964$ are the best to be cured.
- NOTE Confidence: 0.858326927333333
- 01:11:17.970 --> 01:11:19.934 Then it's reasonable to
- NOTE Confidence: 0.858326927333333
- $01:11:19.934 \rightarrow 01:11:21.407$ consider incorporating it.
- NOTE Confidence: 0.858326927333333
- $01:11:21.410 \longrightarrow 01:11:23.270$ One might not think it's
- NOTE Confidence: 0.858326927333333
- $01:11:23.270 \longrightarrow 01:11:25.130$ worth incorporating it in a
- NOTE Confidence: 0.858326927333333
- 01:11:25.206 --> 01:11:27.570 relatively lower anatomical risk,
- NOTE Confidence: 0.858326927333333
- $01:11:27.570 \rightarrow 01:11:31.399$ so maybe a stage one patient or,
- NOTE Confidence: 0.858326927333333
- 01:11:31.400 --> 01:11:32.952 and as you said,
- NOTE Confidence: 0.858326927333333
- 01:11:32.952 --> 01:11:34.892 we know from the metastatic
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}34{.}892 \dashrightarrow 01{:}11{:}37{.}464$ setting with the TNT trial that the
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}37{.}464 \dashrightarrow 01{:}11{:}39{.}349$ response rate for BRCA germline
- NOTE Confidence: 0.858326927333333
- 01:11:39.349 --> 01:11:41.229 mutation carriers is quite high,
- NOTE Confidence: 0.858326927333333

- $01:11:41.230 \rightarrow 01:11:43.396$ so it may be worth incorporating
- NOTE Confidence: 0.858326927333333
- $01:11:43.396 \longrightarrow 01:11:44.840$ it in that standpoint,
- NOTE Confidence: 0.858326927333333
- $01:11:44.840 \longrightarrow 01:11:46.950$ although there was an early
- NOTE Confidence: 0.858326927333333
- $01:11:46.950 \longrightarrow 01:11:48.638$ stage trial that compared.
- NOTE Confidence: 0.858326927333333
- 01:11:48.640 --> 01:11:48.975 Yes,
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}48.975 \dashrightarrow 01{:}11{:}50.650$ this Platten to standard chemotherapy
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}50.650 \dashrightarrow 01{:}11{:}53.493$ and it wasn't much of a difference in
- NOTE Confidence: 0.858326927333333
- $01:11:53.493 \rightarrow 01:11:55.293$ terms of pathological complete response.
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}55{.}300 \dashrightarrow 01{:}11{:}57{.}910$ For just just that comparison.
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}57{.}910 \dashrightarrow 01{:}11{:}59{.}926$ So it's still a question that's up
- NOTE Confidence: 0.858326927333333
- $01{:}11{:}59{.}926 \dashrightarrow 01{:}12{:}01{.}986$ in the air whether to incorporate
- NOTE Confidence: 0.858326927333333
- $01:12:01.986 \longrightarrow 01:12:03.866$ it into the early stage.
- NOTE Confidence: 0.7494846625
- $01:12:06.690 \rightarrow 01:12:08.748$ There's a probably a question maybe
- NOTE Confidence: 0.7494846625
- $01:12:08.748 \longrightarrow 01:12:10.975$ for Andrew, but also others in the
- NOTE Confidence: 0.7494846625
- 01:12:10.975 --> 01:12:13.230 chat box from our fellow Angelique.
- NOTE Confidence: 0.7494846625
- $01:12:13.230 \longrightarrow 01:12:15.552$ Has there been any reduction of

- NOTE Confidence: 0.7494846625
- $01:12:15.552 \rightarrow 01:12:17.520$ the disparities in outcomes between
- NOTE Confidence: 0.7494846625
- $01:12:17.520 \longrightarrow 01:12:19.644$ minority races and white women in
- NOTE Confidence: 0.7494846625
- $01:12:19.644 \longrightarrow 01:12:21.888$ the last two or three decades?
- NOTE Confidence: 0.7494846625
- $01:12:21.890 \rightarrow 01:12:24.602$ And maybe expanding on some of the exciting
- NOTE Confidence: 0.7494846625
- $01:12:24.602 \longrightarrow 01:12:27.048$ work and research that you've been?
- NOTE Confidence: 0.7494846625
- 01:12:27.050 --> 01:12:28.670 An advocacy that you've been
- NOTE Confidence: 0.7494846625
- $01:12:28.670 \rightarrow 01:12:30.290$ doing here here at home?
- NOTE Confidence: 0.850145492142857
- $01{:}12{:}31{.}570 \dashrightarrow 01{:}12{:}35{.}010$ I'm. We do a lot better in Connecticut
- NOTE Confidence: 0.850145492142857
- $01:12:35.010 \longrightarrow 01:12:37.840$ than in rest of the country.
- NOTE Confidence: 0.850145492142857
- 01:12:37.840 --> 01:12:42.776 Some of the disparities in terms of outcomes,
- NOTE Confidence: 0.850145492142857
- 01:12:42.780 --> 01:12:44.700 certainly in terms of
- NOTE Confidence: 0.850145492142857
- $01{:}12{:}44.700 \dashrightarrow 01{:}12{:}47.100$ screening and access to care,
- NOTE Confidence: 0.850145492142857
- $01{:}12{:}47{.}100 \dashrightarrow 01{:}12{:}50{.}468$ are better in this state than many others,
- NOTE Confidence: 0.850145492142857
- $01{:}12{:}50{.}470 \dashrightarrow 01{:}12{:}54{.}096$ but there is still a huge disparity.
- NOTE Confidence: 0.850145492142857
- $01:12:54.100 \rightarrow 01:12:58.040$ Partially because white women are
- NOTE Confidence: 0.850145492142857

 $01:12:58.040 \rightarrow 01:13:01.957$ doing better, which it increases.

NOTE Confidence: 0.850145492142857

 $01{:}13{:}01{.}957 \dashrightarrow 01{:}13{:}08{.}360$ But the difference between races and I think.

NOTE Confidence: 0.850145492142857

 $01:13:08.360 \rightarrow 01:13:10.628$ You know, we've got a long way to go.

NOTE Confidence: 0.837891923076923

 $01:13:13.840 \longrightarrow 01:13:17.128$ There is a question in the chat box

NOTE Confidence: 0.837891923076923

 $01{:}13{:}17{.}128 \dashrightarrow 01{:}13{:}19{.}348$ from Professor Rim and Merriam.

NOTE Confidence: 0.837891923076923

01:13:19.350 --> 01:13:21.870 Do you want to 'cause I can't even

NOTE Confidence: 0.837891923076923

 $01{:}13{:}21.870 \dashrightarrow 01{:}13{:}23.984$ pronounce half the drugs that you guys

NOTE Confidence: 0.837891923076923

01:13:23.984 --> 01:13:26.290 can put out the transducer map I get,

NOTE Confidence: 0.837891923076923

 $01{:}13{:}26{.}290 \dashrightarrow 01{:}13{:}28{.}130$ but the others are tougher.

NOTE Confidence: 0.872252413333333

01:13:29.390 --> 01:13:30.329 Yeah, it's great.

NOTE Confidence: 0.872252413333333

01:13:30.330 --> 01:13:32.486 Great question, so I think I

NOTE Confidence: 0.872252413333333

 $01:13:32.486 \longrightarrow 01:13:34.130$ think what you're pointing at is,

NOTE Confidence: 0.872252413333333

 $01{:}13{:}34{.}130 \dashrightarrow 01{:}13{:}37{.}140$ I think our our poor man's definition

NOTE Confidence: 0.872252413333333

 $01:13:37.140 \longrightarrow 01:13:39.430$ of what's triple negative and

NOTE Confidence: 0.872252413333333

 $01:13:39.430 \longrightarrow 01:13:41.710$ what's to her two positive.

NOTE Confidence: 0.872252413333333

 $01:13:41.710 \longrightarrow 01:13:43.342$ I think it's going to change a lot

- NOTE Confidence: 0.872252413333333
- $01:13:43.342 \longrightarrow 01:13:45.576$ in the coming years because of these
- NOTE Confidence: 0.872252413333333
- $01:13:45.576 \longrightarrow 01:13:46.992$ antibody drug conjugate therapies.
- NOTE Confidence: 0.8079124575
- $01:13:49.590 \longrightarrow 01:13:52.551$ Drugs like this have shown to have
- NOTE Confidence: 0.8079124575
- $01{:}13{:}52{.}551 \dashrightarrow 01{:}13{:}55{.}080$ remarkable activity even in what we would
- NOTE Confidence: 0.8079124575
- $01:13:55.080 \rightarrow 01:13:56.616$ consider normally hurting negative,
- NOTE Confidence: 0.8079124575
- 01:13:56.616 --> 01:13:59.184 but just a little bit of
- NOTE Confidence: 0.8079124575
- $01:13:59.184 \rightarrow 01:14:01.797$ her to her too low signal.
- NOTE Confidence: 0.8079124575
- $01:14:01.800 \rightarrow 01:14:04.253$ Is associated with significant outcomes.
- NOTE Confidence: 0.8079124575
- 01:14:04.253 --> 01:14:09.199 So I do agree with you Doctor Ram that I,
- NOTE Confidence: 0.8079124575
- 01:14:09.200 --> 01:14:12.609 I suspect, as these trials are finalized,
- NOTE Confidence: 0.8079124575
- $01:14:12.610 \longrightarrow 01:14:14.542$ I think we will be looking at
- NOTE Confidence: 0.8079124575
- $01{:}14{:}14{.}542 \dashrightarrow 01{:}14{:}15{.}768$ different standards or care
- NOTE Confidence: 0.8079124575
- $01:14:15.768 \longrightarrow 01:14:17.128$ for this purchase subgroup.
- NOTE Confidence: 0.86461306625
- 01:14:18.210 --> 01:14:20.394 And for those who couldn't see the question,
- NOTE Confidence: 0.86461306625
- $01{:}14{:}20{.}400 \dashrightarrow 01{:}14{:}22{.}703$ it will is will trousers some outdoor
- NOTE Confidence: 0.86461306625

 $01:14:22.703 \longrightarrow 01:14:24.880$ teak sent he can make all low.

NOTE Confidence: 0.86461306625

 $01{:}14{:}24{.}880 \dashrightarrow 01{:}14{:}26{.}332$ Her two patients targets

NOTE Confidence: 0.86461306625

 $01:14:26.332 \longrightarrow 01:14:28.147$ for this sort of the rapy.

NOTE Confidence: 0.86461306625

 $01:14:28.150 \longrightarrow 01:14:29.835$ And will this change the

NOTE Confidence: 0.86461306625

 $01:14:29.835 \longrightarrow 01:14:31.183$ triple negative category so?

NOTE Confidence: 0.836180874

01:14:32.580 --> 01:14:34.950 So, so it's like, yeah, I think

NOTE Confidence: 0.836180874

 $01{:}14{:}34{.}950 \dashrightarrow 01{:}14{:}38{.}135$ obviously we need to wait for additional.

NOTE Confidence: 0.836180874

 $01:14:38.140 \rightarrow 01:14:41.060$ You know, phase three data for that category,

NOTE Confidence: 0.836180874

 $01:14:41.060 \rightarrow 01:14:44.399$ but so far the results are very,

NOTE Confidence: 0.836180874

 $01:14:44.400 \longrightarrow 01:14:48.144$ very promising. I think there may

NOTE Confidence: 0.836180874

 $01:14:48.144 \longrightarrow 01:14:52.069$ be additional Adcs that maybe safer.

NOTE Confidence: 0.836180874

01:14:52.070 --> 01:14:53.870 But with this particular drug,

NOTE Confidence: 0.836180874

 $01:14:53.870 \rightarrow 01:14:56.198$ the higher, higher risk of interstitial

NOTE Confidence: 0.836180874

 $01:14:56.198 \longrightarrow 01:14:58.370$ lung disease is a concern.

NOTE Confidence: 0.836180874

01:14:58.370 --> 01:15:00.442 But but, but I, I really think

NOTE Confidence: 0.836180874

 $01:15:00.442 \rightarrow 01:15:02.449$ we're going to have a lot more.

01:15:02.450 --> 01:15:04.928 ABC's in the next few years,

NOTE Confidence: 0.836180874

 $01:15:04.930 \longrightarrow 01:15:06.526$ and they seem to be very

NOTE Confidence: 0.836180874

01:15:06.526 --> 01:15:07.590 effective class of drugs.

NOTE Confidence: 0.88565961444444

 $01:15:09.090 \rightarrow 01:15:12.735$ So maybe a question for all three of you.

NOTE Confidence: 0.88565961444444

01:15:12.740 --> 01:15:14.700 You know, I guess, how do you you

NOTE Confidence: 0.88565961444444

 $01{:}15{:}14.700 \dashrightarrow 01{:}15{:}16.611$ know in your leadership positions and

NOTE Confidence: 0.88565961444444

 $01:15:16.611 \rightarrow 01:15:19.077$ when you go to advocate for these

NOTE Confidence: 0.88565961444444

 $01:15:19.077 \rightarrow 01:15:21.225$ drug therapy trials to be developed,

NOTE Confidence: 0.88565961444444

01:15:21.230 --> 01:15:24.394 you know how do you convince drug

NOTE Confidence: 0.88565961444444

 $01{:}15{:}24{.}394 \dashrightarrow 01{:}15{:}26{.}176$ companies and pharmaceuticals to

NOTE Confidence: 0.88565961444444

 $01{:}15{:}26.176 \dashrightarrow 01{:}15{:}28.633$ dees calate when so much of their work

NOTE Confidence: 0.885659614444444

01:15:28.633 - 01:15:31.437 is based on giving more so that they

NOTE Confidence: 0.88565961444444

 $01{:}15{:}31{.}437 \dashrightarrow 01{:}15{:}34{.}332$ can make more money for themselves and

NOTE Confidence: 0.885659614444444

 $01{:}15{:}34{.}332 \dashrightarrow 01{:}15{:}37{.}930$ their shareholders and that kind of that.

NOTE Confidence: 0.88565961444444

 $01{:}15{:}37{.}930 \dashrightarrow 01{:}15{:}40{.}927$ Challenge that you know that we all we all

 $01{:}15{:}40{.}927 \dashrightarrow 01{:}15{:}43{.}808$ face in in this in these discussions.

NOTE Confidence: 0.87893873

01:15:47.570 --> 01:15:49.260 No simple answer, I'm sure. I

NOTE Confidence: 0.8241693666666667

 $01:15:49.270 \longrightarrow 01:15:52.348$ think there is such a mark.

NOTE Confidence: 0.8241693666666667

 $01:15:52.350 \longrightarrow 01:15:53.988$ I live in a market because

NOTE Confidence: 0.8241693666666667

 $01:15:53.988 \longrightarrow 01:15:55.080$ these are human lives,

NOTE Confidence: 0.8241693666666667

 $01:15:55.080 \rightarrow 01:15:58.496$ but there there is so much need.

NOTE Confidence: 0.8241693666666667

 $01{:}15{:}58{.}500 \dashrightarrow 01{:}15{:}59{.}912$ For additional the rapeutic that

NOTE Confidence: 0.8241693666666667

 $01:15:59.912 \longrightarrow 01:16:02.451$ sadly there is a market to have

NOTE Confidence: 0.8241693666666667

 $01:16:02.451 \rightarrow 01:16:04.226$ new drugs that address things.

NOTE Confidence: 0.8241693666666667

 $01:16:04.230 \longrightarrow 01:16:06.085$ But one thing if we were talking

NOTE Confidence: 0.8241693666666667

 $01{:}16{:}06.085 \dashrightarrow 01{:}16{:}07.782$ about the business model of things

NOTE Confidence: 0.8241693666666667

 $01:16:07.782 \rightarrow 01:16:09.480$ is what happens in breast cancer?

NOTE Confidence: 0.8241693666666667

 $01{:}16{:}09{.}480 \dashrightarrow 01{:}16{:}11{.}532$ Is if an agent is shown to be effective

NOTE Confidence: 0.8241693666666667

 $01:16:11.532 \rightarrow 01:16:13.536$ in the metastatic setting then we move

NOTE Confidence: 0.8241693666666667

 $01:16:13.536 \longrightarrow 01:16:15.560$ it forward to the earlier stages.

NOTE Confidence: 0.8241693666666667

 $01:16:15.560 \rightarrow 01:16:17.380$ Untested and early state setting.

- NOTE Confidence: 0.8241693666666667
- 01:16:17.380 --> 01:16:19.921 So just take the CD 46 inhibitors
- NOTE Confidence: 0.8241693666666667
- $01:16:19.921 \longrightarrow 01:16:22.590$ or even even some of these Adcs.
- NOTE Confidence: 0.8241693666666667
- $01:16:22.590 \longrightarrow 01:16:24.438$ I think the market will expand
- NOTE Confidence: 0.8241693666666667
- $01:16:24.438 \longrightarrow 01:16:26.801$ and they will be tested in these
- NOTE Confidence: 0.8241693666666667
- 01:16:26.801 --> 01:16:28.571 earlier stage cancers with the
- NOTE Confidence: 0.8241693666666667
- $01:16:28.571 \rightarrow 01:16:30.790$ goal of improving outcomes so.
- NOTE Confidence: 0.8241693666666667
- 01:16:30.790 --> 01:16:32.617 I don't, I think they'll do fine.
- NOTE Confidence: 0.8241693666666667
- 01:16:32.620 --> 01:16:33.890 I think they'll be OK.
- NOTE Confidence: 0.8963903016666667
- 01:16:34.600 $\operatorname{-->}$ 01:16:36.556 And I guess I would add the drug
- NOTE Confidence: 0.8963903016666667
- $01{:}16{:}36{.}556 \dashrightarrow 01{:}16{:}38{.}340$ looks the best when it has the best
- NOTE Confidence: 0.8963903016666667
- $01:16:38.396 \longrightarrow 01:16:40.279$ outcome and the drugs have the best
- NOTE Confidence: 0.8963903016666667
- $01{:}16{:}40.279 \dashrightarrow 01{:}16{:}42.156$ outcome when they are used in the
- NOTE Confidence: 0.8963903016666667
- $01:16:42.156 \longrightarrow 01:16:43.426$ population for which they there
- NOTE Confidence: 0.8963903016666667
- $01:16:43.426 \longrightarrow 01:16:44.930$ is really the benefit for them.
- NOTE Confidence: 0.7771661
- $01{:}16{:}46.970 \dashrightarrow 01{:}16{:}48.150$ And I was going to say,
- NOTE Confidence: 0.899846958

 $01:16:48.150 \rightarrow 01:16:50.618$ with respect to disparities,

NOTE Confidence: 0.899846958

 $01:16:50.618 \rightarrow 01:16:55.072$ that if more people who had chronic

NOTE Confidence: 0.899846958

 $01:16:55.072 \rightarrow 01:16:58.080$ conditions from different backgrounds

NOTE Confidence: 0.899846958

 $01:16:58.080 \rightarrow 01:17:01.840$ were in the clinical trials,

NOTE Confidence: 0.899846958

 $01{:}17{:}01{.}840 \dashrightarrow 01{:}17{:}04{.}717$ they would better be able to evaluate

NOTE Confidence: 0.899846958

 $01:17:04.717 \longrightarrow 01:17:07.060$ is more better for everyone.

NOTE Confidence: 0.899846958

 $01:17:07.060 \rightarrow 01:17:10.154$ What happens with the diabetic obese patient?

NOTE Confidence: 0.899846958

01:17:10.160 --> 01:17:12.746 Maybe more isn't better for them,

NOTE Confidence: 0.899846958

 $01{:}17{:}12.750 \dashrightarrow 01{:}17{:}15.726$ and because so many of these

NOTE Confidence: 0.899846958

 $01{:}17{:}15.726 \dashrightarrow 01{:}17{:}18.440$ patients are excluded from trials.

NOTE Confidence: 0.899846958

 $01:17:18.440 \longrightarrow 01:17:20.140$ We're able to say more,

NOTE Confidence: 0.899846958

 $01:17:20.140 \longrightarrow 01:17:22.940$ maybe better for the healthy,

NOTE Confidence: 0.899846958

 $01:17:22.940 \longrightarrow 01:17:25.884$ wealthy and wise patients,

NOTE Confidence: 0.899846958

 $01{:}17{:}25.884 \dashrightarrow 01{:}17{:}30.300$ but not necessarily for other patients.

NOTE Confidence: 0.8508904466666667

 $01:17:31.610 \longrightarrow 01:17:33.150$ And maybe that points to the kind

NOTE Confidence: 0.8508904466666667

 $01:17:33.150 \longrightarrow 01:17:34.810$ of the low resource countries,

 $01:17:34.810 \longrightarrow 01:17:36.664$ because a lot of this has been focused on,

NOTE Confidence: 0.8508904466666667

01:17:36.670 --> 01:17:37.513 you know, discussions,

NOTE Confidence: 0.8508904466666667

 $01:17:37.513 \longrightarrow 01:17:39.199$ and what happens here in the

NOTE Confidence: 0.8508904466666667

01:17:39.199 --> 01:17:40.510 United States and you know,

NOTE Confidence: 0.8508904466666667

01:17:40.510 $\operatorname{-->}$ 01:17:42.904 many of the audience you know are

NOTE Confidence: 0.8508904466666667

 $01:17:42.904 \rightarrow 01:17:44.896$ what may be potentially calling

NOTE Confidence: 0.8508904466666667

 $01:17:44.896 \longrightarrow 01:17:47.101$ in or watching from overseas

NOTE Confidence: 0.8508904466666667

 $01:17:47.101 \longrightarrow 01:17:49.879$ and a low resource settings.

NOTE Confidence: 0.8508904466666667

 $01{:}17{:}49{.}880 \dashrightarrow 01{:}17{:}52{.}071$ And you know some of the challenges

NOTE Confidence: 0.8508904466666667

 $01:17:52.071 \longrightarrow 01:17:53.969$ they may face not having the

NOTE Confidence: 0.8508904466666667

 $01{:}17{:}53.970 \dashrightarrow 01{:}17{:}55.914$ access of the same drug the rapies

NOTE Confidence: 0.8508904466666667

 $01{:}17{:}55{.}914 \dashrightarrow 01{:}17{:}57{.}938$ that we do here in the US.

NOTE Confidence: 0.8874447

 $01{:}18{:}00{.}720 \dashrightarrow 01{:}18{:}03{.}185$ Yeah, so the the World Health

NOTE Confidence: 0.8874447

01:18:03.185 --> 01:18:05.270 Organization has launched a new

NOTE Confidence: 0.825585508571429

01:18:05.351 --> 01:18:07.779 global Breast health initiative,

 $01:18:07.780 \longrightarrow 01:18:10.115$ and there are actually looking

NOTE Confidence: 0.825585508571429

 $01:18:10.115 \longrightarrow 01:18:12.450$ for interested members to apply

NOTE Confidence: 0.825585508571429

 $01:18:12.525 \rightarrow 01:18:14.859$ to be part of these committees.

NOTE Confidence: 0.825585508571429

01:18:14.860 --> 01:18:17.268 Looking at different pillars

NOTE Confidence: 0.825585508571429

 $01{:}18{:}17.268 \dashrightarrow 01{:}18{:}19.676$ and that includes diagnostics.

NOTE Confidence: 0.825585508571429

 $01{:}18{:}19.680 \dashrightarrow 01{:}18{:}22.472$ That's one area where if you can't even

NOTE Confidence: 0.825585508571429

 $01:18:22.472 \rightarrow 01:18:24.620$ determine her two results reliably,

NOTE Confidence: 0.825585508571429

 $01:18:24.620 \longrightarrow 01:18:26.306$ you know how can you even

NOTE Confidence: 0.825585508571429

 $01:18:26.306 \longrightarrow 01:18:27.430$ determined a good therapies.

NOTE Confidence: 0.825585508571429

 $01:18:27.430 \longrightarrow 01:18:28.876$ So there's a. There's a pillar.

NOTE Confidence: 0.825585508571429

01:18:28.880 --> 01:18:30.284 Focus on Diagnostics,

NOTE Confidence: 0.825585508571429

 $01{:}18{:}30{.}284 \dashrightarrow 01{:}18{:}32{.}156$ an access to the rapeutic.

NOTE Confidence: 0.825585508571429

01:18:32.160 --> 01:18:33.990 Supportive care and symptom management.

NOTE Confidence: 0.825585508571429

 $01:18:33.990 \rightarrow 01:18:37.203$ So I think there are some exciting

NOTE Confidence: 0.825585508571429

 $01:18:37.203 \longrightarrow 01:18:39.033$ developments in diagnostics so

NOTE Confidence: 0.825585508571429

 $01{:}18{:}39{.}033 \dashrightarrow 01{:}18{:}42{.}049$ that we can at least have a better

 $01:18:42.049 \rightarrow 01:18:44.357$ understanding of the subtype of breast

NOTE Confidence: 0.825585508571429

 $01{:}18{:}44{.}357 \dashrightarrow 01{:}18{:}46{.}790$ cancer and then further working with

NOTE Confidence: 0.825585508571429

 $01:18:46.790 \rightarrow 01:18:48.990$ pharma companies to form collaboration.

NOTE Confidence: 0.825585508571429

 $01{:}18{:}48{.}990 \dashrightarrow 01{:}18{:}51{.}748$ So so for those who are interested

NOTE Confidence: 0.825585508571429

01:18:51.750 --> 01:18:53.810 WHO is now accepting applications

NOTE Confidence: 0.825585508571429

 $01:18:53.810 \longrightarrow 01:18:55.046$ to these committees,

NOTE Confidence: 0.825585508571429

 $01:18:55.050 \rightarrow 01:18:57.270$ and if you need if you want to be in touch,

NOTE Confidence: 0.825585508571429

01:18:57.270 --> 01:18:59.167 I'm happy to put you in touch.

NOTE Confidence: 0.839474755454545

 $01{:}19{:}00.060 \dashrightarrow 01{:}19{:}03.486$ I'm also encouraged at Yale seeing

NOTE Confidence: 0.839474755454545

01:19:03.486 --> 01:19:06.340 younger physicians who are very,

NOTE Confidence: 0.839474755454545

 $01:19:06.340 \rightarrow 01:19:09.570$ very interested in lower resource

NOTE Confidence: 0.839474755454545

 $01:19:09.570 \longrightarrow 01:19:13.654$ nations an in devoting their academic

NOTE Confidence: 0.839474755454545

 $01{:}19{:}13.654 \dashrightarrow 01{:}19{:}17.389$ careers to finding some solutions.

NOTE Confidence: 0.750877056

 $01{:}19{:}20{.}420 \dashrightarrow 01{:}19{:}23{.}340$ Excellent and any parting words.

NOTE Confidence: 0.750877056

01:19:23.340 --> 01:19:25.620 Merriam, Andrea, Michael.

01:19:28.390 --> 01:19:30.735 I just wanted to thank Doctor

NOTE Confidence: 0.91841394

01:19:30.735 --> 01:19:32.880 Gauchan for organizing the series

NOTE Confidence: 0.801163685625

01:19:32.950 --> 01:19:35.056 of best breast care is really,

NOTE Confidence: 0.801163685625

 $01:19:35.060 \rightarrow 01:19:39.608$ truly multidisciplinary and I think Next

NOTE Confidence: 0.801163685625

01:19:39.608 --> 01:19:41.780 up will be radiation oncology, correct?

NOTE Confidence: 0.865352983684211

 $01{:}19{:}43.100 \dashrightarrow 01{:}19{:}44.820$ And I'll say that you asked about the

NOTE Confidence: 0.865352983684211

 $01:19:44.820 \longrightarrow 01:19:46.052$ difficulty of getting patients on

NOTE Confidence: 0.865352983684211

 $01:19:46.052 \longrightarrow 01:19:47.570$ some of our other clinical trials,

NOTE Confidence: 0.865352983684211

 $01{:}19{:}47{.}570 \dashrightarrow 01{:}19{:}48{.}830$ and I'll say clinical trials

NOTE Confidence: 0.865352983684211

01:19:48.830 --> 01:19:50.090 is also the best care.

NOTE Confidence: 0.93961334

 $01:19:51.540 \longrightarrow 01:19:52.530$ Absolutely.

NOTE Confidence: 0.905919320333333

01:19:53.660 $\operatorname{-->}$ 01:19:55.884 And I was just going to conclude by

NOTE Confidence: 0.905919320333333

 $01:19:55.884 \rightarrow 01:19:58.572$ saying I'm lucky to be able to work with

NOTE Confidence: 0.905919320333333

01:19:58.572 $\operatorname{-->}$ 01:20:00.581 the colleagues that I can because we

NOTE Confidence: 0.905919320333333

 $01:20:00.581 \rightarrow 01:20:02.540$ really do have a breadth of experience.

NOTE Confidence: 0.905919320333333

 $01:20:02.540 \rightarrow 01:20:05.780$ And thank you very much for having me here.

- NOTE Confidence: 0.865230198461538
- $01:20:06.530 \rightarrow 01:20:08.539$ Thank you everyone and would like to
- NOTE Confidence: 0.865230198461538
- $01{:}20{:}08.539 \dashrightarrow 01{:}20{:}10.730$ thank all the participants you know,
- NOTE Confidence: 0.865230198461538
- $01:20:10.730 \longrightarrow 01:20:12.305$ calling either from the office
- NOTE Confidence: 0.865230198461538
- $01{:}20{:}12{.}305 \dashrightarrow 01{:}20{:}13{.}880$ next door or from overseas.
- NOTE Confidence: 0.865230198461538
- $01{:}20{:}13.880 \dashrightarrow 01{:}20{:}15.769$ This is a lot of fun. Thanks so much.