## WEBVTT

NOTE duration: "01:20:20"

NOTE language:en-us

NOTE Confidence: 0.836859365789474

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

NOTE Confidence: 0.836859365789474

 $00:00:02.790 \longrightarrow 00:00:06.320$  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

 $00:00:12.855 \longrightarrow 00:00:15.525$  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

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

NOTE Confidence: 0.836859365789474

 $00:00:22.390 \longrightarrow 00:00:23.338$  packing her bags,

NOTE Confidence: 0.836859365789474

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

NOTE Confidence: 0.836859365789474

 $00:00:26.184 \longrightarrow 00:00:28.448$  in the in the next couple of weeks,

NOTE Confidence: 0.836859365789474

 $00:00:28.450 \longrightarrow 00:00:30.786$  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

 $00:00:32.934 \longrightarrow 00:00:35.078$  just so much excitement,

NOTE Confidence: 0.836859365789474

 $00{:}00{:}35.080 \dashrightarrow 00{:}00{:}38.216$  change and controversy on when do we

 $00:00:38.216 \longrightarrow 00:00:41.182$  dees calate and when do we escalate

NOTE Confidence: 0.836859365789474

00:00:41.182 --> 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

 $00:00:51.330 \longrightarrow 00:00:53.688$  and you know each year whether it's at ASCO,

NOTE Confidence: 0.836859365789474

 $00:00:53.690 \longrightarrow 00:00:55.242$  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 --> 00:00:59.625 developments in drug therapy that

NOTE Confidence: 0.836859365789474

00:00:59.625 --> 00:01:03.247 come out and it'll be great to to

NOTE Confidence: 0.836859365789474

 $00{:}01{:}03.247 \dashrightarrow 00{:}01{:}05.569$  hear about those and certainly last

NOTE Confidence: 0.836859365789474

 $00:01:05.569 \longrightarrow 00:01:08.848$  but not least is Doctor Andrea Silber

NOTE Confidence: 0.836859365789474

 $00:01:08.848 \longrightarrow 00:01:11.310$  discussing really super important topic

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

NOTE Confidence: 0.836859365789474

 $00:01:14.395 \longrightarrow 00:01:15.765$  Risk factors,

NOTE Confidence: 0.836859365789474

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

NOTE Confidence: 0.836859365789474 00:01:19.190 --> 00:01:19.875 population. NOTE Confidence: 0.836859365789474

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

NOTE Confidence: 0.836859365789474

 $00:01:21.924 \longrightarrow 00:01:24.258$  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

 $00:01:26.871 \longrightarrow 00:01:29.076$  questions either into the chat box

NOTE Confidence: 0.836859365789474

 $00{:}01{:}29.076 \dashrightarrow 00{:}01{:}31.435$  or to the question and answer box.

NOTE Confidence: 0.836859365789474

 $00:01:31.440 \longrightarrow 00:01:33.648$  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

 $00:01:35.810 \longrightarrow 00:01:38.310$  leave time for some discussion

NOTE Confidence: 0.836859365789474

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

NOTE Confidence: 0.836859365789474

 $00{:}01{:}40.810 \dashrightarrow 00{:}01{:}41.764$  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,

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

 $00:01:49.720 \longrightarrow 00:01:50.472$  Current status.

NOTE Confidence: 0.836859365789474

00:01:50.472 --> 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

 $00:02:01.302 \longrightarrow 00:02:03.727$  patient perspectives on the escalation

NOTE Confidence: 0.848286186923077

 $00:02:03.727 \longrightarrow 00:02:06.119$  of medical oncology therapies.

NOTE Confidence: 0.848286186923077

 $00:02:06.120 \longrightarrow 00:02:09.102$  This was a recent publication where

NOTE Confidence: 0.848286186923077

00:02:09.102 --> 00:02:12.116 patients and advocates were engaged on

NOTE Confidence: 0.848286186923077

 $00:02:12.116 \longrightarrow 00:02:14.954$  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

 $00:02:18.617 \longrightarrow 00:02:21.130$  perceived barriers and facilitators.

NOTE Confidence: 0.848286186923077

 $00:02:21.130 \longrightarrow 00:02:23.890$  And in these discussions,

 $00:02:23.890 \longrightarrow 00:02:26.458$  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

 $00{:}02{:}29.050 \dashrightarrow 00{:}02{:}31.375$  Some unwillingness to participate in

NOTE Confidence: 0.848286186923077

 $00:02:31.375 \longrightarrow 00:02:33.700$  a deescalation medical oncology trial

NOTE Confidence: 0.848286186923077

 $00:02:33.765 \longrightarrow 00:02:36.404$  and some of it was actually centered

NOTE Confidence: 0.848286186923077

00:02:36.404 --> 00:02:38.304 around terminology they actually did

NOTE Confidence: 0.848286186923077

 $00:02:38.304 \longrightarrow 00:02:40.768$  not like the term dees calation and the

NOTE Confidence: 0.848286186923077

 $00:02:40.768 \longrightarrow 00:02:43.480$  most preferred terminology was actually

NOTE Confidence: 0.848286186923077

 $00{:}02{:}43.480 \dashrightarrow 00{:}02{:}46.430$  the lowest effective chemotherapy goes.

NOTE Confidence: 0.848286186923077

 $00:02:46.430 \longrightarrow 00:02:49.566$  Listed here are some of the facilitators

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 $00{:}02{:}49.566 \dashrightarrow 00{:}02{:}51.971$  that patients expressed and a lot

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

NOTE Confidence: 0.848286186923077

 $00{:}02{:}53.945 \dashrightarrow 00{:}02{:}55.868$  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,

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 $00{:}03{:}00.750 \dashrightarrow 00{:}03{:}03.648$  and less out of pocket expenses.

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

NOTE Confidence: 0.848286186923077

00:03:05.828 --> 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

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

NOTE Confidence: 0.848286186923077

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

NOTE Confidence: 0.848286186923077

00:03:16.840 --> 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 --> 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 dees calated 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

NOTE Confidence: 0.848286186923077

 $00:03:36.246 \longrightarrow 00:03:38.197$  latest advances in the escalation

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 $00:03:38.197 \longrightarrow 00:03:39.889$  in medical oncology.

 $00:03:39.890 \longrightarrow 00:03:41.810$  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

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

NOTE Confidence: 0.848286186923077

00:03:48.210 --> 00:03:50.045 The calls aren't you reduced

NOTE Confidence: 0.848286186923077

 $00:03:50.045 \longrightarrow 00:03:51.880$  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

 $00:03:53.550 \longrightarrow 00:03:55.482$  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

 $00{:}04{:}00.928 \dashrightarrow 00{:}04{:}03.198$  be effective in reducing costs.

NOTE Confidence: 0.848286186923077

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

NOTE Confidence: 0.848286186923077

 $00:04:05.790 \longrightarrow 00:04:08.942$  Most of you are familiar with the Taylor

NOTE Confidence: 0.848286186923077

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

NOTE Confidence: 0.848286186923077

00:04:12.310 --> 00:04:15.920 21 gene expression assay or Oncotype DX.

NOTE Confidence: 0.848286186923077

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

 $00:04:19.900 \longrightarrow 00:04:23.218$  Most patients with low required scores.

NOTE Confidence: 0.848286186923077

 $00{:}04{:}23.220 \dashrightarrow 00{:}04{:}25.590$  There really was no improvement in

NOTE Confidence: 0.848286186923077

 $00:04:25.590 \longrightarrow 00:04:28.035$  outcomes by the addition of chemotherapy

NOTE Confidence: 0.848286186923077

 $00:04:28.035 \longrightarrow 00:04:30.800$  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

 $00:04:33.758 \longrightarrow 00:04:37.746$  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 --> 00:04:43.669 use in ER positive breast cancer.

NOTE Confidence: 0.848286186923077

00:04:43.670 --> 00:04:46.001 Going on to just kind of delving

NOTE Confidence: 0.848286186923077

 $00:04:46.001 \longrightarrow 00:04:48.380$  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

 $00:04:52.055 \longrightarrow 00:04:55.572$  younger cohort where a little less clear

NOTE Confidence: 0.848286186923077

 $00{:}04{:}55.572 \dashrightarrow 00{:}04{:}59.459$  based on the Taylor Taylor RX study Hall,

NOTE Confidence: 0.848286186923077

 $00:04:59.460 \longrightarrow 00:05:04.095$  and I think we can see here in those.

NOTE Confidence: 0.848286186923077

 $00:05:04.100 \longrightarrow 00:05:07.580$  In those patients who are 50 or younger

 $00:05:07.580 \longrightarrow 00:05:10.927$  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

 $00:05:13.086 \longrightarrow 00:05:15.933$  there was a lower at that rate do

NOTE Confidence: 0.848286186923077

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

NOTE Confidence: 0.848286186923077

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

NOTE Confidence: 0.848286186923077

 $00:05:20.000 \longrightarrow 00:05:23.640$  So is this what is leading

NOTE Confidence: 0.848286186923077

 $00:05:23.640 \longrightarrow 00:05:25.915$  to this better outcome and this is

NOTE Confidence: 0.848286186923077

 $00{:}05{:}25.915 \dashrightarrow 00{:}05{:}27.550$  continues to be widely debated.

NOTE Confidence: 0.848286186923077

00:05:27.550 --> 00:05:29.194 Is it ovarian suppression,

NOTE Confidence: 0.848286186923077

 $00:05:29.194 \longrightarrow 00:05:30.427$  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

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

NOTE Confidence: 0.848286186923077

 $00:05:35.490 \longrightarrow 00:05:39.158$  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

 $00:05:40.984 \longrightarrow 00:05:43.720$  And to answer this question and

NOTE Confidence: 0.86163117

 $00:05:43.791 \longrightarrow 00:05:46.027$  different medical oncologists have

 $00:05:46.027 \longrightarrow 00:05:48.842$  very strong opinions about this

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:05:52.240 \longrightarrow 00:05:54.040$  So what about the escalation

NOTE Confidence: 0.86163117

00:05:54.040 --> 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

 $00{:}05{:}58.075 \dashrightarrow 00{:}06{:}01.175$  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

 $00:06:03.640 \longrightarrow 00:06:07.384$  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

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:06:15.043 \longrightarrow 00:06:17.238$  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

 $00:06:19.700 \longrightarrow 00:06:21.176$  Anderson therapy 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

 $00:06:27.670 \longrightarrow 00:06:30.376$  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

 $00:06:31.820 \longrightarrow 00:06:34.370$  there was no significant difference in

NOTE Confidence: 0.86163117

 $00:06:34.370 \longrightarrow 00:06:36.560$  invasive disease free survival with

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

00:06:40.820 --> 00:06:43.424 After immediate follow up of five years,

NOTE Confidence: 0.86163117

 $00:06:43.430 \longrightarrow 00:06:48.590$  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 --> 00:06:54.294 to reassure our patients with not

NOTE Confidence: 0.86163117

 $00:06:54.294 \longrightarrow 00:06:56.590$  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 --> 00:07:03.080 But again, similar to the Taylor RX study,

NOTE Confidence: 0.86163117

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

 $00{:}07{:}06.328 \mathrel{--}{>} 00{:}07{:}09.927$  patients is a little less clear in

NOTE Confidence: 0.86163117

 $00{:}07{:}09.927 \dashrightarrow 00{:}07{:}13.269$  the in the study that premenopausal

NOTE Confidence: 0.86163117

00:07:13.269 --> 00:07:15.903 cohort appeared to have significant

NOTE Confidence: 0.86163117

 $00:07:15.903 \longrightarrow 00:07:17.795$  difference in outcomes when

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:07:19.220 \longrightarrow 00:07:22.532$  And again whether this was due to the

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

00:07:27.650 --> 00:07:29.888 These data are not going to

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:07:33.868 \longrightarrow 00:07:35.428$  type of endocrine therapy that

NOTE Confidence: 0.86163117

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

 $00:07:36.900 \longrightarrow 00:07:39.126$  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

 $00{:}07{:}40.270 \dashrightarrow 00{:}07{:}42.019$  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

 $00:07:48.440 \longrightarrow 00:07:50.735$  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

 $00{:}07{:}54.170 \dashrightarrow 00{:}07{:}56.792$  How do we approach that younger

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:07:59.240 \longrightarrow 00:08:01.790$  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

 $00:08:03.070 \longrightarrow 00:08:05.200$  and it's important to also highlight

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:08:07.058 \longrightarrow 00:08:09.302$  also in the last time Junior

NOTE Confidence: 0.86163117

 $00:08:09.302 \longrightarrow 00:08:11.460$  breast meeting by Nadia Harbucks,

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

 $00:08:17.780 \longrightarrow 00:08:20.280$  monitoring where those who actually

NOTE Confidence: 0.86163117

 $00{:}08{:}20.377 \dashrightarrow 00{:}08{:}23.576$  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 --> 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

 $00:08:30.042 \longrightarrow 00:08:31.368$  nodal disease burden.

NOTE Confidence: 0.86163117

 $00:08:31.370 \longrightarrow 00:08:34.730$  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

 $00:08:37.484 \longrightarrow 00:08:40.686$  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

 $00:08:41.965 \longrightarrow 00:08:44.226$  to be able to better pluck out,

NOTE Confidence: 0.86163117

00:08:44.230 --> 00:08:45.935 patients were at higher risk

 $00:08:45.935 \longrightarrow 00:08:46.958$  versus lower risk,

NOTE Confidence: 0.86163117

 $00:08:46.960 \longrightarrow 00:08:50.140$  can be better tailor our therapies

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

 $00{:}08{:}58.847 \dashrightarrow 00{:}09{:}01.188$  operative in the rapy at the data

NOTE Confidence: 0.86163117

 $00:09:01.188 \longrightarrow 00:09:03.400$  I just showed you in the previous

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.86163117

 $00:09:05.790 \longrightarrow 00:09:06.741$  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

 $00:09:09.036 \longrightarrow 00:09:11.328$  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

 $00:09:12.860 \longrightarrow 00:09:14.384$  and as I mentioned,

NOTE Confidence: 0.86163117

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

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

00:09:19.651 --> 00:09:22.556 to take into account on anatomical risk,

 $00:09:22.560 \longrightarrow 00:09:24.840$  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 --> 00:09:27.730 whether it's Uncle Type DX,

NOTE Confidence: 0.876628236470588

00:09:27.730 --> 00:09:30.094 mammaprint and then whether we should

NOTE Confidence: 0.876628236470588

 $00:09:30.094 \longrightarrow 00:09:33.283$  also use some type of endocrine therapy

NOTE Confidence: 0.876628236470588

 $00:09:33.283 \longrightarrow 00:09:35.838$  response guided measurements I think.

NOTE Confidence: 0.876628236470588

00:09:35.840 --> 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 --> 00:09:51.770 talk in two years.

NOTE Confidence: 0.876628236470588

 $00:09:51.770 \longrightarrow 00:09:54.605$  Will have additional data to share with

NOTE Confidence: 0.876628236470588

 $00:09:54.605 \longrightarrow 00:09:57.320$  you moving on to her two positive disease,

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

NOTE Confidence: 0.876628236470588

 $00:09:59.742 \longrightarrow 00:10:02.097$  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

 $00:10:04.525 \longrightarrow 00:10:06.330$  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

 $00:10:08.600 \longrightarrow 00:10:11.150$  there has been continued effort

NOTE Confidence: 0.876628236470588

00:10:11.150 --> 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 --> 00:10:27.792 showed that where non after after cycling,

NOTE Confidence: 0.876628236470588

 $00:10:27.792 \longrightarrow 00:10:30.960$  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

 $00:10:33.810 \longrightarrow 00:10:35.994$  And other numerically the numbers favor

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

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

00:10:40.427 --> 00:10:42.609 in outcomes between the two groups,

NOTE Confidence: 0.876628236470588

00:10:42.610 --> 00:10:46.060 but certainly higher toxicity with

NOTE Confidence: 0.876628236470588

 $00:10:46.060 \longrightarrow 00:10:49.920$  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

 $00:10:53.330 \longrightarrow 00:10:55.635$  But this numerical difference still

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

 $00{:}11{:}00.946 \dashrightarrow 00{:}11{:}04.310$  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

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

NOTE Confidence: 0.876628236470588

 $00:11:11.300 \longrightarrow 00:11:13.407$  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

 $00:11:17.470 \longrightarrow 00:11:19.078$  This was originally presented

 $00:11:19.078 \longrightarrow 00:11:20.686$  in the last ASKO,

NOTE Confidence: 0.876628236470588

 $00{:}11{:}20.690 \dashrightarrow 00{:}11{:}22.955$  where a more modern regiment

NOTE Confidence: 0.876628236470588

 $00{:}11{:}22.955 \dashrightarrow 00{:}11{:}25.690$  including for choosing map was used.

NOTE Confidence: 0.876628236470588

 $00:11:25.690 \longrightarrow 00:11:27.140$  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

 $00:11:28.560 \longrightarrow 00:11:30.287$  between the upper side pain and

NOTE Confidence: 0.876628236470588

00:11:30.287 --> 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

 $00:11:43.650 \longrightarrow 00:11:45.594$  what about staging won her two

NOTE Confidence: 0.876628236470588

00:11:45.594 --> 00:11:46.566 positive breast cancer?

NOTE Confidence: 0.876628236470588

 $00:11:46.570 \longrightarrow 00:11:49.634$  Obviously you know we used to use multi

NOTE Confidence: 0.876628236470588

 $00:11:49.634 \longrightarrow 00:11:52.149$  pomp chemotherapy for these tumors as well,

00:11:52.150 --> 00:11:55.480 But what if we use less than the APITI study,

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

 $00:11:57.825 \longrightarrow 00:12:00.170$  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 --> 00:12:05.210 very highly effective outcomes,

NOTE Confidence: 0.876628236470588

 $00:12:05.210 \longrightarrow 00:12:08.252$  and it was certainly better tolerated

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

 $00{:}12{:}11.399 \dashrightarrow 00{:}12{:}13.835$  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

 $00:12:17.090 \longrightarrow 00:12:19.256$  Can we further dees calate this therapy

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

 $00:12:21.920 \longrightarrow 00:12:24.702$  at what if we substituted the taxing

NOTE Confidence: 0.876628236470588

 $00{:}12{:}24.702 \dashrightarrow 00{:}12{:}28.110$  percept in ARM with TDM one which tends

NOTE Confidence: 0.876628236470588

 $00:12:28.205 \longrightarrow 00:12:31.614$  to be better tolerated in some respects.

NOTE Confidence: 0.876628236470588

00:12:31.620 --> 00:12:33.664 I can have a little less neuropathy,

00:12:33.670 --> 00:12:34.573 not hair loss,

NOTE Confidence: 0.876628236470588

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

NOTE Confidence: 0.876628236470588

 $00:12:37.084 \longrightarrow 00:12:39.464$  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 --> 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

 $00:12:49.012 \longrightarrow 00:12:51.636$  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

 $00:12:56.430 \longrightarrow 00:12:59.510$  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 --> 00:13:03.670 And this is still in development,

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

00:13:06.160 --> 00:13:08.760 Further attempt at Deescalating stage

NOTE Confidence: 0.910635278

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

 $00:13:11.360 \longrightarrow 00:13:13.208$  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 --> 00:13:16.487 just highlight that it's it's.

NOTE Confidence: 0.910635278

00:13:16.490 --> 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

 $00:13:21.495 \longrightarrow 00:13:23.459$  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

 $00{:}13{:}28.926 \dashrightarrow 00{:}13{:}31.486$  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

 $00:13:33.900 \longrightarrow 00:13:35.846$  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

 $00:13:38.309 \longrightarrow 00:13:40.264$  essentially add a small molecule

NOTE Confidence: 0.910635278

 $00:13:40.264 \longrightarrow 00:13:42.135$  inhibitor to catch them which has

00:13:42.135 --> 00:13:44.308 been shown to have great CNS activity

NOTE Confidence: 0.910635278

 $00:13:44.308 \longrightarrow 00:13:46.926$  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 --> 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

 $00:13:53.930 \longrightarrow 00:13:56.625$  I think there is an opportunity to

NOTE Confidence: 0.910635278

 $00:13:56.625 \longrightarrow 00:13:58.759$  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 --> 00:14:04.030 more likely to achieve PCR without

NOTE Confidence: 0.910635278

 $00:14:04.030 \longrightarrow 00:14:06.906$  chemotherapy with just the use of dual.

NOTE Confidence: 0.910635278

00:14:06.906 --> 00:14:08.810 Her two targeted the rapy.

NOTE Confidence: 0.910635278

 $00{:}14{:}08.810 \dashrightarrow 00{:}14{:}11.345$  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

 $00:14:14.091 \longrightarrow 00:14:17.200$  approach using PET imaging as a as a.

NOTE Confidence: 0.910635278

 $00:14:17.200 \longrightarrow 00:14:19.165$  Biomarker for picking the patients

00:14:19.165 --> 00:14:21.602 that can have a deescalated approach

NOTE Confidence: 0.910635278

00:14:21.602 --> 00:14:24.002 is actually going to be prospectively

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

 $00:14:27.110 \longrightarrow 00:14:29.903$  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 --> 00:14:35.455 Looking also at chemotherapy for you edge

NOTE Confidence: 0.910635278

00:14:35.455 --> 00:14:38.740 events coming up in the upcoming ASCO.

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

 $00:14:43.644 \longrightarrow 00:14:45.200$  of triple negative disease,

NOTE Confidence: 0.910635278

00:14:45.200 --> 00:14:46.825 we've been much more cautious

NOTE Confidence: 0.910635278

 $00:14:46.825 \longrightarrow 00:14:48.450$  about the escalating the rapies in

NOTE Confidence: 0.910635278

00:14:48.509 --> 00:14:50.057 triple negative breast cancer,

 $00:14:50.060 \longrightarrow 00:14:51.900$  but I would be remiss if I didn't

NOTE Confidence: 0.910635278

 $00:14:51.900 \longrightarrow 00:14:53.386$  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 --> 00:14:56.982 implicating lymphocytes as a

NOTE Confidence: 0.910635278

00:14:56.982 --> 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

 $00{:}15{:}00.900 \dashrightarrow 00{:}15{:}02.440$  can lead to potentially DFD.

NOTE Confidence: 0.910635278

00:15:02.440 --> 00:15:04.816 Escalated immunotherapy based treatments,

NOTE Confidence: 0.910635278

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

NOTE Confidence: 0.910635278

00:15:07.790 --> 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

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

NOTE Confidence: 0.910635278

 $00:15:14.284 \longrightarrow 00:15:17.541$  high tells actually did did just as

NOTE Confidence: 0.910635278

 $00:15:17.541 \longrightarrow 00:15:19.476$  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

 $00:15:20.900 \longrightarrow 00:15:21.250$  exciting,

 $00:15:21.250 \longrightarrow 00:15:23.000$  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 --> 00:15:27.253 safely deescalate therapy and

NOTE Confidence: 0.910635278

00:15:27.253 --> 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

 $00:15:31.300 \longrightarrow 00:15:33.215$  An exciting abstract and presentation

NOTE Confidence: 0.910635278

 $00:15:33.215 \longrightarrow 00:15:36.053$  will be presented in this year's ASCO

NOTE Confidence: 0.910635278

00:15:36.053 --> 00:15:38.639 looking at part inhibitor alone as

NOTE Confidence: 0.910635278

 $00:15:38.639 \longrightarrow 00:15:39.924$  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 --> 00:15:45.090 This is without any chemotherapy

NOTE Confidence: 0.910635278

 $00:15:45.090 \longrightarrow 00:15:47.190$  patients with these types of tumors

NOTE Confidence: 0.910635278

 $00{:}15{:}47.190 \dashrightarrow 00{:}15{:}49.410$  actually had pretty high on PCR rates,

NOTE Confidence: 0.910635278

 $00:15:49.410 \longrightarrow 00:15:52.248$  so these are exciting data that

NOTE Confidence: 0.910635278

 $00:15:52.248 \longrightarrow 00:15:54.612$  will be further represented in

00:15:54.612 --> 00:15:56.946 this coming as still coming up.

NOTE Confidence: 0.847098561428571

 $00{:}15{:}56.950 {\:{\circ}{\circ}{\circ}}>00{:}15{:}59.036$  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

 $00:15:59.694 \longrightarrow 00:16:02.310$  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 --> 00:16:07.165 Certainly we've made a lot of progress,

NOTE Confidence: 0.847098561428571

 $00:16:07.170 \longrightarrow 00:16:09.606$  but we still have over 40,000

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

00:16:11.305 --> 00:16:13.610 dying from advanced breast cancer,

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

00:16:22.640 --> 00:16:23.852 in my opinion,

NOTE Confidence: 0.847098561428571

 $00:16:23.852 \longrightarrow 00:16:26.796$  has been the the introduction of the CD.

NOTE Confidence: 0.847098561428571

 $00:16:26.800 \longrightarrow 00:16:30.940$  46 inhibitors 222 minus static breast cancer.

NOTE Confidence: 0.847098561428571

 $00:16:30.940 \longrightarrow 00:16:33.586$  That's, ER, positive that they have led

 $00:16:33.586 \longrightarrow 00:16:35.620$  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

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

NOTE Confidence: 0.847098561428571

 $00:16:40.772 \longrightarrow 00:16:42.950$  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

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

00:17:00.222 --> 00:17:02.062 underground therapy in early stage?

NOTE Confidence: 0.847098561428571

 $00:17:02.070 \longrightarrow 00:17:03.160$  Breast cancer.

NOTE Confidence: 0.847098561428571

 $00:17:03.160 \longrightarrow 00:17:06.430$  Three studies have been reported out,

NOTE Confidence: 0.847098561428571

00:17:06.430 --> 00:17:09.762 but only monarchy with Emoci club has

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

NOTE Confidence: 0.847098561428571

00:17:13.430 --> 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

 $00:17:22.250 \longrightarrow 00:17:23.738$  Add city 46 inhibitors.

NOTE Confidence: 0.847098561428571

 $00:17:23.738 \longrightarrow 00:17:24.854$  Agile and therapy.

NOTE Confidence: 0.847098561428571

 $00:17:24.860 \longrightarrow 00:17:27.550$  At this point in time.

NOTE Confidence: 0.847098561428571

00:17:27.550 --> 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

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

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

 $00:17:39.240 \longrightarrow 00:17:40.956$  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 --> 00:17:47.266 derive benefit and Penelope and they

NOTE Confidence: 0.847098561428571

 $00:17:47.266 \longrightarrow 00:17:49.570$  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

 $00:17:52.490 \longrightarrow 00:17:53.990$  Whether we can kind of phenotype,

NOTE Confidence: 0.847098561428571

 $00:17:53.990 \longrightarrow 00:17:56.020$  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

 $00:17:57.930 \longrightarrow 00:18:00.730$  Happy, I think it's the next step.

NOTE Confidence: 0.847098561428571

00:18:00.730 --> 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

 $00:18:06.130 \longrightarrow 00:18:08.130$  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 --> 00:18:13.548 to catnip that I mentioned in the

NOTE Confidence: 0.847098561428571

 $00:18:13.548 \longrightarrow 00:18:15.726$  in the compass study coming up.

NOTE Confidence: 0.847098561428571

 $00{:}18{:}15.730 \dashrightarrow 00{:}18{:}21.018$  And I will wrap up with escalation of

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

 $00:18:23.694 \longrightarrow 00:18:27.050$  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 --> 00:18:34.510 but what about in the pre operative setting?

NOTE Confidence: 0.847098561428571 00:18:34.510 --> 00:18:34.926 Again,

00:18:34.926 --> 00:18:37.422 Keynote 522 has been in the

NOTE Confidence: 0.847098561428571

NOTE Confidence: 0.847098561428571

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

NOTE Confidence: 0.847098561428571

 $00:18:39.910 \longrightarrow 00:18:42.804$  The patients and in the intervention arm

NOTE Confidence: 0.847098561428571

00:18:42.804 --> 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 --> 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

 $00:18:49.726 \longrightarrow 00:18:52.051$  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

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

NOTE Confidence: 0.847098561428571

 $00{:}18{:}59.193 \dashrightarrow 00{:}19{:}02.470$  arm improved event free survival.

 $00:19:02.470 \longrightarrow 00:19:03.829$  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 --> 00:19:11.826 of pembrolizumab for pre operative.

NOTE Confidence: 0.847098561428571

 $00:19:11.830 \longrightarrow 00:19:14.670$  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

 $00:19:17.730 \longrightarrow 00:19:20.772$  The the Act committee wanted to

NOTE Confidence: 0.847098561428571

 $00{:}19{:}20.772 \longrightarrow 00{:}19{:}24.526$  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

 $00:19:30.420 \longrightarrow 00:19:32.835$  and they were positive whether they're going

NOTE Confidence: 0.875422415833334

 $00:19:32.835 \longrightarrow 00:19:36.097$  to go back in after time .4 or wait until

NOTE Confidence: 0.875422415833334

 $00:19:36.097 \longrightarrow 00:19:38.277$  the final analysis remains to be seen.

NOTE Confidence: 0.875422415833334

 $00:19:38.280 \longrightarrow 00:19:41.976$  But generally I think most of us think

 $00:19:41.976 \longrightarrow 00:19:45.260$  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

 $00:19:47.384 \longrightarrow 00:19:49.444$  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 --> 00:20:00.640 There wasn't a year of immunotherapy

NOTE Confidence: 0.875422415833334

 $00:20:00.717 \longrightarrow 00:20:03.678$  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

 $00:20:06.627 \longrightarrow 00:20:07.469$  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

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

NOTE Confidence: 0.875422415833334

00:20:12.010 --> 00:20:14.515 This is something that potentially

NOTE Confidence: 0.875422415833334

00:20:14.515 --> 00:20:16.538 could help. Our patients.

00:20:16.538 --> 00:20:20.913 I'm gonna wrap up with a saying that won't

NOTE Confidence: 0.875422415833334

 $00:20:20.913 \longrightarrow 00:20:23.034$  have time to discuss in great length.

NOTE Confidence: 0.875422415833334

 $00:20:23.040 \longrightarrow 00:20:24.800$  Our escalation strategies and

NOTE Confidence: 0.875422415833334

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

NOTE Confidence: 0.875422415833334

 $00:20:26.120 \longrightarrow 00:20:28.360$  but a lot of exciting work is going

NOTE Confidence: 0.875422415833334

 $00:20:28.360 \longrightarrow 00:20:30.855$  on in this area and it will be a

NOTE Confidence: 0.875422415833334

 $00:20:30.855 \longrightarrow 00:20:33.030$  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

 $00:20:36.390 \longrightarrow 00:20:38.520$  not D, escalation or escalation.

NOTE Confidence: 0.875422415833334

00:20:38.520 --> 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 --> 00:20:44.238 patient engagement,

NOTE Confidence: 0.875422415833334

00:20:44.238 --> 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

 $00:20:50.720 \longrightarrow 00:20:53.114$  Thank you Doctor Lustberg that was

NOTE Confidence: 0.856699082307692

 $00:20:53.114 \longrightarrow 00:20:55.683$  really fantastic and I know I have

NOTE Confidence: 0.856699082307692

00:20:55.683 --> 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 --> 00:21:06.416 will put some questions in the

NOTE Confidence: 0.856699082307692

 $00:21:06.416 \longrightarrow 00:21:09.407$  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

 $00:21:12.120 \longrightarrow 00:21:14.980$  Geovanna and discussing recent advances

NOTE Confidence: 0.856699082307692

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

NOTE Confidence: 0.856699082307692

 $00:21:20.000 \longrightarrow 00:21:21.788$  Thank you doctor Cubana.

NOTE Confidence: 0.892945618

00:21:56.780 --> 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

 $00:22:06.449 \longrightarrow 00:22:09.136$  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

 $00:22:11.466 \longrightarrow 00:22:13.867$  two positive breast cancer we now have.

NOTE Confidence: 0.892945618

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

NOTE Confidence: 0.892945618

 $00:22:15.960 \longrightarrow 00:22:18.550$  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 --> 00:22:24.578 there's actually been five new FDA

NOTE Confidence: 0.892945618

 $00:22:24.578 \longrightarrow 00:22:27.109$  approvals in just the last two years.

NOTE Confidence: 0.892945618

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

NOTE Confidence: 0.892945618

00:22:28.790 --> 00:22:29.910 highlighted in red here,

NOTE Confidence: 0.892945618

00:22:29.910 --> 00:22:32.381 and that does not even include FDA

 $00:22:32.381 \longrightarrow 00:22:34.397$  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

 $00{:}22{:}37.050 \dashrightarrow 00{:}22{:}39.577$  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

 $00:22:42.640 \longrightarrow 00:22:44.272$  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

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

NOTE Confidence: 0.892945618

00:22:47.130 --> 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

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

NOTE Confidence: 0.892945618

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

NOTE Confidence: 0.892945618

 $00:22:59.505 \longrightarrow 00:23:01.970$  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

 $00:23:05.010 \longrightarrow 00:23:07.544$  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

 $00{:}23{:}09.720 \dashrightarrow 00{:}23{:}11.230$  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

 $00:23:16.050 \longrightarrow 00:23:18.650$  Recent results using this drug

NOTE Confidence: 0.892945618

00:23:18.650 --> 00:23:20.594 were the results of the Catherine

NOTE Confidence: 0.892945618

 $00:23:20.594 \longrightarrow 00:23:23.003$  trial that looked at this drug in

NOTE Confidence: 0.892945618

00:23:23.003 --> 00:23:24.803 the post neoadjuvant setting in

NOTE Confidence: 0.892945618

 $00:23:24.803 \longrightarrow 00:23:27.161$  patients who had been treated in

NOTE Confidence: 0.892945618

 $00:23:27.161 \longrightarrow 00:23:29.101$  the neoadjuvant setting with trust

NOTE Confidence: 0.892945618

 $00{:}23{:}29.101 \dashrightarrow 00{:}23{:}31.177$  using map based the rapy and those

NOTE Confidence: 0.892945618

 $00{:}23{:}31.177 \dashrightarrow 00{:}23{:}33.857$  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

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

NOTE Confidence: 0.892945618

 $00:23:38.048 \longrightarrow 00:23:39.840$  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

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

NOTE Confidence: 0.892945618

00:23:47.964 --> 00:23:50.595 50% decrease in disease free survival

NOTE Confidence: 0.892945618

 $00:23:50.595 \longrightarrow 00:23:53.505$  and freedom from distant response and

NOTE Confidence: 0.892945618

 $00:23:53.505 \longrightarrow 00:23:56.349$  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

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

NOTE Confidence: 0.892945618

 $00{:}24{:}01.734 \longrightarrow 00{:}24{:}03.764$  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

 $00:24:06.138 \longrightarrow 00:24:08.560$  couple of the important follow line

NOTE Confidence: 0.892945618

 $00:24:08.560 \longrightarrow 00:24:10.835$  subgroup analysis from this trial.

NOTE Confidence: 0.892945618

 $00:24:10.840 \longrightarrow 00:24:13.018$  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

 $00:24:15.622 \longrightarrow 00:24:17.610$  patients who were treated with an for

NOTE Confidence: 0.892945618

00:24:17.669 --> 00:24:19.657 cycling as well as those who were

00:24:19.657 --> 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

 $00:24:24.171 \longrightarrow 00:24:26.900$  very highest risk disease categories.

NOTE Confidence: 0.892945618

00:24:26.900 --> 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 --> 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

 $00{:}24{:}38.975 \dashrightarrow 00{:}24{:}42.830$  having clinical stage one disease

NOTE Confidence: 0.892945618

 $00:24:42.830 \longrightarrow 00:24:44.274$  and getting neoadjuvant therapy.

NOTE Confidence: 0.892945618

 $00:24:44.274 \longrightarrow 00:24:46.870$  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

 $00:24:52.566 \longrightarrow 00:24:54.559$  one seemed to have a benefit,

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

NOTE Confidence: 0.892945618

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

NOTE Confidence: 0.892945618

 $00:24:58.390 \longrightarrow 00:25:01.547$  But there were six disease free survival

NOTE Confidence: 0.892945618

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

NOTE Confidence: 0.892945618

 $00:25:05.160 \longrightarrow 00:25:08.430$  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

 $00:25:10.650 \longrightarrow 00:25:12.996$  three of them were non CNS

NOTE Confidence: 0.892945618

 $00:25:12.996 \longrightarrow 00:25:13.778$  distant recurrences,

NOTE Confidence: 0.836663429090909

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

NOTE Confidence: 0.836663429090909

 $00:25:15.180 \longrightarrow 00:25:17.770$  and one was a contralateral breast cancer.

NOTE Confidence: 0.836663429090909

 $00:25:17.770 \longrightarrow 00:25:19.972$  So although small numbers it gives

NOTE Confidence: 0.836663429090909

00:25:19.972 --> 00:25:22.769 us pause to think about even using

NOTE Confidence: 0.836663429090909

00:25:22.769 --> 00:25:25.271 this strategy in patients who present

NOTE Confidence: 0.836663429090909

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

NOTE Confidence: 0.836663429090909

 $00:25:27.670 \longrightarrow 00:25:29.090$  and that's a controversial area

NOTE Confidence: 0.836663429090909

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

 $00:25:33.650 \longrightarrow 00:25:35.396$  But the Catherine trial did set

NOTE Confidence: 0.843883554

00:25:35.396 --> 00:25:37.016 a new paradigm for treating

NOTE Confidence: 0.843883554

 $00:25:37.016 \longrightarrow 00:25:38.600$  her two positive disease,

NOTE Confidence: 0.843883554

 $00:25:38.600 \longrightarrow 00:25:41.030$  which is in general we could

NOTE Confidence: 0.843883554

00:25:41.030 --> 00:25:42.650 debate stage one disease,

NOTE Confidence: 0.843883554

 $00:25:42.650 \longrightarrow 00:25:43.950$  but in general patients with

NOTE Confidence: 0.843883554

 $00:25:43.950 \longrightarrow 00:25:44.990$  her two positive disease,

NOTE Confidence: 0.843883554

00:25:44.990 --> 00:25:47.874 now we think should get neoadjuvant therapy,

NOTE Confidence: 0.843883554

 $00:25:47.880 \longrightarrow 00:25:50.247$  because if they get a non path CR we

NOTE Confidence: 0.843883554

00:25:50.247 --> 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

 $00:25:57.809 \longrightarrow 00:25:59.950$  negative subset because the create X

NOTE Confidence: 0.843883554

 $00:25:59.950 \longrightarrow 00:26:02.080$  trial showed that in triple negative

NOTE Confidence: 0.843883554

 $00:26:02.080 \longrightarrow 00:26:04.097$  patients who get neoadjuvant chemo.

 $00:26:04.100 \longrightarrow 00:26:04.361$  Therapy.

NOTE Confidence: 0.843883554

 $00:26:04.361 \longrightarrow 00:26:06.710$  Those who do not get a path CR and

NOTE Confidence: 0.843883554

 $00:26:06.778 \longrightarrow 00:26:08.906$  we now have a worse outcome can

NOTE Confidence: 0.843883554

 $00:26:08.906 \longrightarrow 00:26:10.683$  have their outcome improved by the

NOTE Confidence: 0.843883554

00:26:10.683 --> 00:26:12.785 use of edge of in Cape cited mean.

NOTE Confidence: 0.843883554

00:26:12.785 --> 00:26:14.585 So I think for both her two positive

NOTE Confidence: 0.843883554

 $00:26:14.585 \longrightarrow 00:26:16.631$  and triple negative disease we should

NOTE Confidence: 0.843883554

00:26:16.631 --> 00:26:18.043 always think about neoadjuvant

NOTE Confidence: 0.843883554

 $00{:}26{:}18.043 \dashrightarrow 00{:}26{:}19.329$  therapy 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 --> 00:26:23.220 setting we can improve long term

NOTE Confidence: 0.843883554

 $00:26:23.220 \longrightarrow 00:26:24.438$  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 --> 00:26:29.644 The next drug I wanted to

NOTE Confidence: 0.812819721818182

 $00:26:29.644 \longrightarrow 00:26:30.680$  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

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

NOTE Confidence: 0.812819721818182

 $00:26:38.688 \longrightarrow 00:26:41.446$  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 --> 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

 $00{:}26{:}53.968 \dashrightarrow 00{:}26{:}55.569$  activity against the EGF receptor.

NOTE Confidence: 0.812819721818182

 $00:26:55.570 \longrightarrow 00:26:58.150$  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

 $00{:}27{:}00.200 \dashrightarrow 00{:}27{:}02.250$  against the EGF receptor interaction.

NOTE Confidence: 0.812819721818182

 $00:27:02.250 \longrightarrow 00:27:03.560$  If actually inhibits all of

NOTE Confidence: 0.812819721818182

 $00:27:03.560 \longrightarrow 00:27:04.870$  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

 $00:27:13.815 \longrightarrow 00:27:15.815$  the metastatic setting for patients

NOTE Confidence: 0.88725716

00:27:15.815 --> 00:27:18.972 who had prior first line therapy with

NOTE Confidence: 0.88725716

 $00:27:18.972 \longrightarrow 00:27:21.252$  trastuzumab and second line therapy

NOTE Confidence: 0.88725716

 $00{:}27{:}21.260 \dashrightarrow 00{:}27{:}23.829$  with TDM one an the really important

NOTE Confidence: 0.88725716

 $00:27:23.829 \longrightarrow 00:27:26.475$  part of this trial as Merriam has

NOTE Confidence: 0.88725716

00:27:26.475 --> 00:27:29.248 shown you is that this trial welcomed

NOTE Confidence: 0.88725716

 $00{:}27{:}29.248 \mathrel{\text{--}}{>} 00{:}27{:}31.718$  patients with brain metastases and

NOTE Confidence: 0.88725716

 $00:27:31.718 \longrightarrow 00:27:34.756$  not only treated brain metastases but

NOTE Confidence: 0.88725716

 $00{:}27{:}34.756 \dashrightarrow 00{:}27{:}37.396$  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

 $00:27:39.600 \longrightarrow 00:27:42.285$  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

 $00:27:44.310 \longrightarrow 00:27:47.488$  and so patients in this trial were

NOTE Confidence: 0.88725716

 $00:27:47.488 \longrightarrow 00:27:50.297$  randomized to therapy with trastuzumab in

 $00:27:50.297 \longrightarrow 00:27:54.210$  capeside of being with or without to continu.

NOTE Confidence: 0.88725716

00:27:54.210 --> 00:27:56.142 And in this trial,

NOTE Confidence: 0.88725716

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

NOTE Confidence: 0.88725716

00:27:59.139 --> 00:28:01.110 with brain metastases.

NOTE Confidence: 0.88725716

 $00:28:01.110 \longrightarrow 00:28:03.100$  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

 $00:28:04.300 \longrightarrow 00:28:07.120$  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

 $00:28:09.380 \longrightarrow 00:28:12.345$  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

 $00{:}28{:}16.996 \dashrightarrow 00{:}28{:}18.586$  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

 $00:28:20.370 \longrightarrow 00:28:22.603$  So this was an important trial showing

NOTE Confidence: 0.88725716

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

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

NOTE Confidence: 0.88725716

 $00:28:26.980 \longrightarrow 00:28:29.302$  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

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

NOTE Confidence: 0.88725716

 $00:28:34.150 \longrightarrow 00:28:36.660$  they achieved the same benefit

NOTE Confidence: 0.88725716

 $00{:}28{:}36.660 {\: --> \:} 00{:}28{:}38.930$  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

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

NOTE Confidence: 0.854608315789474

 $00{:}28{:}45.762 \dashrightarrow 00{:}28{:}49.740$  in the brain metastases of patients

NOTE Confidence: 0.854608315789474

 $00:28:49.833 \longrightarrow 00:28:53.163$  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

 $00{:}28{:}55.814 \longrightarrow 00{:}28{:}58.110$  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 --> 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

 $00:29:07.653 \longrightarrow 00:29:10.300$  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

 $00:29:12.300 \longrightarrow 00:29:15.387$  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 --> 00:29:30.070 almost 10 months and at one year 40%

NOTE Confidence: 0.854608315789474

 $00:29:30.070 \longrightarrow 00:29:32.170$  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

 $00{:}29{:}37.246 \to 00{:}29{:}40.749$  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

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

NOTE Confidence: 0.854608315789474

 $00:29:43.440 \longrightarrow 00:29:44.820$  The overall survival,

NOTE Confidence: 0.854608315789474

 $00:29:44.820 \longrightarrow 00:29:47.580$  which was improved by six months

NOTE Confidence: 0.854608315789474

00:29:47.580 --> 00:29:49.919 from 12 months to 18 months,

NOTE Confidence: 0.854608315789474

 $00:29:49.920 \longrightarrow 00:29:52.440$  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

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

NOTE Confidence: 0.854608315789474

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

NOTE Confidence: 0.854608315789474

 $00:30:00.152 \longrightarrow 00:30:03.485$  line in the her two climb 02 trial

NOTE Confidence: 0.854608315789474

00:30:03.485 --> 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 --> 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

 $00:30:24.630 \longrightarrow 00:30:25.785$  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

 $00:30:33.134 \longrightarrow 00:30:35.264$  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

 $00{:}30{:}45.722 \dashrightarrow 00{:}30{:}47.890$  the her two expression in a tumor,

NOTE Confidence: 0.819517523

 $00{:}30{:}47.890 \dashrightarrow 00{:}30{:}49.920$  you can get killing of cells that

NOTE Confidence: 0.819517523

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

 $00:30:51.850 \longrightarrow 00:30:55.590$  By this by stander effect.

NOTE Confidence: 0.819517523

00:30:55.590 --> 00:30:57.510 And in phase one trials,

NOTE Confidence: 0.819517523

 $00:30:57.510 \longrightarrow 00:30:59.742$  this drug was extremely active in

NOTE Confidence: 0.819517523

00:30:59.742 --> 00:31:01.986 her two positive breast cancer and

NOTE Confidence: 0.819517523

 $00:31:01.986 \longrightarrow 00:31:03.711$  her two positive gastric cancer

NOTE Confidence: 0.819517523

 $00:31:03.711 \longrightarrow 00:31:05.856$  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 --> 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

 $00:31:12.374 \longrightarrow 00:31:14.606$  levels of her two expression and

NOTE Confidence: 0.819517523

 $00:31:14.606 \longrightarrow 00:31:17.606$  in phase one trials overall 86% of

NOTE Confidence: 0.819517523

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

NOTE Confidence: 0.819517523

00:31:20.890 --> 00:31:22.746 And so the trial that got this drug,

NOTE Confidence: 0.819517523

00:31:22.750 --> 00:31:25.590 FDA approved was the destiny of 1 trial,

NOTE Confidence: 0.819517523

00:31:25.590 --> 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

 $00:31:29.680 \longrightarrow 00:31:32.116$  metastatic setting had to have prior

NOTE Confidence: 0.819517523

 $00{:}31{:}32.116 \dashrightarrow 00{:}31{:}34.692$  trastuzumab an prior TDM one and 2/3

NOTE Confidence: 0.819517523

00:31:34.692 --> 00:31:37.648 of them also had prior per Susan Mab.

NOTE Confidence: 0.819517523

00:31:37.650 --> 00:31:40.499 Almost all of them had visceral metastases,

NOTE Confidence: 0.819517523

 $00:31:40.500 \longrightarrow 00:31:42.999$  and this was a fairly late line

NOTE Confidence: 0.819517523

 $00:31:42.999 \longrightarrow 00:31:45.398$  trial with the median number of

NOTE Confidence: 0.819517523

 $00:31:45.398 \longrightarrow 00:31:47.882$  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

 $00:31:50.110 \longrightarrow 00:31:51.220$  trial once again,

NOTE Confidence: 0.819517523

 $00{:}31{:}51.220 \dashrightarrow 00{:}31{:}53.660$  the activity was really dramatic

NOTE Confidence: 0.819517523

00:31:53.660 --> 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 --> 00:32:00.597 tumor by recist criteria,

NOTE Confidence: 0.819517523

 $00:32:00.600 \longrightarrow 00:32:04.248$  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%,

 $00:32:07.496 \longrightarrow 00:32:11.328$  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

 $00:32:13.440 \longrightarrow 00:32:15.420$  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 --> 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

 $00:32:24.740 \longrightarrow 00:32:27.752$  as well with their median duration

NOTE Confidence: 0.819517523

 $00:32:27.752 \longrightarrow 00:32:30.680$  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 --> 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

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

NOTE Confidence: 0.819517523

 $00:32:43.909 \longrightarrow 00:32:45.565$  of interstitial lung disease,

NOTE Confidence: 0.819517523

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

 $00:32:46.970 \longrightarrow 00:32:50.524$  which occur din almost 1415% of

NOTE Confidence: 0.819517523

00:32:50.524 --> 00:32:53.654 patients an in two point 2% of patients.

NOTE Confidence: 0.819517523

00:32:53.654 --> 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

 $00:32:59.801 \longrightarrow 00:33:02.031$  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

 $00:33:16.696 \longrightarrow 00:33:18.699$  trial is the definitive trial.

NOTE Confidence: 0.819517523

 $00:33:18.700 \longrightarrow 00:33:20.392$  Comparing this drug to treatment of

 $00:33:20.392 \longrightarrow 00:33:22.550$  physicians choice in a phase three setting.

NOTE Confidence: 0.819517523

00:33:22.550 --> 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

 $00:33:35.060 \longrightarrow 00:33:36.308$  One in second line.

NOTE Confidence: 0.8611110825

 $00{:}33{:}36.308 \dashrightarrow 00{:}33{:}38.573$  The Destiny 04 trial is looking at

NOTE Confidence: 0.8611110825

00:33:38.573 --> 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

 $00:33:42.650 \longrightarrow 00:33:44.830$  Trials responses in those patients.

NOTE Confidence: 0.8611110825

00:33:44.830 --> 00:33:48.286 So this is just using map touristy 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

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

NOTE Confidence: 0.8611110825

 $00{:}33{:}57.210 \dashrightarrow 00{:}33{:}58.884$  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

 $00:34:00.397 \longrightarrow 00:34:02.102$  therapy 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

 $00{:}34{:}04.026 \dashrightarrow 00{:}34{:}05.538$ 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

 $00:34:08.504 \longrightarrow 00:34:09.986$  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

 $00:34:13.161 \longrightarrow 00:34:15.769$  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

 $00{:}34{:}19.417 \dashrightarrow 00{:}34{:}23.134$  her of trastuzumab that has the FC

NOTE Confidence: 0.8611110825

 $00{:}34{:}23.134 \dashrightarrow 00{:}34{:}25.584$  Gamma portion replaced by another

NOTE Confidence: 0.8611110825

 $00:34:25.584 \longrightarrow 00:34:28.296$  FC Gamma alteration that has a

NOTE Confidence: 0.8611110825

 $00:34:28.296 \longrightarrow 00:34:30.644$  higher affinity for activating FC

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

NOTE Confidence: 0.8611110825

 $00{:}34{:}33.356 \dashrightarrow 00{:}34{:}36.200$  for inhibitory FC Gamma receptor.

NOTE Confidence: 0.8611110825

 $00:34:36.200 \longrightarrow 00:34:38.224$  And this is based on the fact that

NOTE Confidence: 0.8611110825

 $00:34:38.224 \longrightarrow 00:34:40.397$  we know that trastuzumab is not

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

00:34:42.410 --> 00:34:45.250 Drug, but it is that immunotherapy as well.

NOTE Confidence: 0.8611110825

00:34:45.250 --> 00:34:47.146 That does recruit the immune system,

NOTE Confidence: 0.8611110825

00:34:47.150 --> 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

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

NOTE Confidence: 0.8611110825

 $00{:}34{:}53.730 \mathrel{--}{>} 00{:}34{:}56.238$  It may give it enhanced activity,

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

 $00:34:59.600 \longrightarrow 00:35:02.407$  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

 $00:35:04.185 \longrightarrow 00:35:05.691$  margetuximab plus chemotherapy

NOTE Confidence: 0.8611110825

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

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

NOTE Confidence: 0.8611110825

 $00{:}35{:}10.690 \dashrightarrow 00{:}35{:}12.608$  As you can see here in progression.

NOTE Confidence: 0.8611110825

 $00:35:12.610 \longrightarrow 00:35:16.068$  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

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

NOTE Confidence: 0.8611110825

 $00:35:20.110 \longrightarrow 00:35:22.945$  So it's now part of our armamentarium

NOTE Confidence: 0.8611110825

 $00:35:22.950 \longrightarrow 00:35:24.792$  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

 $00:35:26.620 \longrightarrow 00:35:29.076$  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

 $00{:}35{:}38.280 {\:{\circ}{\circ}{\circ}}>00{:}35{:}39.929$ metastatic her two positive disease

NOTE Confidence: 0.8611110825

 $00:35:39.929 \longrightarrow 00:35:42.092$  and the new rotten if compared to

00:35:42.092 --> 00:35:43.926 La Pata nib did have an improved

NOTE Confidence: 0.8611110825

 $00{:}35{:}43.926 \dashrightarrow 00{:}35{:}44.960$  progression free survival.

NOTE Confidence: 0.8611110825

00:35:44.960 --> 00:35:45.762 Overall response,

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

00:35:48.970 --> 00:35:52.226 None of these patients had prior to continu,

NOTE Confidence: 0.8611110825

 $00:35:52.230 \longrightarrow 00:35:54.606$  and so in the era now of using

NOTE Confidence: 0.8611110825

 $00:35:54.606 \longrightarrow 00:35:55.200$  two continents,

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

 $00{:}35{:}57.576 \dashrightarrow 00{:}35{:}59.978$  is a place for new ratine in metastatic.

NOTE Confidence: 0.8611110825

 $00:35:59.980 \longrightarrow 00:36:03.148$  Her two positive disease.

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

 $00:36:03.630 \longrightarrow 00:36:04.590$  as I showed you,

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

 $00:36:07.390 \longrightarrow 00:36:09.770$  An I oppose this as a reasonable

NOTE Confidence: 0.8611110825

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

NOTE Confidence: 0.8611110825

00:36:11.613 --> 00:36:14.231 we can use for her two positive

00:36:14.231 --> 00:36:15.840 metastatic disease patients.

NOTE Confidence: 0.8611110825

 $00:36:15.840 \longrightarrow 00:36:17.140$  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

 $00:36:18.950 \longrightarrow 00:36:22.010$  and taxane because of the remarkable

NOTE Confidence: 0.8611110825

 $00:36:22.010 \longrightarrow 00:36:23.980$  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

 $00:36:30.173 \longrightarrow 00:36:32.689$  we now can consider a third line therapy.

NOTE Confidence: 0.8611110825

00:36:32.690 --> 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

 $00{:}36{:}36.716 \dashrightarrow 00{:}36{:}38.231$  seen an improvement in overall

NOTE Confidence: 0.8611110825

00:36:38.231 --> 00:36:39.913 survival in the her two climb

NOTE Confidence: 0.8611110825

 $00:36:39.913 \longrightarrow 00:36:41.238$  study and this is especially

00:36:41.240 --> 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

 $00:36:45.280 \longrightarrow 00:36:47.430$  their her two positive disease and

NOTE Confidence: 0.837415576470588

00:36:47.430 --> 00:36:49.230 then perhaps enforced line therapy,

NOTE Confidence: 0.837415576470588

 $00:36:49.230 \longrightarrow 00:36:50.490$  we could use a trust.

NOTE Confidence: 0.837415576470588

 $00:36:50.490 \longrightarrow 00:36:52.094$  Susan abjure Exede can,

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:36:54.568 \longrightarrow 00:36:57.136$  the her two climb regimen for third line

NOTE Confidence: 0.837415576470588

00:36:57.136 --> 00:36:59.448 therapy and then in late line therapy,

NOTE Confidence: 0.837415576470588

 $00:36:59.450 \longrightarrow 00:37:01.613$  perhaps we might want to use margetuximab

NOTE Confidence: 0.837415576470588

 $00{:}37{:}01.613 \dashrightarrow 00{:}37{:}03.869$  for the slight edge it might have over

NOTE Confidence: 0.837415576470588

 $00:37:03.869 \longrightarrow 00:37:06.189$  trust using map in the Wave line therapy.

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:37:09.750 \longrightarrow 00:37:12.249$  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

 $00{:}37{:}14.490 \dashrightarrow 00{:}37{:}16.670$  triple negative breast cancer.

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

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:37:23.450 \longrightarrow 00:37:26.126$  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

 $00:37:27.954 \longrightarrow 00:37:29.759$  11 map and Pember Lism AB.

NOTE Confidence: 0.837415576470588

 $00:37:29.760 \longrightarrow 00:37:31.440$  We have an antibody drug conjugate

NOTE Confidence: 0.837415576470588

 $00:37:31.440 \longrightarrow 00:37:33.418$  and I kind of include carboplatin

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:37:35.800 \longrightarrow 00:37:37.629$  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 --> 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

 $00:37:45.716 \longrightarrow 00:37:47.733$  rate to single agent carboplatin

NOTE Confidence: 0.837415576470588

00:37:47.733 --> 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

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

NOTE Confidence: 0.837415576470588

 $00:38:01.990 \longrightarrow 00:38:04.630$  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

 $00:38:05.950 \longrightarrow 00:38:08.092$  I think the results aren't as

NOTE Confidence: 0.837415576470588

 $00:38:08.092 \longrightarrow 00:38:09.882$  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

 $00:38:14.630 \longrightarrow 00:38:16.430$  but they are positive results,

NOTE Confidence: 0.837415576470588

 $00:38:16.430 \longrightarrow 00:38:18.902$  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

 $00:38:21.955 \longrightarrow 00:38:24.976$  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

 $00:38:26.960 \longrightarrow 00:38:30.019$  an 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

 $00:38:32.085 \longrightarrow 00:38:33.749$  improvement in progression Free Survival,

NOTE Confidence: 0.837415576470588

 $00{:}38{:}33.750 \dashrightarrow 00{:}38{:}36.198$  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

 $00:38:40.255 \longrightarrow 00:38:41.884$  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

 $00:38:46.860 \longrightarrow 00:38:48.655$  and the chemotherapy might have

NOTE Confidence: 0.837415576470588

 $00{:}38{:}48.655 \dashrightarrow 00{:}38{:}51.125$  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

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

NOTE Confidence: 0.837415576470588

 $00:38:57.380 \longrightarrow 00:38:59.535$  an improvement in progression free

NOTE Confidence: 0.837415576470588

 $00:38:59.535 \longrightarrow 00:39:01.690$  survival of almost four months.

 $00:39:01.690 \longrightarrow 00:39:04.178$  And so we now have either of these

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:39:06.090 \longrightarrow 00:39:08.397$  AB for approval for PD L1 positive

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

00:39:10.833 --> 00:39:13.875 might add in the first line setting

NOTE Confidence: 0.837415576470588

 $00{:}39{:}13.875 \dashrightarrow 00{:}39{:}15.655$  with these chemotherapy agents

NOTE Confidence: 0.837415576470588

 $00:39:15.655 \longrightarrow 00:39:17.825$  there was another trial looking at

NOTE Confidence: 0.837415576470588

 $00:39:17.825 \longrightarrow 00:39:20.699$  a teasel is a map with paclitaxel,

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:39:23.890 \longrightarrow 00:39:25.927$  This was a flat out negative trial

NOTE Confidence: 0.837415576470588

 $00{:}39{:}25.927 \dashrightarrow 00{:}39{:}27.670$  with no improvement in progression.

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

 $00:39:28.482 \longrightarrow 00:39:30.512$  minimal improvement in response rate

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

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

NOTE Confidence: 0.837415576470588

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

 $00:39:38.420 \longrightarrow 00:39:39.701$  slow versus paclitaxel.

NOTE Confidence: 0.837415576470588

 $00:39:39.701 \longrightarrow 00:39:42.263$  So we don't really understand why

NOTE Confidence: 0.837415576470588

 $00:39:42.263 \longrightarrow 00:39:44.048$  is this one negative?

NOTE Confidence: 0.837415576470588

 $00:39:44.050 \longrightarrow 00:39:46.416$  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

 $00:39:48.040 \longrightarrow 00:39:49.391$  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

 $00:39:50.520 \longrightarrow 00:39:51.888$  Triple negative patients.

NOTE Confidence: 0.837415576470588

 $00:39:51.888 \longrightarrow 00:39:53.712$  Is there truly some

NOTE Confidence: 0.837415576470588

 $00{:}39{:}53.712 \dashrightarrow 00{:}39{:}55.080$  magical difference between

NOTE Confidence: 0.76114745375

00:39:55.148 --> 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

 $00:39:58.286 \longrightarrow 00:40:00.140$  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 --> 00:40:03.446 that it would make this difference?

 $00:40:03.450 \longrightarrow 00:40:06.474$  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 --> 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 --> 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 --> 00:40:19.666 but for now, if we use atezolizumab,

NOTE Confidence: 0.76114745375

 $00:40:19.670 \longrightarrow 00:40:21.044$  we should use it with nab

NOTE Confidence: 0.76114745375

00:40:21.044 --> 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

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

NOTE Confidence: 0.895919262857143

00:40:32.430 --> 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

 $00:40:37.435 \longrightarrow 00:40:38.831$  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

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

NOTE Confidence: 0.895919262857143

00:40:44.567 --> 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

 $00:40:50.310 \longrightarrow 00:40:53.834$  as Merriam explained with a 14% improvement

NOTE Confidence: 0.895919262857143

 $00:40:53.834 \longrightarrow 00:40:55.994$  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

 $00{:}41{:}00.844 \dashrightarrow 00{:}41{:}02.944$  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

 $00:41:04.630 \longrightarrow 00:41:06.466$  past has said that they would

NOTE Confidence: 0.895919262857143

 $00{:}41{:}06.466 \operatorname{--}{>} 00{:}41{:}08.171$  consider drug approvals based on

NOTE Confidence: 0.895919262857143

 $00:41:08.171 \longrightarrow 00:41:09.563$  improvement in pathologic complete

NOTE Confidence: 0.895919262857143

 $00:41:09.563 \longrightarrow 00:41:11.555$  response for this type of disease.

 $00:41:15.620 \longrightarrow 00:41:17.400$  This is not yet approved,

NOTE Confidence: 0.922421592

00:41:17.400 --> 00:41:21.570 and as Marion mentioned in February,

NOTE Confidence: 0.922421592

00:41:21.570 --> 00:41:23.458 the pharmaceutical company actually

NOTE Confidence: 0.922421592

 $00:41:23.458 \longrightarrow 00:41:26.290$  asked the FDA to consider accelerated

NOTE Confidence: 0.922421592

 $00:41:26.360 \longrightarrow 00:41:28.820$  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

 $00:41:30.140 \longrightarrow 00:41:33.220$  there was an ODAC meeting in February

NOTE Confidence: 0.922421592

 $00:41:33.300 \longrightarrow 00:41:36.464$  and the Odacon the FDA decided at that

NOTE Confidence: 0.922421592

 $00:41:36.464 \longrightarrow 00:41:39.740$  time not yet to grant accelerated approval.

NOTE Confidence: 0.922421592

 $00:41:39.740 \longrightarrow 00:41:42.236$  Wanting further follow up and more

NOTE Confidence: 0.922421592

 $00:41:42.236 \longrightarrow 00:41:44.670$  endpoints that were still premature.

NOTE Confidence: 0.922421592

 $00:41:44.670 \longrightarrow 00:41:46.662$  In terms of event free survival

NOTE Confidence: 0.922421592

 $00:41:46.662 \longrightarrow 00:41:47.658$  and overall survival,

NOTE Confidence: 0.922421592

 $00{:}41{:}47.660 \dashrightarrow 00{:}41{:}50.060$  and in fact at the time of this

NOTE Confidence: 0.922421592

 $00:41:50.060 \longrightarrow 00:41:52.377$  meeting the trial was up to over

NOTE Confidence: 0.922421592

00:41:52.377 --> 00:41:54.763 1100 patients and the path CR rate

 $00:41:54.763 \longrightarrow 00:41:57.108$  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

 $00:42:05.450 \longrightarrow 00:42:07.880$  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

 $00:42:12.860 \longrightarrow 00:42:14.165$  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 --> 00:42:19.222 Yet at this point,

NOTE Confidence: 0.922421592

 $00{:}42{:}19.222 \dashrightarrow 00{:}42{:}21.220$  and Merriam showed you that there

NOTE Confidence: 0.922421592

00:42:21.288 --> 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.

00:42:24.750 --> 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

 $00:42:29.082 \longrightarrow 00:42:30.586$  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

 $00:42:33.380 \longrightarrow 00:42:35.780$  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

 $00:42:37.330 \longrightarrow 00:42:39.544$  very high risk multiple node positive

NOTE Confidence: 0.922421592

00:42:39.544 --> 00:42:42.248 patients who I have encountered a since

NOTE Confidence: 0.922421592

 $00{:}42{:}42.248 \dashrightarrow 00{:}42{:}44.576$  the publication of the first data.

NOTE Confidence: 0.922421592

 $00:42:44.580 \longrightarrow 00:42:46.470$  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

 $00{:}42{:}48.807 \dashrightarrow 00{:}42{:}50.810$  don't know the long term outcome.

NOTE Confidence: 0.922421592

 $00{:}42{:}50.810 \dashrightarrow 00{:}42{:}52.658$  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

 $00:42:57.545 \longrightarrow 00:43:01.036$  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

 $00:43:02.727 \longrightarrow 00:43:04.429$  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

 $00:43:06.368 \longrightarrow 00:43:07.900$  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

 $00:43:08.970 \longrightarrow 00:43:10.146$  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 --> 00:43:15.578 We now have an antibody drug

NOTE Confidence: 0.864887442857143

 $00{:}43{:}15.578 \to 00{:}43{:}16.830$  conjugate for treating metastatic

NOTE Confidence: 0.864887442857143

 $00:43:16.884 \longrightarrow 00:43:18.400$  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 --> 00:43:24.285 the antigen is trope too,

NOTE Confidence: 0.864887442857143

 $00:43:24.290 \longrightarrow 00:43:27.618$  which is present on many breast cancers and

NOTE Confidence: 0.864887442857143

 $00:43:27.618 \longrightarrow 00:43:30.918$  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

 $00:43:40.400 \longrightarrow 00:43:42.427$  ascent trial versus treatment of

NOTE Confidence: 0.864887442857143

00:43:42.427 --> 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

 $00:43:46.010 \longrightarrow 00:43:47.972$  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

 $00:43:51.356 \longrightarrow 00:43:52.740$  survival and of substantial

NOTE Confidence: 0.864887442857143

 $00:43:52.804 \longrightarrow 00:43:54.649$  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

 $00:43:56.426 \longrightarrow 00:43:57.610$  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

 $00:43:59.880 \longrightarrow 00:44:01.590$  and it's actually now being tested

 $00:44:01.590 \longrightarrow 00:44:03.696$  in hormone receptor positive as well.

NOTE Confidence: 0.864887442857143

 $00:44:03.696 \longrightarrow 00:44:05.112$  We are participating in that trial

NOTE Confidence: 0.864887442857143

 $00:44:05.112 \longrightarrow 00:44:06.767$  and I've had patients with hormone

NOTE Confidence: 0.864887442857143

 $00:44:06.767 \longrightarrow 00:44:08.573$  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 --> 00:44:16.511 conjugate as a much more tolerable

NOTE Confidence: 0.864887442857143

00:44:16.511 --> 00:44:19.186 therapy than a naked chemotherapy,

NOTE Confidence: 0.864887442857143

00:44:19.190 --> 00:44:21.766 but actually I have to say this

NOTE Confidence: 0.864887442857143

 $00:44:21.766 \longrightarrow 00:44:23.825$  particular drug does have toxicities

NOTE Confidence: 0.864887442857143

00:44:23.825 --> 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

 $00:44:27.492 \longrightarrow 00:44:29.010$  nausea and vomiting,

NOTE Confidence: 0.864887442857143

 $00{:}44{:}29.010 \dashrightarrow 00{:}44{:}31.404$  diarrhea, abdominal symptoms,

NOTE Confidence: 0.864887442857143

00:44:31.404 --> 00:44:34.812 complete alopecia, low blood counts,

 $00:44:34.812 \longrightarrow 00:44:36.648$  decreased appetite, and rash.

NOTE Confidence: 0.864887442857143

00:44:36.648 --> 00:44:38.218 So although it's a very

NOTE Confidence: 0.864887442857143

 $00:44:38.218 \longrightarrow 00:44:40.019$  active drug in a good drug,

NOTE Confidence: 0.864887442857143

00:44:40.020 --> 00:44:42.029 it doesn't seem in terms of toxicity.

NOTE Confidence: 0.864887442857143

 $00:44:42.030 \longrightarrow 00:44:44.570$  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 --> 00:44:46.949 And then finally,

NOTE Confidence: 0.864887442857143

00:44:46.949 --> 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

 $00:44:50.800 \longrightarrow 00:44:51.883$  receptor positive disease.

NOTE Confidence: 0.864887442857143

00:44:51.890 --> 00:44:54.890 We now have five biological agents that we

NOTE Confidence: 0.864887442857143

 $00:44:54.890 \longrightarrow 00:44:57.730$  can combine with our endocrine therapies.

NOTE Confidence: 0.864887442857143

00:44:57.730 --> 00:45:00.555 The three CDK 46 inhibitors

NOTE Confidence: 0.864887442857143

 $00:45:00.555 \longrightarrow 00:45:03.380$  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

 $00:45:05.552 \longrightarrow 00:45:08.528$  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

 $00:45:12.377 \longrightarrow 00:45:14.937$  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

 $00:45:16.690 \longrightarrow 00:45:18.090$  which was a randomized phase

NOTE Confidence: 0.864887442857143

00:45:18.090 --> 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

 $00:45:20.866 \longrightarrow 00:45:22.930$  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 --> 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 --> 00:45:35.165 This can have some substantial

NOTE Confidence: 0.864887442857143

00:45:35.165 --> 00:45:37.630 toxicity as well, including diarrhea.

 $00:45:37.630 \longrightarrow 00:45:39.670$  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

 $00:45:43.802 \longrightarrow 00:45:46.449$  prevented by using an antihistamine.

NOTE Confidence: 0.864887442857143

 $00:45:46.450 \longrightarrow 00:45:49.964$  We have the three CDK 46 inhibitors

NOTE Confidence: 0.864887442857143

00:45:49.964 --> 00:45:53.360 which have remarkable activity in the

NOTE Confidence: 0.864887442857143

 $00:45:53.360 \longrightarrow 00:45:55.544$  metastatic setting in first line,

NOTE Confidence: 0.864887442857143

 $00:45:55.544 \longrightarrow 00:45:57.840$  and says the second line nearly doubling

NOTE Confidence: 0.864887442857143

 $00:45:57.901 \longrightarrow 00:45:59.866$  response rate and nearly doubling

NOTE Confidence: 0.864887442857143

 $00:45:59.866 \longrightarrow 00:46:02.245$  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 --> 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

 $00:46:08.728 \longrightarrow 00:46:11.233$  abemaciclib 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,

 $00:46:14.820 \longrightarrow 00:46:17.876$  and perhaps some potential to cross the CNS.

NOTE Confidence: 0.864887442857143

 $00:46:17.880 \longrightarrow 00:46:20.554$  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

 $00:46:22.975 \longrightarrow 00:46:25.249$  metastatic setting they seem to be

NOTE Confidence: 0.864887442857143

 $00:46:25.249 \longrightarrow 00:46:27.199$  extremely active and equally active.

NOTE Confidence: 0.864887442857143

 $00:46:27.200 \longrightarrow 00:46:28.664$  So as Miriam mentioned,

NOTE Confidence: 0.864887442857143

 $00:46:28.664 \longrightarrow 00:46:30.860$  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

 $00:46:33.532 \longrightarrow 00:46:35.388$  stage setting and she mentioned

NOTE Confidence: 0.888861496206897

 $00:46:35.388 \longrightarrow 00:46:37.650$  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

 $00:46:38.775 \longrightarrow 00:46:41.400$  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

 $00:46:46.192 \longrightarrow 00:46:48.202$  high risk features and enrolled.

00:46:48.210 --> 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 abemaciclib for two

NOTE Confidence: 0.888861496206897

 $00:46:52.752 \longrightarrow 00:46:55.160$  years with the edge of an enderman

NOTE Confidence: 0.888861496206897

 $00:46:55.160 \longrightarrow 00:46:57.499$  therapy versus not an this at early.

NOTE Confidence: 0.888861496206897

 $00:46:57.500 \longrightarrow 00:47:00.080$  At about a year and a half follow up as

NOTE Confidence: 0.888861496206897

 $00:47:00.150 \longrightarrow 00:47:02.769$  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

 $00:47:05.250 \longrightarrow 00:47:07.640$  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

 $00:47:10.140 \longrightarrow 00:47:12.660$  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

 $00:47:17.839 \longrightarrow 00:47:20.240$  and so is there really a difference

NOTE Confidence: 0.888861496206897

00:47:20.240 --> 00:47:21.940 between abemaciclib in pablum?

NOTE Confidence: 0.888861496206897

00:47:21.940 --> 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

00:47:24.870 --> 00:47:25.420 patient population?

NOTE Confidence: 0.888861496206897

 $00:47:25.420 \longrightarrow 00:47:26.975$  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 --> 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

 $00:47:33.250 \longrightarrow 00:47:35.025$  these results are reported at

NOTE Confidence: 0.888861496206897

 $00:47:35.025 \longrightarrow 00:47:36.800$  different time points and there

NOTE Confidence: 0.888861496206897

 $00:47:36.868 \longrightarrow 00:47:38.908$  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

 $00{:}47{:}41.800 \dashrightarrow 00{:}47{:}44.884$  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 --> 00:47:51.100 this analysis is out at 43 months.

NOTE Confidence: 0.888861496206897

 $00:47:51.100 \longrightarrow 00:47:54.430$  And if you looked at the two year mark,

NOTE Confidence: 0.888861496206897

 $00:47:54.430 \longrightarrow 00:47:57.232$  there was a 4% difference in

NOTE Confidence: 0.888861496206897

 $00:47:57.232 \longrightarrow 00:47:59.100$  favor of the palbociclib,

 $00:47:59.100 \longrightarrow 00:48:01.634$  but that went down at three years,

NOTE Confidence: 0.888861496206897

00:48:01.640 --> 00:48:03.915 and at the four year follow-up Timepoint,

NOTE Confidence: 0.888861496206897

 $00:48:03.920 \longrightarrow 00:48:06.176$  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

 $00:48:07.932 \longrightarrow 00:48:08.516$  with abemaciclib,

NOTE Confidence: 0.888861496206897

 $00:48:08.520 \longrightarrow 00:48:11.400$  which appears to be a positive trial so far.

NOTE Confidence: 0.888861496206897

 $00:48:11.400 \longrightarrow 00:48:13.260$  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

 $00:48:17.847 \longrightarrow 00:48:20.089$  that we see some effect of these

NOTE Confidence: 0.888861496206897

 $00:48:20.089 \longrightarrow 00:48:22.219$  while the therapy is going on.

NOTE Confidence: 0.888861496206897

00:48:22.220 --> 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 --> 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

 $00:48:31.931 \longrightarrow 00:48:33.870$  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

 $00:48:35.910 \longrightarrow 00:48:38.018$  three years in high risk disease.

NOTE Confidence: 0.888861496206897

 $00:48:38.020 \longrightarrow 00:48:39.680$  That's my last slide.

NOTE Confidence: 0.89656174

00:48:40.850 --> 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

 $00:48:43.688 \longrightarrow 00:48:45.351$  dealing with the person to sitting

NOTE Confidence: 0.877980285789474

00:48:45.351 --> 00:48:47.043 in front of you question arises.

NOTE Confidence: 0.877980285789474

00:48:47.050 --> 00:48:49.794 Should we act on this data with abemaciclib?

NOTE Confidence: 0.877980285789474

 $00:48:49.800 \longrightarrow 00:48:51.172$  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 --> 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

 $00:48:57.914 \longrightarrow 00:48:59.657$  this up sometimes with patients.

NOTE Confidence: 0.877980285789474

 $00:48:59.660 \longrightarrow 00:49:02.748$  So I recently had a patient who had

 $00:49:02.748 \longrightarrow 00:49:05.512$  12 nodes positive and was starting her

NOTE Confidence: 0.877980285789474

 $00:49:05.512 \longrightarrow 00:49:07.216$  regimen therapy and I discussed with

NOTE Confidence: 0.877980285789474

 $00{:}49{:}07.216 \longrightarrow 00{:}49{:}09.319$  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

 $00:49:10.950 \longrightarrow 00:49:13.365$  Well, no, it's positive and I prescribed

NOTE Confidence: 0.877980285789474

 $00:49:13.365 \longrightarrow 00:49:15.389$  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 --> 00:49:19.456 Again, we don't know if we should be

NOTE Confidence: 0.877980285789474

 $00:49:19.456 \longrightarrow 00:49:21.124$  doing this. We sometimes act early.

NOTE Confidence: 0.877980285789474

00:49:21.124 --> 00:49:23.706 We may be giving therapy 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 --> 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 --> 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

 $00:49:34.680 \longrightarrow 00:49:36.451$  but that's my last slide and I'll

 $00:49:36.451 \longrightarrow 00:49:38.189$  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

 $00:49:43.746 \longrightarrow 00:49:46.653$  that was fantastic and there are questions

NOTE Confidence: 0.8365242304

 $00:49:46.653 \longrightarrow 00:49:49.124$  that are trickling in and they both

NOTE Confidence: 0.8365242304

 $00:49:49.124 \longrightarrow 00:49:51.799$  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

 $00:49:54.690 \longrightarrow 00:49:57.576$  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

 $00{:}50{:}01.044 \dashrightarrow 00{:}50{:}02.900$ epidemiology for risk factors,

NOTE Confidence: 0.8365242304

 $00:50:02.900 \longrightarrow 00:50:06.200$  especially in our vulnerable populations so.

NOTE Confidence: 0.8365242304

 $00:50:06.200 \longrightarrow 00:50:07.169$  Thank you, Andrea.

NOTE Confidence: 0.77995725

 $00:50:14.970 \longrightarrow 00:50:16.218$  You're on mute still.

NOTE Confidence: 0.916978778571429

 $00:50:19.170 \longrightarrow 00:50:19.960$  Good afternoon,

 $00:50:19.960 \longrightarrow 00:50:21.935$  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

 $00:50:24.478 \longrightarrow 00:50:27.725$  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

 $00:50:30.170 \longrightarrow 00:50:32.695$  in 2021 and I reviewed current

NOTE Confidence: 0.916978778571429

00:50:32.695 --> 00:50:35.180 epidemiology and how we got here.

NOTE Confidence: 0.631061254

 $00:50:44.820 \longrightarrow 00:50:47.630$  Sure, but it's not advancing.

NOTE Confidence: 0.803014352

 $00:50:58.350 \longrightarrow 00:51:01.510$  It's my conflict of interest.

NOTE Confidence: 0.803014352

 $00{:}51{:}01.510 \dashrightarrow 00{:}51{:}04.230$  And as you can see on this slide,

NOTE Confidence: 0.803014352

 $00:51:04.230 \longrightarrow 00:51:06.565$  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

 $00:51:08.440 \longrightarrow 00:51:12.176$  It's the most common cancer one season women.

NOTE Confidence: 0.803014352

 $00:51:12.180 \longrightarrow 00:51:14.595$  But it is not the most common

NOTE Confidence: 0.803014352

 $00:51:14.595 \longrightarrow 00:51:17.279$  cause of death that is lung cancer.

NOTE Confidence: 0.803014352

 $00:51:17.280 \longrightarrow 00:51:20.526$  You can compare the results of

NOTE Confidence: 0.803014352

 $00:51:20.526 \longrightarrow 00:51:23.281$  deaths that are anticipated in 2021

 $00:51:23.281 \longrightarrow 00:51:25.458$  for lung cancer, which is 100 and

NOTE Confidence: 0.86731378555556

 $00:51:27.490 \longrightarrow 00:51:30.670$  16,660. It's a very common

NOTE Confidence: 0.86731378555556

 $00:51:30.670 \longrightarrow 00:51:33.214$  tumor in elderly women.

NOTE Confidence: 0.86731378555556

 $00:51:33.220 \longrightarrow 00:51:36.514$  7% of all breast cancers will

NOTE Confidence: 0.86731378555556

 $00:51:36.514 \longrightarrow 00:51:40.358$  appear in women over the age of 70.

NOTE Confidence: 0.853695164

 $00:51:43.450 \longrightarrow 00:51:45.496$  Just want to highlight a little

NOTE Confidence: 0.853695164

 $00:51:45.496 \longrightarrow 00:51:47.373$  bit that breast cancer is

NOTE Confidence: 0.853695164

 $00:51:47.373 \longrightarrow 00:51:49.613$  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

 $00:51:53.054 \longrightarrow 00:51:55.740$  such as Lumenal A and luminal B.

NOTE Confidence: 0.853695164

00:51:55.740 --> 00:51:58.440 The significance of this is going

NOTE Confidence: 0.853695164

 $00:51:58.440 \longrightarrow 00:52:02.166$  to be come clear when we talk about

NOTE Confidence: 0.853695164

 $00:52:02.166 \longrightarrow 00:52:05.092$  etiology and prevention and also keep

NOTE Confidence: 0.853695164

 $00:52:05.092 \longrightarrow 00:52:07.966$  in mind that breast cancer subtypes

 $00:52:07.966 \longrightarrow 00:52:10.871$  actually can change in up to 25%

NOTE Confidence: 0.853695164

 $00:52:10.871 \longrightarrow 00:52:13.976$  of patients when they metastasize.

NOTE Confidence: 0.853695164

 $00:52:13.980 \longrightarrow 00:52:16.195$  Their breast cancer has changed

NOTE Confidence: 0.853695164

 $00:52:16.195 \longrightarrow 00:52:18.892$  subtype and the most common change

NOTE Confidence: 0.853695164

00:52:18.892 --> 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 --> 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

 $00{:}52{:}30.140 \dashrightarrow 00{:}52{:}34.388$  and you can see that lumenal a specifically,

NOTE Confidence: 0.870443961111111

 $00:52:34.390 \longrightarrow 00:52:37.828$  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: 0.870443961111111

 $00:52:42.900 \dashrightarrow 00:52:45.784$  and it's six times more common than

NOTE Confidence: 0.8704439611111111

 $00{:}52{:}45.784 \dashrightarrow 00{:}52{:}48.150$  the triple negative breast cancer.

NOTE Confidence: 0.87256719625

 $00:52:50.320 \longrightarrow 00:52:53.448$  Let's move ahead and talk about risk factors.

NOTE Confidence: 0.87256719625

00:52:53.450 --> 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

 $00:53:03.350 \longrightarrow 00:53:07.109$  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

 $00:53:10.362 \longrightarrow 00:53:13.849$  invasive breast cancer predisposes to both

NOTE Confidence: 0.87256719625

 $00:53:13.849 \longrightarrow 00:53:16.325$  contralateral and ipsilateral primaries.

NOTE Confidence: 0.87256719625

 $00:53:16.330 \longrightarrow 00:53:19.940$  Benign breast disease with atypia.

NOTE Confidence: 0.87256719625

 $00{:}53{:}19.940 \dashrightarrow 00{:}53{:}22.364$  Family history and this is regardless

NOTE Confidence: 0.87256719625

 $00:53:22.364 \longrightarrow 00:53:24.511$  of whether there's a mutation

NOTE Confidence: 0.87256719625

00:53:24.511 --> 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 --> 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

 $00:53:37.074 \longrightarrow 00:53:39.100 \ 10\%$  of all breast cancers.

NOTE Confidence: 0.87256719625

 $00:53:39.100 \longrightarrow 00:53:42.103$  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

 $00:53:48.102 \longrightarrow 00:53:50.820$  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 --> 00:53:56.535 Menses now starts below the age

NOTE Confidence: 0.87256719625

 $00:53:56.535 \longrightarrow 00:53:58.725$  of 11 in the United States.

NOTE Confidence: 0.87256719625

 $00:53:58.730 \longrightarrow 00:54:00.638$  This was not true.

NOTE Confidence: 0.87256719625

00:54:00.638 --> 00:54:03.462 A generation ago, delayed childbearing

NOTE Confidence: 0.87256719625

 $00{:}54{:}03.462 \dashrightarrow 00{:}54{:}06.600$  or no lipperhey late menopause.

NOTE Confidence: 0.87256719625

00:54:06.600 --> 00:54:09.976 Menopause is occurring later now, it said.

NOTE Confidence: 0.87256719625

 $00:54:09.976 \longrightarrow 00:54:11.468$  Between 50 and 51,

NOTE Confidence: 0.87256719625

 $00:54:11.470 \longrightarrow 00:54:12.970$  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 --> 00:54:16.445 exogenous estrogen that has been

NOTE Confidence: 0.87256719625

00:54:16.445 --> 00:54:19.817 given to women to help them through

NOTE Confidence: 0.87256719625

 $00:54:19.817 \longrightarrow 00:54:22.631$  the menopause and that estrogen is

 $00:54:22.631 \longrightarrow 00:54:26.304$  more of a risk when it's combined

NOTE Confidence: 0.87256719625

 $00{:}54{:}26.304 \dashrightarrow 00{:}54{:}28.949$  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

 $00:54:34.324 \longrightarrow 00:54:36.802$  who have had hysterectomies is not

NOTE Confidence: 0.87256719625

 $00:54:36.802 \longrightarrow 00:54:40.260$  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 --> 00:54:46.900 Moving along to radiation,

NOTE Confidence: 0.87256719625

 $00:54:46.900 \longrightarrow 00:54:48.460$  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

 $00:54:52.114 \longrightarrow 00:54:54.470$  radiation for Hodgkin's disease.

NOTE Confidence: 0.87256719625

 $00:54:54.470 \longrightarrow 00:54:57.164$  Radiation therapy is the highest risk

NOTE Confidence: 0.87256719625

 $00{:}54{:}57.164 \dashrightarrow 00{:}54{:}59.940$  when it's given during a dolescence,

NOTE Confidence: 0.87256719625

00:54:59.940 --> 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

 $00:55:06.590 \longrightarrow 00:55:09.010$  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

 $00{:}55{:}23.538 \dashrightarrow 00{:}55{:}27.242$  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

 $00:55:32.083 \longrightarrow 00:55:36.049$  As little as one alcoholic beverage

NOTE Confidence: 0.87256719625

00:55:36.049 --> 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 --> 00:55:46.907 breast cancer and then obesity.

NOTE Confidence: 0.87256719625

 $00:55:46.910 \longrightarrow 00:55:50.018$  Just wanted to highlight breast density.

 $00:55:50.020 \longrightarrow 00:55:54.432$  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

 $00:56:01.544 \longrightarrow 00:56:04.768$  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

 $00:56:10.004 \longrightarrow 00:56:13.352$  So much so that the Christmas

NOTE Confidence: 0.87256719625

 $00:56:13.352 \longrightarrow 00:56:16.417$  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

 $00:56:22.183 \longrightarrow 00:56:24.019$  trial using tamoxifen.

NOTE Confidence: 0.770337186666667

00:56:26.980 --> 00:56:30.730 An risk factors vary by subtype.

NOTE Confidence: 0.770337186666667

 $00{:}56{:}30.730 \dashrightarrow 00{:}56{:}32.346$  Greater parity was associated

NOTE Confidence: 0.770337186666667

 $00{:}56{:}32.346 {\:\dashrightarrow\:} 00{:}56{:}34.770$  with a lower risk of hormone

NOTE Confidence: 0.770337186666667

00:56:34.841 --> 00:56:37.069 receptor positive breast cancer,

NOTE Confidence: 0.770337186666667

 $00:56:37.070 \longrightarrow 00:56:40.094$  but it is an increased risk for

00:56:40.094 --> 00:56:42.040 triple negative breast cancer.

NOTE Confidence: 0.770337186666667

 $00:56:42.040 \longrightarrow 00:56:44.656$  Breastfeeding can cut the risk for

NOTE Confidence: 0.770337186666667

 $00:56:44.656 \longrightarrow 00:56:47.170$  triple negative breast cancer by 50%.

NOTE Confidence: 0.770337186666667

 $00:56:47.170 \longrightarrow 00:56:49.970$  Well, that's not true for

NOTE Confidence: 0.770337186666667

 $00:56:49.970 \longrightarrow 00:56:52.210$  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

 $00:56:59.210 \longrightarrow 00:57:02.594$  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 --> 00:57:09.435 positive breast cancer by delaying

NOTE Confidence: 0.872638806363636

00:57:09.435 --> 00:57:11.825 childbearing having fewer children

NOTE Confidence: 0.872638806363636

00:57:11.825 --> 00:57:15.107 and those things increase the risk.

NOTE Confidence: 0.872638806363636

00:57:15.110 --> 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

 $00:57:20.498 \longrightarrow 00:57:23.522$  areas like the I-95 corridor,

NOTE Confidence: 0.872638806363636

 $00:57:23.522 \longrightarrow 00:57:25.786$  an in Marin County,

00:57:25.790 --> 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

 $00:57:30.643 \longrightarrow 00:57:33.620$  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

 $00:57:36.360 \longrightarrow 00:57:38.355$  Bigger also are more likely

NOTE Confidence: 0.872638806363636

 $00:57:38.355 \longrightarrow 00:57:41.090$  to be diverse in this country,

NOTE Confidence: 0.872638806363636

 $00:57:41.090 \longrightarrow 00:57:44.384$  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

 $00:57:47.410 \longrightarrow 00:57:48.855$  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

 $00:57:50.750 \longrightarrow 00:57:55.578$  Global incidence is increasing.

NOTE Confidence: 0.872638806363636

 $00:57:55.580 \longrightarrow 00:57:58.204$  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

 $00:58:02.484 \longrightarrow 00:58:05.477$  most women get breast cancer when they're

 $00:58:05.477 \longrightarrow 00:58:07.777$  older and less developed countries.

NOTE Confidence: 0.872638806363636

 $00:58:07.780 \longrightarrow 00:58:08.797$  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

 $00:58:13.048 \longrightarrow 00:58:15.308$  having higher rates of obesity.

NOTE Confidence: 0.872638806363636

 $00.58.15.310 \longrightarrow 00.58.16.960$  But as you can imagine,

NOTE Confidence: 0.872638806363636

 $00{:}58{:}16.960 \dashrightarrow 00{:}58{:}20.014$  the case fatality rate is lowest

NOTE Confidence: 0.872638806363636

00:58:20.014 --> 00:58:22.050 in highly developed countries,

NOTE Confidence: 0.872638806363636

 $00{:}58{:}22.050 \to 00{:}58{:}25.587$  and this is even true in our own country.

NOTE Confidence: 0.872638806363636

 $00:58:25.590 \longrightarrow 00:58:27.599$  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

 $00:58:33.850 \longrightarrow 00:58:38.506$  the case fatality rate is the lowest Ann.

NOTE Confidence: 0.872638806363636

 $00:58:38.510 \longrightarrow 00:58:42.398$  You compare that to some of our Southern

NOTE Confidence: 0.872638806363636

 $00{:}58{:}42.398 \dashrightarrow 00{:}58{:}45.789$  states that may have lower incidence

00:58:45.789 --> 00:58:48.694 but higher case fatality rates,

NOTE Confidence: 0.872638806363636

 $00:58:48.700 \longrightarrow 00:58:52.420$  and this may have to do with insurance

NOTE Confidence: 0.872638806363636

 $00:58:52.420 \longrightarrow 00:58:56.427$  in these various states in our country.

NOTE Confidence: 0.872638806363636

 $00:58:56.430 \longrightarrow 00:58:58.843$  When we look at the nationality, the

NOTE Confidence: 0.872638806363636

00:58:58.843 --> 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 --> 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

 $00:59:17.593 \longrightarrow 00:59:20.011$  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

 $00:59:26.906 \longrightarrow 00:59:29.140$  States does vary by subtype.

NOTE Confidence: 0.848581026363636

 $00:59:29.140 \longrightarrow 00:59:33.466$  The hormone receptor positive breast cancers.

00:59:33.470 --> 00:59:35.996 Looking at the most recent SEER

NOTE Confidence: 0.848581026363636

 $00{:}59{:}35.996 \dashrightarrow 00{:}59{:}38.200$  data have an excellent prognosis

NOTE Confidence: 0.848581026363636

 $00:59:38.200 \longrightarrow 00:59:41.259$  and even the five year survival for

NOTE Confidence: 0.848581026363636

00:59:41.259 --> 00:59:44.143 the triple negatives when they are

NOTE Confidence: 0.848581026363636

 $00:59:44.143 \longrightarrow 00:59:46.558$  localized have a better prognosis

NOTE Confidence: 0.848581026363636

 $00:59:46.558 \longrightarrow 00:59:49.360$  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: 0.915700154444445

 $00:59:53.466 \longrightarrow 00:59:55.886$  really tell the whole story.

NOTE Confidence: 0.915700154444445

00:59:55.890 --> 00:59:59.614 First of all, women being diagnosed with

NOTE Confidence: 0.915700154444445

 $00:59:59.614 \longrightarrow 01:00:03.518$  breast cancer today may have better outcomes.

NOTE Confidence: 0.9157001544444445

 $01{:}00{:}03.520 \to 01{:}00{:}06.544$  We'll see in the most recent SEER data,

NOTE Confidence: 0.915700154444445

 $01:00:06.550 \longrightarrow 01:00:09.150$  but diagnostics and treatments

NOTE Confidence: 0.915700154444445

01:00:09.150 --> 01:00:11.750 continue to improve overtime,

NOTE Confidence: 0.915700154444445

01:00:11.750 --> 01:00:14.683 and there's good access in highly developed

NOTE Confidence: 0.915700154444445

01:00:14.683 --> 01:00:17.129 countries and highly developed cities.

NOTE Confidence: 0.915700154444445

01:00:17.130 --> 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: 0.915700154444445 01:00:23.850 --> 01:00:25.434 First of all, NOTE Confidence: 0.915700154444445

01:00:25.434 --> 01:00:28.074 survival rates for hormone receptor

NOTE Confidence: 0.915700154444445

 $01:00:28.074 \longrightarrow 01:00:29.790$  positive breast cancer.

NOTE Confidence: 0.915700154444445

 $01:00:29.790 \longrightarrow 01:00:32.710$  50% of the patients that are going to

NOTE Confidence: 0.915700154444445

 $01:00:32.710 \longrightarrow 01:00:35.338$  relapse will relapse after five years.

NOTE Confidence: 0.915700154444445

 $01:00:35.340 \longrightarrow 01:00:38.756$  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: 0.915700154444445

 $01:00:42.290 \longrightarrow 01:00:45.188$  although they may be due to stage,

NOTE Confidence: 0.9157001544444445

01:00:45.190 --> 01:00:48.396 they may really have to do with

NOTE Confidence: 0.915700154444445

 $01:00:48.396 \longrightarrow 01:00:49.770$  overall health response,

NOTE Confidence: 0.915700154444445

 $01{:}00{:}49.770 \dashrightarrow 01{:}00{:}53.172$  an access to treatment so different

NOTE Confidence: 0.915700154444445

 $01:00:53.172 \longrightarrow 01:00:56.529$  subtypes may predict timing of relapse.

NOTE Confidence: 0.915700154444445

 $01:00:56.530 \longrightarrow 01:00:59.306$  But there are so many other things I'm

 $01:00:59.306 \longrightarrow 01:01:02.436$  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: 0.915700154444445

01:01:05.470 --> 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: 0.915700154444445

 $01:01:11.503 \longrightarrow 01:01:14.288$  really decimated their health system.

NOTE Confidence: 0.915700154444445

01:01:14.290 --> 01:01:16.398 That does change screening.

NOTE Confidence: 0.915700154444445

01:01:16.398 --> 01:01:19.033 It does change treatment and

NOTE Confidence: 0.915700154444445

 $01:01:19.033 \longrightarrow 01:01:21.438$  it will change outcome.

NOTE Confidence: 0.915700154444445

 $01:01:21.440 \longrightarrow 01:01:23.592$  Let's take geopolitical changes

NOTE Confidence: 0.915700154444445

 $01:01:23.592 \longrightarrow 01:01:25.744$  in our own country.

NOTE Confidence: 0.9157001544444445

 $01:01:25.750 \longrightarrow 01:01:27.760$  Let's look at the pandemic.

NOTE Confidence: 0.915700154444445

 $01:01:27.760 \longrightarrow 01:01:30.682$  For the pandemic may have changed

NOTE Confidence: 0.915700154444445

 $01:01:30.682 \longrightarrow 01:01:33.090$  patterns of screening change patterns

NOTE Confidence: 0.9157001544444445

 $01:01:33.090 \longrightarrow 01:01:36.106$  of treatment and I hate to say it

NOTE Confidence: 0.915700154444445

 $01:01:36.106 \longrightarrow 01:01:39.875$  women have been known to increase their

NOTE Confidence: 0.915700154444445

 $01{:}01{:}39.875 \dashrightarrow 01{:}01{:}42.870$  alcohol intake during the pandemic.

 $01{:}01{:}42.870 \longrightarrow 01{:}01{:}47.294$  Are we going to see changes in

NOTE Confidence: 0.915700154444445

01:01:47.294 --> 01:01:50.959 epidemiology due to the pandemic?

NOTE Confidence: 0.915700154444445

 $01:01:50.960 \longrightarrow 01:01:53.738$  So who are the most vulnerable

NOTE Confidence: 0.915700154444445

 $01:01:53.738 \longrightarrow 01:01:55.590$  that we see now?

NOTE Confidence: 0.915700154444445

 $01:01:55.590 \longrightarrow 01:01:59.090$  Black women, particularly younger women.

NOTE Confidence: 0.915700154444445

 $01:01:59.090 \longrightarrow 01:02:02.324$  They are more likely to be diagnosed

NOTE Confidence: 0.915700154444445

 $01:02:02.330 \longrightarrow 01:02:04.315$  with triple negative breast cancer

NOTE Confidence: 0.915700154444445

 $01:02:04.315 \dashrightarrow 01:02:07.090$  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: 0.915700154444445

 $01:02:10.100 \longrightarrow 01:02:12.452$  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: 0.915700154444445

01:02:14.750 --> 01:02:17.090 They presented a later stage,

NOTE Confidence: 0.915700154444445

 $01:02:17.090 \longrightarrow 01:02:20.420$  but their insurance status is worse

NOTE Confidence: 0.915700154444445

 $01:02:20.420 \longrightarrow 01:02:24.090$  twice as likely to be uninsured.

NOTE Confidence: 0.915700154444445 01:02:24.090 --> 01:02:24.536 Well,

01:02:24.536 --> 01:02:26.320 immigrants from less developed

NOTE Confidence: 0.915700154444445

 $01:02:26.320 \longrightarrow 01:02:28.955$  nations we talked about what you

NOTE Confidence: 0.915700154444445

 $01:02:28.955 \longrightarrow 01:02:30.635$  see with global breast cancer

NOTE Confidence: 0.915700154444445

 $01:02:30.635 \longrightarrow 01:02:33.312$  and I'll talk a little bit about

NOTE Confidence: 0.915700154444445

 $01:02:33.312 \longrightarrow 01:02:34.996$  sexual minorities as well.

NOTE Confidence: 0.80241686

01:02:37.490 --> 01:02:40.570 The NCI talks about risks in terms

NOTE Confidence: 0.80241686

 $01:02:40.570 \longrightarrow 01:02:43.020$  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 --> 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 --> 01:03:00.261 groups that are more likely to

NOTE Confidence: 0.80241686

01:03:00.261 --> 01:03:02.545 suffer cancer health disparities,

NOTE Confidence: 0.80241686

 $01:03:02.550 \longrightarrow 01:03:05.448$  and I think I'm going to describe for you

NOTE Confidence: 0.80241686

 $01:03:05.448 \longrightarrow 01:03:08.494$  how many of these apply to breast cancer.

 $01:03:08.500 \longrightarrow 01:03:11.248$  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

 $01:03:13.820 \longrightarrow 01:03:16.585$  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

 $01:03:18.800 \longrightarrow 01:03:22.895$  We also have a higher risk of both getting

NOTE Confidence: 0.80241686

 $01:03:22.895 \longrightarrow 01:03:26.978$  breast cancer or particularly their outcomes.

NOTE Confidence: 0.80241686

01:03:26.980 --> 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 --> 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 --> 01:03:44.822 Well, individuals with disabilities

NOTE Confidence: 0.80241686

 $01:03:44.822 \longrightarrow 01:03:47.930$  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.

01:03:49.250 --> 01:03:52.043 At Mammographic screening

NOTE Confidence: 0.80241686

01:03:52.043 --> 01:03:54.836 in wheelchair population.

NOTE Confidence: 0.80241686

01:03:54.840 --> 01:03:55.417 Again,

NOTE Confidence: 0.80241686

 $01:03:55.417 \longrightarrow 01:03:57.725$  individuals who have poor

NOTE Confidence: 0.80241686

 $01:03:57.725 \longrightarrow 01:04:00.610$  insurance coverage are less likely

NOTE Confidence: 0.80241686

 $01:04:00.696 \longrightarrow 01:04:03.276$  to get the best possible care.

NOTE Confidence: 0.80241686

 $01:04:03.280 \longrightarrow 01:04:05.740$  We talked about the rural areas

NOTE Confidence: 0.80241686

01:04:05.740 --> 01:04:08.930 in the United States in the South

NOTE Confidence: 0.80241686

 $01{:}04{:}08.930 \dashrightarrow 01{:}04{:}11.375$  that those patients have worse

NOTE Confidence: 0.80241686

 $01:04:11.375 \longrightarrow 01:04:13.567$  insurance coverage and are less

NOTE Confidence: 0.80241686

 $01{:}04{:}13.567 \dashrightarrow 01{:}04{:}15.829$  likely to have access to care.

NOTE Confidence: 0.80241686

01:04:15.830 --> 01:04:17.426 LGBT population.

NOTE Confidence: 0.80241686

01:04:17.426 --> 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

 $01:04:29.816 \longrightarrow 01:04:33.520$  factors that would increase their risk.

01:04:33.520 --> 01:04:36.760 We talked about immigrants,

NOTE Confidence: 0.80241686

 $01:04:36.760 \longrightarrow 01:04:37.570$  refugees,

NOTE Confidence: 0.80241686

01:04:37.570 --> 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

 $01:04:44.590 \longrightarrow 01:04:46.996$  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

 $01:04:50.132 \longrightarrow 01:04:52.316$  diagnostic advances and some of the

NOTE Confidence: 0.80241686

 $01{:}04{:}52.398 \to 01{:}04{:}55.387$  things that Mariam and Mike talked about.

NOTE Confidence: 0.80241686

01:04:55.390 --> 01:04:58.435 But risk factors have been identified and

NOTE Confidence: 0.80241686

 $01:04:58.435 \longrightarrow 01:05:01.687$  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

 $01:05:03.910 \longrightarrow 01:05:06.070$  but in our own country that

NOTE Confidence: 0.80241686

 $01:05:06.070 \longrightarrow 01:05:08.176$  are increased risk for adverse

NOTE Confidence: 0.80241686

 $01:05:08.176 \longrightarrow 01:05:10.540$  outcomes and special populations.

NOTE Confidence: 0.80241686

 $01:05:10.540 \longrightarrow 01:05:14.194$  In the United States are disproportionately

 $01:05:14.194 \longrightarrow 01:05:16.630$  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

 $01:05:28.286 \longrightarrow 01:05:30.596$  transform cancer care for all people.

NOTE Confidence: 0.80241686

 $01:05:30.600 \longrightarrow 01:05:33.272$  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 --> 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 --> 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

 $01:05:46.092 \longrightarrow 01:05:48.594$  communities that people grew up in.

NOTE Confidence: 0.913730628333333

01:05:50.760 --> 01:05:52.638 And thank you for your attention,

NOTE Confidence: 0.913730628333333

 $01:05:52.640 \longrightarrow 01:05:55.167$  and I always like to mention those

NOTE Confidence: 0.913730628333333

 $01:05:55.167 \longrightarrow 01:05:58.096$  that I seen with breast cancer or

 $01{:}05{:}58.096 \dashrightarrow 01{:}06{:}00.736$  have been affected by the disease.

NOTE Confidence: 0.82665481

 $01:06:03.880 \longrightarrow 01:06:05.506$  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 --> 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 --> 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

 $01:06:27.394 \longrightarrow 01:06:29.338$  that we have moving forward in

NOTE Confidence: 0.82665481

 $01:06:29.338 \longrightarrow 01:06:31.802$  terms of not only screening but

 $01:06:31.802 \longrightarrow 01:06:34.707$  treatment of our more vulnerable.

NOTE Confidence: 0.82665481

 $01:06:34.710 \longrightarrow 01:06:36.480$  Populations there were a couple of

NOTE Confidence: 0.82665481

 $01:06:36.480 \longrightarrow 01:06:38.554$  questions in the chat box and hopefully

NOTE Confidence: 0.82665481

 $01:06:38.554 \longrightarrow 01:06:40.507$  others will come in the question

NOTE Confidence: 0.82665481

 $01:06:40.566 \longrightarrow 01:06:42.358$  and answer until we get some more.

NOTE Confidence: 0.82665481

01:06:42.360 --> 01:06:44.866 I wanted to start with a question

NOTE Confidence: 0.82665481

 $01:06:44.866 \longrightarrow 01:06:47.216$  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

 $01:06:56.850 \longrightarrow 01:06:59.386$  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

01:07:08.446 --> 01:07:10.630 that trial to them on deescalation,

NOTE Confidence: 0.82665481

01:07:10.630 --> 01:07:11.686 but kind of.

NOTE Confidence: 0.82665481

 $01:07:11.686 \longrightarrow 01:07:14.150$  How do you make them feel comfortable

NOTE Confidence: 0.82665481

01:07:14.225 --> 01:07:16.410 moving forward down that route?

NOTE Confidence: 0.82665481

 $01{:}07{:}16.410 --> 01{:}07{:}16.620 \ {\rm Yeah},$ 

NOTE Confidence: 0.71441351

 $01:07:16.630 \longrightarrow 01:07:17.874$  that's a great question.

NOTE Confidence: 0.71441351

01:07:17.874 --> 01:07:19.490 Doctor goes on, I think.

NOTE Confidence: 0.71441351

 $01{:}07{:}19.490 \dashrightarrow 01{:}07{:}23.520$  I think it takes a lot of open communication,

NOTE Confidence: 0.71441351

 $01:07:23.520 \longrightarrow 01:07:26.008$  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

 $01{:}07{:}29.623 \dashrightarrow 01{:}07{:}32.528$  time laying out the rationale.

NOTE Confidence: 0.71441351

 $01:07:32.530 \longrightarrow 01:07:35.258$  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

 $01:07:38.000 \longrightarrow 01:07:39.688$  essentially synthesizing all the

NOTE Confidence: 0.71441351

 $01:07:39.688 \longrightarrow 01:07:42.660$  best data that we have to date.

01:07:42.660 --> 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

 $01:07:46.041 \longrightarrow 01:07:49.808$  necessarily more so it does take more time.

NOTE Confidence: 0.71441351

 $01:07:49.810 \longrightarrow 01:07:51.986$  But I think I tend to use that

NOTE Confidence: 0.71441351

01:07:51.986 --> 01:07:54.430 as an educational opportunity,

NOTE Confidence: 0.71441351

01:07:54.430 --> 01:07:57.307 and certainly if they don't feel comfortable,

NOTE Confidence: 0.71441351

01:07:57.310 --> 01:07:58.834 that's their choice.

NOTE Confidence: 0.71441351

01:07:58.834 --> 01:08:00.866 But I think regardless,

NOTE Confidence: 0.71441351

 $01{:}08{:}00.870 \dashrightarrow 01{:}08{:}03.510$  I think it opens up the dialogue for

NOTE Confidence: 0.71441351

 $01:08:03.510 \longrightarrow 01:08:05.410$  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 --> 01:08:10.340 about the clinical trial process,

NOTE Confidence: 0.71441351

 $01:08:10.340 \longrightarrow 01:08:13.520$  how these concepts are vetted so

NOTE Confidence: 0.71441351

 $01:08:13.520 \longrightarrow 01:08:16.919$  carefully and that we would never.

NOTE Confidence: 0.71441351

01:08:16.920 --> 01:08:18.264 Consciously give a therapy

NOTE Confidence: 0.71441351

 $01:08:18.264 \longrightarrow 01:08:20.630$  that is known to be so far.

 $01:08:22.430 \longrightarrow 01:08:26.018$  Angel yeah. In a safer,

NOTE Confidence: 0.56738253

 $01:08:26.018 \longrightarrow 01:08:27.050$  vulnerable population.

NOTE Confidence: 0.92762132875

01:08:27.050 --> 01:08:29.222 So many women have to work

NOTE Confidence: 0.92762132875

 $01:08:29.222 \longrightarrow 01:08:32.450$  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

 $01:08:34.140 \longrightarrow 01:08:36.710$  And it's not a choice.

NOTE Confidence: 0.92762132875

 $01:08:36.710 \longrightarrow 01:08:39.769$  And if we can deescalate it can

NOTE Confidence: 0.92762132875

01:08:39.769 --> 01:08:42.393 be the difference between being

NOTE Confidence: 0.92762132875

01:08:42.393 --> 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

 $01:08:51.010 \longrightarrow 01:08:54.920$  they can be attractive. Slowly.

NOTE Confidence: 0.850641555

 $01:08:56.990 \longrightarrow 01:08:59.238$  There is a question in the chat box

NOTE Confidence: 0.850641555

 $01:08:59.238 \longrightarrow 01:09:01.389$  from Carolyn Friedman and maybe Andrew.

NOTE Confidence: 0.850641555

 $01:09:01.390 \longrightarrow 01:09:03.582$  You want to tackle this first and then

 $01:09:03.582 \longrightarrow 01:09:05.848$  the other is why are dense breast

NOTE Confidence: 0.850641555

 $01:09:05.848 \longrightarrow 01:09:07.503$  dense breasted women still getting

NOTE Confidence: 0.850641555

01:09:07.568 --> 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

 $01:09:11.388 \longrightarrow 01:09:12.600$  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

 $01:09:15.240 \longrightarrow 01:09:18.607$  I'm, well, Connecticut was one of the

NOTE Confidence: 0.874390768

 $01:09:18.607 \longrightarrow 01:09:22.283$  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

 $01:09:28.312 \longrightarrow 01:09:31.032$  sure that there is insurance

NOTE Confidence: 0.874390768

 $01:09:31.040 \longrightarrow 01:09:34.224$  coverage for additional testing

NOTE Confidence: 0.874390768

 $01:09:34.224 \longrightarrow 01:09:39.000$  either an ultrasound or an MRI.

NOTE Confidence: 0.874390768

01:09:39.000 --> 01:09:42.024 An Carolyn, you bring up a great point.

NOTE Confidence: 0.874390768

 $01:09:42.030 \longrightarrow 01:09:45.229$  Many states have signed on to this.

NOTE Confidence: 0.874390768

 $01:09:45.230 \longrightarrow 01:09:50.536$  But not all States and you ask a question.

 $01:09:50.536 \dashrightarrow 01:09:53.500$  I think it's a matter of priorities.

NOTE Confidence: 0.874390768

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

 $01:09:58.200 \longrightarrow 01:10:01.242$  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 --> 01:10:08.077 experience of having a mammographic

NOTE Confidence: 0.874390768

 $01:10:08.077 \longrightarrow 01:10:09.890$  le undetectable tumor.

NOTE Confidence: 0.874390768

 $01:10:09.890 \longrightarrow 01:10:12.220$  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

 $01{:}10{:}18.410 \dashrightarrow 01{:}10{:}21.650$  Michael, I'm here Chesapeake early on,

NOTE Confidence: 0.788246111666667

01:10:21.650 --> 01:10:24.298 about two years ago it posed a question

NOTE Confidence: 0.788246111666667

 $01:10:24.298 \longrightarrow 01:10:26.858$  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

 $01:10:29.669 \longrightarrow 01:10:32.169$  cancer in the neoadjuvant setting.

NOTE Confidence: 0.788246111666667

 $01:10:32.170 \longrightarrow 01:10:33.500$  You know, have things changed,

 $01:10:33.500 \longrightarrow 01:10:36.650$  or is it still something that were?

NOTE Confidence: 0.788246111666667

01:10:36.650 --> 01:10:39.422 You know struggling through case by

NOTE Confidence: 0.788246111666667

 $01:10:39.422 \longrightarrow 01:10:41.868$  case and differences maybe between

NOTE Confidence: 0.788246111666667

 $01:10:41.868 \longrightarrow 01:10:45.800$  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 --> 01:10:54.769 still not standard of care.

NOTE Confidence: 0.858326927333333

 $01:10:54.770 \longrightarrow 01:10:57.010$  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

 $01:11:00.900 \longrightarrow 01:11:02.480$  it improves the pathological

NOTE Confidence: 0.858326927333333

 $01{:}11{:}02.480 \dashrightarrow 01{:}11{:}03.665$  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 --> 01:11:11.359 breast cancer is to maximize the triple,

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

 $01:11:16.182 \longrightarrow 01:11:17.964$  are the best to be cured.

NOTE Confidence: 0.858326927333333

 $01:11:17.970 \longrightarrow 01:11:19.934$  Then it's reasonable to

NOTE Confidence: 0.858326927333333

 $01:11:19.934 \longrightarrow 01:11:21.407$  consider incorporating it.

NOTE Confidence: 0.858326927333333

01:11:21.410 --> 01:11:23.270 One might not think it's

NOTE Confidence: 0.858326927333333

 $01{:}11{:}23.270 \dashrightarrow 01{:}11{:}25.130$  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 --> 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

 $01:11:32.952 \longrightarrow 01:11:34.892$  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

 $01:11:37.464 \longrightarrow 01:11:39.349$  response rate for BRCA germline

NOTE Confidence: 0.858326927333333

01:11:39.349 --> 01:11:41.229 mutation carriers is quite high,

01:11:41.230 --> 01:11:43.396 so it may be worth incorporating

NOTE Confidence: 0.858326927333333

01:11:43.396 --> 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

 $01:11:48.975 \longrightarrow 01:11:50.650$  this Platten to standard chemotherapy

NOTE Confidence: 0.858326927333333

 $01:11:50.650 \longrightarrow 01:11:53.493$  and it wasn't much of a difference in

NOTE Confidence: 0.858326927333333

 $01:11:53.493 \longrightarrow 01:11:55.293$  terms of pathological complete response.

NOTE Confidence: 0.858326927333333

 $01:11:55.300 \longrightarrow 01:11:57.910$  For just just that comparison.

NOTE Confidence: 0.858326927333333

01:11:57.910 --> 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

 $01:12:06.690 \longrightarrow 01:12:08.748$  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

 $01:12:10.975 \longrightarrow 01:12:13.230$  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

 $01:12:15.552 \longrightarrow 01:12:17.520$  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 --> 01:12:21.888 the last two or three decades?

NOTE Confidence: 0.7494846625

01:12:21.890 --> 01:12:24.602 And maybe expanding on some of the exciting

NOTE Confidence: 0.7494846625

01:12:24.602 --> 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

 $01:12:28.670 \longrightarrow 01:12:30.290$  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

 $01:12:37.840 \longrightarrow 01:12:42.776$  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 --> 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

 $01:12:50.470 \longrightarrow 01:12:54.096$  but there is still a huge disparity.

NOTE Confidence: 0.850145492142857

 $01:12:54.100 \longrightarrow 01:12:58.040$  Partially because white women are

 $01:12:58.040 \longrightarrow 01:13:01.957$  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 --> 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

 $01:13:17.128 \longrightarrow 01:13:19.348$  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

 $01:13:21.870 \longrightarrow 01:13:23.984$  pronounce half the drugs that you guys

NOTE Confidence: 0.837891923076923

 $01:13:23.984 \longrightarrow 01:13:26.290$  can put out the transducer map I get,

NOTE Confidence: 0.837891923076923

 $01:13:26.290 \longrightarrow 01:13:28.130$  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

 $01{:}13{:}32.486 \dashrightarrow 01{:}13{:}34.130$  think what you're pointing at is,

NOTE Confidence: 0.872252413333333

 $01:13:34.130 \longrightarrow 01:13:37.140$  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

 $01:13:43.342 \longrightarrow 01:13:45.576$  in the coming years because of these

NOTE Confidence: 0.872252413333333

 $01{:}13{:}45.576 \dashrightarrow 01{:}13{:}46.992$  antibody drug conjugate the rapies.

NOTE Confidence: 0.8079124575

 $01:13:49.590 \longrightarrow 01:13:52.551$  Drugs like this have shown to have

NOTE Confidence: 0.8079124575

 $01:13:52.551 \longrightarrow 01:13:55.080$  remarkable activity even in what we would

NOTE Confidence: 0.8079124575

01:13:55.080 --> 01:13:56.616 consider normally hurting negative,

NOTE Confidence: 0.8079124575

 $01:13:56.616 \longrightarrow 01:13:59.184$  but just a little bit of

NOTE Confidence: 0.8079124575

 $01:13:59.184 \longrightarrow 01:14:01.797$  her to her too low signal.

NOTE Confidence: 0.8079124575

 $01:14:01.800 \longrightarrow 01:14:04.253$  Is associated with significant outcomes.

NOTE Confidence: 0.8079124575

 $01:14:04.253 \longrightarrow 01:14:09.199$  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 --> 01:14:14.542 I think we will be looking at

NOTE Confidence: 0.8079124575

 $01:14:14.542 \longrightarrow 01:14:15.768$  different standards or care

NOTE Confidence: 0.8079124575

 $01{:}14{:}15.768 \dashrightarrow 01{:}14{:}17.128$  for this purchase subgroup.

NOTE Confidence: 0.86461306625

 $01:14:18.210 \longrightarrow 01:14:20.394$  And for those who couldn't see the question,

NOTE Confidence: 0.86461306625

 $01:14:20.400 \longrightarrow 01:14:22.703$  it will is will trousers some outdoor

 $01:14:22.703 \longrightarrow 01:14:24.880$  teak sent he can make all low.

NOTE Confidence: 0.86461306625

01:14:24.880 --> 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 therapy.

NOTE Confidence: 0.86461306625

01:14:28.150 --> 01:14:29.835 And will this change the

NOTE Confidence: 0.86461306625

01:14:29.835 --> 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

 $01:14:34.950 \longrightarrow 01:14:38.135$  obviously we need to wait for additional.

NOTE Confidence: 0.836180874

01:14:38.140 --> 01:14:41.060 You know, phase three data for that category,

NOTE Confidence: 0.836180874

 $01:14:41.060 \longrightarrow 01:14:44.399$  but so far the results are very,

NOTE Confidence: 0.836180874

01:14:44.400 --> 01:14:48.144 very promising. I think there may

NOTE Confidence: 0.836180874

 $01{:}14{:}48.144 \dashrightarrow 01{:}14{:}52.069$  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

 $01:14:53.870 \longrightarrow 01:14:56.198$  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

 $01:15:00.442 \longrightarrow 01:15:02.449$  we're going to have a lot more.

 $01:15:02.450 \longrightarrow 01:15:04.928$  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

 $01:15:06.526 \longrightarrow 01:15:07.590$  effective class of drugs.

NOTE Confidence: 0.885659614444444

 $01:15:09.090 \longrightarrow 01:15:12.735$  So maybe a question for all three of you.

NOTE Confidence: 0.885659614444444

01:15:12.740 --> 01:15:14.700 You know, I guess, how do you you

NOTE Confidence: 0.885659614444444

01:15:14.700 --> 01:15:16.611 know in your leadership positions and

NOTE Confidence: 0.885659614444444

 $01:15:16.611 \longrightarrow 01:15:19.077$  when you go to advocate for these

NOTE Confidence: 0.885659614444444

 $01:15:19.077 \longrightarrow 01:15:21.225$  drug therapy trials to be developed,

NOTE Confidence: 0.885659614444444

01:15:21.230 --> 01:15:24.394 you know how do you convince drug

NOTE Confidence: 0.885659614444444

 $01:15:24.394 \longrightarrow 01:15:26.176$  companies and pharmaceuticals to

NOTE Confidence: 0.8856596144444444

 $01:15:26.176 \longrightarrow 01:15:28.633$  deescalate when so much of their work

NOTE Confidence: 0.885659614444444

 $01:15:28.633 \longrightarrow 01:15:31.437$  is based on giving more so that they

NOTE Confidence: 0.885659614444444

 $01{:}15{:}31.437 \dashrightarrow 01{:}15{:}34.332$  can make more money for themselves and

NOTE Confidence: 0.885659614444444

 $01:15:34.332 \longrightarrow 01:15:37.930$  their shareholders and that kind of that.

NOTE Confidence: 0.885659614444444

 $01:15:37.930 \longrightarrow 01:15:40.927$  Challenge that you know that we all we all

 $01:15:40.927 \longrightarrow 01:15:43.808$  face in in this in these discussions.

NOTE Confidence: 0.87893873

 $01:15:47.570 \longrightarrow 01:15:49.260$  No simple answer, I'm sure. I

NOTE Confidence: 0.824169366666667

 $01:15:49.270 \longrightarrow 01:15:52.348$  think there is such a mark.

NOTE Confidence: 0.824169366666667

 $01:15:52.350 \longrightarrow 01:15:53.988$  I live in a market because

NOTE Confidence: 0.824169366666667

 $01:15:53.988 \longrightarrow 01:15:55.080$  these are human lives,

NOTE Confidence: 0.824169366666667

 $01:15:55.080 \longrightarrow 01:15:58.496$  but there there is so much need.

NOTE Confidence: 0.824169366666667

 $01:15:58.500 \longrightarrow 01:15:59.912$  For additional therapeutic that

NOTE Confidence: 0.824169366666667

 $01:15:59.912 \longrightarrow 01:16:02.451$  sadly there is a market to have

NOTE Confidence: 0.824169366666667

 $01:16:02.451 \longrightarrow 01:16:04.226$  new drugs that address things.

NOTE Confidence: 0.824169366666667

01:16:04.230 --> 01:16:06.085 But one thing if we were talking

NOTE Confidence: 0.824169366666667

 $01{:}16{:}06.085 \dashrightarrow 01{:}16{:}07.782$  about the business model of things

NOTE Confidence: 0.824169366666667

 $01:16:07.782 \longrightarrow 01:16:09.480$  is what happens in breast cancer?

NOTE Confidence: 0.824169366666667

 $01:16:09.480 \longrightarrow 01:16:11.532$  Is if an agent is shown to be effective

NOTE Confidence: 0.824169366666667

 $01:16:11.532 \longrightarrow 01:16:13.536$  in the metastatic setting then we move

NOTE Confidence: 0.824169366666667

 $01:16:13.536 \longrightarrow 01:16:15.560$  it forward to the earlier stages.

NOTE Confidence: 0.824169366666667

 $01:16:15.560 \longrightarrow 01:16:17.380$  Untested and early state setting.

 $01:16:17.380 \longrightarrow 01:16:19.921$  So just take the CD 46 inhibitors

NOTE Confidence: 0.824169366666667

 $01:16:19.921 \longrightarrow 01:16:22.590$  or even even some of these Adcs.

NOTE Confidence: 0.824169366666667

01:16:22.590 --> 01:16:24.438 I think the market will expand

NOTE Confidence: 0.824169366666667

 $01:16:24.438 \longrightarrow 01:16:26.801$  and they will be tested in these

NOTE Confidence: 0.824169366666667

 $01:16:26.801 \longrightarrow 01:16:28.571$  earlier stage cancers with the

NOTE Confidence: 0.824169366666667

 $01:16:28.571 \longrightarrow 01:16:30.790$  goal of improving outcomes so.

NOTE Confidence: 0.824169366666667

01:16:30.790 --> 01:16:32.617 I don't, I think they'll do fine.

NOTE Confidence: 0.824169366666667

 $01:16:32.620 \longrightarrow 01:16:33.890$  I think they'll be OK.

NOTE Confidence: 0.896390301666667

 $01:16:34.600 \longrightarrow 01:16:36.556$  And I guess I would add the drug

NOTE Confidence: 0.896390301666667

 $01:16:36.556 \longrightarrow 01:16:38.340$  looks the best when it has the best

NOTE Confidence: 0.896390301666667

 $01:16:38.396 \longrightarrow 01:16:40.279$  outcome and the drugs have the best

NOTE Confidence: 0.896390301666667

 $01:16:40.279 \longrightarrow 01:16:42.156$  outcome when they are used in the

NOTE Confidence: 0.896390301666667

 $01{:}16{:}42.156 \dashrightarrow 01{:}16{:}43.426$  population for which they there

NOTE Confidence: 0.896390301666667

 $01:16:43.426 \longrightarrow 01:16:44.930$  is really the benefit for them.

NOTE Confidence: 0.7771661

01:16:46.970 --> 01:16:48.150 And I was going to say,

01:16:48.150 --> 01:16:50.618 with respect to disparities,

NOTE Confidence: 0.899846958

01:16:50.618 --> 01:16:55.072 that if more people who had chronic

NOTE Confidence: 0.899846958

 $01:16:55.072 \longrightarrow 01:16:58.080$  conditions from different backgrounds

NOTE Confidence: 0.899846958

 $01:16:58.080 \longrightarrow 01:17:01.840$  were in the clinical trials,

NOTE Confidence: 0.899846958

 $01:17:01.840 \longrightarrow 01:17:04.717$  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 --> 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

 $01:17:15.726 \longrightarrow 01:17:18.440$  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 --> 01:17:22.940 maybe better for the healthy,

NOTE Confidence: 0.899846958

01:17:22.940 --> 01:17:25.884 wealthy and wise patients,

NOTE Confidence: 0.899846958

01:17:25.884 --> 01:17:30.300 but not necessarily for other patients.

NOTE Confidence: 0.850890446666667

01:17:31.610 --> 01:17:33.150 And maybe that points to the kind

NOTE Confidence: 0.850890446666667

01:17:33.150 --> 01:17:34.810 of the low resource countries,

01:17:34.810 --> 01:17:36.664 because a lot of this has been focused on,

NOTE Confidence: 0.850890446666667

01:17:36.670 --> 01:17:37.513 you know, discussions,

NOTE Confidence: 0.850890446666667

 $01:17:37.513 \longrightarrow 01:17:39.199$  and what happens here in the

NOTE Confidence: 0.850890446666667

01:17:39.199 --> 01:17:40.510 United States and you know,

NOTE Confidence: 0.850890446666667

 $01:17:40.510 \longrightarrow 01:17:42.904$  many of the audience you know are

NOTE Confidence: 0.850890446666667

01:17:42.904 --> 01:17:44.896 what may be potentially calling

NOTE Confidence: 0.850890446666667

 $01:17:44.896 \longrightarrow 01:17:47.101$  in or watching from overseas

NOTE Confidence: 0.850890446666667

 $01{:}17{:}47.101 \dashrightarrow 01{:}17{:}49.879$  and a low resource settings.

NOTE Confidence: 0.850890446666667

 $01{:}17{:}49.880 \dashrightarrow 01{:}17{:}52.071$  And you know some of the challenges

NOTE Confidence: 0.850890446666667

 $01:17:52.071 \longrightarrow 01:17:53.969$  they may face not having the

NOTE Confidence: 0.850890446666667

 $01{:}17{:}53.970 \dashrightarrow 01{:}17{:}55.914$  access of the same drug the rapies

NOTE Confidence: 0.850890446666667

 $01:17:55.914 \longrightarrow 01:17:57.938$  that we do here in the US.

NOTE Confidence: 0.8874447

 $01:18:00.720 \longrightarrow 01:18:03.185$  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

 $01:18:12.525 \longrightarrow 01:18:14.859$  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

 $01:18:17.268 \longrightarrow 01:18:19.676$  and that includes diagnostics.

NOTE Confidence: 0.825585508571429

01:18:19.680 --> 01:18:22.472 That's one area where if you can't even

NOTE Confidence: 0.825585508571429

01:18:22.472 --> 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

 $01:18:30.284 \longrightarrow 01:18:32.156$  an access to the rapeutic.

NOTE Confidence: 0.825585508571429

 $01:18:32.160 \longrightarrow 01:18:33.990$  Supportive care and symptom management.

NOTE Confidence: 0.825585508571429

 $01:18:33.990 \longrightarrow 01:18:37.203$  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

 $01:18:39.033 \longrightarrow 01:18:42.049$  that we can at least have a better

01:18:42.049 --> 01:18:44.357 understanding of the subtype of breast

NOTE Confidence: 0.825585508571429

 $01:18:44.357 \longrightarrow 01:18:46.790$  cancer and then further working with

NOTE Confidence: 0.825585508571429

 $01:18:46.790 \longrightarrow 01:18:48.990$  pharma companies to form collaboration.

NOTE Confidence: 0.825585508571429

01:18:48.990 --> 01:18:51.748 So so for those who are interested

NOTE Confidence: 0.825585508571429

 $01:18:51.750 \longrightarrow 01:18:53.810$  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 --> 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 --> 01:19:03.486 I'm also encouraged at Yale seeing

NOTE Confidence: 0.839474755454545

 $01:19:03.486 \longrightarrow 01:19:06.340$  younger physicians who are very,

NOTE Confidence: 0.839474755454545

01:19:06.340 --> 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

 $01:19:20.420 \longrightarrow 01:19:23.340$  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

 $01{:}19{:}30.735 \dashrightarrow 01{:}19{:}32.880$  Gauchan for organizing the series

NOTE Confidence: 0.801163685625

 $01:19:32.950 \longrightarrow 01:19:35.056$  of best breast care is really,

NOTE Confidence: 0.801163685625

 $01:19:35.060 \longrightarrow 01:19:39.608$  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 --> 01:19:44.820 And I'll say that you asked about the

NOTE Confidence: 0.865352983684211

01:19:44.820 --> 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

 $01:19:47.570 \longrightarrow 01:19:48.830$  and I'll say clinical trials

NOTE Confidence: 0.865352983684211

 $01:19:48.830 \longrightarrow 01:19:50.090$  is also the best care.

NOTE Confidence: 0.93961334

01:19:51.540 --> 01:19:52.530 Absolutely. NOTE Confidence: 0.905919320333333

 $01{:}19{:}53.660 \dashrightarrow 01{:}19{:}55.884$  And I was just going to conclude by

NOTE Confidence: 0.905919320333333

01:19:55.884 --> 01:19:58.572 saying I'm lucky to be able to work with

NOTE Confidence: 0.905919320333333

 $01:19:58.572 \longrightarrow 01:20:00.581$  the colleagues that I can because we

NOTE Confidence: 0.905919320333333

 $01:20:00.581 \longrightarrow 01:20:02.540$  really do have a breadth of experience.

NOTE Confidence: 0.905919320333333

01:20:02.540 --> 01:20:05.780 And thank you very much for having me here.

 $01:20:06.530 \longrightarrow 01:20:08.539$  Thank you everyone and would like to

NOTE Confidence: 0.865230198461538

 $01{:}20{:}08.539 \to 01{:}20{:}10.730$  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 --> 01:20:13.880 next door or from overseas.

NOTE Confidence: 0.865230198461538

 $01:20:13.880 \longrightarrow 01:20:15.769$  This is a lot of fun. Thanks so much.