## WEBVTT

NOTE duration:"01:00:46" NOTE recognizability:0.822

NOTE language:en-us

NOTE Confidence: 0.802374280588235

00:00:00.000 --> 00:00:01.716 So the yield Cancer Center I

NOTE Confidence: 0.802374280588235

 $00:00:01.716 \longrightarrow 00:00:03.243$  wanted to welcome those attending

NOTE Confidence: 0.802374280588235

 $00:00:03.243 \longrightarrow 00:00:05.175$  as well as my participants here

NOTE Confidence: 0.802374280588235

 $00:00:05.180 \longrightarrow 00:00:07.958$  for the ash update on lymphoma.

NOTE Confidence: 0.802374280588235

00:00:07.960 --> 00:00:09.952 So my name is Scott Harrington

NOTE Confidence: 0.802374280588235

 $00{:}00{:}09.952 \dashrightarrow 00{:}00{:}12.012$ lymphoma clinician as well as a

NOTE Confidence: 0.802374280588235

 $00:00:12.012 \longrightarrow 00:00:13.360$  health services researcher and

NOTE Confidence: 0.802374280588235

 $00{:}00{:}13.360 \dashrightarrow 00{:}00{:}15.240$  I'm joined with Doctor Kothari.

NOTE Confidence: 0.802374280588235

00:00:15.240 --> 00:00:17.778 He'll be focusing on aggressive B

NOTE Confidence: 0.802374280588235

 $00:00:17.778 \dashrightarrow 00:00:19.728$  cell malignancies and mantle cell

NOTE Confidence: 0.802374280588235

00:00:19.728 --> 00:00:22.101 lymphoma as well as doctor Taxin Sethi

NOTE Confidence: 0.802374280588235

 $00:00:22.101 \longrightarrow 00:00:24.268$  who will present some updates on

NOTE Confidence: 0.802374280588235

 $00:00:24.268 \longrightarrow 00:00:26.720$  Hodgkin lymphoma and T cell lymphomas.

 $00:00:26.720 \longrightarrow 00:00:28.232$  Dr Frost will be joining us

NOTE Confidence: 0.802374280588235

00:00:28.232 --> 00:00:30.069 towards the end to help lead the.

NOTE Confidence: 0.802374280588235

 $00{:}00{:}30.070 \dashrightarrow 00{:}00{:}31.570$  Question and answer discussion.

NOTE Confidence: 0.905562311111111

00:00:35.900 --> 00:00:38.126 So I know many have been focused

NOTE Confidence: 0.905562311111111

 $00:00:38.126 \longrightarrow 00:00:40.288$  on COVID and would love to

NOTE Confidence: 0.905562311111111

 $00:00:40.288 \longrightarrow 00:00:42.183$  look forward into the future.

NOTE Confidence: 0.905562311111111

00:00:42.190 --> 00:00:45.054 But in terms of indolent lymphomas and CLL,

NOTE Confidence: 0.905562311111111

00:00:45.060 --> 00:00:47.170 my slides are actually mostly

NOTE Confidence: 0.9055623111111111

 $00:00:47.170 \longrightarrow 00:00:50.058$  focused on on how to kind of

NOTE Confidence: 0.905562311111111

00:00:50.058 --> 00:00:52.003 navigate our patients through the

NOTE Confidence: 0.905562311111111

 $00:00:52.003 \longrightarrow 00:00:54.560$  COVID era with indolent lymphomas.

NOTE Confidence: 0.905562311111111

 $00:00:54.560 \longrightarrow 00:00:55.680$  He's in my disclosures.

NOTE Confidence: 0.783083061111111

 $00:00:58.530 \longrightarrow 00:01:00.545$  And when we think about

NOTE Confidence: 0.7830830611111111

 $00{:}01{:}00.545 \dashrightarrow 00{:}01{:}02.157$  approaching sealant on how,

NOTE Confidence: 0.783083061111111

 $00:01:02.160 \longrightarrow 00:01:03.840$  given the uncertainty that we are

NOTE Confidence: 0.783083061111111

 $00:01:03.840 \longrightarrow 00:01:05.470$  facing with the COVID pandemic,

 $00:01:05.470 \longrightarrow 00:01:07.474$  there's a few takeaways of historical

NOTE Confidence: 0.783083061111111

 $00{:}01{:}07.474 \dashrightarrow 00{:}01{:}09.838$  data that really come to forefront of

NOTE Confidence: 0.783083061111111

00:01:09.838 --> 00:01:11.764 my mind when approaching a patient,

NOTE Confidence: 0.783083061111111

 $00:01:11.770 \longrightarrow 00:01:12.853$  and that's that.

NOTE Confidence: 0.783083061111111

 $00:01:12.853 \longrightarrow 00:01:14.658$  The improvement in progression free

NOTE Confidence: 0.783083061111111

 $00:01:14.658 \longrightarrow 00:01:16.262$  survival infrequently has translated

NOTE Confidence: 0.783083061111111

 $00:01:16.262 \longrightarrow 00:01:18.332$  to overall survival benefits for

NOTE Confidence: 0.783083061111111

 $00{:}01{:}18.332 \dashrightarrow 00{:}01{:}20.156$  patients receiving first line treatment

NOTE Confidence: 0.783083061111111

 $00:01:20.156 \longrightarrow 00:01:22.040$  for in lymphomas very different from

NOTE Confidence: 0.783083061111111

 $00{:}01{:}22.040 \dashrightarrow 00{:}01{:}23.902$  my colleagues will be talking about

NOTE Confidence: 0.7830830611111111

00:01:23.902 --> 00:01:25.863 DLBCL and Ansel cell and Hodgkin,

NOTE Confidence: 0.783083061111111

 $00{:}01{:}25.863 \dashrightarrow 00{:}01{:}29.567$  but in this situation where CL and lymphoma.

NOTE Confidence: 0.7830830611111111

 $00{:}01{:}29.570 \dashrightarrow 00{:}01{:}32.852$  This kind of association has been

NOTE Confidence: 0.783083061111111

 $00:01:32.852 \longrightarrow 00:01:34.998$  seen frequently and there were some

NOTE Confidence: 0.783083061111111

 $00:01:34.998 \longrightarrow 00:01:36.570$  updates showing out here at Ash.

 $00:01:36.570 \longrightarrow 00:01:38.466$  This was doctor Wack who presented

NOTE Confidence: 0.783083061111111

 $00{:}01{:}38.466 \dashrightarrow 00{:}01{:}41.032$  the update on the Alliance study and

NOTE Confidence: 0.783083061111111

 $00:01:41.032 \longrightarrow 00:01:43.095$  this was a randomized randomized

NOTE Confidence: 0.783083061111111

 $00:01:43.095 \longrightarrow 00:01:45.235$  study comparing bendamustine rituximab

NOTE Confidence: 0.783083061111111

 $00:01:45.235 \longrightarrow 00:01:48.855$  to a brute model therapy or brute

NOTE Confidence: 0.783083061111111

00:01:48.855 --> 00:01:50.525 rituximab and this was an important

NOTE Confidence: 0.783083061111111

 $00:01:50.525 \longrightarrow 00:01:52.465$  study that really led to the use of

NOTE Confidence: 0.783083061111111

00:01:52.465 --> 00:01:54.254 front line of root nymph and many of

NOTE Confidence: 0.7830830611111111

 $00{:}01{:}54.254 \dashrightarrow 00{:}01{:}55.738$  our patients and that was based off

NOTE Confidence: 0.783083061111111

 $00:01:55.738 \longrightarrow 00:01:57.726$  of a really progression free survival

NOTE Confidence: 0.7830830611111111

 $00{:}01{:}57.726 \dashrightarrow 00{:}02{:}00.060$  benefit both in the model the rapy.

NOTE Confidence: 0.783083061111111

 $00:02:00.060 \longrightarrow 00:02:02.412$  Farm as well as the route number toxin

NOTE Confidence: 0.783083061111111

 $00{:}02{:}02{:}02{:}412 \dashrightarrow 00{:}02{:}04.655$  that Barm both had a hazard ratio of

NOTE Confidence: 0.7830830611111111

 $00:02:04.660 \longrightarrow 00:02:06.940$  1.36 in the updated median follow-up

NOTE Confidence: 0.783083061111111

 $00:02:06.940 \longrightarrow 00:02:09.534$  of 55 months that PFS benefit was

NOTE Confidence: 0.783083061111111

 $00{:}02{:}09.534 \dashrightarrow 00{:}02{:}12.700$  was made to be quite impressive.

00:02:12.700 --> 00:02:14.891 Doctor William did a very nice job

NOTE Confidence: 0.783083061111111

 $00{:}02{:}14.891 \dashrightarrow 00{:}02{:}17.520$  in terms of presenting updated PFS

NOTE Confidence: 0.783083061111111

00:02:17.520 --> 00:02:20.340 stratified by risk factors and CLL,

NOTE Confidence: 0.783083061111111

 $00:02:20.340 \longrightarrow 00:02:21.586$  but she also had this slide here,

NOTE Confidence: 0.783083061111111

 $00:02:21.590 \longrightarrow 00:02:23.312$  which was overall survival and so

NOTE Confidence: 0.783083061111111

 $00:02:23.312 \longrightarrow 00:02:25.190$  at a median follow-up of 55 months.

NOTE Confidence: 0.783083061111111

00:02:25.190 --> 00:02:26.895 Overall survival between the three

NOTE Confidence: 0.783083061111111

 $00{:}02{:}26.895 \dashrightarrow 00{:}02{:}28.600$  arms was that really identical

NOTE Confidence: 0.783083061111111

 $00:02:28.653 \longrightarrow 00:02:30.068$  and it's important to note.

NOTE Confidence: 0.783083061111111

 $00{:}02{:}30.070 \dashrightarrow 00{:}02{:}32.919$  Got to follow up for this analysis

NOTE Confidence: 0.7830830611111111

 $00:02:32.919 \longrightarrow 00:02:34.826$  was locked at April 2020.

NOTE Confidence: 0.783083061111111

 $00:02:34.826 \longrightarrow 00:02:37.227$  Kind of right before the pandemic and

NOTE Confidence: 0.783083061111111

 $00{:}02{:}37.227 \dashrightarrow 00{:}02{:}39.708$  so having both this data as well as

NOTE Confidence: 0.783083061111111

 $00:02:39.708 \longrightarrow 00:02:41.915$  the corresponding ACOG study that was

NOTE Confidence: 0.783083061111111

 $00:02:41.915 \longrightarrow 00:02:44.646$  FDR versus abroad number Tux map will be,

00:02:44.646 --> 00:02:45.222 I think,

NOTE Confidence: 0.783083061111111

 $00:02:45.222 \longrightarrow 00:02:46.950$  important in terms of overall survival

NOTE Confidence: 0.783083061111111

 $00:02:47.010 \longrightarrow 00:02:48.660$  and how we address our patients.

NOTE Confidence: 0.783083061111111

 $00:02:48.660 \longrightarrow 00:02:49.940$  When we think about indolent,

NOTE Confidence: 0.783083061111111

 $00:02:49.940 \longrightarrow 00:02:53.127$  non Hodgkin lymphoma is often in

NOTE Confidence: 0.783083061111111

 $00:02:53.127 \longrightarrow 00:02:56.046$  the use of maintenance is a hot

NOTE Confidence: 0.783083061111111

 $00:02:56.046 \longrightarrow 00:02:59.311$  topic and this is just a little bit

NOTE Confidence: 0.783083061111111

00:02:59.311 --> 00:03:01.693 dated data now of follicular pharma

NOTE Confidence: 0.7830830611111111

 $00:03:01.693 \longrightarrow 00:03:03.370$  maintenance or following our chemo.

NOTE Confidence: 0.783083061111111

00:03:03.370 --> 00:03:05.890 This is a randomized study PRIMA study

NOTE Confidence: 0.783083061111111

 $00{:}03{:}05.952 \dashrightarrow 00{:}03{:}08.202$  and this is the data at 10 years and

NOTE Confidence: 0.783083061111111

 $00:03:08.202 \longrightarrow 00:03:10.240$  what we see is that adding maintenance

NOTE Confidence: 0.783083061111111

 $00:03:10.240 \longrightarrow 00:03:12.415$  rituximab for two years certainly

NOTE Confidence: 0.7830830611111111

 $00:03:12.415 \longrightarrow 00:03:14.559$  improves progression free survival type.

NOTE Confidence: 0.783083061111111

 $00:03:14.560 \longrightarrow 00:03:17.370$  The next treatment time to

NOTE Confidence: 0.783083061111111

 $00:03:17.370 \longrightarrow 00:03:19.618$  delay of cytotoxic chemotherapy.

00:03:19.620 --> 00:03:21.496 In pretty stark differences,

NOTE Confidence: 0.783083061111111

 $00:03:21.496 \longrightarrow 00:03:24.540$  10.5 years in median PFS compared to

NOTE Confidence: 0.783083061111111

 $00:03:24.540 \longrightarrow 00:03:26.400$  4.1 for those without maintenance.

NOTE Confidence: 0.783083061111111 00:03:26.400 --> 00:03:27.026 But again, NOTE Confidence: 0.783083061111111

 $00:03:27.026 \longrightarrow 00:03:28.904$  the overall survival in this patient

NOTE Confidence: 0.783083061111111

 $00:03:28.904 \longrightarrow 00:03:31.680$  population at 9 years was identical.

NOTE Confidence: 0.783083061111111

 $00:03:31.680 \longrightarrow 00:03:33.220$  So why do we think about that?

NOTE Confidence: 0.783083061111111

 $00:03:33.220 \longrightarrow 00:03:34.844$  As we move forward,

NOTE Confidence: 0.783083061111111

 $00:03:34.844 \longrightarrow 00:03:36.874$  is that our patients within

NOTE Confidence: 0.783083061111111

 $00:03:36.874 \longrightarrow 00:03:39.280$  lymphomas usually live for for years,

NOTE Confidence: 0.7830830611111111

 $00{:}03{:}39.280 \dashrightarrow 00{:}03{:}40.780$  often well over a decade,

NOTE Confidence: 0.783083061111111

 $00:03:40.780 \longrightarrow 00:03:43.144$  and if there's a new potential

NOTE Confidence: 0.7830830611111111

 $00{:}03{:}43.144 \dashrightarrow 00{:}03{:}45.676$  downside or new pandemic that might

NOTE Confidence: 0.783083061111111

00:03:45.676 --> 00:03:47.876 impact their long term survival,

NOTE Confidence: 0.783083061111111 00:03:47.880 --> 00:03:48.741 a focus of, NOTE Confidence: 0.783083061111111  $00:03:48.741 \longrightarrow 00:03:51.168$  I think of our management needs to be

NOTE Confidence: 0.783083061111111

 $00{:}03{:}51.168 \to 00{:}03{:}53.256$  addressed in that in that situation,

NOTE Confidence: 0.783083061111111

 $00:03:53.260 \longrightarrow 00:03:56.148$  and so most of the data on concerns

NOTE Confidence: 0.7830830611111111

 $00:03:56.148 \longrightarrow 00:03:58.415$  of differential impact on COVID in

NOTE Confidence: 0.783083061111111

 $00:03:58.415 \longrightarrow 00:04:00.623$  our patients has been mostly data

NOTE Confidence: 0.889315382857143

 $00:04:00.697 \longrightarrow 00:04:03.212$  from CLO. This was very nice work from the

NOTE Confidence: 0.889315382857143

 $00{:}04{:}03.212 \dashrightarrow 00{:}04{:}04.939$  French innovative leukemia organization.

NOTE Confidence: 0.889315382857143

00:04:04.940 --> 00:04:07.957 From Doctor Bacchus in and what they

NOTE Confidence: 0.889315382857143

 $00{:}04{:}07.957 \dashrightarrow 00{:}04{:}11.160$  looked at was just over 500 patients

NOTE Confidence: 0.889315382857143

 $00:04:11.160 \longrightarrow 00:04:14.335$  treated in 17 French groups in with

NOTE Confidence: 0.889315382857143

 $00{:}04{:}14.335 \dashrightarrow 00{:}04{:}17.040$  CLL and they presented the antibody

NOTE Confidence: 0.889315382857143

 $00:04:17.040 \longrightarrow 00:04:20.656$  response to two vaccines of M RNA COVID

NOTE Confidence: 0.889315382857143

 $00{:}04{:}20.656 \dashrightarrow 00{:}04{:}23.400$  vaccinations and what we see is about

NOTE Confidence: 0.889315382857143

 $00:04:23.480 \longrightarrow 00:04:25.995$  70% of patients that were treatment

NOTE Confidence: 0.889315382857143

00:04:25.995 --> 00:04:28.270 naive mounted antibody response compared

NOTE Confidence: 0.889315382857143

 $00:04:28.340 \longrightarrow 00:04:30.580$  to 60% that were treated prior but off

 $00:04:30.580 \longrightarrow 00:04:33.168$  therapy at the time of their vaccination.

NOTE Confidence: 0.889315382857143

 $00{:}04{:}33.170 \dashrightarrow 00{:}04{:}34.940$  And that compared pretty favorable

NOTE Confidence: 0.889315382857143

 $00:04:34.940 \longrightarrow 00:04:36.710$  compared to the on treatments.

NOTE Confidence: 0.889315382857143

 $00:04:36.710 \longrightarrow 00:04:40.040$  Only 22% of patients that received

NOTE Confidence: 0.889315382857143

 $00:04:40.040 \longrightarrow 00:04:42.260$  on treatment vaccination mounted

NOTE Confidence: 0.889315382857143

 $00:04:42.350 \longrightarrow 00:04:45.170$  antibody response after two doses.

NOTE Confidence: 0.889315382857143

 $00:04:45.170 \longrightarrow 00:04:47.906$  When you look at what those therapies were,

NOTE Confidence: 0.889315382857143

 $00:04:47.910 \longrightarrow 00:04:49.810$  the vast majority of patients

NOTE Confidence: 0.889315382857143

00:04:49.810 --> 00:04:51.710 were on BTK continues BTK,

NOTE Confidence: 0.889315382857143

 $00:04:51.710 \longrightarrow 00:04:52.842$  and in those patients,

NOTE Confidence: 0.889315382857143

 $00:04:52.842 \longrightarrow 00:04:55.130$  just 22% of patients mounted antibody

NOTE Confidence: 0.889315382857143

 $00{:}04{:}55.130 \dashrightarrow 00{:}04{:}56.850$  response after two vaccinations.

NOTE Confidence: 0.889315382857143

00:04:56.850 --> 00:04:58.330 If you're on Phenetics,

NOTE Confidence: 0.889315382857143

 $00:04:58.330 \longrightarrow 00:04:59.810$  monotherapy is about 50%,

NOTE Confidence: 0.889315382857143

 $00:04:59.810 \longrightarrow 00:05:02.290$  and if you run vanetta clicks along with

00:05:02.290 --> 00:05:04.346 either anti CD 20 or BTK inhibitor,

NOTE Confidence: 0.889315382857143

 $00{:}05{:}04.350 \dashrightarrow 00{:}05{:}07.176$  there was really very minimal or

NOTE Confidence: 0.889315382857143

00:05:07.176 --> 00:05:10.253 no response in terms of human

NOTE Confidence: 0.889315382857143

 $00:05:10.253 \longrightarrow 00:05:12.445$  response to to vaccinations.

NOTE Confidence: 0.889315382857143

 $00:05:12.450 \longrightarrow 00:05:14.358$  Now you might think that we've

NOTE Confidence: 0.889315382857143

 $00:05:14.358 \longrightarrow 00:05:15.630$  moved beyond two vaccinations.

NOTE Confidence: 0.889315382857143

 $00:05:15.630 \longrightarrow 00:05:16.317$  We've done three.

NOTE Confidence: 0.889315382857143

00:05:16.317 --> 00:05:17.920 We've done 4 here in the United

NOTE Confidence: 0.889315382857143

00:05:17.970 --> 00:05:19.138 States from our patients.

NOTE Confidence: 0.889315382857143

 $00:05:19.140 \longrightarrow 00:05:21.030$  This data did look at patients that

NOTE Confidence: 0.889315382857143

 $00{:}05{:}21.030 \dashrightarrow 00{:}05{:}22.630$  had no response to two vaccinations

NOTE Confidence: 0.889315382857143

 $00:05:22.630 \longrightarrow 00:05:24.710$  that then went on to get a third,

NOTE Confidence: 0.889315382857143

00:05:24.710 --> 00:05:27.139 just about 1/4 of patients will will

NOTE Confidence: 0.889315382857143

 $00:05:27.139 \longrightarrow 00:05:29.062$  respond to 1/3 dose, and again,

NOTE Confidence: 0.889315382857143

00:05:29.062 --> 00:05:30.478 most of those responses were seen

NOTE Confidence: 0.889315382857143

00:05:30.478 --> 00:05:32.134 in the treatment, naive CLL,

 $00:05:32.134 \longrightarrow 00:05:34.126$  or those that were off treatment.

NOTE Confidence: 0.889315382857143

 $00:05:34.130 \longrightarrow 00:05:35.790$  If you were on therapy,

NOTE Confidence: 0.889315382857143

 $00:05:35.790 \longrightarrow 00:05:37.857$  you had only about a 25% chance

NOTE Confidence: 0.889315382857143

00:05:37.857 --> 00:05:39.892 of mounting antibody response to

NOTE Confidence: 0.889315382857143

 $00:05:39.892 \longrightarrow 00:05:41.520$  three doses of vaccine.

NOTE Confidence: 0.854066936

00:05:44.050 --> 00:05:46.101 So that data really goes nicely with

NOTE Confidence: 0.854066936

00:05:46.101 --> 00:05:47.668 what's been reported at smaller

NOTE Confidence: 0.854066936

 $00{:}05{:}47.668 \dashrightarrow 00{:}05{:}49.576$  institution studies here in United States

NOTE Confidence: 0.854066936

 $00{:}05{:}49.576 \dashrightarrow 00{:}05{:}51.657$  have been published in the last year.

NOTE Confidence: 0.854066936

 $00{:}05{:}51.660 \to 00{:}05{:}53.420$  What we really didn't have is a lot

NOTE Confidence: 0.854066936

 $00:05:53.420 \longrightarrow 00:05:55.408$  of data in other independent farmers,

NOTE Confidence: 0.854066936

 $00:05:55.410 \longrightarrow 00:05:58.479$  and so this was very nice data from Doctor

NOTE Confidence: 0.854066936

 $00:05:58.479 \longrightarrow 00:06:01.134$  Beaton from Australia that presented data

NOTE Confidence: 0.854066936

 $00:06:01.134 \longrightarrow 00:06:03.758$  looking at waldenstrom's patients as well

NOTE Confidence: 0.854066936

 $00:06:03.758 \longrightarrow 00:06:06.350$  as Flickr lymphoma patients in Australia.

00:06:06.350 --> 00:06:09.605 So smaller study only about 34 patients

NOTE Confidence: 0.854066936

 $00{:}06{:}09.605 \dashrightarrow 00{:}06{:}12.432$  with follicular 37 with waldenstrom's about

NOTE Confidence: 0.854066936

 $00:06:12.432 \longrightarrow 00:06:16.009 1/3$  of patients had been treatment naive.

NOTE Confidence: 0.854066936

 $00:06:16.010 \longrightarrow 00:06:18.195$  Many of those in follicular

NOTE Confidence: 0.854066936

 $00:06:18.195 \longrightarrow 00:06:19.506$  had had immunotherapy,

NOTE Confidence: 0.854066936

00:06:19.510 --> 00:06:22.234 including some that had just completed

NOTE Confidence: 0.854066936

 $00:06:22.234 \longrightarrow 00:06:24.950$  treatment a few months previously.

NOTE Confidence: 0.854066936

 $00:06:24.950 \longrightarrow 00:06:27.583$  BTK was quite common in the Waldenstrom's

NOTE Confidence: 0.854066936

 $00{:}06{:}27.583 \to 00{:}06{:}29.475$  group and fairly representative

NOTE Confidence: 0.854066936

00:06:29.475 --> 00:06:31.840 population for our patients with

NOTE Confidence: 0.854066936

 $00{:}06{:}31.901 \dashrightarrow 00{:}06{:}34.250$  follicular and waldenstrom's.

NOTE Confidence: 0.854066936

00:06:34.250 --> 00:06:36.469 Not only did they have antibody titers,

NOTE Confidence: 0.854066936

 $00:06:36.470 \longrightarrow 00:06:38.486$  but they also did some neutralization assays.

NOTE Confidence: 0.854066936

00:06:38.490 --> 00:06:39.729 I'm not going to present that data,

NOTE Confidence: 0.854066936

 $00:06:39.730 \longrightarrow 00:06:41.308$  but really there was strong correlation.

NOTE Confidence: 0.854066936

 $00{:}06{:}41.310 \dashrightarrow 00{:}06{:}44.076$  So for antibody titers and neutralization

 $00:06:44.076 \longrightarrow 00:06:47.344$  correlated quite well and they also had some

NOTE Confidence: 0.854066936

 $00:06:47.344 \longrightarrow 00:06:50.198$  T cell acids that I'll present at the end.

NOTE Confidence: 0.854066936

 $00:06:50.200 \longrightarrow 00:06:53.264$  This is just the antibody titers for patients

NOTE Confidence: 0.854066936

 $00:06:53.264 \longrightarrow 00:06:56.157$  that had in a chemotherapy compared to

NOTE Confidence: 0.854066936

 $00:06:56.160 \longrightarrow 00:06:58.878$  treatment naive compared to healthy controls.

NOTE Confidence: 0.854066936

 $00:06:58.880 \longrightarrow 00:07:00.040$  And really the treatment naive.

NOTE Confidence: 0.854066936

 $00:07:00.040 \longrightarrow 00:07:01.524$  Whether you had waldenstrom's

NOTE Confidence: 0.854066936

00:07:01.524 --> 00:07:02.637 or for lymphoma,

NOTE Confidence: 0.854066936

 $00:07:02.640 \longrightarrow 00:07:04.210$  their antibody titers were very

NOTE Confidence: 0.854066936

 $00{:}07{:}04.210 \dashrightarrow 00{:}07{:}05.780$  similar to the healthy controls.

NOTE Confidence: 0.854066936

00:07:05.780 --> 00:07:07.345 But if you were getting

NOTE Confidence: 0.854066936

 $00:07:07.345 \longrightarrow 00:07:08.597$  immunochemotherapy within six months

NOTE Confidence: 0.854066936

 $00{:}07{:}08.597 \dashrightarrow 00{:}07{:}10.460$  of completing immunochemotherapy,

NOTE Confidence: 0.854066936

 $00{:}07{:}10.460 \dashrightarrow 00{:}07{:}12.055$  there was really significantly reduced

NOTE Confidence: 0.854066936

 $00:07:12.055 \longrightarrow 00:07:14.219$  antibody titers and they had very few

 $00:07:14.219 \longrightarrow 00:07:15.755$  patients getting a bit of tourism.

NOTE Confidence: 0.854066936

00:07:15.760 --> 00:07:17.776 But it did look like that response

NOTE Confidence: 0.854066936

00:07:17.776 --> 00:07:19.533 or reduction in antibody titers

NOTE Confidence: 0.854066936

 $00:07:19.533 \longrightarrow 00:07:20.778$  persisted quite far.

NOTE Confidence: 0.854066936

 $00:07:20.780 \longrightarrow 00:07:22.600$  They had one patient that was 21.

NOTE Confidence: 0.854066936

 $00{:}07{:}22.600 \dashrightarrow 00{:}07{:}24.046$  Months out from finishing up in

NOTE Confidence: 0.854066936

 $00{:}07{:}24.046 \dashrightarrow 00{:}07{:}26.048$  a tourism map that still did not

NOTE Confidence: 0.854066936

00:07:26.048 --> 00:07:27.035 mountain antibody response.

NOTE Confidence: 0.736526830769231

 $00{:}07{:}29.250 \dashrightarrow 00{:}07{:}31.483$  This is there kind of a snapshot

NOTE Confidence: 0.736526830769231

00:07:31.483 --> 00:07:33.370 of their functional T cell assays,

NOTE Confidence: 0.736526830769231

 $00{:}07{:}33.370 \dashrightarrow 00{:}07{:}35.368$  and So what they had was

NOTE Confidence: 0.736526830769231

 $00:07:35.370 \longrightarrow 00:07:37.022$  peripheral blood mononuclear cells,

NOTE Confidence: 0.736526830769231

 $00{:}07{:}37.022 \dashrightarrow 00{:}07{:}39.087$  pre vaccination and then post

NOTE Confidence: 0.736526830769231

 $00:07:39.087 \longrightarrow 00:07:40.848$  vaccination and revaccination there.

NOTE Confidence: 0.736526830769231

 $00:07:40.850 \longrightarrow 00:07:42.535$  Really there was no stimulation

NOTE Confidence: 0.736526830769231

 $00:07:42.535 \longrightarrow 00:07:45.954$  of the T cells when these T cells

 $00:07:45.954 \longrightarrow 00:07:48.158$  were subjugated to COVID peptides.

NOTE Confidence: 0.736526830769231

 $00{:}07{:}48.158 \dashrightarrow 00{:}07{:}51.630$  But in all patients which was encouraging,

NOTE Confidence: 0.736526830769231

 $00{:}07{:}51.630 \dashrightarrow 00{:}07{:}54.059$  they did see signs of activation in

NOTE Confidence: 0.736526830769231

 $00:07:54.059 \longrightarrow 00:07:56.281$  the post vaccination and so this

NOTE Confidence: 0.736526830769231

 $00:07:56.281 \longrightarrow 00:07:58.141$  data suggested that these patients

NOTE Confidence: 0.736526830769231

00:07:58.141 --> 00:07:59.938 with Wellness drums and flick.

NOTE Confidence: 0.736526830769231

00:07:59.940 --> 00:08:02.467 At least have some T cell education

NOTE Confidence: 0.736526830769231

 $00:08:02.467 \longrightarrow 00:08:03.550$  with the vaccination.

NOTE Confidence: 0.939563118333333

00:08:06.210 --> 00:08:08.370 So just to kind of summarize,

NOTE Confidence: 0.939563118333333

 $00{:}08{:}08.370 \dashrightarrow 00{:}08{:}10.380$  both the the ASH presentations but

NOTE Confidence: 0.939563118333333

 $00{:}08{:}10.380 \dashrightarrow 00{:}08{:}13.306$  also kind of the the growing data into

NOTE Confidence: 0.939563118333333

 $00:08:13.306 \longrightarrow 00:08:16.092$  lymphomas in CLL and COVID is that

NOTE Confidence: 0.939563118333333

 $00{:}08{:}16.092 \dashrightarrow 00{:}08{:}18.370$  patients with indolent lymphomas,

NOTE Confidence: 0.939563118333333

 $00{:}08{:}18.370 \dashrightarrow 00{:}08{:}19.742$  particularly CLL at baseline,

NOTE Confidence: 0.939563118333333

00:08:19.742 --> 00:08:21.800 have lower human response to COVID

 $00:08:21.857 \longrightarrow 00:08:24.107$  vaccinations compared to healthy controls.

NOTE Confidence: 0.939563118333333

 $00{:}08{:}24.110 \dashrightarrow 00{:}08{:}25.870$  Despite I think limited and

NOTE Confidence: 0.939563118333333

 $00:08:25.870 \longrightarrow 00:08:27.630$  relatively mixed T cell data,

NOTE Confidence: 0.939563118333333

 $00:08:27.630 \longrightarrow 00:08:29.148$  there really is very little downside

NOTE Confidence: 0.939563118333333

 $00:08:29.148 \longrightarrow 00:08:30.770$  of giving our patients vaccinations,

NOTE Confidence: 0.939563118333333

 $00:08:30.770 \longrightarrow 00:08:32.258$  and so all vaccine.

NOTE Confidence: 0.939563118333333

 $00:08:32.258 \longrightarrow 00:08:34.118$  All unvaccinated patients that come

NOTE Confidence: 0.939563118333333

 $00:08:34.118 \longrightarrow 00:08:36.440$  through your office with these diseases.

NOTE Confidence: 0.939563118333333

 $00{:}08{:}36.440 \dashrightarrow 00{:}08{:}38.106$  Need to be cancelled every time you

NOTE Confidence: 0.939563118333333

 $00:08:38.106 \longrightarrow 00:08:39.953$  see them to really educate them to

NOTE Confidence: 0.939563118333333

 $00{:}08{:}39.953 \dashrightarrow 00{:}08{:}41.902$  try to get them vaccinated and then

NOTE Confidence: 0.939563118333333

 $00:08:41.902 \longrightarrow 00:08:43.594$  even in those that are vaccinated,

NOTE Confidence: 0.939563118333333

 $00:08:43.600 \longrightarrow 00:08:44.398$  the vaccine itself,

NOTE Confidence: 0.939563118333333

00:08:44.398 --> 00:08:45.994 I mean actually not be producing

NOTE Confidence: 0.939563118333333

00:08:45.994 --> 00:08:47.600 a huge amount of protection,

NOTE Confidence: 0.939563118333333

 $00:08:47.600 \longrightarrow 00:08:49.865$  and so I'm having discussions

00:08:49.865 --> 00:08:51.677 about precautions and having

NOTE Confidence: 0.939563118333333

 $00:08:51.677 \longrightarrow 00:08:53.651$  discussions about use of prophylaxis,

NOTE Confidence: 0.939563118333333

 $00:08:53.651 \longrightarrow 00:08:55.913$  including heavy shelter here at Yale.

NOTE Confidence: 0.939563118333333

 $00:08:55.920 \longrightarrow 00:08:58.056$  We have this heavy shield COVID

NOTE Confidence: 0.939563118333333

 $00:08:58.056 \longrightarrow 00:09:00.098$  prophylaxis panel order set that is

NOTE Confidence: 0.939563118333333

 $00:09:00.098 \longrightarrow 00:09:02.314$  quite helpful in will kind of walk you

NOTE Confidence: 0.939563118333333

 $00:09:02.383 \longrightarrow 00:09:05.036$  through getting every shell to our patients.

NOTE Confidence: 0.939563118333333

 $00:09:05.040 \longrightarrow 00:09:06.150$  I also think it's important

NOTE Confidence: 0.939563118333333

 $00:09:06.150 \longrightarrow 00:09:06.816$  to recognize that.

NOTE Confidence: 0.939563118333333

 $00{:}09{:}06.820 \dashrightarrow 00{:}09{:}08.580$  Treatments used for our diseases.

NOTE Confidence: 0.939563118333333

 $00:09:08.580 \longrightarrow 00:09:10.336$  Skeletal infamous likely have

NOTE Confidence: 0.939563118333333

 $00{:}09{:}10.336 \dashrightarrow 00{:}09{:}12.092$  differential impact on human

NOTE Confidence: 0.939563118333333

 $00{:}09{:}12.092 \dashrightarrow 00{:}09{:}14.229$  response to color vaccinations.

NOTE Confidence: 0.939563118333333

00:09:14.230 --> 00:09:15.004 Not surprisingly,

NOTE Confidence: 0.939563118333333

00:09:15.004 --> 00:09:18.748 anti CD 20 can really lead to low antibody

00:09:18.748 --> 00:09:21.305 titers after vaccination for 6:12,

NOTE Confidence: 0.939563118333333

00:09:21.305 --> 00:09:22.220 perhaps even longer.

NOTE Confidence: 0.939563118333333

00:09:22.220 --> 00:09:24.730 It is important to to kind of think

NOTE Confidence: 0.939563118333333

 $00:09:24.730 \longrightarrow 00:09:26.590$  about and then also maybe more

NOTE Confidence: 0.939563118333333

 $00:09:26.590 \longrightarrow 00:09:28.427$  surprising was the use of BTK so

NOTE Confidence: 0.939563118333333

 $00{:}09{:}28.427 \dashrightarrow 00{:}09{:}30.424$  people in Bteq seem to have lower

NOTE Confidence: 0.939563118333333

 $00:09:30.424 \longrightarrow 00:09:32.956$  responsive to go vaccinations as well,

NOTE Confidence: 0.939563118333333

 $00:09:32.960 \longrightarrow 00:09:34.824$  and so because to this all of our

NOTE Confidence: 0.939563118333333

00:09:34.824 --> 00:09:36.184 patients with CLL and lymphomas

NOTE Confidence: 0.939563118333333

 $00:09:36.184 \longrightarrow 00:09:37.870$  really need to be educated about.

NOTE Confidence: 0.939563118333333

 $00{:}09{:}37.870 \dashrightarrow 00{:}09{:}39.230$  Early identification of COVID

NOTE Confidence: 0.939563118333333

 $00{:}09{:}39.230 \dashrightarrow 00{:}09{:}41.270$ illness as well as perhaps using

NOTE Confidence: 0.939563118333333

 $00:09:41.332 \longrightarrow 00:09:43.090$  outpatient treatment strategies.

NOTE Confidence: 0.939563118333333

00:09:43.090 --> 00:09:43.930 Monoclonal antibodies,

NOTE Confidence: 0.939563118333333

00:09:43.930 --> 00:09:45.190 antivirals, I think,

NOTE Confidence: 0.939563118333333 00:09:45.190 --> 00:09:45.573 actually,

00:09:45.573 --> 00:09:48.637 that is a key take away for managing

NOTE Confidence: 0.939563118333333

 $00{:}09{:}48.637 \dashrightarrow 00{:}09{:}51.455$  patients with CLL and lymphomas these days.

NOTE Confidence: 0.909959435

 $00:09:53.500 \longrightarrow 00:09:54.860$  So there's going to be a couple studies.

NOTE Confidence: 0.909959435

00:09:54.860 --> 00:09:56.050 Hopefully reading out this later

NOTE Confidence: 0.909959435

 $00{:}09{:}56.050 \dashrightarrow 00{:}09{:}58.004$  this year that will help give us a

NOTE Confidence: 0.909959435

 $00:09:58.004 \longrightarrow 00:09:59.194$  little more information about our

NOTE Confidence: 0.909959435

 $00:09:59.194 \longrightarrow 00:10:00.600$  patients that are immunosuppressed.

NOTE Confidence: 0.909959435

 $00{:}10{:}00.600 \dashrightarrow 00{:}10{:}02.316$  The melody study is a massive

NOTE Confidence: 0.909959435

 $00:10:02.316 \longrightarrow 00:10:03.914$  valuation of lateral flow immunoassays

NOTE Confidence: 0.909959435

00:10:03.914 --> 00:10:05.909 and detecting antibodies to SARS,

NOTE Confidence: 0.909959435

 $00:10:05.910 \longrightarrow 00:10:08.150$  Co V2 and this is a large

NOTE Confidence: 0.909959435

 $00:10:08.150 \dashrightarrow 00:10:09.860$  community based study in the UK.

NOTE Confidence: 0.909959435

 $00:10:09.860 \longrightarrow 00:10:11.545$  So about 35,000 patients were

NOTE Confidence: 0.909959435

 $00:10:11.545 \longrightarrow 00:10:13.230$  enrolled and they're going to

NOTE Confidence: 0.909959435

00:10:13.289 --> 00:10:14.859 be looking at antibody response

00:10:14.859 --> 00:10:17.452 to three and four doses of M RNA

NOTE Confidence: 0.909959435

00:10:17.452 --> 00:10:19.057 vaccine and then really importantly,

NOTE Confidence: 0.909959435

00:10:19.060 --> 00:10:20.915 they're going to look at whether the

NOTE Confidence: 0.909959435

 $00:10:20.915 \longrightarrow 00:10:22.481$  lack of antibody response correlate's

NOTE Confidence: 0.909959435

00:10:22.481 --> 00:10:24.407 with the risk of COVID-19 infection.

NOTE Confidence: 0.909959435

00:10:24.410 --> 00:10:26.390 As well, severity of disease.

NOTE Confidence: 0.909959435

 $00:10:26.390 \longrightarrow 00:10:27.910$  There's also an important study

NOTE Confidence: 0.909959435

00:10:27.910 --> 00:10:29.882 for our patients with CLL BTK'S,

NOTE Confidence: 0.909959435

00:10:29.882 --> 00:10:31.386 which public Tribeca study.

NOTE Confidence: 0.909959435

00:10:31.390 --> 00:10:32.470 This is out of Australia,

NOTE Confidence: 0.909959435

 $00:10:32.470 \longrightarrow 00:10:34.678$  where they're basically going to stop

NOTE Confidence: 0.909959435

00:10:34.678 --> 00:10:36.668 patients on their BTK temporarily

NOTE Confidence: 0.909959435

 $00{:}10{:}36.668 \dashrightarrow 00{:}10{:}38.464$  vaccinate them with different

NOTE Confidence: 0.909959435

 $00{:}10{:}38.464 \dashrightarrow 00{:}10{:}41.280$  strategies in terms of holding the BTK,

NOTE Confidence: 0.909959435

00:10:41.280 --> 00:10:44.024 ideally to identify ways of allowing our

NOTE Confidence: 0.909959435

 $00:10:44.024 \longrightarrow 00:10:47.327$  BTK patients to Mona a nice antibody

 $00:10:47.327 \longrightarrow 00:10:49.892$  response following vaccination against Kovan.

NOTE Confidence: 0.909959435

00:10:49.900 --> 00:10:51.164 So, given this uncertainty,

NOTE Confidence: 0.909959435

 $00:10:51.164 \longrightarrow 00:10:53.060$  given the fact that our patients

NOTE Confidence: 0.909959435

00:10:53.119 --> 00:10:55.368 typically do very well with a

NOTE Confidence: 0.909959435

00:10:55.368 --> 00:10:57.000 current modern therapeutics,

NOTE Confidence: 0.909959435

 $00:10:57.000 \longrightarrow 00:10:58.600$  I've generally recommended fixed duration

NOTE Confidence: 0.909959435

00:10:58.600 --> 00:11:00.779 without maintenance for most of my patients,

NOTE Confidence: 0.909959435

 $00:11:00.780 \longrightarrow 00:11:02.700$  and so when we think about fixed duration,

NOTE Confidence: 0.909959435

00:11:02.700 --> 00:11:03.684 lack of maintenance,

NOTE Confidence: 0.909959435

 $00:11:03.684 \longrightarrow 00:11:05.980$  was there any studies that ash that

NOTE Confidence: 0.909959435

 $00:11:06.046 \longrightarrow 00:11:07.760$  might influence our therapies going

NOTE Confidence: 0.909959435

 $00:11:07.760 \longrightarrow 00:11:09.535$  forward and there certainly were,

NOTE Confidence: 0.909959435

 $00{:}11{:}09.540 \dashrightarrow 00{:}11{:}12.235$  and I'll focus on those in the

NOTE Confidence: 0.909959435

 $00:11:12.235 \longrightarrow 00:11:13.390$  next few slides.

NOTE Confidence: 0.909959435

 $00:11:13.390 \longrightarrow 00:11:15.244$  So this was an important study

00:11:15.244 --> 00:11:16.480 presented by Doctor Eickhorst,

NOTE Confidence: 0.909959435

 $00:11:16.480 \longrightarrow 00:11:18.880$  which was a CLL 13 study.

NOTE Confidence: 0.909959435

 $00{:}11{:}18.880 \dashrightarrow 00{:}11{:}21.178$  This was a large randomized European

NOTE Confidence: 0.909959435

00:11:21.178 --> 00:11:23.310 study where patients without deletion,

NOTE Confidence: 0.909959435

00:11:23.310 --> 00:11:27.564 segmenting P without TP 53

NOTE Confidence: 0.909959435

00:11:27.564 --> 00:11:29.872 mutations were randomized either

NOTE Confidence: 0.909959435

 $00:11:29.872 \longrightarrow 00:11:32.180$  to standard IMMUNOCHEMOTHERAPY FC

NOTE Confidence: 0.909959435

00:11:32.264 --> 00:11:34.589 RVR or Vertex magnetic locks.

NOTE Confidence: 0.909959435

 $00{:}11{:}34.590 \dashrightarrow 00{:}11{:}35.738$  Or the triplet venetoclax

NOTE Confidence: 0.909959435

00:11:35.738 --> 00:11:36.886 of Britain have been,

NOTE Confidence: 0.909959435

 $00{:}11{:}36.890 \dashrightarrow 00{:}11{:}39.144$  and I've been a choose him out.

NOTE Confidence: 0.909959435

 $00:11:39.150 \longrightarrow 00:11:40.470$  Standard dosing so patients

NOTE Confidence: 0.909959435

 $00:11:40.470 \longrightarrow 00:11:42.770$  got six months of anti CD 20s.

NOTE Confidence: 0.909959435

00:11:42.770 --> 00:11:44.396 They got 12 cycles of venetoclax

NOTE Confidence: 0.909959435

 $00:11:44.396 \longrightarrow 00:11:46.374$  and then for Brewton if if people

NOTE Confidence: 0.909959435

 $00:11:46.374 \longrightarrow 00:11:47.486$  were still under deposit.

00:11:47.490 --> 00:11:49.434 If people could get up to 36 cycles.

NOTE Confidence: 0.831199428333333

 $00:11:52.050 \longrightarrow 00:11:53.610$  So the primary outcome was a.

NOTE Confidence: 0.831199428333333

00:11:53.610 --> 00:11:56.788 It was a 2 coprimary outcomes MRD,

NOTE Confidence: 0.831199428333333

00:11:56.790 --> 00:11:58.260 undetectable rate of 15 months,

NOTE Confidence: 0.831199428333333

 $00:11:58.260 \longrightarrow 00:12:00.768$  as well as PFS. Not surprisingly,

NOTE Confidence: 0.831199428333333

 $00:12:00.770 \longrightarrow 00:12:02.639$  with this kind of early follow-up that

NOTE Confidence: 0.831199428333333

00:12:02.639 --> 00:12:04.388 PFS has interim that's assessment hasn't

NOTE Confidence: 0.831199428333333

 $00:12:04.388 \longrightarrow 00:12:06.770$  been reached and so that's still to come,

NOTE Confidence: 0.831199428333333

 $00:12:06.770 \longrightarrow 00:12:09.266$  but they didn't have the 15 month MRD

NOTE Confidence: 0.831199428333333

 $00:12:09.266 \longrightarrow 00:12:11.758$  data that they presented at Ash and what

NOTE Confidence: 0.831199428333333

00:12:11.758 --> 00:12:14.945 we see here is that the peripheral blood

NOTE Confidence: 0.831199428333333

 $00{:}12{:}14.945 \dashrightarrow 00{:}12{:}17.345$  flow cytometry based undetectable Mardi

NOTE Confidence: 0.831199428333333

00:12:17.350 --> 00:12:21.868 was 86% in the jivan arm and 92.2%.

NOTE Confidence: 0.831199428333333

00:12:21.868 --> 00:12:24.004 Can be tripled arm both the

NOTE Confidence: 0.831199428333333

 $00:12:24.004 \longrightarrow 00:12:25.756$  community therapy as well as RTX.

00:12:25.760 --> 00:12:28.616 Magnetic locks had lower around 50%

NOTE Confidence: 0.831199428333333

 $00:12:28.620 \longrightarrow 00:12:31.112$  and overall this there was two positive

NOTE Confidence: 0.831199428333333

 $00:12:31.112 \longrightarrow 00:12:33.660$  alarms compared to the immunochemotherapy.

NOTE Confidence: 0.831199428333333

 $00:12:33.660 \longrightarrow 00:12:37.788$  Both the G Ven and Gebruik infinite clocks.

NOTE Confidence: 0.831199428333333

 $00:12:37.790 \longrightarrow 00:12:40.961$  There was a kind of companion MRD

NOTE Confidence: 0.831199428333333

00:12:40.961 --> 00:12:43.046 assessment presentation which I think

NOTE Confidence: 0.831199428333333

 $00:12:43.046 \longrightarrow 00:12:45.398$  was was quite interesting where

NOTE Confidence: 0.831199428333333

00:12:45.398 --> 00:12:48.657 they looked at MRD by the CLL molecular

NOTE Confidence: 0.831199428333333

00:12:48.657 --> 00:12:51.811 phenotype and what we can see here is

NOTE Confidence: 0.831199428333333

00:12:51.811 --> 00:12:53.976 that the molecular subtypes of seal

NOTE Confidence: 0.831199428333333

 $00{:}12{:}53.976 \dashrightarrow 00{:}12{:}56.482$  that typically do much better with a

NOTE Confidence: 0.831199428333333

00:12:56.482 --> 00:12:58.022 brute compared to immunochemotherapy

NOTE Confidence: 0.831199428333333

 $00:12:58.022 \longrightarrow 00:12:59.684$  do better on the trip with the arm.

NOTE Confidence: 0.831199428333333

 $00:12:59.690 \longrightarrow 00:13:02.248$  So patients that are 11 Q patients

NOTE Confidence: 0.831199428333333

 $00:13:02.248 \longrightarrow 00:13:04.334$  that are unmutated have at least kind

NOTE Confidence: 0.831199428333333

 $00:13:04.334 \longrightarrow 00:13:06.576$  of a 1010 absolute percent increase

 $00{:}13{:}06.576 \dashrightarrow 00{:}13{:}08.556$  of them are deemed detectable.

NOTE Confidence: 0.831199428333333

 $00{:}13{:}08.560 \dashrightarrow 00{:}13{:}11.178$  With the triplet compared to the double

NOTE Confidence: 0.831199428333333

 $00:13:11.178 \longrightarrow 00:13:13.632$  ARM patients that have the lower risk

NOTE Confidence: 0.831199428333333

00:13:13.632 --> 00:13:16.249 disease in terms of being IG HV mutated

NOTE Confidence: 0.831199428333333

 $00:13:16.250 \longrightarrow 00:13:18.889$  seem to have relatively similar energy rates.

NOTE Confidence: 0.831199428333333

00:13:18.890 --> 00:13:20.730 Whether you get the doublet or the triplet.

NOTE Confidence: 0.772712632222222

 $00:13:23.240 \longrightarrow 00:13:24.554$  This energy does come at some

NOTE Confidence: 0.772712632222222

 $00{:}13{:}24.554 \dashrightarrow 00{:}13{:}25.930$  toxicity in terms of the triple

NOTE Confidence: 0.772712632222222

 $00:13:25.930 \longrightarrow 00:13:27.280$  arm compared to the double it,

NOTE Confidence: 0.772712632222222

 $00{:}13{:}27.280 \dashrightarrow 00{:}13{:}29.152$  and so things like febrile neutropenic

NOTE Confidence: 0.772712632222222

 $00:13:29.152 \longrightarrow 00:13:30.755$  infections were higher in the

NOTE Confidence: 0.772712632222222

 $00{:}13{:}30.755 \dashrightarrow 00{:}13{:}32.260$  triplet compared to the doublets.

NOTE Confidence: 0.772712632222222

 $00:13:32.260 \longrightarrow 00:13:33.835$  And then when you add a brute

NOTE Confidence: 0.772712632222222

 $00{:}13{:}33.835 \dashrightarrow 00{:}13{:}35.377$ nib you also saw a low rate,

NOTE Confidence: 0.772712632222222

 $00:13:35.380 \longrightarrow 00:13:36.585$  although it was there at

 $00:13:36.585 \longrightarrow 00:13:37.730$  2% in terms of eight Feb.

NOTE Confidence: 0.924631176666667

00:13:40.330 --> 00:13:42.176 So in terms of the summary, and take

NOTE Confidence: 0.924631176666667

00:13:42.176 --> 00:13:44.960 away was that in terms of MRD status,

NOTE Confidence: 0.924631176666667

 $00:13:44.960 \longrightarrow 00:13:47.720$  the advantage choosing venetoclax

NOTE Confidence: 0.924631176666667

00:13:47.720 --> 00:13:50.780 were superior to chemotherapy and

NOTE Confidence: 0.924631176666667

 $00{:}13{:}50.780 \dashrightarrow 00{:}13{:}52.880$  there was two arms that met their

NOTE Confidence: 0.924631176666667

 $00{:}13{:}52.880 \dashrightarrow 00{:}13{:}54.621$ Co primary endpoint Rituxan Venetic

NOTE Confidence: 0.924631176666667

 $00:13:54.621 \longrightarrow 00:13:57.120$  LEX was not superior in terms of

NOTE Confidence: 0.924631176666667

 $00{:}13{:}57.183 \mathrel{--}{>} 00{:}13{:}59.547$  MRD of detectable rate compared to

NOTE Confidence: 0.924631176666667

00:13:59.547 --> 00:14:01.389 the primary FCR chemotherapy arm.

NOTE Confidence: 0.924631176666667

 $00{:}14{:}01.389 \dashrightarrow 00{:}14{:}03.461$  They were very happy to see that most

NOTE Confidence: 0.924631176666667

 $00:14:03.461 \longrightarrow 00:14:05.040$  patients tolerated treatment well.

NOTE Confidence: 0.924631176666667

 $00:14:05.040 \longrightarrow 00:14:07.698$  There was very low rates of

NOTE Confidence: 0.924631176666667

 $00{:}14{:}07.698 \operatorname{--}{>} 00{:}14{:}09.830$  discontinuation and although there was.

NOTE Confidence: 0.924631176666667

 $00:14:09.830 \longrightarrow 00:14:10.442$  Some increased,

NOTE Confidence: 0.924631176666667

 $00:14:10.442 \longrightarrow 00:14:12.584$  perhaps toxicity for the triplet in terms

00:14:12.584 --> 00:14:14.740 of infection in terms of pepperoncini,

NOTE Confidence: 0.924631176666667

 $00:14:14.740 \longrightarrow 00:14:15.780$  and generally people tolerate

NOTE Confidence: 0.924631176666667

 $00:14:15.780 \longrightarrow 00:14:17.080$  this this regimen as well.

NOTE Confidence: 0.90232694

 $00:14:19.580 \longrightarrow 00:14:21.692$  So if we think about kind of the

NOTE Confidence: 0.90232694

00:14:21.692 --> 00:14:23.420 majority of patients are older,

NOTE Confidence: 0.90232694

 $00:14:23.420 \longrightarrow 00:14:25.055$  perhaps have comedies,

NOTE Confidence: 0.90232694

 $00:14:25.055 \longrightarrow 00:14:28.454$  maybe the triplet is is is not

NOTE Confidence: 0.90232694

 $00:14:28.454 \longrightarrow 00:14:30.659$  appropriate for that patient population.

NOTE Confidence: 0.90232694

 $00:14:30.660 \longrightarrow 00:14:31.710$  Is there another fixed duration

NOTE Confidence: 0.90232694

 $00:14:31.710 \longrightarrow 00:14:32.964$  regimen that we might be able

NOTE Confidence: 0.90232694

 $00:14:32.964 \longrightarrow 00:14:33.960$  to use in the near future?

NOTE Confidence: 0.90232694

 $00:14:33.960 \longrightarrow 00:14:34.866$  And there is?

NOTE Confidence: 0.90232694

 $00{:}14{:}34.866 \dashrightarrow 00{:}14{:}37.202$  This is the GLOBE study and this

NOTE Confidence: 0.90232694

00:14:37.202 --> 00:14:39.659 was a randomized trial of patients

NOTE Confidence: 0.90232694

 $00:14:39.659 \longrightarrow 00:14:42.053$  that were older or those that

00:14:42.053 --> 00:14:44.110 were younger with committees,

NOTE Confidence: 0.90232694

 $00:14:44.110 \longrightarrow 00:14:46.648$  about 210 patients or so were

NOTE Confidence: 0.90232694

 $00:14:46.648 \longrightarrow 00:14:49.108$  randomized to either have been a 2.

NOTE Confidence: 0.90232694

 $00:14:49.110 \longrightarrow 00:14:50.138$  I take that back.

NOTE Confidence: 0.90232694

00:14:50.138 --> 00:14:51.166 They are brute NIM,

NOTE Confidence: 0.90232694

 $00:14:51.170 \longrightarrow 00:14:52.580$  so a brute in bleeding for

NOTE Confidence: 0.90232694

 $00:14:52.580 \longrightarrow 00:14:54.039$  three months and then a brute

NOTE Confidence: 0.90232694

 $00:14:54.039 \longrightarrow 00:14:55.449$  in Veneta clicks for toy cycles

NOTE Confidence: 0.90232694

00:14:55.449 --> 00:14:56.800 and then everyone stopped.

NOTE Confidence: 0.90232694

00:14:56.800 --> 00:14:59.596 It was not MRD directed therapy

NOTE Confidence: 0.90232694

 $00:14:59.600 \longrightarrow 00:15:01.148$  and then the old control arm.

NOTE Confidence: 0.90232694

 $00:15:01.150 \longrightarrow 00:15:02.760$  Here is a bit mad with crab.

NOTE Confidence: 0.774811938

 $00:15:05.460 \longrightarrow 00:15:06.730$  This is the PFS data.

NOTE Confidence: 0.774811938

 $00:15:06.730 \longrightarrow 00:15:08.626$  This data has been presented earlier

NOTE Confidence: 0.774811938

00:15:08.626 --> 00:15:10.808 EHA and what the focus of this

NOTE Confidence: 0.774811938

 $00:15:10.808 \longrightarrow 00:15:12.524$  abstract was was really on them

 $00:15:12.524 \longrightarrow 00:15:14.600$  or D rates in this in this arms,

NOTE Confidence: 0.774811938

 $00:15:14.600 \longrightarrow 00:15:16.470$  so we can see sphere.

NOTE Confidence: 0.774811938

00:15:16.470 --> 00:15:19.260 Certainly clear superiority in that PFS

NOTE Confidence: 0.774811938

 $00:15:19.260 \longrightarrow 00:15:21.620$  benefit of the approvement phenetics

NOTE Confidence: 0.774811938

00:15:21.620 --> 00:15:24.158 arm compared to Carnival in two,

NOTE Confidence: 0.774811938

00:15:24.160 --> 00:15:26.096 with a median follow-up of of 34 months,

NOTE Confidence: 0.774811938

 $00:15:26.100 \longrightarrow 00:15:27.375$  although overall survival

NOTE Confidence: 0.774811938

00:15:27.375 --> 00:15:29.075 was actually down tickle,

NOTE Confidence: 0.774811938

 $00:15:29.080 \longrightarrow 00:15:30.662$  and it'll be important to see the

NOTE Confidence: 0.774811938

00:15:30.662 --> 00:15:31.979 long term follow up from this.

NOTE Confidence: 0.774811938

 $00:15:31.980 \longrightarrow 00:15:32.848$  This study as well.

NOTE Confidence: 0.765406958

 $00:15:34.870 \longrightarrow 00:15:36.440$  That instead of being flow,

NOTE Confidence: 0.765406958

 $00{:}15{:}36.440 \dashrightarrow 00{:}15{:}38.600$  they used NGS a little bit more sensitive

NOTE Confidence: 0.765406958

 $00{:}15{:}38.600 \dashrightarrow 00{:}15{:}40.870$  and a little bit more reproducible.

NOTE Confidence: 0.765406958

 $00:15:40.870 \longrightarrow 00:15:42.571$  And what we see here is that

 $00:15:42.571 \longrightarrow 00:15:44.480$  the rates of them are detectable

NOTE Confidence: 0.765406958

 $00:15:44.480 \longrightarrow 00:15:46.335$  with this doublet oral double.

NOTE Confidence: 0.765406958

 $00:15:46.340 \longrightarrow 00:15:48.629$  It was about 50% in the peripheral

NOTE Confidence: 0.765406958

 $00:15:48.629 \longrightarrow 00:15:50.779$  blood as well as develop Mira,

NOTE Confidence: 0.765406958

 $00:15:50.780 \longrightarrow 00:15:53.110$  and that was statistically significantly

NOTE Confidence: 0.765406958

 $00:15:53.110 \longrightarrow 00:15:54.974$  improved over claim Bissell.

NOTE Confidence: 0.765406958

 $00:15:54.980 \longrightarrow 00:15:58.220$  And it's also notable that the

NOTE Confidence: 0.765406958

 $00:15:58.220 \longrightarrow 00:15:59.960$  concordance of bone marrow to

NOTE Confidence: 0.765406958

 $00{:}16{:}00.028 \dashrightarrow 00{:}16{:}01.708$  preferred blood MRD was much

NOTE Confidence: 0.765406958

00:16:01.708 --> 00:16:03.995 higher in the doublet arm compared

NOTE Confidence: 0.765406958

 $00{:}16{:}03.995 \dashrightarrow 00{:}16{:}05.627$  to the immunochemotherapy.

NOTE Confidence: 0.765406958

00:16:05.630 --> 00:16:06.210 A pharmacy.

NOTE Confidence: 0.864281604285714

 $00:16:09.330 \longrightarrow 00:16:11.017$  For patients that I think are thinking

NOTE Confidence: 0.864281604285714

 $00:16:11.017 \longrightarrow 00:16:13.085$  about PFS and how long they're going to

NOTE Confidence: 0.864281604285714

 $00:16:13.085 \longrightarrow 00:16:14.900$  be in remission after stopping treatment,

NOTE Confidence: 0.864281604285714

 $00:16:14.900 \longrightarrow 00:16:16.937$  I think this was a really important

 $00:16:16.937 \longrightarrow 00:16:18.439$  key addition of the study,

NOTE Confidence: 0.864281604285714

 $00:16:18.440 \longrightarrow 00:16:22.168$  which was everyone stopped a therapy in at

NOTE Confidence: 0.864281604285714

00:16:22.168 --> 00:16:25.278 certainly about 30-30 months of follow up.

NOTE Confidence: 0.864281604285714

 $00:16:25.280 \longrightarrow 00:16:27.114$  Here you can see that patients that

NOTE Confidence: 0.864281604285714

 $00{:}16{:}27.114 \dashrightarrow 00{:}16{:}29.243$  were still in more detectable at the

NOTE Confidence: 0.864281604285714

00:16:29.243 --> 00:16:30.848 time of stopping therapy maintained

NOTE Confidence: 0.864281604285714

 $00:16:30.848 \longrightarrow 00:16:32.780$  a response without progression,

NOTE Confidence: 0.864281604285714

 $00:16:32.780 \longrightarrow 00:16:33.776$  and so this was, I think,

NOTE Confidence: 0.864281604285714

00:16:33.780 --> 00:16:35.660 important finding moving forward.

NOTE Confidence: 0.902005453846154

 $00{:}16{:}37.950 \dashrightarrow 00{:}16{:}40.148$  And together with GLOW study as well

NOTE Confidence: 0.902005453846154

00:16:40.148 --> 00:16:42.510 as other phase two studies captivate.

NOTE Confidence: 0.902005453846154

 $00:16:42.510 \longrightarrow 00:16:44.600$  For instance, it's possible that

NOTE Confidence: 0.902005453846154

 $00:16:44.600 \longrightarrow 00:16:47.124$  we'll see additional labels of doublet

NOTE Confidence: 0.902005453846154

 $00:16:47.124 \longrightarrow 00:16:49.284$  or or doublet later this year,

NOTE Confidence: 0.902005453846154

 $00:16:49.290 \longrightarrow 00:16:50.704$  and I would stay tuned to see

 $00:16:50.704 \longrightarrow 00:16:52.012$  whether that could be incorporated

NOTE Confidence: 0.902005453846154

00:16:52.012 --> 00:16:52.996 into standard practice.

NOTE Confidence: 0.649605598181818

 $00:16:55.300 \longrightarrow 00:16:56.452$  So when we think about flicking

NOTE Confidence: 0.649605598181818

 $00:16:56.452 \longrightarrow 00:16:57.600$  them from and fixed duration,

NOTE Confidence: 0.649605598181818

 $00:16:57.600 \longrightarrow 00:16:59.700$  we're really more thinking about the

NOTE Confidence: 0.649605598181818

00:16:59.700 --> 00:17:02.604 anti CD 20 in terms of maintenance

NOTE Confidence: 0.649605598181818

 $00:17:02.604 \longrightarrow 00:17:05.070$  Rituxan mount and this was an important

NOTE Confidence: 0.649605598181818

 $00:17:05.070 \longrightarrow 00:17:06.960$  update from Doctor Call from Washington

NOTE Confidence: 0.649605598181818

00:17:06.960 --> 00:17:08.880 St Louis of the Resort study.

NOTE Confidence: 0.649605598181818

 $00:17:08.880 \longrightarrow 00:17:10.338$  So this was a randomized study

NOTE Confidence: 0.649605598181818

 $00{:}17{:}10.338 \dashrightarrow 00{:}17{:}12.089$  done here in the United States.

NOTE Confidence: 0.649605598181818

00:17:12.090 --> 00:17:13.890 Patients had low burden of silicone

NOTE Confidence: 0.649605598181818

 $00:17:13.890 \longrightarrow 00:17:15.400$  phomma they all received four

NOTE Confidence: 0.649605598181818

 $00:17:15.400 \longrightarrow 00:17:16.700$  weekly doses and Rituxan mab

NOTE Confidence: 0.649605598181818

 $00:17:16.700 \longrightarrow 00:17:18.340$  and then they were randomized.

NOTE Confidence: 0.649605598181818

 $00:17:18.340 \longrightarrow 00:17:22.407$  If patients had a stable disease or

 $00:17:22.407 \longrightarrow 00:17:24.690$  better in patients either got rituximab.

NOTE Confidence: 0.649605598181818

00:17:24.690 --> 00:17:26.478 Monotherapy every three months,

NOTE Confidence: 0.649605598181818

00:17:26.478 --> 00:17:28.266 indefinitely until progression or

NOTE Confidence: 0.649605598181818

00:17:28.266 --> 00:17:30.457 they were on active surveillance

NOTE Confidence: 0.649605598181818

 $00:17:30.457 \longrightarrow 00:17:32.726$  with re-treatment with rituximab and

NOTE Confidence: 0.649605598181818

 $00:17:32.726 \longrightarrow 00:17:34.238$  this was a one to one randomization.

NOTE Confidence: 0.915858376666667

 $00:17:36.890 \longrightarrow 00:17:39.266$  This data was originally published in

NOTE Confidence: 0.915858376666667

 $00{:}17{:}39.270 --> 00{:}17{:}41.552$  JCM 2014 and the conclusions are here

NOTE Confidence: 0.915858376666667

 $00{:}17{:}41.552 \to 00{:}17{:}43.316$  where basically Rituxan every treatment

NOTE Confidence: 0.915858376666667

 $00{:}17{:}43.316 \dashrightarrow 00{:}17{:}45.146$  was as effective as maintenance.

NOTE Confidence: 0.915858376666667

 $00:17:45.150 \longrightarrow 00:17:47.246$  Rituximab for treatment failure.

NOTE Confidence: 0.915858376666667

 $00:17:47.246 \longrightarrow 00:17:48.886$  However, the main instruction

NOTE Confidence: 0.915858376666667

 $00{:}17{:}48.886 \to 00{:}17{:}51.118$  map did delay time to needing

NOTE Confidence: 0.915858376666667

00:17:51.118 --> 00:17:52.556 cytotoxic chemo and ultimately,

NOTE Confidence: 0.915858376666667

 $00:17:52.556 \longrightarrow 00:17:53.928$  as you might expect,

 $00:17:53.930 \longrightarrow 00:17:55.784$  there was more rituximab used in

NOTE Confidence: 0.915858376666667

 $00:17:55.784 \longrightarrow 00:17:57.406$  the maintenance compared to the

NOTE Confidence: 0.915858376666667

00:17:57.406 --> 00:17:58.639 retreatment arm a year later.

NOTE Confidence: 0.915858376666667

00:17:58.639 --> 00:17:59.797 They followed up on quality of

NOTE Confidence: 0.915858376666667

 $00:17:59.797 \longrightarrow 00:18:01.332$  life and there was really no

NOTE Confidence: 0.915858376666667

00:18:01.332 --> 00:18:02.368 difference between the maintenance,

NOTE Confidence: 0.915858376666667

00:18:02.370 --> 00:18:04.090 rituximab norm compared to the

NOTE Confidence: 0.915858376666667

00:18:04.090 --> 00:18:05.810 retreatment and based off of

NOTE Confidence: 0.915858376666667

 $00{:}18{:}05.878 \dashrightarrow 00{:}18{:}07.690$  this kind of earlier follow up.

NOTE Confidence: 0.915858376666667

00:18:07.690 --> 00:18:08.324 Doctor Colin,

NOTE Confidence: 0.915858376666667

 $00:18:08.324 \longrightarrow 00:18:09.909$  his colleagues recommended that re

NOTE Confidence: 0.915858376666667

 $00:18:09.909 \dashrightarrow 00:18:11.818$  treatment rather than maintenance or tuck.

NOTE Confidence: 0.915858376666667

 $00:18:11.820 \longrightarrow 00:18:14.990$  Seemab was the preferred strategy.

NOTE Confidence: 0.915858376666667

00:18:14.990 --> 00:18:16.826 So now at around 10 years of follow up,

NOTE Confidence: 0.915858376666667

 $00:18:16.830 \longrightarrow 00:18:18.456$  do we have any different signals

NOTE Confidence: 0.915858376666667

 $00{:}18{:}18.456 \dashrightarrow 00{:}18{:}20.433$  here and so this was freedom from

 $00:18:20.433 \longrightarrow 00:18:22.372$  first sent a toxic chemo and with

NOTE Confidence: 0.915858376666667

 $00{:}18{:}22.429 \dashrightarrow 00{:}18{:}24.557$ long term follow up we still see a

NOTE Confidence: 0.915858376666667

 $00{:}18{:}24.557 \dashrightarrow 00{:}18{:}26.320$  separation of the curves between

NOTE Confidence: 0.915858376666667

00:18:26.320 --> 00:18:27.960 Rituxan and maintenance continuously

NOTE Confidence: 0.915858376666667

 $00:18:27.960 \longrightarrow 00:18:30.518$  compared to the RE treatment strategy.

NOTE Confidence: 0.915858376666667

 $00:18:30.520 \longrightarrow 00:18:32.596$  You also see improved duration of

NOTE Confidence: 0.915858376666667

 $00:18:32.596 \longrightarrow 00:18:34.711$  response and so 66% of patients

NOTE Confidence: 0.915858376666667

 $00{:}18{:}34.711 \dashrightarrow 00{:}18{:}36.853$  treated the maintenance or tux mab

NOTE Confidence: 0.915858376666667

 $00{:}18{:}36.860 \dashrightarrow 00{:}18{:}39.500$  do not have progression compared to

NOTE Confidence: 0.915858376666667

 $00:18:39.500 \dashrightarrow 00:18:42.305$  just 30% of patients treated with four

NOTE Confidence: 0.915858376666667

 $00:18:42.305 \longrightarrow 00:18:45.200$  doses of Rituxan have actually so much lower.

NOTE Confidence: 0.915858376666667

 $00{:}18{:}45.200 \dashrightarrow 00{:}18{:}47.426$  Obviously need of Rituxan effort in

NOTE Confidence: 0.915858376666667

 $00{:}18{:}47.426 \dashrightarrow 00{:}18{:}49.380$  in in administration Rituxan effort,

NOTE Confidence: 0.915858376666667

 $00:18:49.380 \longrightarrow 00:18:51.669$  the retreatment arm.

NOTE Confidence: 0.915858376666667 00:18:51.670 --> 00:18:52.552 And then, NOTE Confidence: 0.915858376666667 00:18:52.552 --> 00:18:52.993 importantly,

NOTE Confidence: 0.915858376666667

 $00{:}18{:}52.993 \dashrightarrow 00{:}18{:}54.757$  despite improvements in and

NOTE Confidence: 0.915858376666667

00:18:54.757 --> 00:18:56.540 time to cytotoxic chemo,

NOTE Confidence: 0.915858376666667

 $00:18:56.540 \longrightarrow 00:18:58.112$  the the main kind of take

NOTE Confidence: 0.915858376666667

 $00:18:58.112 \longrightarrow 00:18:59.760$  away was that oral survival,

NOTE Confidence: 0.915858376666667

00:18:59.760 --> 00:19:01.656 transformation risk secondary malignancy

NOTE Confidence: 0.915858376666667

 $00:19:01.656 \longrightarrow 00:19:04.500$  seemed very similar between the arms.

NOTE Confidence: 0.915858376666667

 $00:19:04.500 \longrightarrow 00:19:06.551$  And so the long term follow-up conclusions

NOTE Confidence: 0.915858376666667

 $00{:}19{:}06.551 \dashrightarrow 00{:}19{:}08.318$  really didn't change from doctor calls.

NOTE Confidence: 0.915858376666667

 $00:19:08.320 \longrightarrow 00:19:10.427$  Mind you know it is true that

NOTE Confidence: 0.915858376666667

 $00{:}19{:}10.427 \dashrightarrow 00{:}19{:}13.157$  time to send a toxic therapy was

NOTE Confidence: 0.915858376666667

00:19:13.157 --> 00:19:15.347 improved with maintenance or toxic,

NOTE Confidence: 0.915858376666667

 $00{:}19{:}15.350 \dashrightarrow 00{:}19{:}17.065$  but the glass was kind of half

NOTE Confidence: 0.915858376666667

 $00:19:17.065 \longrightarrow 00:19:19.450$  half full in the sense that 63% of

NOTE Confidence: 0.915858376666667

 $00:19:19.450 \longrightarrow 00:19:21.030$  patients treated with retreatment

NOTE Confidence: 0.915858376666667

 $00{:}19{:}21.030 \dashrightarrow 00{:}19{:}23.460$  remain chemo free at seven years.

 $00:19:23.460 \longrightarrow 00:19:24.870$  The duration response was certainly

NOTE Confidence: 0.915858376666667

 $00{:}19{:}24.870 \to 00{:}19{:}26.500$  better with maintenance or Tux Mab,

NOTE Confidence: 0.915858376666667

 $00:19:26.500 \longrightarrow 00:19:28.418$  but he'd argued that 30% of

NOTE Confidence: 0.915858376666667

00:19:28.418 --> 00:19:29.846 patients received just 4 doses of

NOTE Confidence: 0.915858376666667

 $00:19:29.846 \dashrightarrow 00:19:31.340$ rituximab in never needed treatment.

NOTE Confidence: 0.915858376666667

 $00:19:31.340 \longrightarrow 00:19:33.200$  Again for 10 plus years.

NOTE Confidence: 0.915858376666667

00:19:33.200 --> 00:19:34.960 And because overall survival

NOTE Confidence: 0.915858376666667

 $00:19:34.960 \longrightarrow 00:19:36.280$  benefit was identical.

NOTE Confidence: 0.915858376666667

 $00{:}19{:}36.280 \dashrightarrow 00{:}19{:}38.300$  The treatment the Rituxan every

NOTE Confidence: 0.915858376666667

 $00:19:38.300 \longrightarrow 00:19:39.512$  treatment strategy rather

NOTE Confidence: 0.915858376666667

 $00:19:39.512 \longrightarrow 00:19:41.309$  than maintenance remained the

NOTE Confidence: 0.915858376666667

 $00:19:41.309 \longrightarrow 00:19:43.165$  recommendation of these investigators.

NOTE Confidence: 0.900593457777778

 $00:19:45.370 \longrightarrow 00:19:48.135$  So where do we stand in the spring of 2022?

NOTE Confidence: 0.900593457777778

 $00:19:48.135 \longrightarrow 00:19:50.310$  We have wonderful the rapies for

NOTE Confidence: 0.900593457777778

00:19:50.310 --> 00:19:52.790 for patients with CLL and Lynn.

00:19:52.790 --> 00:19:54.962 On Hodgman, Thelma and we have

NOTE Confidence: 0.900593457777778

 $00{:}19{:}54.962 \dashrightarrow 00{:}19{:}57.249$  to recognize that our therapy is,

NOTE Confidence: 0.900593457777778

00:19:57.250 --> 00:19:58.345 although they're wonderful,

NOTE Confidence: 0.900593457777778

 $00:19:58.345 \longrightarrow 00:19:59.440$  are not currative.

NOTE Confidence: 0.900593457777778

00:19:59.440 --> 00:20:01.690 Patients typically derive, you know,

NOTE Confidence: 0.900593457777778

 $00:20:01.690 \longrightarrow 00:20:03.370$  decade plus long benefits.

NOTE Confidence: 0.900593457777778

 $00:20:03.370 \longrightarrow 00:20:05.470$  And historically they've been poor.

NOTE Confidence: 0.900593457777778

 $00:20:05.470 \longrightarrow 00:20:06.698$  Correlation of first on

NOTE Confidence: 0.900593457777778

 $00:20:06.698 \longrightarrow 00:20:07.926$  PFS with overall survival,

NOTE Confidence: 0.900593457777778

 $00:20:07.930 \longrightarrow 00:20:10.082$  meaning that we can we can salvage our

NOTE Confidence: 0.900593457777778

00:20:10.082 --> 00:20:12.354 patients if they relapse and because of that,

NOTE Confidence: 0.900593457777778

 $00{:}20{:}12.354 \dashrightarrow 00{:}20{:}14.619$  must much of my focus has been mainly.

NOTE Confidence: 0.900593457777778

00:20:14.620 --> 00:20:16.240 Maintaining good quality of life

NOTE Confidence: 0.900593457777778

 $00:20:16.240 \longrightarrow 00:20:18.508$  and and safety in there of COVID

NOTE Confidence: 0.900593457777778

00:20:18.508 --> 00:20:20.573 and what that really means is that

NOTE Confidence: 0.900593457777778

 $00:20:20.573 \longrightarrow 00:20:22.140$  actress surveillance and remains

 $00:20:22.140 \longrightarrow 00:20:23.700$  the standard of care for those

NOTE Confidence: 0.900593457777778

 $00:20:23.700 \longrightarrow 00:20:25.433$  that don't have clear indications

NOTE Confidence: 0.900593457777778

 $00{:}20{:}25.433 \dashrightarrow 00{:}20{:}26.977$  for lymphoma directed treatment.

NOTE Confidence: 0.900593457777778

00:20:26.980 --> 00:20:29.434 It means educating patients really ad

NOTE Confidence: 0.900593457777778

 $00:20:29.434 \longrightarrow 00:20:31.510$  nauseum about vaccinations and early

NOTE Confidence: 0.900593457777778

 $00:20:31.510 \longrightarrow 00:20:33.778$  COVID testing as well as therapeutics.

NOTE Confidence: 0.900593457777778

00:20:33.780 --> 00:20:35.740 And then it means if if we do need treatment,

NOTE Confidence: 0.900593457777778

00:20:35.740 --> 00:20:38.080 which certainly some do shifting more

NOTE Confidence: 0.900593457777778

 $00:20:38.080 \longrightarrow 00:20:40.320$  towards the fixed duration therapies.

NOTE Confidence: 0.900593457777778

 $00:20:40.320 \longrightarrow 00:20:42.420$  Ultimately, as we move forward,

NOTE Confidence: 0.900593457777778

00:20:42.420 --> 00:20:45.017 I think MRD is an important outcome.

NOTE Confidence: 0.900593457777778

 $00:20:45.020 \longrightarrow 00:20:46.604$  But I also think that things

NOTE Confidence: 0.900593457777778

00:20:46.604 --> 00:20:47.660 like I mean reconstitution,

NOTE Confidence: 0.900593457777778

 $00:20:47.660 \longrightarrow 00:20:50.117$  quality of life and non formal related

NOTE Confidence: 0.900593457777778

 $00:20:50.117 \longrightarrow 00:20:51.887$  mortality but really important key

00:20:51.887 --> 00:20:54.176 metrics as we look at the future

NOTE Confidence: 0.900593457777778

00:20:54.176 --> 00:20:55.974 readouts of clinical trials and

NOTE Confidence: 0.900593457777778

 $00:20:55.974 \longrightarrow 00:20:58.490$  so with that I will move over to

NOTE Confidence: 0.900593457777778

 $00:20:58.490 \longrightarrow 00:21:00.275$  Doctor Kothari who will lead us in

NOTE Confidence: 0.900593457777778

 $00:21:00.275 \longrightarrow 00:21:01.926$  our presentation of diffuse large

NOTE Confidence: 0.900593457777778

00:21:01.926 --> 00:21:03.924 B cell phone mantels on phone.

NOTE Confidence: 0.888663788888889

 $00:21:16.020 \longrightarrow 00:21:17.790$  Thank you Scott.

NOTE Confidence: 0.888663788888889

 $00:21:17.790 \longrightarrow 00:21:21.330$  So I'm going to present on.

NOTE Confidence: 0.888663788888889

 $00{:}21{:}21.330 \dashrightarrow 00{:}21{:}23.270$  DLBCL and Mantle cell lymphoma.

NOTE Confidence: 0.888663788888889

00:21:23.270 --> 00:21:26.426 Ash 2021. Highlights and for DLBCL.

NOTE Confidence: 0.888663788888889

00:21:26.430 --> 00:21:28.548 I would like to focus on

NOTE Confidence: 0.888663788888889

 $00:21:28.548 \longrightarrow 00:21:29.656$  two frontline studies,

NOTE Confidence: 0.888663788888889

 $00:21:29.656 \longrightarrow 00:21:32.428$  one being a Polaris which has been

NOTE Confidence: 0.888663788888889

 $00:21:32.428 \longrightarrow 00:21:34.880$  hotly debated and discussed in various

NOTE Confidence: 0.888663788888889

 $00:21:34.880 \longrightarrow 00:21:37.256$  forums after it was presented as

NOTE Confidence: 0.888663788888889

 $00{:}21{:}37.331 \dashrightarrow 00{:}21{:}39.413$  a late breaking abstract and then

00:21:39.413 --> 00:21:42.114 use of high dose methotrexate to

NOTE Confidence: 0.888663788888889

 $00{:}21{:}42.114 \dashrightarrow 00{:}21{:}46.962$  reduce CNS relapse which was a big

NOTE Confidence: 0.888663788888889

 $00:21:46.962 \longrightarrow 00:21:49.084$  retrospective analysis that we'll

NOTE Confidence: 0.888663788888889

 $00:21:49.084 \longrightarrow 00:21:50.769$  discuss in mantle cell lymphoma.

NOTE Confidence: 0.88866378888888900:21:50.770 --> 00:21:51.480 I'll discuss.

NOTE Confidence: 0.888663788888889

00:21:51.480 --> 00:21:54.430 From the front line, long term data on MCL.

NOTE Confidence: 0.888663788888889

00:21:54.430 --> 00:21:55.786 One younger trial,

NOTE Confidence: 0.888663788888889

00:21:55.786 --> 00:21:58.950 which is which uses hydro site urban

NOTE Confidence: 0.888663788888889

00:21:59.037 --> 00:22:01.722 containing regimens compared to R

NOTE Confidence: 0.888663788888889

 $00:22:01.722 \longrightarrow 00:22:03.966$  Chop and then in maintenance setting.

NOTE Confidence: 0.888663788888889

 $00:22:03.970 \longrightarrow 00:22:06.580$  Use of R-squared which is limited

NOTE Confidence: 0.888663788888889

 $00{:}22{:}06.580 \dashrightarrow 00{:}22{:}08.320$  with rituximab versus rituximab.

NOTE Confidence: 0.888663788888889

 $00{:}22{:}08.320 \dashrightarrow 00{:}22{:}10.798$  After first line in elderly patients

NOTE Confidence: 0.888663788888889

00:22:10.798 --> 00:22:13.086 and then in relapsed refractory

NOTE Confidence: 0.888663788888889

 $00:22:13.086 \longrightarrow 00:22:15.708$  setting glue which is a bite.

 $00{:}22{:}15.708 \dashrightarrow 00{:}22{:}17.216$  Bispecific T cell engager

NOTE Confidence: 0.888663788888889

 $00:22:17.216 \longrightarrow 00:22:19.307$  after we take a I failure.

NOTE Confidence: 0.7022962075

 $00:22:21.850 \longrightarrow 00:22:23.078$  Here are my disclosures.

NOTE Confidence: 0.91562578555556

 $00:22:25.260 \longrightarrow 00:22:29.644$  So this was probably one of the most

NOTE Confidence: 0.91562578555556

00:22:29.644 --> 00:22:32.540 exciting trials that were, you know,

NOTE Confidence: 0.91562578555556

00:22:32.540 --> 00:22:35.424 discussed and presented at ASH 2021,

NOTE Confidence: 0.91562578555556

 $00:22:35.424 \longrightarrow 00:22:37.236$  which potentially changes

NOTE Confidence: 0.91562578555556

00:22:37.236 --> 00:22:40.256 our frontline care in DLBCL.

NOTE Confidence: 0.915625785555556

 $00:22:40.260 \longrightarrow 00:22:42.740$  And hence I would like to discuss this

NOTE Confidence: 0.91562578555556

 $00:22:42.740 \longrightarrow 00:22:45.197$  so there's a bullet is alive with Odin,

NOTE Confidence: 0.915625785555556

00:22:45.200 --> 00:22:48.386 is an antibody drug conjugate which

NOTE Confidence: 0.91562578555556

 $00:22:48.386 \longrightarrow 00:22:52.115$  targets CD79-B and eventually leads to

NOTE Confidence: 0.91562578555556

 $00:22:52.115 \longrightarrow 00:22:55.310$  microtubule disruption and epic ptosis.

NOTE Confidence: 0.915625785555556

 $00:22:55.310 \longrightarrow 00:22:57.030$  And you know it was.

NOTE Confidence: 0.91562578555556

00:22:57.030 --> 00:22:59.838 It has been extensively studied and

NOTE Confidence: 0.91562578555556

 $00:22:59.838 \longrightarrow 00:23:02.160$  now approved in combination with.

 $00:23:02.160 \longrightarrow 00:23:05.710$  In the relapsed refractory setting.

NOTE Confidence: 0.91562578555556

 $00:23:05.710 \longrightarrow 00:23:09.660$  So the researchers here studied

NOTE Confidence: 0.91562578555556

00:23:09.660 --> 00:23:12.370 patients who were previously untreated,

NOTE Confidence: 0.91562578555556

 $00:23:12.370 \longrightarrow 00:23:13.842$  had done previously untreated

NOTE Confidence: 0.91562578555556

 $00:23:13.842 \longrightarrow 00:23:16.050$  DLBCL age 18 to 8 years.

NOTE Confidence: 0.91562578555556

 $00:23:16.050 \longrightarrow 00:23:21.530$  IPI score of two to 5 = 0 to 2.

NOTE Confidence: 0.91562578555556

 $00:23:21.530 \longrightarrow 00:23:23.408$  With stratification factors

NOTE Confidence: 0.91562578555556

 $00:23:23.408 \longrightarrow 00:23:25.286$  as mentioned here.

NOTE Confidence: 0.91562578555556

 $00:23:25.290 \longrightarrow 00:23:27.310$  Randomize one to one between

NOTE Confidence: 0.91562578555556

 $00{:}23{:}27.310 \dashrightarrow 00{:}23{:}29.330$  Polar archip versus R chop.

NOTE Confidence: 0.91562578555556

 $00:23:29.330 \longrightarrow 00:23:30.705$  So when Christine was swapped

NOTE Confidence: 0.91562578555556

00:23:30.705 --> 00:23:33.800 with a political map, dowtin.

NOTE Confidence: 0.91562578555556

 $00{:}23{:}33.800 \dashrightarrow 00{:}23{:}35.776$  And it's important to note that it is

NOTE Confidence: 0.91562578555556

00:23:35.776 --> 00:23:37.360 a randomized double blinded study,

NOTE Confidence: 0.91562578555556

 $00:23:37.360 \longrightarrow 00:23:40.258$  so the investigators or patients had no,

 $00:23:40.260 \longrightarrow 00:23:43.158$  I did not know what therapy

NOTE Confidence: 0.91562578555556

 $00:23:43.158 \longrightarrow 00:23:44.607$  they were receiving.

NOTE Confidence: 0.91562578555556

 $00:23:44.610 \longrightarrow 00:23:46.075$  And this was followed by

NOTE Confidence: 0.91562578555556

 $00:23:46.075 \longrightarrow 00:23:47.247$  two cycles of rituximab.

NOTE Confidence: 0.91562578555556

 $00:23:47.250 \longrightarrow 00:23:51.090$  This was mainly to satisfy European

NOTE Confidence: 0.91562578555556

 $00:23:51.090 \longrightarrow 00:23:54.240$  regulatory requirements as eight cycles

NOTE Confidence: 0.91562578555556

00:23:54.240 --> 00:23:57.698 of therapy is a standard in Europe.

NOTE Confidence: 0.91562578555556

 $00:23:57.700 \longrightarrow 00:23:59.148$  The primary endpoint was

NOTE Confidence: 0.91562578555556

 $00{:}23{:}59.148 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}24{:}00.234$  progression free survival,

NOTE Confidence: 0.91562578555556

 $00:24:00.240 \longrightarrow 00:24:01.860$  which was investigator assessed.

NOTE Confidence: 0.915625785555556

 $00:24:01.860 \longrightarrow 00:24:03.885$  Secondary endpoints are listed here.

NOTE Confidence: 0.828113313

 $00:24:06.630 \longrightarrow 00:24:08.568$  And these were the demographic and

NOTE Confidence: 0.828113313

 $00:24:08.568 \longrightarrow 00:24:09.860$  clinical characteristics at baseline,

NOTE Confidence: 0.828113313

 $00:24:09.860 \longrightarrow 00:24:13.304$  so you know it's very well balanced.

NOTE Confidence: 0.828113313

 $00:24:13.310 \longrightarrow 00:24:15.662$  The important things to note here

NOTE Confidence: 0.828113313

 $00:24:15.662 \longrightarrow 00:24:18.212$  are there are 10% of patients

 $00:24:18.212 \longrightarrow 00:24:21.158$  with early stage disease and 90%

NOTE Confidence: 0.828113313

 $00{:}24{:}21.160 \dashrightarrow 00{:}24{:}23.788$  with stage three or four disease,

NOTE Confidence: 0.828113313

 $00:24:23.790 \longrightarrow 00:24:27.549$  and IPI score of two was in

NOTE Confidence: 0.828113313

 $00:24:27.549 \longrightarrow 00:24:29.636$  approximately 38% of patients

NOTE Confidence: 0.828113313

 $00:24:29.636 \longrightarrow 00:24:32.654$  versus 62% were three to five,

NOTE Confidence: 0.828113313

 $00:24:32.660 \longrightarrow 00:24:36.524$  and it was well balanced between ABC and.

NOTE Confidence: 0.828113313

00:24:36.530 --> 00:24:37.852 Subtype, interestingly,

NOTE Confidence: 0.828113313

 $00:24:37.852 \longrightarrow 00:24:41.157$  there were double expressor lymphomas

NOTE Confidence: 0.828113313

00:24:41.157 --> 00:24:43.140 quite heavily represented,

NOTE Confidence: 0.828113313

 $00:24:43.140 \longrightarrow 00:24:46.080 38\%$  versus 41%,

NOTE Confidence: 0.828113313

 $00{:}24{:}46.080 \dashrightarrow 00{:}24{:}49.510$  and double hit lymphoma or triple in

NOTE Confidence: 0.828113313

 $00{:}24{:}49.510 \dashrightarrow 00{:}24{:}52.678$  lymphomas were 8% and 6% respectively.

NOTE Confidence: 0.786806552

 $00:24:54.940 \longrightarrow 00:24:57.280$  So these are the curves,

NOTE Confidence: 0.786806552

 $00:24:57.280 \longrightarrow 00:25:00.244$  the number one being investigated as

NOTE Confidence: 0.786806552

 $00:25:00.244 \longrightarrow 00:25:02.220$  assessed progression free survival,

00:25:02.220 --> 00:25:05.476 which was the primary endpoint of this trial,

NOTE Confidence: 0.786806552

 $00:25:05.480 \longrightarrow 00:25:09.200$  and the hazard ratio was of 0.73 not

NOTE Confidence: 0.786806552

 $00:25:09.200 \longrightarrow 00:25:12.350$  crossing one with P value of 0.02,

NOTE Confidence: 0.786806552

 $00:25:12.350 \longrightarrow 00:25:15.110$  showing statistical significance of

NOTE Confidence: 0.786806552

 $00:25:15.110 \longrightarrow 00:25:19.669$  polar chip in comparison to our chalk.

NOTE Confidence: 0.786806552

 $00{:}25{:}19.670 \dashrightarrow 00{:}25{:}22.510$  If you if you see here the overall

NOTE Confidence: 0.786806552

 $00:25:22.510 \longrightarrow 00:25:25.352$  survival then you clearly there is no

NOTE Confidence: 0.786806552

 $00:25:25.352 \longrightarrow 00:25:28.250$  overall survival benefit at at the

NOTE Confidence: 0.786806552

 $00{:}25{:}28.342 \dashrightarrow 00{:}25{:}31.382$  short term follow-up so far with a P

NOTE Confidence: 0.786806552

 $00:25:31.382 \longrightarrow 00:25:34.340$  value of 0.75 and hazard ratio of 0.94.

NOTE Confidence: 0.860221215333333

 $00{:}25{:}36.830 \dashrightarrow 00{:}25{:}39.250$  Interestingly, this is assessment

NOTE Confidence: 0.860221215333333

 $00:25:39.250 \longrightarrow 00:25:41.670$  of patients who received subsequent

NOTE Confidence: 0.860221215333333

 $00:25:41.740 \longrightarrow 00:25:44.430$  treatments after this frontline therapy.

NOTE Confidence: 0.860221215333333

00:25:44.430 --> 00:25:46.365 And clearly if you count

NOTE Confidence: 0.860221215333333

 $00:25:46.365 \longrightarrow 00:25:47.913$  any modality of treatment,

NOTE Confidence: 0.860221215333333

 $00:25:47.920 \longrightarrow 00:25:50.485$  then our top armed patients

 $00:25:50.485 \longrightarrow 00:25:52.024$  got substantially more.

NOTE Confidence: 0.860221215333333

 $00:25:52.030 \longrightarrow 00:25:54.870 \ 30\%$  of patients got received.

NOTE Confidence: 0.860221215333333

 $00{:}25{:}54.870 \dashrightarrow 00{:}25{:}56.910$  Subsequent treatments versus

NOTE Confidence: 0.860221215333333

 $00:25:56.910 \longrightarrow 00:25:58.898$  only 22.5% in polar artship.

NOTE Confidence: 0.89812805

 $00:26:02.230 \longrightarrow 00:26:04.141$  This is the subgroup analysis and I

NOTE Confidence: 0.89812805

00:26:04.141 --> 00:26:06.129 would like to draw your attention,

NOTE Confidence: 0.89812805

00:26:06.130 --> 00:26:08.994 although we would you know caution in making

NOTE Confidence: 0.89812805

 $00:26:08.994 \longrightarrow 00:26:13.820$  any too strong of conclusions here, but.

NOTE Confidence: 0.89812805

 $00{:}26{:}13.820 \dashrightarrow 00{:}26{:}15.842$  Monkey disease if it was absent

NOTE Confidence: 0.89812805

 $00:26:15.842 \longrightarrow 00:26:18.296$  at polar Chip, showed more

NOTE Confidence: 0.89812805

 $00:26:18.296 \longrightarrow 00:26:20.450$  statistically significant advantage.

NOTE Confidence: 0.89812805

00:26:20.450 --> 00:26:24.440 ABC seller Origin, you know,

NOTE Confidence: 0.89812805

 $00:26:24.440 \longrightarrow 00:26:28.416$  pull our chip bit better in that

NOTE Confidence: 0.89812805

 $00:26:28.416 \longrightarrow 00:26:30.994$  and IPI score of three to five

NOTE Confidence: 0.89812805

 $00:26:30.994 \longrightarrow 00:26:33.151$  versus 2 polar chips seem to

 $00:26:33.151 \longrightarrow 00:26:35.026$  do better in those subgroups.

NOTE Confidence: 0.843307762

 $00:26:38.720 \longrightarrow 00:26:39.680$  Common adverse events.

NOTE Confidence: 0.843307762

00:26:39.680 --> 00:26:42.036 This is, I think, a very important slide,

NOTE Confidence: 0.843307762

 $00:26:42.040 \longrightarrow 00:26:44.854$  because this really tells us that the

NOTE Confidence: 0.843307762

 $00:26:44.854 \longrightarrow 00:26:47.352$  double blinded portion of the study

NOTE Confidence: 0.843307762

 $00:26:47.352 \longrightarrow 00:26:49.392$  worked well because it's identical

NOTE Confidence: 0.843307762

00:26:49.392 --> 00:26:51.488 between polar chip and our chop,

NOTE Confidence: 0.843307762

00:26:51.490 --> 00:26:53.498 including peripheral neuropathy incidents.

NOTE Confidence: 0.843307762

 $00:26:53.498 \longrightarrow 00:26:56.510$  There was slight higher rate of

NOTE Confidence: 0.843307762

 $00:26:56.582 \longrightarrow 00:26:58.290$  higher grade febrile neutropenia

NOTE Confidence: 0.843307762

00:26:58.290 --> 00:27:00.852 in polar archip versus R chop,

NOTE Confidence: 0.843307762

 $00:27:00.860 \longrightarrow 00:27:02.354$  but the rest of the side

NOTE Confidence: 0.843307762

00:27:02.354 --> 00:27:03.350 effects are pretty compatible.

NOTE Confidence: 0.878186221904762

 $00:27:05.500 \longrightarrow 00:27:07.932$  So the way I see this trial is

NOTE Confidence: 0.878186221904762

00:27:07.932 --> 00:27:10.296 very nicely depicted in this figure

NOTE Confidence: 0.878186221904762

 $00{:}27{:}10.296 \to 00{:}27{:}12.816$  from a cancer cell paper published

00:27:12.890 --> 00:27:15.925 recently by Doctor Chu is essentially

NOTE Confidence: 0.878186221904762

 $00{:}27{:}15.925 \dashrightarrow 00{:}27{:}19.517$  a patients who are at have higher

NOTE Confidence: 0.878186221904762

 $00{:}27{:}19.517 \dashrightarrow 00{:}27{:}21.518$  IPI score in the current setting.

NOTE Confidence: 0.878186221904762

00:27:21.518 --> 00:27:23.443 They would get our chop and when they

NOTE Confidence: 0.878186221904762

 $00:27:23.443 \longrightarrow 00:27:25.115$  fail they would be in this pool to

NOTE Confidence: 0.878186221904762

 $00:27:25.167 \longrightarrow 00:27:26.617$  get autologous stem cell transplant

NOTE Confidence: 0.878186221904762

00:27:26.617 --> 00:27:28.864 or they would have failed and they

NOTE Confidence: 0.878186221904762

 $00{:}27{:}28.864 \dashrightarrow 00{:}27{:}31.246$  would have gotten a salvage regimens.

NOTE Confidence: 0.878186221904762

 $00:27:31.250 \longrightarrow 00:27:33.574$  In the future we would re stratify

NOTE Confidence: 0.878186221904762

 $00{:}27{:}33.574 \dashrightarrow 00{:}27{:}35.749$  them based on their IPI score.

NOTE Confidence: 0.878186221904762

 $00:27:35.750 \longrightarrow 00:27:37.748$  I remember that 225 was the

NOTE Confidence: 0.878186221904762

 $00:27:37.748 \longrightarrow 00:27:38.414$  inclusion criteria,

NOTE Confidence: 0.878186221904762

 $00{:}27{:}38.420 \dashrightarrow 00{:}27{:}40.415$  subgroup was for the three to five,

NOTE Confidence: 0.878186221904762

00:27:40.420 --> 00:27:42.175 showing more advantage,

NOTE Confidence: 0.878186221904762

00:27:42.175 --> 00:27:45.685 but all you know the inclusion

 $00:27:45.685 \longrightarrow 00:27:47.848$  criteria was two to five.

NOTE Confidence: 0.878186221904762

 $00:27:47.850 \longrightarrow 00:27:49.986$  And then you would basically give

NOTE Confidence: 0.878186221904762

00:27:49.986 --> 00:27:51.870 our choppin lower IPI score.

NOTE Confidence: 0.878186221904762

00:27:51.870 --> 00:27:54.766 Patients and polar ship in the higher ones,

NOTE Confidence: 0.878186221904762

 $00:27:54.770 \longrightarrow 00:27:57.185$  and then you would have less patience.

NOTE Confidence: 0.878186221904762

 $00:27:57.190 \longrightarrow 00:27:59.080$  Who would relapse and the ones

NOTE Confidence: 0.878186221904762

 $00:27:59.080 \longrightarrow 00:28:00.025$  who would relapse.

NOTE Confidence: 0.878186221904762

00:28:00.030 --> 00:28:01.848 You have now options of autologous

NOTE Confidence: 0.878186221904762

 $00{:}28{:}01.848 \dashrightarrow 00{:}28{:}03.423$  stem cell transplant if they

NOTE Confidence: 0.878186221904762

 $00:28:03.423 \longrightarrow 00:28:04.948$  have relapsed after 12 months,

NOTE Confidence: 0.878186221904762

 $00:28:04.950 \longrightarrow 00:28:08.262$  or they have achieved complete remission

NOTE Confidence: 0.878186221904762

 $00:28:08.262 \longrightarrow 00:28:11.510$  from salvage regimen or car T cell therapy,

NOTE Confidence: 0.878186221904762

 $00:28:11.510 \longrightarrow 00:28:13.246$  and if they fail then to move

NOTE Confidence: 0.878186221904762

 $00{:}28{:}13.246 \dashrightarrow 00{:}28{:}14.520$  on to salvage regimen.

NOTE Confidence: 0.878186221904762

 $00:28:14.520 \longrightarrow 00:28:16.711$  So this way we hope that we

NOTE Confidence: 0.878186221904762

00:28:16.711 --> 00:28:17.650 have less patience.

 $00:28:17.650 \longrightarrow 00:28:19.880$  In this pool to treat.

NOTE Confidence: 0.824315556842105

 $00:28:23.600 \longrightarrow 00:28:25.861$  So my final thoughts on the politics

NOTE Confidence: 0.824315556842105

00:28:25.861 --> 00:28:28.946 trial is that PFS benefit from a well

NOTE Confidence: 0.824315556842105

 $00:28:28.946 \longrightarrow 00:28:30.582$  designed randomized control trial

NOTE Confidence: 0.824315556842105

 $00:28:30.590 \longrightarrow 00:28:33.390$  in this population is meaningful.

NOTE Confidence: 0.824315556842105

00:28:33.390 --> 00:28:35.654 Regulatory approval is pending.

NOTE Confidence: 0.824315556842105

00:28:35.654 --> 00:28:38.085 Currently, long term data will guide

NOTE Confidence: 0.824315556842105

 $00:28:38.085 \longrightarrow 00:28:40.518$  further use subgroup analysis is only

NOTE Confidence: 0.824315556842105

 $00{:}28{:}40.518 \dashrightarrow 00{:}28{:}42.998$  hypothesis generating no known biological

NOTE Confidence: 0.824315556842105

 $00{:}28{:}42.998 \dashrightarrow 00{:}28{:}45.499$  rationale for higher responses in ABC.

NOTE Confidence: 0.824315556842105

 $00:28:45.500 \longrightarrow 00:28:47.680$  DLBCL is known so far.

NOTE Confidence: 0.824315556842105

 $00:28:47.680 \longrightarrow 00:28:49.730$  What will be the role of polit ISM and we

NOTE Confidence: 0.824315556842105

 $00{:}28{:}49.780 \dashrightarrow 00{:}28{:}51.676$  wrote in and relaxed refractory DLBCL.

NOTE Confidence: 0.824315556842105

 $00:28:51.680 \longrightarrow 00:28:54.830$  Uh, because we all use polar,

NOTE Confidence: 0.824315556842105

00:28:54.830 --> 00:28:56.782 quite commonly in relapsed

00:28:56.782 --> 00:28:58.556 refractory setting as salvage,

NOTE Confidence: 0.824315556842105

 $00{:}28{:}58.556 \dashrightarrow 00{:}29{:}01.942$  and that is going to become a problem

NOTE Confidence: 0.824315556842105

 $00:29:01.942 \longrightarrow 00:29:04.726$  once polatuzumab wrote in moves frontline.

NOTE Confidence: 0.824315556842105

 $00:29:04.730 \longrightarrow 00:29:07.068$  The good news is that we have

NOTE Confidence: 0.824315556842105

 $00:29:07.068 \longrightarrow 00:29:08.737$  other approved the rapies like Tafel

NOTE Confidence: 0.824315556842105

00:29:08.737 --> 00:29:10.543 in and Lanka struck some AB,

NOTE Confidence: 0.824315556842105

 $00:29:10.550 \longrightarrow 00:29:13.034$  so hopefully we'll have more approvals

NOTE Confidence: 0.824315556842105

 $00:29:13.034 \longrightarrow 00:29:16.843$  in the future and we can expand our

NOTE Confidence: 0.824315556842105

00:29:16.843 --> 00:29:18.397 relapsed refractory repertoire.

NOTE Confidence: 0.824315556842105

 $00:29:18.400 \longrightarrow 00:29:20.540$  While the differences are statistically

NOTE Confidence: 0.824315556842105

00:29:20.540 --> 00:29:21.824 and clinically meaningful,

NOTE Confidence: 0.824315556842105

 $00:29:21.830 \longrightarrow 00:29:23.780$  this is not a game changer.

NOTE Confidence: 0.824315556842105

 $00{:}29{:}23.780 \longrightarrow 00{:}29{:}25.635$  Other class of drugs like bites and

NOTE Confidence: 0.824315556842105

00:29:25.635 --> 00:29:27.841 car T cells should and are being

NOTE Confidence: 0.824315556842105

00:29:27.841 --> 00:29:28.855 studied in frontline,

NOTE Confidence: 0.824315556842105

 $00:29:28.860 \longrightarrow 00:29:31.620$  especially in high risk disease.

 $00{:}29{:}31.620 \dashrightarrow 00{:}29{:}33.560$  Financial toxicity is real and

NOTE Confidence: 0.824315556842105

 $00:29:33.560 \longrightarrow 00:29:35.500$  should be discussed with patients

NOTE Confidence: 0.824315556842105

 $00:29:35.564 \longrightarrow 00:29:37.016$  on a case by case basis.

NOTE Confidence: 0.780394385833333

 $00:29:39.840 \longrightarrow 00:29:42.773$  2nd is hydro methotrexate is not associated

NOTE Confidence: 0.780394385833333

00:29:42.773 --> 00:29:45.722 with reduction in CNS relapse in patients

NOTE Confidence: 0.780394385833333

00:29:45.722 --> 00:29:48.152 with aggressive B cell lymphoma and

NOTE Confidence: 0.780394385833333

00:29:48.226 --> 00:29:50.698 international retrospective study of

NOTE Confidence: 0.780394385833333

 $00:29:50.700 \longrightarrow 00:29:55.656$  2300 patients presented by Doctor Lewis.

NOTE Confidence: 0.780394385833333

 $00:29:55.660 \longrightarrow 00:29:58.315$  So we know that CNS IPI score is helpful

NOTE Confidence: 0.780394385833333

 $00:29:58.315 \longrightarrow 00:30:00.698$  in knowing what kind of patients are

NOTE Confidence: 0.780394385833333

 $00{:}30{:}00.698 \mathrel{\text{--}}{>} 00{:}30{:}03.268$  going to have a CNS relapse at are

NOTE Confidence: 0.780394385833333

 $00:30:03.268 \dashrightarrow 00:30:05.677$  at a higher risk of CNS relapse.

NOTE Confidence: 0.780394385833333

 $00:30:05.677 \dashrightarrow 00:30:10.416$  But overall patients with those high risk

NOTE Confidence: 0.780394385833333

 $00:30:10.416 \longrightarrow 00:30:14.478$  features they fare poorly and much needs

NOTE Confidence: 0.780394385833333

 $00:30:14.478 \longrightarrow 00:30:17.926$  to be done to prevent these relapses,

00:30:17.926 --> 00:30:21.433 so there is no consensus on what CNS

NOTE Confidence: 0.780394385833333

 $00:30:21.433 \longrightarrow 00:30:23.548$  directed prophylactic therapy should be

NOTE Confidence: 0.780394385833333

 $00:30:23.548 \longrightarrow 00:30:26.194$  given and how it should be incorporated.

NOTE Confidence: 0.780394385833333

 $00:30:26.200 \longrightarrow 00:30:30.190$  Into the systemic therapy backbone.

NOTE Confidence: 0.780394385833333

00:30:30.190 --> 00:30:31.846 Many centers, including Yale,

NOTE Confidence: 0.780394385833333

00:30:31.846 --> 00:30:34.330 we we have used hydro methotrexate,

NOTE Confidence: 0.780394385833333

 $00:30:34.330 \longrightarrow 00:30:36.502$  which we hope mitigate CNS risk

NOTE Confidence: 0.780394385833333

 $00:30:36.502 \dashrightarrow 00:30:38.510$  based on some retrospective studies.

NOTE Confidence: 0.780394385833333

00:30:38.510 --> 00:30:41.058 In the past there is no prospective

NOTE Confidence: 0.780394385833333

00:30:41.058 --> 00:30:43.269 data to guide our treatment.

NOTE Confidence: 0.780394385833333

 $00{:}30{:}43.270 \dashrightarrow 00{:}30{:}45.130$  So this eligibility criteria was

NOTE Confidence: 0.780394385833333

00:30:45.130 --> 00:30:47.749 patients with CNS IP S score of

NOTE Confidence: 0.780394385833333

00:30:47.749 --> 00:30:49.825 426 high grade B cell lymphomas,

NOTE Confidence: 0.780394385833333

 $00:30:49.830 \longrightarrow 00:30:52.182$  where we automatically give

NOTE Confidence: 0.780394385833333

00:30:52.182 --> 00:30:53.946 CNS prophylaxis therapy,

NOTE Confidence: 0.780394385833333

 $00:30:53.950 \longrightarrow 00:30:57.958$  primary breast or testicular DLBCL with the

 $00:30:57.958 \longrightarrow 00:31:01.136$  rest of the inclusion criteria shown here.

NOTE Confidence: 0.780394385833333

 $00{:}31{:}01.140 \dashrightarrow 00{:}31{:}03.564$  Including exclusion being CNS

NOTE Confidence: 0.780394385833333

 $00:31:03.564 \longrightarrow 00:31:06.594$  involvement by lymphoma at diagnosis.

NOTE Confidence: 0.745650676

 $00:31:08.660 \longrightarrow 00:31:12.600$  2300 patients were enrolled and.

NOTE Confidence: 0.745650676

 $00:31:12.600 \longrightarrow 00:31:14.550$  Almost 2000 to 1800 patients did

NOTE Confidence: 0.745650676

 $00:31:14.550 \longrightarrow 00:31:16.354$  not get high dose methotrexate

NOTE Confidence: 0.745650676

00:31:16.354 --> 00:31:18.970 versus 400 patients got high dose

NOTE Confidence: 0.745650676

 $00:31:18.970 \longrightarrow 00:31:21.318$  methotrexate and out of those patients

NOTE Confidence: 0.745650676

 $00{:}31{:}21.318 \dashrightarrow 00{:}31{:}23.126$  who got high dose methotrexate,

NOTE Confidence: 0.745650676

 $00{:}31{:}23.126 \dashrightarrow 00{:}31{:}25.656$  CNS relapse was observed in

NOTE Confidence: 0.745650676

 $00:31:25.656 \longrightarrow 00:31:28.010$  31 patients which is 8%.

NOTE Confidence: 0.79133678

 $00:31:30.750 \longrightarrow 00:31:34.230$  Just to draw your attention to

NOTE Confidence: 0.79133678

 $00:31:34.230 \longrightarrow 00:31:37.469$  the fact that really it was,

NOTE Confidence: 0.79133678

00:31:37.470 --> 00:31:39.648 you know, but it percentage wise,

NOTE Confidence: 0.79133678

 $00:31:39.650 \longrightarrow 00:31:43.904$  well balanced study including the E,

 $00:31:43.904 \longrightarrow 00:31:46.536$  COG and B symptoms.

NOTE Confidence: 0.79133678

00:31:46.540 --> 00:31:48.025 And external sites,

NOTE Confidence: 0.79133678

00:31:48.025 --> 00:31:50.995 which was of course heavily heavily

NOTE Confidence: 0.79133678

 $00{:}31{:}50.995 \dashrightarrow 00{:}31{:}53.930$  represented in high dose methotrexate group.

NOTE Confidence: 0.79133678

 $00{:}31{:}53.930 \dashrightarrow 00{:}31{:}55.810$  Here I would like to draw your attention

NOTE Confidence: 0.79133678

 $00{:}31{:}55.810 \dashrightarrow 00{:}31{:}57.688$  to the high risk extranodal sites.

NOTE Confidence: 0.79133678

 $00:31:57.690 \longrightarrow 00:32:00.174$  So clearly we have more representation

NOTE Confidence: 0.79133678

 $00:32:00.174 \longrightarrow 00:32:03.121$  of those patients in the high dose

NOTE Confidence: 0.79133678

 $00:32:03.121 \dashrightarrow 00:32:05.563$  methotrexate group as we would have

NOTE Confidence: 0.79133678

 $00:32:05.563 \longrightarrow 00:32:07.674$  expected and in as you go higher

NOTE Confidence: 0.79133678

 $00{:}32{:}07.674 \dashrightarrow 00{:}32{:}10.120$  up in the number of external sites

NOTE Confidence: 0.79133678

 $00:32:10.120 \longrightarrow 00:32:12.180$  you have high representation in

NOTE Confidence: 0.79133678

 $00:32:12.180 \longrightarrow 00:32:14.409$  the high dose methotrexate group

NOTE Confidence: 0.79133678

 $00:32:14.409 \longrightarrow 00:32:16.629$  as we would have expected.

NOTE Confidence: 0.79133678

 $00:32:16.630 \longrightarrow 00:32:17.860$  These these are the results,

NOTE Confidence: 0.79133678

 $00:32:17.860 \longrightarrow 00:32:19.640$  so in all patients,

 $00:32:19.640 \longrightarrow 00:32:21.865$  cumulative incidence of CNS relapse

NOTE Confidence: 0.79133678

 $00{:}32{:}21.865 \dashrightarrow 00{:}32{:}24.168$  was not statistically significant

NOTE Confidence: 0.79133678

 $00:32:24.168 \longrightarrow 00:32:26.540$  between these two groups.

NOTE Confidence: 0.79133678

 $00:32:26.540 \longrightarrow 00:32:29.277$  It shows 9.2% in Hydros method exit

NOTE Confidence: 0.79133678

 $00:32:29.277 \longrightarrow 00:32:32.674$  group and eight point 1% in in patients

NOTE Confidence: 0.79133678

 $00:32:32.674 \longrightarrow 00:32:36.230$  who did not get high dose methotrexate.

NOTE Confidence: 0.79133678

 $00:32:36.230 \longrightarrow 00:32:38.030$  The similar results hold true

NOTE Confidence: 0.79133678

 $00{:}32{:}38.030 \dashrightarrow 00{:}32{:}39.830$  for patients who achieved CR,

NOTE Confidence: 0.79133678

 $00{:}32{:}39.830 \dashrightarrow 00{:}32{:}42.038$  so this is a subgroup analysis.

NOTE Confidence: 0.81215900125

 $00:32:46.310 \longrightarrow 00:32:48.334$  And this is the site of CNS relapse,

NOTE Confidence: 0.81215900125

00:32:48.340 --> 00:32:49.960 which I thought was very interesting.

NOTE Confidence: 0.81215900125

 $00{:}32{:}49.960 \dashrightarrow 00{:}32{:}52.585$  So patients who did get high dose

NOTE Confidence: 0.81215900125

 $00{:}32{:}52.585 \dashrightarrow 00{:}32{:}54.571$  methotrexate they saw less of

NOTE Confidence: 0.81215900125

 $00{:}32{:}54.571 \dashrightarrow 00{:}32{:}56.520$  parent kaimal relapse versus they

NOTE Confidence: 0.81215900125

 $00:32:56.520 \longrightarrow 00:32:58.040$  saw higher leptomeningeal relapse.

 $00:32:58.040 \longrightarrow 00:32:59.540$  So that brings into question

NOTE Confidence: 0.81215900125

 $00:32:59.540 \longrightarrow 00:33:01.547$  whether a dual strategy of high

NOTE Confidence: 0.81215900125

 $00:33:01.547 \longrightarrow 00:33:03.343$  dose methotrexate with intrathecal

NOTE Confidence: 0.81215900125

 $00:33:03.343 \longrightarrow 00:33:05.139$  methotrexate would be appropriate.

NOTE Confidence: 0.81215900125

 $00:33:05.140 \longrightarrow 00:33:08.530$  Although there is no data to support that.

NOTE Confidence: 0.926234849285714

 $00:33:11.060 \longrightarrow 00:33:13.265$  And then the group describes

NOTE Confidence: 0.926234849285714

 $00{:}33{:}13.265 \dashrightarrow 00{:}33{:}15.029$  multiple subgroup analysis based

NOTE Confidence: 0.926234849285714

 $00:33:15.029 \longrightarrow 00:33:17.269$  on number of external sites.

NOTE Confidence: 0.926234849285714

00:33:17.270 --> 00:33:19.474 Specific external site involvement,

NOTE Confidence: 0.926234849285714

 $00:33:19.474 \longrightarrow 00:33:23.932$  CNS IPI score and the dosage of high dose

NOTE Confidence: 0.926234849285714

 $00{:}33{:}23.932 \dashrightarrow 00{:}33{:}25.756$  methotrexate and so on and so forth.

NOTE Confidence: 0.926234849285714

 $00:33:25.760 \longrightarrow 00:33:28.308$  But none of these subgroup analysis showed

NOTE Confidence: 0.926234849285714

 $00:33:28.308 \longrightarrow 00:33:30.420$  any statistical or clinically meaningful

NOTE Confidence: 0.926234849285714

 $00:33:30.420 \longrightarrow 00:33:32.810$  difference between the two groups.

NOTE Confidence: 0.909237501111111

 $00:33:39.030 \longrightarrow 00:33:40.842$  So in conclusion, in the largest

NOTE Confidence: 0.909237501111111

 $00{:}33{:}40.842 \dashrightarrow 00{:}33{:}42.116$  study to date, investigating

 $00:33:42.116 \longrightarrow 00:33:43.946$  efficacy of high dose methotrexate.

NOTE Confidence: 0.578636815

 $00{:}33{:}46.070 \dashrightarrow 00{:}33{:}48.170$  In reducing CNS relapse in high risk

NOTE Confidence: 0.578636815

00:33:48.170 --> 00:33:50.195 patients, high dose methotrexate was not

NOTE Confidence: 0.578636815

 $00:33:50.195 \longrightarrow 00:33:52.420$  associated with reduction in CNS relapse.

NOTE Confidence: 0.578636815

 $00:33:52.420 \longrightarrow 00:33:54.210$  In overall, for patients within

NOTE Confidence: 0.578636815

 $00:33:54.210 \longrightarrow 00:33:57.100$  CR or in any high risk subgroup.

NOTE Confidence: 0.798993183909091

00:34:00.490 --> 00:34:03.682 Up next I would like to move to

NOTE Confidence: 0.798993183909091

 $00:34:03.682 \longrightarrow 00:34:06.208$  mantle cell lymphoma and discuss

NOTE Confidence: 0.798993183909091

 $00{:}34{:}06.208 \mathrel{--}{>} 00{:}34{:}08.872$  addition of hydro site therapy into

NOTE Confidence: 0.798993183909091

 $00{:}34{:}08.872 \dashrightarrow 00{:}34{:}10.225$ immunochemotherapy before autologous

NOTE Confidence: 0.798993183909091

00:34:10.225 --> 00:34:12.205 stem cell transplantation in patients

NOTE Confidence: 0.798993183909091

00:34:12.205 --> 00:34:14.799 aged 65 years or younger with MCL

NOTE Confidence: 0.798993183909091

 $00{:}34{:}14.799 \dashrightarrow 00{:}34{:}17.011$  known as the MCL one younger study.

NOTE Confidence: 0.796857616666667

00:34:19.240 --> 00:34:21.598 497 patients were randomized between control,

NOTE Confidence: 0.796857616666667

 $00:34:21.600 \longrightarrow 00:34:23.910$  which is our chop and experimental group

00:34:23.910 --> 00:34:26.587 being our chop alternating with our dehab,

NOTE Confidence: 0.796857616666667

 $00{:}34{:}26.590 \dashrightarrow 00{:}34{:}28.390$  which can contain Sitara green.

NOTE Confidence: 0.672028358142857

 $00:34:30.680 \longrightarrow 00:34:33.333$  The results in which were initially 1st

NOTE Confidence: 0.672028358142857

00:34:33.333 --> 00:34:35.800 results published in 2016 are shown here,

NOTE Confidence: 0.672028358142857

 $00:34:35.800 \longrightarrow 00:34:37.186$  which I'm going to skip over.

NOTE Confidence: 0.8688862075

00:34:39.300 --> 00:34:43.940 The updated results from 2021 are shown here,

NOTE Confidence: 0.8688862075

 $00:34:43.940 \longrightarrow 00:34:46.313$  so you see that there is significant

NOTE Confidence: 0.8688862075

 $00{:}34{:}46.313 \dashrightarrow 00{:}34{:}48.149$  difference between the site urban

NOTE Confidence: 0.8688862075

 $00:34:48.149 \longrightarrow 00:34:50.039$  containing regimen versus our chop.

NOTE Confidence: 0.8688862075

 $00:34:50.040 \longrightarrow 00:34:52.740$  With trying to treatment failure

NOTE Confidence: 0.8688862075

 $00:34:52.740 \longrightarrow 00:34:54.558$  8.4 years in our dehab arm

NOTE Confidence: 0.8688862075

 $00:34:54.558 \longrightarrow 00:34:56.419$  versus four years in our chop.

NOTE Confidence: 0.569701485714286

00:34:58.510 --> 00:35:03.046 Similar results hold true for in PFS,

NOTE Confidence: 0.569701485714286

 $00:35:03.050 \longrightarrow 00:35:07.175$  looking at from randomization from end of

NOTE Confidence: 0.569701485714286

 $00:35:07.175 \longrightarrow 00:35:10.420$  induction and from a stem cell transplant

NOTE Confidence: 0.569701485714286

 $00:35:10.420 \longrightarrow 00:35:13.087$  and you know this is very striking.

 $00:35:13.090 \longrightarrow 00:35:15.771$  To note that eight years was the

NOTE Confidence: 0.569701485714286

00:35:15.771 --> 00:35:19.009 median PFS in our chat party help arm,

NOTE Confidence: 0.569701485714286

 $00:35:19.010 \longrightarrow 00:35:22.138$  which is quite significant.

NOTE Confidence: 0.77298903

 $00:35:24.240 \longrightarrow 00:35:27.082$  Overall survival when you look at all

NOTE Confidence: 0.77298903

 $00:35:27.082 \longrightarrow 00:35:29.778$  comers and intention to treat population,

NOTE Confidence: 0.77298903

 $00:35:29.780 \longrightarrow 00:35:31.792$  there was no statistically

NOTE Confidence: 0.77298903

 $00:35:31.792 \longrightarrow 00:35:32.798$  significant difference.

NOTE Confidence: 0.77298903

 $00:35:32.800 \longrightarrow 00:35:35.166$  But if you stratify them by nippy

NOTE Confidence: 0.77298903

 $00:35:35.166 \longrightarrow 00:35:37.331$  then there was statistical least

NOTE Confidence: 0.77298903

 $00{:}35{:}37.331 \dashrightarrow 00{:}35{:}39.479$  significant difference with hazard

NOTE Confidence: 0.77298903

 $00{:}35{:}39.479 \dashrightarrow 00{:}35{:}42.730$  ratio of .74 not crossing the midline.

NOTE Confidence: 0.736200225833333

 $00:35:44.800 \longrightarrow 00:35:48.104$  And these are the highest subgroup

NOTE Confidence: 0.736200225833333

 $00{:}35{:}48.104 \dashrightarrow 00{:}35{:}50.500$  stratification curves for all survival.

NOTE Confidence: 0.736200225833333

 $00{:}35{:}50.500 --> 00{:}35{:}51.980$  So here you have high

NOTE Confidence: 0.736200225833333

 $00:35:51.980 \longrightarrow 00:35:53.460$  risk in defined by high,

 $00:35:53.460 \longrightarrow 00:35:55.240$  intermediate or high MIDI score.

NOTE Confidence: 0.736200225833333

00:35:55.240 --> 00:35:59.937 High High P53, MHC or BLASTOID variant,

NOTE Confidence: 0.736200225833333

 $00:35:59.940 \longrightarrow 00:36:02.886$  and versus low risk where you

NOTE Confidence: 0.736200225833333

 $00:36:02.886 \longrightarrow 00:36:04.850$  have no statistically significant

NOTE Confidence: 0.736200225833333

 $00:36:04.935 \longrightarrow 00:36:07.510$  difference between the two parks.

NOTE Confidence: 0.736200225833333

 $00:36:07.510 \longrightarrow 00:36:09.848$  So conclusions are that hydro site have

NOTE Confidence: 0.736200225833333

 $00:36:09.848 \longrightarrow 00:36:11.620$  been containing induction and autologous

NOTE Confidence: 0.736200225833333

 $00:36:11.620 \longrightarrow 00:36:13.415$  stem cell transplant achieves 60%.

NOTE Confidence: 0.87940361375

00:36:15.970 --> 00:36:18.480 60% survival at 10 years

NOTE Confidence: 0.87940361375

 $00:36:18.480 \longrightarrow 00:36:19.986$  with acceptable toxicity.

NOTE Confidence: 0.87940361375

 $00:36:19.990 \longrightarrow 00:36:21.525$  Benefits of hydro cytarabine in

NOTE Confidence: 0.87940361375

 $00:36:21.525 \longrightarrow 00:36:23.640$  high and low low risk patients.

NOTE Confidence: 0.87940361375

 $00:36:23.640 \longrightarrow 00:36:26.164$  Was observed was significantly

NOTE Confidence: 0.87940361375

 $00:36:26.164 \longrightarrow 00:36:29.154$  improved when adjusted to 67.

NOTE Confidence: 0.87940361375

 $00:36:29.154 \longrightarrow 00:36:31.010$  Open questions still remain.

NOTE Confidence: 0.87940361375

 $00{:}36{:}31.010 \dashrightarrow 00{:}36{:}33.240$  Salvage treatment in art shop

 $00:36:33.240 \longrightarrow 00:36:35.822$  patients and avoidance of TBI

NOTE Confidence: 0.87940361375

 $00:36:35.822 \longrightarrow 00:36:38.487$  may reduce rates of secondary

NOTE Confidence: 0.87940361375

 $00{:}36{:}38.487 \dashrightarrow 00{:}36{:}40.458$  malignancies in in both arms.

NOTE Confidence: 0.667661556

00:36:43.690 --> 00:36:47.070 Next, I'll quickly discuss rituximab,

NOTE Confidence: 0.667661556

 $00:36:47.070 \longrightarrow 00:36:49.006$  a little mild maintenance,

NOTE Confidence: 0.667661556

 $00:36:49.006 \longrightarrow 00:36:51.426$  superior to rituximab maintenance after

NOTE Confidence: 0.667661556

00:36:51.426 --> 00:36:53.630 Firstline Immunochemotherapy in MCL,

NOTE Confidence: 0.667661556

 $00:36:53.630 \longrightarrow 00:36:56.010$  which was the R-squared,

NOTE Confidence: 0.667661556

 $00:36:56.010 \longrightarrow 00:36:58.950$  elderly Merle clinical trial. Uhm?

NOTE Confidence: 0.7044647775

 $00:37:01.660 \longrightarrow 00:37:04.232$  And, uh, another abstract

NOTE Confidence: 0.7044647775

 $00:37:04.232 \longrightarrow 00:37:06.804$  from the same trial.

NOTE Confidence: 0.7044647775

 $00{:}37{:}06.810 \dashrightarrow 00{:}37{:}09.684$  Looking at MRD and its prognostic

NOTE Confidence: 0.7044647775

 $00{:}37{:}09.684 \dashrightarrow 00{:}37{:}12.260$  value in the same trial.

NOTE Confidence: 0.7044647775

 $00:37:12.260 \dashrightarrow 00:37:16.070$  So this trial randomized 620 patients

NOTE Confidence: 0.7044647775

 $00:37:16.070 \longrightarrow 00:37:19.646$  between control arm where 312 patients

 $00:37:19.646 \longrightarrow 00:37:22.236$  got our chopped versus cytarabine

NOTE Confidence: 0.7044647775

 $00{:}37{:}22.236 \dashrightarrow 00{:}37{:}25.037$  containing regimen which incorporated art

NOTE Confidence: 0.7044647775

 $00:37:25.037 \longrightarrow 00:37:27.957$  shop alternating with hydro cytarabine.

NOTE Confidence: 0.7044647775

 $00:37:27.960 \longrightarrow 00:37:31.290$  And then there was second randomization

NOTE Confidence: 0.7044647775

 $00:37:31.290 \longrightarrow 00:37:34.029$  for patients who achieved a CR.

NOTE Confidence: 0.7044647775

00:37:34.030 --> 00:37:38.970 Between R&R squared maintenance.

NOTE Confidence: 0.7044647775

 $00:37:38.970 \longrightarrow 00:37:41.196$  So I'm not going to go over

NOTE Confidence: 0.7044647775

 $00:37:41.196 \longrightarrow 00:37:42.150$  these patient characteristics.

NOTE Confidence: 0.7044647775

 $00{:}37{:}42.150 \dashrightarrow 00{:}37{:}45.030$  They are well balanced in both

NOTE Confidence: 0.7044647775

 $00:37:45.030 \longrightarrow 00:37:48.100$  the arms and same thing holds true

NOTE Confidence: 0.7044647775

 $00:37:48.100 \longrightarrow 00:37:50.700$  for the maintenance arm as well.

NOTE Confidence: 0.7044647775

 $00:37:50.700 \longrightarrow 00:37:53.610$  These were the safety profile differences,

NOTE Confidence: 0.7044647775

 $00:37:53.610 \longrightarrow 00:37:56.345$  quite significant blood and lymphatic

NOTE Confidence: 0.7044647775

 $00{:}37{:}56.345 \dashrightarrow 00{:}37{:}58.533$  system disorders were observed

NOTE Confidence: 0.7044647775

 $00:37:58.533 \longrightarrow 00:38:02.020$  in R-squared versus hour and not

NOTE Confidence: 0.7044647775

 $00:38:02.020 \longrightarrow 00:38:05.120$  unexpectedly higher grades of neutropenia,

 $00:38:05.120 \longrightarrow 00:38:07.380$  anemia and infections were

NOTE Confidence: 0.7044647775

 $00:38:07.380 \longrightarrow 00:38:10.205$  observed in the R-squared arm.

NOTE Confidence: 0.7044647775

 $00:38:10.210 \longrightarrow 00:38:12.778$  Well, these are the PFS and OS curves.

NOTE Confidence: 0.7044647775

 $00:38:12.780 \longrightarrow 00:38:15.084$  There was no OS difference between the two.

NOTE Confidence: 0.7044647775

 $00{:}38{:}15.090 \dashrightarrow 00{:}38{:}18.180$  While there was a higher PFS

NOTE Confidence: 0.7044647775

 $00:38:18.180 \longrightarrow 00:38:20.730$  benefit in the R-squared arm.

NOTE Confidence: 0.7044647775

 $00:38:20.730 \longrightarrow 00:38:23.957$  What I found most interesting was the

NOTE Confidence: 0.7044647775

00:38:23.957 --> 00:38:27.831 MRD analysis on in on this set of

NOTE Confidence: 0.7044647775

 $00:38:27.831 \longrightarrow 00:38:30.226$  patients where we found paradoxically

NOTE Confidence: 0.7044647775

 $00{:}38{:}30.230 \dashrightarrow 00{:}38{:}35.206$  improved PFS in the R-squared arm in MRD

NOTE Confidence: 0.7044647775

 $00{:}38{:}35.206 \dashrightarrow 00{:}38{:}37.995$  negative patients versus MRD positive.

NOTE Confidence: 0.7044647775

 $00:38:37.995 \longrightarrow 00:38:40.570$  The difference is quite striking

NOTE Confidence: 0.7044647775

 $00{:}38{:}40.570 --> 00{:}38{:}44.089 \ 61\% \ versus \ 84\%.$ 

NOTE Confidence: 0.7044647775

 $00:38:44.090 \longrightarrow 00:38:46.450$  So the conclusions are,

NOTE Confidence: 0.7044647775

00:38:46.450 --> 00:38:47.630 I think,

 $00:38:47.630 \longrightarrow 00:38:50.294$  mainly that there is an MRD

NOTE Confidence: 0.7044647775

 $00:38:50.294 \longrightarrow 00:38:52.653$  below the detection threshold of

NOTE Confidence: 0.7044647775

 $00:38:52.653 \longrightarrow 00:38:54.649$  the currently used technique.

NOTE Confidence: 0.7044647775

 $00:38:54.650 \longrightarrow 00:38:55.135$  Clearly,

NOTE Confidence: 0.7044647775

 $00:38:55.135 \longrightarrow 00:38:57.560$  since there was improvement in

NOTE Confidence: 0.7044647775

00:38:57.560 --> 00:38:59.950 the experimental arm which added

NOTE Confidence: 0.7044647775

 $00:38:59.950 \longrightarrow 00:39:01.525$  in negative patients,

NOTE Confidence: 0.7044647775

 $00:39:01.525 \longrightarrow 00:39:05.200$  so we have to take murded studies

NOTE Confidence: 0.7044647775

 $00:39:05.297 \longrightarrow 00:39:08.561$  and you know analyze them carefully

NOTE Confidence: 0.7044647775

 $00:39:08.561 \longrightarrow 00:39:11.980$  before making any big conclusions.

NOTE Confidence: 0.7044647775

 $00:39:11.980 \longrightarrow 00:39:12.224$  Lastly,

NOTE Confidence: 0.7044647775

 $00:39:12.224 \longrightarrow 00:39:13.932$  I would like to show a couple

NOTE Confidence: 0.7044647775

 $00:39:13.932 \longrightarrow 00:39:15.410$  of slides on to fit the map.

NOTE Confidence: 0.7044647775

00:39:15.410 --> 00:39:17.918 A step up dosing in relapse,

NOTE Confidence: 0.7044647775

 $00:39:17.920 \dashrightarrow 00:39:19.720$  refractory mantle cell lymphoma

NOTE Confidence: 0.7044647775

 $00:39:19.720 \longrightarrow 00:39:22.420$  who had paid failed priority care

 $00:39:22.495 \longrightarrow 00:39:25.060$  therapy presented by Doctor Phillips.

NOTE Confidence: 0.7044647775

00:39:25.060 --> 00:39:29.148 Blue Phantom AB is a 20CD3 bispecific

NOTE Confidence: 0.7044647775

00:39:29.148 --> 00:39:31.068 antibody engager with two is

NOTE Confidence: 0.7044647775

 $00:39:31.068 \longrightarrow 00:39:32.930$  21 configuration as shown here.

NOTE Confidence: 0.888712264285714

 $00:39:35.120 \longrightarrow 00:39:38.020$  This was done in combination

NOTE Confidence: 0.888712264285714

 $00:39:38.020 \longrightarrow 00:39:39.180$  with obinutuzumab.

NOTE Confidence: 0.888712264285714

00:39:39.180 --> 00:39:42.300 Either invest fixed dozing or step up dozing.

NOTE Confidence: 0.888712264285714

 $00:39:42.300 \longrightarrow 00:39:44.253$  What I want to draw your attention

NOTE Confidence: 0.888712264285714

 $00:39:44.253 \longrightarrow 00:39:45.720$  to is most patients.

NOTE Confidence: 0.888712264285714

 $00:39:45.720 \dashrightarrow 00:39:50.280$ 69% of patients had relapsed after

NOTE Confidence: 0.888712264285714

00:39:50.280 --> 00:39:53.148 therapy and many of these patients

NOTE Confidence: 0.888712264285714

00:39:53.148 --> 00:39:55.800 were refractory to prior therapy.

NOTE Confidence: 0.888712264285714

00:39:55.800 --> 00:39:58.105 90% of them including refractory

NOTE Confidence: 0.888712264285714

 $00:39:58.105 \longrightarrow 00:39:59.949$  to first line therapy.

NOTE Confidence: 0.888712264285714

 $00:39:59.950 \longrightarrow 00:40:01.190$  In half of the patients.

 $00:40:03.470 \longrightarrow 00:40:05.710$  Serious adverse events were

NOTE Confidence: 0.77609080625

00:40:05.710 --> 00:40:09.420 observed in in this small study,

NOTE Confidence: 0.77609080625

 $00:40:09.420 \longrightarrow 00:40:12.360$  including 62% of patients,

NOTE Confidence: 0.77609080625

 $00:40:12.360 \longrightarrow 00:40:15.330$  most of them being related to Blue Fit map.

NOTE Confidence: 0.77609080625

 $00:40:15.330 \longrightarrow 00:40:17.622$  But important to note that no

NOTE Confidence: 0.77609080625

 $00:40:17.622 \longrightarrow 00:40:19.915$  adverse events leading to treatment

NOTE Confidence: 0.77609080625

00:40:19.915 --> 00:40:21.997 discontinuation were reported.

NOTE Confidence: 0.77609080625

 $00{:}40{:}22.000 \dashrightarrow 00{:}40{:}25.846$  And these are the adverse events.

NOTE Confidence: 0.77609080625

 $00{:}40{:}25.850 \dashrightarrow 00{:}40{:}27.266$  Cytokine release syndrome

NOTE Confidence: 0.77609080625

 $00:40:27.266 \longrightarrow 00:40:29.626$  being the most common one.

NOTE Confidence: 0.77609080625

00:40:29.630 --> 00:40:31.784 This is why I thought of

NOTE Confidence: 0.77609080625

00:40:31.784 --> 00:40:33.220 presenting this trial here.

NOTE Confidence: 0.77609080625

00:40:33.220 --> 00:40:38.292 Very high CR rates and over our

NOTE Confidence: 0.77609080625

 $00:40:38.292 \longrightarrow 00:40:42.464$  rates 67% in all patients and CR

NOTE Confidence: 0.77609080625

 $00:40:42.464 \longrightarrow 00:40:45.668$  versus 81% overall response rate,

NOTE Confidence: 0.77609080625

00:40:45.668 --> 00:40:48.276 especially in patients who

 $00:40:48.276 \longrightarrow 00:40:51.060$  have received prior therapy.

NOTE Confidence: 0.77609080625

 $00:40:51.060 \longrightarrow 00:40:54.806$  So we believe that bytes bytes

NOTE Confidence: 0.77609080625

 $00:40:54.806 \longrightarrow 00:40:57.164$  specific bispecific T cell engagers are

NOTE Confidence: 0.77609080625

 $00:40:57.164 \longrightarrow 00:40:59.729$  going to play an important role in.

NOTE Confidence: 0.77609080625

 $00{:}40{:}59.730 \dashrightarrow 00{:}41{:}01.814$  Refractory mantle cell lymphoma

NOTE Confidence: 0.77609080625

 $00:41:01.814 \longrightarrow 00:41:03.377$  in the future.

NOTE Confidence: 0.77609080625

 $00:41:03.380 \longrightarrow 00:41:05.396$  Thank you and I'll pass on

NOTE Confidence: 0.77609080625

 $00:41:05.396 \longrightarrow 00:41:06.740$  to Doctor Kirschen Sethi,

NOTE Confidence: 0.77609080625

00:41:06.740 --> 00:41:08.665 who will present in Hodgkin

NOTE Confidence: 0.77609080625

 $00{:}41{:}08.665 \dashrightarrow 00{:}41{:}10.205$  lymphoma and diesel lymphomas.

NOTE Confidence: 0.8504945711111111

00:41:13.710 --> 00:41:15.270 Hi everyone, while I'm

NOTE Confidence: 0.850494571111111

 $00:41:15.270 \longrightarrow 00:41:17.220$  trying to share my slides.

NOTE Confidence: 0.850494571111111

 $00{:}41{:}17.220 \dashrightarrow 00{:}41{:}18.977$  Thank you so much for joining us.

NOTE Confidence: 0.902381872

 $00{:}41{:}34.590 --> 00{:}41{:}36.670$  Alright, so I'm going to.

NOTE Confidence: 0.902381872

 $00:41:36.670 \longrightarrow 00:41:38.250$  I have no relevant disclosures.

 $00:41:38.250 \longrightarrow 00:41:40.966$  I'm going to start with Hodgkin lymphoma.

NOTE Confidence: 0.902381872

00:41:40.970 --> 00:41:43.450 My intention is to do a

NOTE Confidence: 0.902381872

 $00:41:43.450 \longrightarrow 00:41:46.010$  very broad overview of.

NOTE Confidence: 0.902381872

 $00:41:46.010 \longrightarrow 00:41:48.002$  Where the field is moving and

NOTE Confidence: 0.902381872

 $00:41:48.002 \longrightarrow 00:41:49.670$  both of these topics are.

NOTE Confidence: 0.902381872

 $00:41:49.670 \longrightarrow 00:41:53.828$  That is Hodgkin and T cell lymphomas.

NOTE Confidence: 0.902381872

 $00:41:53.830 \longrightarrow 00:41:56.170$  So first we'll start with some

NOTE Confidence: 0.902381872

00:41:56.170 --> 00:41:57.730 frontline trials in Hodgkin

NOTE Confidence: 0.902381872

 $00{:}41{:}57.800 \dashrightarrow 00{:}42{:}00.344$  lymphoma and then moving on to

NOTE Confidence: 0.902381872

 $00:42:00.344 \longrightarrow 00:42:02.040$  some relapsed refractory trials.

NOTE Confidence: 0.902381872

 $00:42:02.040 \longrightarrow 00:42:04.144$  I think it's just important to note that

NOTE Confidence: 0.902381872

 $00:42:04.144 \longrightarrow 00:42:06.204$  all of these are basically checkpoint

NOTE Confidence: 0.902381872

 $00:42:06.204 \longrightarrow 00:42:10.060$  therapy based studies that I had I have.

NOTE Confidence: 0.902381872

 $00:42:10.060 \longrightarrow 00:42:11.228$  Included here,

NOTE Confidence: 0.902381872

 $00:42:11.228 \longrightarrow 00:42:14.148$  as you can see here,

NOTE Confidence: 0.902381872

 $00{:}42{:}14.150 \dashrightarrow 00{:}42{:}15.794$ you know checkpoint in a better

00:42:15.794 --> 00:42:17.583 therapy is being brought into the

NOTE Confidence: 0.902381872

 $00{:}42{:}17.583 \dashrightarrow 00{:}42{:}18.855$  frontline in Hodgkin lymphoma.

NOTE Confidence: 0.902381872

 $00:42:18.860 \longrightarrow 00:42:22.580$  In the in the hope of improving long

NOTE Confidence: 0.902381872

 $00:42:22.580 \longrightarrow 00:42:26.027$  term outcome while reducing toxicity and

NOTE Confidence: 0.902381872

 $00:42:26.027 \longrightarrow 00:42:29.780$  then at the same time you we also have.

NOTE Confidence: 0.902381872

00:42:29.780 --> 00:42:32.880 You know, relapse refractory.

NOTE Confidence: 0.902381872

 $00:42:32.880 \longrightarrow 00:42:34.996$  Specially the population that

NOTE Confidence: 0.902381872

00:42:34.996 --> 00:42:37.112 relapses post autologous stem

NOTE Confidence: 0.902381872

 $00:42:37.112 \longrightarrow 00:42:39.936$  cell transplant and there is a,

NOTE Confidence: 0.902381872

 $00:42:39.936 \longrightarrow 00:42:41.904$  uh, a need for.

NOTE Confidence: 0.902381872

00:42:41.910 --> 00:42:43.535 Therapy in patients who fail

NOTE Confidence: 0.902381872

 $00:42:43.535 \longrightarrow 00:42:45.686$  both been tax map and checkpoint

NOTE Confidence: 0.902381872

 $00{:}42{:}45.686 \dashrightarrow 00{:}42{:}47.506$  inhibition in that line,

NOTE Confidence: 0.902381872

 $00:42:47.510 \longrightarrow 00:42:49.406$  and so that's where some of

NOTE Confidence: 0.902381872

 $00:42:49.406 \longrightarrow 00:42:51.000$  most of these studies are.

 $00:42:53.210 \longrightarrow 00:42:55.877$  That's the the therapy they need

NOTE Confidence: 0.696124229166667

 $00{:}42{:}55.877 \dashrightarrow 00{:}42{:}58.129$  that these studies are addressing.

NOTE Confidence: 0.696124229166667

 $00:42:58.130 \longrightarrow 00:43:00.290$  So first the frontline of the

NOTE Confidence: 0.696124229166667

 $00:43:00.290 \longrightarrow 00:43:02.492$  study that I'd like to mention

NOTE Confidence: 0.696124229166667

00:43:02.492 --> 00:43:06.286 is the by Doctor Alan at Emory,

NOTE Confidence: 0.696124229166667

 $00:43:06.290 \longrightarrow 00:43:07.880$  and this was looking at

NOTE Confidence: 0.696124229166667

00:43:07.880 --> 00:43:08.834 single agent pembrolizumab.

NOTE Confidence: 0.696124229166667

 $00:43:08.840 \longrightarrow 00:43:10.848$  I've followed by avd.

NOTE Confidence: 0.696124229166667

00:43:10.848 --> 00:43:12.856 For classical Hodgkin lymphoma,

NOTE Confidence: 0.696124229166667

 $00:43:12.860 \longrightarrow 00:43:15.216$  so this is Brett.

NOTE Confidence: 0.696124229166667

 $00:43:15.216 \longrightarrow 00:43:18.161$  This particular presentation was an

NOTE Confidence: 0.696124229166667

 $00:43:18.161 \longrightarrow 00:43:21.110$  update from a prior ASH presentation

NOTE Confidence: 0.696124229166667

 $00:43:21.110 \longrightarrow 00:43:23.945$  where they had presented the primary

NOTE Confidence: 0.696124229166667

 $00:43:23.945 \longrightarrow 00:43:26.375$  endpoint that is the complete metabolic

NOTE Confidence: 0.696124229166667

 $00:43:26.375 \longrightarrow 00:43:28.154$  response rate by pet city initially.

NOTE Confidence: 0.696124229166667

00:43:28.154 --> 00:43:30.458 So the brief background of this

 $00:43:30.458 \longrightarrow 00:43:34.130$  study was that as we know, 9 feet,

NOTE Confidence: 0.696124229166667

 $00:43:34.130 \longrightarrow 00:43:36.745$  24.1 amplification is common in

NOTE Confidence: 0.696124229166667

00:43:36.745 --> 00:43:38.837 patients with Hodgkin lymphoma.

NOTE Confidence: 0.696124229166667

 $00:43:38.840 \longrightarrow 00:43:42.746$  And so this study by design was.

NOTE Confidence: 0.696124229166667

 $00:43:42.750 \longrightarrow 00:43:45.342$  You had the lead in pembrolizumab

NOTE Confidence: 0.696124229166667

 $00:43:45.342 \longrightarrow 00:43:48.118$  primarily to be able to get some.

NOTE Confidence: 0.696124229166667

00:43:48.120 --> 00:43:50.685 Correlated data for febrile alone

NOTE Confidence: 0.696124229166667

 $00{:}43{:}50.685 \dashrightarrow 00{:}43{:}54.250$  in these patients and to be able to.

NOTE Confidence: 0.696124229166667

 $00:43:54.250 \longrightarrow 00:43:58.428$  Again, see what is it that is

NOTE Confidence: 0.696124229166667

 $00:43:58.430 \longrightarrow 00:44:00.554$  correlating with both response

NOTE Confidence: 0.696124229166667

00:44:00.554 --> 00:44:03.209 and prognosis in these patients?

NOTE Confidence: 0.696124229166667

 $00{:}44{:}03.210 \dashrightarrow 00{:}44{:}05.875$  So this particular abstract was

NOTE Confidence: 0.696124229166667

 $00:44:05.875 \longrightarrow 00:44:08.007$  presenting the secondary endpoints

NOTE Confidence: 0.696124229166667

 $00{:}44{:}08.007 \dashrightarrow 00{:}44{:}10.750$  of updated PFS and overall survival

NOTE Confidence: 0.696124229166667

00:44:10.750 --> 00:44:13.730 at around the 33 month follow up,

 $00:44:13.730 \longrightarrow 00:44:18.020$  and then also further correlative studies.

NOTE Confidence: 0.696124229166667

00:44:18.020 --> 00:44:21.422 So this as I mentioned it was

NOTE Confidence: 0.696124229166667

 $00:44:21.422 \longrightarrow 00:44:23.549$  sequential Pembroke followed by Avd.

NOTE Confidence: 0.696124229166667

 $00:44:23.550 \longrightarrow 00:44:28.241$  The after the initial PET scan 3 cycles

NOTE Confidence: 0.696124229166667

 $00:44:28.241 \longrightarrow 00:44:30.463$  of pembrolizumab was were given and

NOTE Confidence: 0.696124229166667

 $00:44:30.463 \longrightarrow 00:44:33.210$  then the second PET scan was obtained.

NOTE Confidence: 0.696124229166667

00:44:33.210 --> 00:44:34.650 At this point of time,

NOTE Confidence: 0.696124229166667

 $00:44:34.650 \longrightarrow 00:44:36.435$  the primary endpoint of complete

NOTE Confidence: 0.696124229166667

 $00:44:36.435 \longrightarrow 00:44:37.863$  of metabolic is complete.

NOTE Confidence: 0.696124229166667

 $00:44:37.870 \longrightarrow 00:44:40.250$  Metabolic response was assessed

NOTE Confidence: 0.696124229166667

 $00{:}44{:}40.250 \dashrightarrow 00{:}44{:}43.792$  and then in addition they did.

NOTE Confidence: 0.696124229166667

 $00:44:43.792 \longrightarrow 00:44:46.602$  Correlative studies that included both

NOTE Confidence: 0.696124229166667

 $00:44:46.602 \longrightarrow 00:44:49.617$  immunohistochemistry as well as fish 9.

NOTE Confidence: 0.696124229166667

 $00:44:49.617 \longrightarrow 00:44:50.778$  P, 24.1 alterations.

NOTE Confidence: 0.696124229166667

00:44:50.778 --> 00:44:53.730 Then patients went on to receive a video.

NOTE Confidence: 0.963252371666667

 $00:44:57.130 \longrightarrow 00:45:00.638$  So as you can see here, the median age.

 $00:45:00.640 \longrightarrow 00:45:03.928$  For this patient, cohort was 29,

NOTE Confidence: 0.963252371666667

 $00:45:03.928 \longrightarrow 00:45:05.868$  but they did include patients

NOTE Confidence: 0.963252371666667

 $00:45:05.868 \longrightarrow 00:45:08.482$  up to 77 years of age and

NOTE Confidence: 0.963252371666667

 $00:45:08.482 \longrightarrow 00:45:10.120$  about 15% for elderly patients.

NOTE Confidence: 0.72681260375

 $00:45:12.290 \longrightarrow 00:45:16.858$  They enrolled a total of 30 patients and.

NOTE Confidence: 0.72681260375

 $00:45:16.860 \longrightarrow 00:45:19.472$  60% were advanced stage

NOTE Confidence: 0.72681260375

 $00:45:19.472 \longrightarrow 00:45:23.126$  Hodgkin and 40% were early.

NOTE Confidence: 0.72681260375

00:45:23.126 --> 00:45:24.690 Unfavorable Hodgkin.

NOTE Confidence: 0.72681260375

 $00:45:24.690 \longrightarrow 00:45:28.190$  So on the top right of the

NOTE Confidence: 0.72681260375

 $00:45:28.190 \longrightarrow 00:45:30.880$  slide you can see that.

NOTE Confidence: 0.72681260375

 $00{:}45{:}30.880 \dashrightarrow 00{:}45{:}33.770$  The there basically assessment of

NOTE Confidence: 0.72681260375

 $00{:}45{:}33.770 \dashrightarrow 00{:}45{:}35.871$  the complete metabolic response

NOTE Confidence: 0.72681260375

 $00{:}45{:}35.871 \dashrightarrow 00{:}45{:}38.406$  after three cycles of pembrolizum ab.

NOTE Confidence: 0.72681260375

 $00:45:38.410 \longrightarrow 00:45:41.548$  They defined a parameter called near

NOTE Confidence: 0.72681260375

 $00:45:41.548 \longrightarrow 00:45:43.962$  complete medical complete metabolic response,

 $00:45:43.962 \longrightarrow 00:45:47.373$  which was defined as more than 90%

NOTE Confidence: 0.72681260375

 $00:45:47.373 \longrightarrow 00:45:50.788$  in metabolically active tumor volume,

NOTE Confidence: 0.72681260375

00:45:50.790 --> 00:45:54.185 and they found that nearly that CR,

NOTE Confidence: 0.72681260375

00:45:54.190 --> 00:45:57.319 along with near CR was seen in

NOTE Confidence: 0.72681260375

 $00:45:57.319 \longrightarrow 00:45:59.750$  about 63% of patients that embryo

NOTE Confidence: 0.72681260375

 $00:45:59.750 \longrightarrow 00:46:01.158$  alone in the frontline.

NOTE Confidence: 0.788871018333333

 $00:46:03.510 \longrightarrow 00:46:05.202$  And the remaining patients

NOTE Confidence: 0.788871018333333

 $00:46:05.202 \longrightarrow 00:46:06.856$  had a partial response.

NOTE Confidence: 0.788871018333333

 $00:46:06.856 \longrightarrow 00:46:09.274$  In addition, they also looked at.

NOTE Confidence: 0.825995102

00:46:12.090 --> 00:46:14.904 At this time, they reported updated

NOTE Confidence: 0.825995102

 $00:46:14.904 \longrightarrow 00:46:17.258$  PFS and overall survival data,

NOTE Confidence: 0.825995102

00:46:17.258 --> 00:46:19.648 which showed 100% progression free

NOTE Confidence: 0.825995102

 $00:46:19.648 \longrightarrow 00:46:22.658$  survival as well as overall survival

NOTE Confidence: 0.825995102

 $00{:}46{:}22.658 \dashrightarrow 00{:}46{:}26.498$  at a median follow-up of 33 months.

NOTE Confidence: 0.825995102

 $00:46:26.498 \longrightarrow 00:46:28.030$  In addition, there.

NOTE Confidence: 0.825995102

 $00:46:28.030 \longrightarrow 00:46:29.950$  This study was very well designed

 $00:46:29.950 \longrightarrow 00:46:32.316$  in terms of Correlators after the

NOTE Confidence: 0.825995102

 $00{:}46{:}32.316 \dashrightarrow 00{:}46{:}35.592$  lead in Pember Lizum app and they

NOTE Confidence: 0.825995102

 $00:46:35.592 \longrightarrow 00:46:39.191$  noted that alterations of 1924.1,

NOTE Confidence: 0.825995102

 $00:46:39.191 \longrightarrow 00:46:41.177$  which they defined as either die.

NOTE Confidence: 0.825995102

00:46:41.180 --> 00:46:44.407 So my polysemy copy number gain or

NOTE Confidence: 0.825995102

 $00{:}46{:}44.410 \to 00{:}46{:}47.416$  amplification was present in one sum,

NOTE Confidence: 0.825995102

 $00:46:47.420 \longrightarrow 00:46:50.940$  one form or the other in all of the patients.

NOTE Confidence: 0.825995102

 $00:46:50.940 \longrightarrow 00:46:52.725$  It's 100% of the patients

NOTE Confidence: 0.825995102

 $00:46:52.725 \longrightarrow 00:46:54.604$  that they had tissue on,

NOTE Confidence: 0.825995102

 $00:46:54.604 \longrightarrow 00:46:57.438$  which is 28 out of the 30 patients.

NOTE Confidence: 0.825995102 00:46:57.440 --> 00:46:59.470 And. NOTE Confidence: 0.825995102

 $00:46:59.470 \longrightarrow 00:47:02.692$  In looking at a more the

NOTE Confidence: 0.825995102

 $00:47:02.692 \longrightarrow 00:47:04.303$  immunohistochemistry they calculated

NOTE Confidence: 0.825995102

 $00:47:04.303 \longrightarrow 00:47:07.081$  and age score which was combining

NOTE Confidence: 0.825995102

 $00:47:07.081 \longrightarrow 00:47:10.898$  the intensity and intensity of PDL 1.

 $00:47:10.898 \longrightarrow 00:47:13.168$  Staining along with the percentage

NOTE Confidence: 0.825995102

00:47:13.168 --> 00:47:15.780 of cells that were positive.

NOTE Confidence: 0.825995102

 $00:47:15.780 \longrightarrow 00:47:19.835$  And they compared both of these to

NOTE Confidence: 0.825995102

 $00:47:19.835 \longrightarrow 00:47:21.730$  the response to response between

NOTE Confidence: 0.825995102

 $00:47:21.798 \longrightarrow 00:47:23.758$  responders and non responders.

NOTE Confidence: 0.825995102

 $00{:}47{:}23.760 \dashrightarrow 00{:}47{:}25.699$  And they did not find any correlation

NOTE Confidence: 0.825995102

 $00:47:25.699 \longrightarrow 00:47:28.100$  between PDF and pathway markers and response.

NOTE Confidence: 0.62557054

 $00:47:30.190 \longrightarrow 00:47:35.198$  So in conclusion, this.

NOTE Confidence: 0.62557054

 $00{:}47{:}35.200 \dashrightarrow 00{:}47{:}37.770$  Was a pretty well tolerated

NOTE Confidence: 0.62557054

 $00:47:37.770 \longrightarrow 00:47:39.826$  regiment where no additional

NOTE Confidence: 0.62557054

 $00{:}47{:}39.826 \dashrightarrow 00{:}47{:}44.110$  signal of safety was seen and.

NOTE Confidence: 0.62557054

 $00:47:44.110 \longrightarrow 00:47:48.506$  Their base they looked at long term

NOTE Confidence: 0.62557054

00:47:48.506 --> 00:47:51.782 into 33 month overall survival at PFS,

NOTE Confidence: 0.62557054

 $00:47:51.790 \longrightarrow 00:47:54.078$  which was both 100%,

NOTE Confidence: 0.62557054

00:47:54.078 --> 00:47:57.390 so it was fairly effective regimen,

NOTE Confidence: 0.62557054

00:47:57.390 --> 00:48:00.705 and along with that they did not find any

 $00:48:00.705 \longrightarrow 00:48:02.324$  correlation between the PD one pathway

NOTE Confidence: 0.62557054

 $00{:}48{:}02.324 \dashrightarrow 00{:}48{:}04.088$  markers and the depth of response.

NOTE Confidence: 0.62557054

 $00:48:04.090 \longrightarrow 00:48:06.230$  So they basically they were.

NOTE Confidence: 0.62557054

 $00:48:06.230 \longrightarrow 00:48:08.846$  They implied that you could see

NOTE Confidence: 0.62557054

 $00{:}48{:}08.846 {\: -->\:} 00{:}48{:}11.265$  favorable responses and even in patients

NOTE Confidence: 0.62557054

00:48:11.265 --> 00:48:13.700 who had low PD L1 positive ITI.

NOTE Confidence: 0.62557054

00:48:13.700 --> 00:48:16.955 So this combination and are now going

NOTE Confidence: 0.62557054

 $00:48:16.955 \longrightarrow 00:48:20.900$  to be studied in phase three trial and

NOTE Confidence: 0.62557054

 $00:48:20.900 \longrightarrow 00:48:25.780$  again one of the active combinations in

NOTE Confidence: 0.62557054

 $00:48:25.780 \longrightarrow 00:48:28.340$  frontline using checkpoint inhibition.

NOTE Confidence: 0.62557054

 $00{:}48{:}28.340 \dashrightarrow 00{:}48{:}30.908$  I'm only going to briefly going to go

NOTE Confidence: 0.62557054

 $00{:}48{:}30.908 \operatorname{--}{>} 00{:}48{:}33.777$  through the concurrent Pembroke and DVD data.

NOTE Confidence: 0.62557054

 $00:48:33.780 \longrightarrow 00:48:34.168$  Again.

NOTE Confidence: 0.62557054

 $00:48:34.168 \longrightarrow 00:48:35.720$  This was frontline here.

NOTE Confidence: 0.62557054

 $00:48:35.720 \longrightarrow 00:48:38.037$  There was no lead in and this

 $00:48:38.040 \longrightarrow 00:48:39.633$  this was basically.

NOTE Confidence: 0.62557054

 $00:48:39.633 \longrightarrow 00:48:43.350$  I bought the drugs were given concurrently

NOTE Confidence: 0.62557054

 $00{:}48{:}43.350 \dashrightarrow 00{:}48{:}45.120$  and one difference between the prior

NOTE Confidence: 0.62557054

 $00:48:45.120 \longrightarrow 00:48:47.233$  study and this was that this was

NOTE Confidence: 0.62557054

 $00:48:47.233 \longrightarrow 00:48:48.973$  primarily a safety signal study that

NOTE Confidence: 0.62557054

 $00:48:48.973 \longrightarrow 00:48:51.254$  was the primary endpoint and then the

NOTE Confidence: 0.62557054

 $00:48:51.254 \longrightarrow 00:48:54.940$  secondary endpoint was the CR rate.

NOTE Confidence: 0.62557054

 $00:48:54.940 \longrightarrow 00:48:58.028$  So in this particular.

NOTE Confidence: 0.62557054

 $00{:}48{:}58.030 \dashrightarrow 00{:}49{:}00.258$  Study they assess response

NOTE Confidence: 0.62557054

00:49:00.258 --> 00:49:03.043 after two cycles of Pembroke,

NOTE Confidence: 0.62557054

 $00{:}49{:}03.050 \mathrel{--}{>} 00{:}49{:}06.200$  given concurrently with Avd and

NOTE Confidence: 0.62557054

 $00:49:06.200 \longrightarrow 00:49:09.014$  then depending upon the stage.

NOTE Confidence: 0.62557054

 $00{:}49{:}09.014 \dashrightarrow 00{:}49{:}11.262$  Because this study included

NOTE Confidence: 0.62557054

 $00:49:11.262 \longrightarrow 00:49:13.566$  patients through all stages.

NOTE Confidence: 0.62557054

00:49:13.570 --> 00:49:15.810 If you look at the patient characteristics,

NOTE Confidence: 0.62557054

 $00:49:15.810 \longrightarrow 00:49:17.730$  it included patients that were

 $00:49:17.730 \longrightarrow 00:49:20.564$  stay as as early as stage one

NOTE Confidence: 0.62557054

00:49:20.564 --> 00:49:22.649 to stage through stage four,

NOTE Confidence: 0.62557054

 $00:49:22.650 \longrightarrow 00:49:24.960$  so the total number of cycles

NOTE Confidence: 0.62557054

 $00:49:24.960 \longrightarrow 00:49:28.370$  really depend on what the stage was.

NOTE Confidence: 0.62557054

 $00:49:28.370 \longrightarrow 00:49:30.020$  But since their primary endpoint

NOTE Confidence: 0.62557054

 $00:49:30.020 \longrightarrow 00:49:31.670$  was safety after two cycles,

NOTE Confidence: 0.62557054

 $00:49:31.670 \longrightarrow 00:49:35.012$  they and the main secondary endpoint

NOTE Confidence: 0.62557054

 $00:49:35.012 \longrightarrow 00:49:39.630$  was response after two cycles that.

NOTE Confidence: 0.62557054

 $00:49:39.630 \longrightarrow 00:49:41.412$  So that was assessed basically regardless

NOTE Confidence: 0.62557054

 $00:49:41.412 \longrightarrow 00:49:43.140$  of the total number of titles.

NOTE Confidence: 0.841524545714286

00:49:47.660 --> 00:49:50.544 So since the primary endpoint was safety,

NOTE Confidence: 0.841524545714286

 $00:49:50.550 \longrightarrow 00:49:54.580$  they showed that the main.

NOTE Confidence: 0.841524545714286

 $00{:}49{:}54.580 --> 00{:}49{:}56.722$  Non habit illogical.

NOTE Confidence: 0.841524545714286

 $00{:}49{:}56.722 \dashrightarrow 00{:}49{:}59.611$  Side effects that were grade

NOTE Confidence: 0.841524545714286

 $00:49:59.611 \longrightarrow 00:50:02.533$  grade three or four they were.

 $00:50:02.540 \longrightarrow 00:50:05.138$  Very minimal and in terms of

NOTE Confidence: 0.841524545714286

 $00:50:05.138 \longrightarrow 00:50:06.870$  immune related side effects,

NOTE Confidence: 0.841524545714286

00:50:06.870 --> 00:50:11.000 they had grade 3-4 transmitters,

NOTE Confidence: 0.841524545714286

 $00:50:11.000 \longrightarrow 00:50:13.220$  specifically the the one patient

NOTE Confidence: 0.841524545714286

 $00:50:13.220 \longrightarrow 00:50:14.996$  with grilled 4 transmitters.

NOTE Confidence: 0.841524545714286

 $00:50:15.000 \longrightarrow 00:50:16.875$  They had a concurrent use

NOTE Confidence: 0.841524545714286

00:50:16.875 --> 00:50:19.140 of over the counter CBD oil.

NOTE Confidence: 0.841524545714286

 $00{:}50{:}19.140 \dashrightarrow 00{:}50{:}22.416$  It appears like so they it was.

NOTE Confidence: 0.841524545714286

 $00:50:22.420 \longrightarrow 00:50:24.562$  They were not sure whether it

NOTE Confidence: 0.841524545714286

00:50:24.562 --> 00:50:26.480 was truly drug related versus

NOTE Confidence: 0.841524545714286

 $00{:}50{:}26.480 \dashrightarrow 00{:}50{:}29.480$  related to this CBD oil use,

NOTE Confidence: 0.841524545714286

 $00:50:29.480 \longrightarrow 00:50:31.880$  but and then there were a few patients.

NOTE Confidence: 0.841524545714286

 $00:50:31.880 \longrightarrow 00:50:34.150$  Three patients with grade 3.

NOTE Confidence: 0.841524545714286

 $00:50:34.150 \longrightarrow 00:50:35.742$  Transformers and all of

NOTE Confidence: 0.841524545714286

 $00:50:35.742 \longrightarrow 00:50:37.334$  those cases were reversible,

NOTE Confidence: 0.841524545714286 00:50:37.340 --> 00:50:38.290 so overall,

 $00:50:38.290 \longrightarrow 00:50:40.665$  this regimen was thought to

NOTE Confidence: 0.841524545714286

 $00:50:40.665 \longrightarrow 00:50:42.090$  be well tolerated.

NOTE Confidence: 0.753642434615385

 $00:50:44.740 \longrightarrow 00:50:47.776$  In, when the two when immune

NOTE Confidence: 0.753642434615385

00:50:47.776 --> 00:50:49.294 checkpoint inhibitor and

NOTE Confidence: 0.753642434615385

 $00:50:49.294 \longrightarrow 00:50:51.638$  chemotherapy was given concurrently.

NOTE Confidence: 0.753642434615385

00:50:51.640 --> 00:50:52.980 Their pet two CR rate,

NOTE Confidence: 0.753642434615385

 $00:50:52.980 \longrightarrow 00:50:54.360$  which was the secondary endpoint,

NOTE Confidence: 0.753642434615385

 $00:50:54.360 \longrightarrow 00:50:58.210$  was 66% in all patients.

NOTE Confidence: 0.753642434615385

 $00:50:58.210 \dashrightarrow 00:51:00.510$  The overall response rate was 100%.

NOTE Confidence: 0.5935753875

 $00{:}51{:}02.850 \longrightarrow 00{:}51{:}05.790$  They reported a median follow at a

NOTE Confidence: 0.5935753875

 $00:51:05.790 \longrightarrow 00:51:07.824$  median follow-up of 16.2 months.

NOTE Confidence: 0.5935753875

 $00:51:07.824 \longrightarrow 00:51:11.100$  They reported a PFS in overall survival of.

NOTE Confidence: 0.62452483

 $00:51:14.000 \longrightarrow 00:51:16.755$  So. Basically,

NOTE Confidence: 0.62452483

 $00:51:16.755 \longrightarrow 00:51:20.145$  the median was not reached and.

NOTE Confidence: 0.62452483

 $00:51:20.150 \longrightarrow 00:51:22.775$  The one year old also I was

 $00:51:22.775 \longrightarrow 00:51:26.660 \ 100\%$  one year, PFS was 96%.

NOTE Confidence: 0.62452483

 $00{:}51{:}26.660 \dashrightarrow 00{:}51{:}29.040$  I think one important thing that is

NOTE Confidence: 0.62452483

 $00:51:29.040 \longrightarrow 00:51:31.386$  important that is keep to both of

NOTE Confidence: 0.62452483

 $00:51:31.386 \longrightarrow 00:51:33.600$  these studies in the frontline is that

NOTE Confidence: 0.62452483

 $00:51:33.600 \longrightarrow 00:51:36.648$  immune checkpoint in a better use.

NOTE Confidence: 0.62452483

 $00:51:36.650 \longrightarrow 00:51:39.359$  Stand result in.

NOTE Confidence: 0.62452483

 $00:51:39.360 \longrightarrow 00:51:42.306$  So PET scans cannot are probably

NOTE Confidence: 0.62452483

 $00{:}51{:}42.306 \dashrightarrow 00{:}51{:}45.498$  not as it's not as straightforward.

NOTE Confidence: 0.62452483

 $00:51:45.498 \longrightarrow 00:51:49.050$  How do you interpret PET scans in the

NOTE Confidence: 0.62452483

00:51:49.050 --> 00:51:51.097 setting of immune checkpoint inhibitors?

NOTE Confidence: 0.62452483

 $00{:}51{:}51.097 \dashrightarrow 00{:}51{:}54.792$  And so it would make sense to look

NOTE Confidence: 0.62452483

 $00:51:54.792 \longrightarrow 00:51:57.684$  at novel things like there is.

NOTE Confidence: 0.62452483

 $00:51:57.690 \longrightarrow 00:52:00.476$  There are the lyric criteria for pet

NOTE Confidence: 0.62452483

 $00{:}52{:}00.476 \to 00{:}52{:}02.870$  city in patients with immune checkpoint

NOTE Confidence: 0.62452483

 $00:52:02.870 \longrightarrow 00:52:07.520$  in a better doctor Alan study looked at.

NOTE Confidence: 0.62452483

00:52:07.520 --> 00:52:09.870 The total metabolic tumor volume

 $00:52:09.870 \longrightarrow 00:52:12.220$  in this particular study looked

NOTE Confidence: 0.62452483

 $00{:}52{:}12.296 \dashrightarrow 00{:}52{:}15.226$  at circulating tumor DNA and the

NOTE Confidence: 0.62452483

 $00:52:15.226 \longrightarrow 00:52:17.917$  reported cases where the circulating

NOTE Confidence: 0.62452483

 $00:52:17.917 \longrightarrow 00:52:20.059$  tumor DNA was both more sensitive

NOTE Confidence: 0.62452483

 $00{:}52{:}20.059 \dashrightarrow 00{:}52{:}21.823$  and specific measure of residual

NOTE Confidence: 0.62452483

 $00:52:21.823 \longrightarrow 00:52:23.408$  disease rather than pet city.

NOTE Confidence: 0.8953847

 $00:52:25.690 \longrightarrow 00:52:29.302$  So. In conclusion, this was

NOTE Confidence: 0.8953847

 $00:52:29.302 \longrightarrow 00:52:31.622$  a safe and effective regimen,

NOTE Confidence: 0.8953847

 $00:52:31.622 \longrightarrow 00:52:35.190$  again given in concurrently in the frontline,

NOTE Confidence: 0.8953847

 $00:52:35.190 \longrightarrow 00:52:39.530$  and again one of the ways that we we see

NOTE Confidence: 0.8953847

 $00{:}52{:}39.530 \dashrightarrow 00{:}52{:}41.862$  checkpoint inhibition being incorporated

NOTE Confidence: 0.8953847

 $00{:}52{:}41.862 \rightarrow 00{:}52{:}44.777$  into the frontline and Hodgkin.

NOTE Confidence: 0.8953847

 $00{:}52{:}44.780 \dashrightarrow 00{:}52{:}48.032$  OK, so I'm going to quickly go through

NOTE Confidence: 0.8953847

 $00:52:48.032 \longrightarrow 00:52:49.802$  three relapse or practice studies

NOTE Confidence: 0.8953847

 $00:52:49.802 \longrightarrow 00:52:51.838$  that are looking at checkpoint

 $00:52:51.838 \longrightarrow 00:52:54.590$  inhibition combinations in relapsed

NOTE Confidence: 0.8953847

00:52:54.590 --> 00:52:56.654 refractory Hodgkin lymphoma.

NOTE Confidence: 0.8953847

 $00:52:56.660 \longrightarrow 00:52:59.040$  The 1st of this is using drugs.

NOTE Confidence: 0.8953847

 $00:52:59.040 \longrightarrow 00:53:01.434$  The Jack 2 inhibitor and this is

NOTE Confidence: 0.8953847

 $00:53:01.434 \longrightarrow 00:53:03.979$  based on the rationale that nine

NOTE Confidence: 0.8953847

 $00{:}53{:}03.980 \dashrightarrow 00{:}53{:}07.069$  P 24.1 amplification results in

NOTE Confidence: 0.8953847

 $00:53:07.069 \longrightarrow 00:53:10.450$  amplification not only of the PDL 1

NOTE Confidence: 0.8953847

00:53:10.539 --> 00:53:15.340 PDL 2 pathway but also of Jack 2. And.

NOTE Confidence: 0.8953847

 $00:53:15.340 \longrightarrow 00:53:17.475$  So that was part of the rationale,

NOTE Confidence: 0.8953847

 $00:53:17.480 \longrightarrow 00:53:22.112$  and so they used a combination

NOTE Confidence: 0.8953847

 $00{:}53{:}22.112 \dashrightarrow 00{:}53{:}24.821$  of nivolumab with ruxolitinib and

NOTE Confidence: 0.8953847

00:53:24.821 --> 00:53:27.756 they did a 3 doors, tested 3 doors,

NOTE Confidence: 0.8953847

00:53:27.756 --> 00:53:29.084 levels of regulator there.

NOTE Confidence: 0.832469206666667

 $00:53:31.820 \longrightarrow 00:53:34.160$  Again, this was the patient population.

NOTE Confidence: 0.832469206666667

00:53:34.160 --> 00:53:35.608 Here was checkpoint inhibitor

NOTE Confidence: 0.832469206666667

 $00:53:35.608 \longrightarrow 00:53:37.780$  refractory so that the patient had

 $00:53:37.843 \longrightarrow 00:53:39.625$  already progressed on a checkpoint in

NOTE Confidence: 0.832469206666667

 $00{:}53{:}39.625 \dashrightarrow 00{:}53{:}41.889$  a bit or single agent the rapy before.

NOTE Confidence: 0.84419361

 $00:53:43.980 \longrightarrow 00:53:46.080$  So the median age of all

NOTE Confidence: 0.84419361

 $00:53:46.080 \longrightarrow 00:53:48.409$  patients with 38 years and.

NOTE Confidence: 0.91491385

 $00:53:50.470 \longrightarrow 00:53:54.270 32\%$  of the patients had had a prior

NOTE Confidence: 0.91491385

 $00:53:54.270 \longrightarrow 00:53:55.958$  autologous stem cell transplant.

NOTE Confidence: 0.61630088

 $00:53:58.050 \longrightarrow 00:54:02.418$  So here they saw they reported.

NOTE Confidence: 0.61630088

 $00:54:02.420 \longrightarrow 00:54:05.140$  Overall response rate of

NOTE Confidence: 0.61630088

 $00:54:05.140 \longrightarrow 00:54:07.750$  48% and the CR rate of 24%.

NOTE Confidence: 0.836803799166667

00:54:11.480 --> 00:54:13.730 The total duration of response

NOTE Confidence: 0.836803799166667

 $00:54:13.730 \longrightarrow 00:54:16.939$  you can see here that there were

NOTE Confidence: 0.836803799166667

 $00:54:16.940 \longrightarrow 00:54:20.130$  several patients that were still.

NOTE Confidence: 0.836803799166667

 $00{:}54{:}20.130 \dashrightarrow 00{:}54{:}22.478$  Had continued response especially.

NOTE Confidence: 0.880154156666667

 $00{:}54{:}25.990 \dashrightarrow 00{:}54{:}28.936$  So especially those who had complete

NOTE Confidence: 0.880154156666667

 $00:54:28.936 \longrightarrow 00:54:31.240$  response with this combination.

 $00:54:44.840 \longrightarrow 00:54:48.390$  Sorry so. As you can see here,

NOTE Confidence: 0.68455123

 $00:54:48.390 \longrightarrow 00:54:50.532$  the they reported the PFS and

NOTE Confidence: 0.68455123

00:54:50.532 --> 00:54:52.570 OS said two years it was,

NOTE Confidence: 0.68455123

 $00:54:52.570 \longrightarrow 00:54:56.964$  which was were 46% and 87% respectively.

NOTE Confidence: 0.68455123

 $00:54:56.964 \longrightarrow 00:54:59.799$  In this multiple refractory population.

NOTE Confidence: 0.77482122875

 $00.55:03.190 \longrightarrow 00.55:06.030$  Most side effects were grade one and two,

NOTE Confidence: 0.77482122875

 $00:55:06.030 \longrightarrow 00:55:08.050$  and primarily consisted of him,

NOTE Confidence: 0.77482122875

00:55:08.050 --> 00:55:08.923 hematological side effects

NOTE Confidence: 0.77482122875

 $00:55:08.923 \longrightarrow 00:55:10.669$  as well as GI side effects.

NOTE Confidence: 0.791328805

 $00:55:13.400 \longrightarrow 00:55:14.830$  And the immune related side

NOTE Confidence: 0.791328805

 $00:55:14.830 \longrightarrow 00:55:16.260$  effects that were seen were

NOTE Confidence: 0.791328805

00:55:16.320 --> 00:55:18.040 mostly hepatitis and pneumonitis,

NOTE Confidence: 0.791328805

 $00{:}55{:}18.040 \dashrightarrow 00{:}55{:}20.740$  and all these were reversible.

NOTE Confidence: 0.791328805

 $00:55:20.740 \longrightarrow 00:55:23.170$  So in the correlative studies,

NOTE Confidence: 0.791328805

 $00:55:23.170 \longrightarrow 00:55:26.334$  they looked at MD after insulating them.

NOTE Confidence: 0.791328805

 $00:55:26.340 \longrightarrow 00:55:28.330$  And. They found that there

 $00:55:28.330 \longrightarrow 00:55:29.922$  was decreased expression of.

NOTE Confidence: 0.837236971666667

 $00{:}55{:}32.310 \dashrightarrow 00{:}55{:}35.916$  With the use of this combination.

NOTE Confidence: 0.837236971666667

 $00:55:35.920 \longrightarrow 00:55:40.610$  So overall this was again found to be a safe.

NOTE Confidence: 0.837236971666667

 $00:55:40.610 \longrightarrow 00:55:43.826$  Combination in multiplicity refractory

NOTE Confidence: 0.837236971666667

 $00:55:43.826 \longrightarrow 00:55:46.310$  population including basically all patients

NOTE Confidence: 0.837236971666667

 $00:55:46.310 \longrightarrow 00:55:48.830$  were checkpoint in a better refractory.

NOTE Confidence: 0.837236971666667

 $00:55:48.830 \longrightarrow 00:55:51.049$  So I'm going to pause here because

NOTE Confidence: 0.837236971666667

 $00:55:51.050 \longrightarrow 00:55:53.510$  in the interest of time. And.

NOTE Confidence: 0.806466

 $00:56:04.870 \longrightarrow 00:56:06.396$  Hi, we're coming up to

NOTE Confidence: 0.806466

 $00:56:06.396 \longrightarrow 00:56:07.530$  the hour and I know people

NOTE Confidence: 0.785555735074074

 $00:56:07.573 \longrightarrow 00:56:09.099$  want to use their one o'clock to

NOTE Confidence: 0.785555735074074

 $00:56:09.099 \longrightarrow 00:56:10.617$  perhaps get outside and do some of

NOTE Confidence: 0.785555735074074

 $00{:}56{:}10.617 \dashrightarrow 00{:}56{:}12.823$  those nice weather. So there's two.

NOTE Confidence: 0.785555735074074

 $00{:}56{:}12.823 \rightarrow 00{:}56{:}16.009$  I think questions that I have.

NOTE Confidence: 0.785555735074074

 $00:56:16.010 \longrightarrow 00:56:17.598$  Induction appreciate the same

00:56:17.598 --> 00:56:20.690 one I had which was to Torshin

NOTE Confidence: 0.785555735074074

 $00:56:20.690 \longrightarrow 00:56:23.440$  in terms of frontline Hodgkin.

NOTE Confidence: 0.785555735074074

 $00:56:23.440 \longrightarrow 00:56:25.695$  You know PFS ruling overall

NOTE Confidence: 0.785555735074074

 $00:56:25.695 \longrightarrow 00:56:27.048$  survival for that.

NOTE Confidence: 0.785555735074074

 $00:56:27.050 \longrightarrow 00:56:29.815$  That one analysis out of Emory shows

NOTE Confidence: 0.785555735074074

00:56:29.815 --> 00:56:32.390 really great with Checkpoint ABA VD,

NOTE Confidence: 0.785555735074074

 $00:56:32.390 \longrightarrow 00:56:34.326$  but we also have good data on BVD.

NOTE Confidence: 0.785555735074074

 $00:56:34.330 \longrightarrow 00:56:36.724$  How do how do you think we move forward?

NOTE Confidence: 0.785555735074074

 $00:56:36.730 \longrightarrow 00:56:38.935$  Do we have a study for that?

NOTE Confidence: 0.785555735074074

 $00:56:38.940 \longrightarrow 00:56:40.446$  Where are we in terms of

NOTE Confidence: 0.785555735074074

 $00:56:40.446 \longrightarrow 00:56:41.199$  addressing that question?

NOTE Confidence: 0.805202502857143

 $00:56:42.330 \longrightarrow 00:56:45.977$  So I believe that there is a.

NOTE Confidence: 0.805202502857143

 $00:56:45.980 \longrightarrow 00:56:48.654$  There is a frontline study that is

NOTE Confidence: 0.805202502857143

 $00{:}56{:}48.654 \dashrightarrow 00{:}56{:}50.504$  looking at the comparison between those

NOTE Confidence: 0.805202502857143

 $00:56:50.504 \longrightarrow 00:56:52.600$  two that can help answer that question,

NOTE Confidence: 0.805202502857143

 $00:56:52.600 \longrightarrow 00:56:56.332$  but at this point it seems like so as far

 $00:56:56.332 \longrightarrow 00:56:57.676$  as this particular study was concerned,

NOTE Confidence: 0.805202502857143

 $00:56:57.680 \longrightarrow 00:56:59.784$  Pembroke followed by it

NOTE Confidence: 0.805202502857143

 $00:56:59.784 \longrightarrow 00:57:01.522$  did include bulky patients.

NOTE Confidence: 0.805202502857143

 $00:57:01.522 \longrightarrow 00:57:03.909$  What they found was that most of

NOTE Confidence: 0.805202502857143

 $00{:}57{:}03.909 \dashrightarrow 00{:}57{:}06.157$  the patients were bulky disease.

NOTE Confidence: 0.805202502857143

00:57:06.160 --> 00:57:09.065 After three cycles of Femoro alone they

NOTE Confidence: 0.805202502857143

 $00:57:09.065 \longrightarrow 00:57:11.340$  had a near complete metabolic response,

NOTE Confidence: 0.805202502857143

 $00:57:11.340 \longrightarrow 00:57:13.320$  not necessarily complete metabolic response.

NOTE Confidence: 0.805202502857143

 $00:57:13.320 \longrightarrow 00:57:15.504$  That was kind of one of the differentiating

NOTE Confidence: 0.805202502857143

 $00:57:15.504 \longrightarrow 00:57:17.198$  features in that particular study.

NOTE Confidence: 0.805202502857143

00:57:17.200 --> 00:57:18.140 But at the same time,

NOTE Confidence: 0.805202502857143

 $00:57:18.140 \longrightarrow 00:57:19.470$  when it comes to immunotherapy,

NOTE Confidence: 0.805202502857143

 $00{:}57{:}19.470 \longrightarrow 00{:}57{:}22.222$  it's very hard to interpret a lot

NOTE Confidence: 0.805202502857143

 $00:57:22.222 \longrightarrow 00:57:24.046$  of the patients, like for example.

NOTE Confidence: 0.805202502857143

 $00:57:24.046 \longrightarrow 00:57:25.356$  Even in the second study,

 $00:57:25.360 \longrightarrow 00:57:28.090$  the pet 2 positivity did not

NOTE Confidence: 0.805202502857143

 $00{:}57{:}28.090 \dashrightarrow 00{:}57{:}29.910$  correlate with early relapse.

NOTE Confidence: 0.805202502857143

 $00:57:29.910 \longrightarrow 00:57:31.982$  So the it's not the same as what

NOTE Confidence: 0.805202502857143

 $00:57:31.982 \longrightarrow 00:57:34.221$  we see with non immuno the rapeutic

NOTE Confidence: 0.805202502857143

00:57:34.221 --> 00:57:36.281 agents like you can sometimes

NOTE Confidence: 0.805202502857143

00:57:36.281 --> 00:57:38.913 have long term responders even if

NOTE Confidence: 0.805202502857143

 $00:57:38.913 \longrightarrow 00:57:40.629$  they have initial positivity.

NOTE Confidence: 0.805202502857143

00:57:40.630 --> 00:57:40.880 So

NOTE Confidence: 0.825018097272727

 $00:57:41.400 \longrightarrow 00:57:43.269$  and then I guess the question is

NOTE Confidence: 0.825018097272727

 $00:57:43.269 \longrightarrow 00:57:44.680$  is sequential versus concurrent.

NOTE Confidence: 0.825018097272727

 $00:57:44.680 \longrightarrow 00:57:47.056$  Do you think we need a trial randomized

NOTE Confidence: 0.825018097272727

 $00:57:47.056 \longrightarrow 00:57:49.323$  trial to really address the the

NOTE Confidence: 0.825018097272727

 $00:57:49.323 \longrightarrow 00:57:51.735$  appropriate timing of checkpoint with avd?

NOTE Confidence: 0.825654972727273

00:57:53.160 --> 00:57:54.252 In the second study,

NOTE Confidence: 0.825654972727273

 $00:57:54.252 \longrightarrow 00:57:56.240$  I think the first study was more.

NOTE Confidence: 0.825654972727273

 $00:57:56.240 \longrightarrow 00:57:59.000$  The design was more to understand.

 $00{:}57{:}59.000 \dashrightarrow 00{:}58{:}01.232$  It was a few years it was started a

NOTE Confidence: 0.825654972727273

 $00:58:01.232 \dashrightarrow 00:58:03.604$  few years ago where we didn't know a

NOTE Confidence: 0.825654972727273

 $00:58:03.604 \longrightarrow 00:58:05.537$  lot about the correlated correlations

NOTE Confidence: 0.825654972727273

 $00:58:05.537 \longrightarrow 00:58:07.619$  for this particular for Pember alone

NOTE Confidence: 0.825654972727273

00:58:07.619 --> 00:58:09.609 and the efficacy of Pembroke loan,

NOTE Confidence: 0.825654972727273

 $00{:}58{:}09.610 \dashrightarrow 00{:}58{:}11.644$  and that was the reason to do the lead

NOTE Confidence: 0.825654972727273

 $00:58:11.644 \longrightarrow 00:58:14.170$  in rather than the safety measure,

NOTE Confidence: 0.825654972727273

00:58:14.170 --> 00:58:15.634 since the second study is already

NOTE Confidence: 0.825654972727273

 $00.58.15.634 \longrightarrow 00.58.16.790$  telling us that there is,

NOTE Confidence: 0.825654972727273

 $00{:}58{:}16.790 \dashrightarrow 00{:}58{:}18.470$  it's safe to do the combination.

NOTE Confidence: 0.825654972727273

00:58:18.470 --> 00:58:21.470 I feel like similar to what we do with BV,

NOTE Confidence: 0.825654972727273

 $00{:}58{:}21.470 \dashrightarrow 00{:}58{:}24.914$  like AVD versus BB followed by avd.

NOTE Confidence: 0.825654972727273

 $00{:}58{:}24.920 \dashrightarrow 00{:}58{:}27.640$  I feel like both of those can be

NOTE Confidence: 0.825654972727273

 $00{:}58{:}27.640 \dashrightarrow 00{:}58{:}29.590$  reasonable options, it seems like.

NOTE Confidence: 0.876679872631579

 $00:58:30.610 \longrightarrow 00:58:31.865$  That's helpful, thank you and

00:58:31.865 --> 00:58:33.615 then the one thought I had before

NOTE Confidence: 0.876679872631579

 $00:58:33.615 \longrightarrow 00:58:35.155$  we open it up to the audience.

NOTE Confidence: 0.876679872631579

00:58:35.160 --> 00:58:36.680 If there's questions, please,

NOTE Confidence: 0.876679872631579

 $00:58:36.680 \longrightarrow 00:58:39.386$  please send them in was to Doctor

NOTE Confidence: 0.876679872631579

 $00:58:39.386 \longrightarrow 00:58:41.266$  Kathari in terms of the long

NOTE Confidence: 0.876679872631579

00:58:41.266 --> 00:58:42.664 term data from Nordic and and

NOTE Confidence: 0.876679872631579

 $00:58:42.664 \longrightarrow 00:58:44.495$  the study that you presented is

NOTE Confidence: 0.876679872631579

 $00:58:44.495 \longrightarrow 00:58:45.807$  anthracycline followed by hydac.

NOTE Confidence: 0.876679872631579

 $00:58:45.810 \longrightarrow 00:58:48.490$  Do you do that or do you use

NOTE Confidence: 0.876679872631579

00:58:48.490 --> 00:58:50.330 bendamustine with your induction?

NOTE Confidence: 0.876679872631579

 $00{:}58{:}50.330 --> 00{:}58{:}50.930$  You know how do?

NOTE Confidence: 0.876679872631579

00:58:50.930 --> 00:58:52.210 How do you put that all together?

NOTE Confidence: 0.915571771428571

 $00:58:53.120 \longrightarrow 00:58:56.246$  Yeah, so there are multiple backbones

NOTE Confidence: 0.915571771428571

 $00:58:56.246 \longrightarrow 00:58:58.306$  that that have been studied,

NOTE Confidence: 0.915571771428571

00:58:58.306 --> 00:59:01.791 but I must admit that the most studied

NOTE Confidence: 0.915571771428571

 $00{:}59{:}01.791 \dashrightarrow 00{:}59{:}03.900$  regimen, and now with this data,

 $00:59:03.900 \longrightarrow 00:59:06.216$  especially with you know high risk

NOTE Confidence: 0.915571771428571

 $00:59:06.216 \longrightarrow 00:59:08.556$  patients having a survival benefit would

NOTE Confidence: 0.915571771428571

 $00:59:08.556 \longrightarrow 00:59:11.300$  be our chop alternating with our dehab.

NOTE Confidence: 0.915571771428571

 $00:59:11.300 \longrightarrow 00:59:13.828$  But you know there is a Nordic regimen

NOTE Confidence: 0.915571771428571

 $00:59:13.828 \longrightarrow 00:59:16.061$  where you alternate art shop with

NOTE Confidence: 0.915571771428571

00:59:16.061 --> 00:59:18.684 hydro cytarabine and then you have a

NOTE Confidence: 0.915571771428571

00:59:18.684 --> 00:59:20.997 you know sort of more of a US regimen

NOTE Confidence: 0.915571771428571

 $00{:}59{:}21.000 \dashrightarrow 00{:}59{:}23.460$  of Arminda alternating with our site.

NOTE Confidence: 0.915571771428571

 $00{:}59{:}23.460 \dashrightarrow 00{:}59{:}25.938$  And again, these are all high doses.

NOTE Confidence: 0.915571771428571

 $00{:}59{:}25.940 \dashrightarrow 00{:}59{:}29.940$  These macaroons have been studied

NOTE Confidence: 0.915571771428571

 $00:59:29.940 \longrightarrow 00:59:31.404$  and compared with each other but

NOTE Confidence: 0.915571771428571

 $00:59:31.404 \longrightarrow 00:59:32.940$  without the site are being part.

NOTE Confidence: 0.915571771428571

 $00:59:32.940 \longrightarrow 00:59:33.885$  So, for example,

NOTE Confidence: 0.915571771428571

 $00:59:33.885 \longrightarrow 00:59:36.090$  our chop was compared with our vendor.

NOTE Confidence: 0.915571771428571

 $00:59:36.090 \longrightarrow 00:59:38.346$  So we are extrapolating that you

 $00:59:38.346 \longrightarrow 00:59:40.651$  know our Brenda is better than

NOTE Confidence: 0.915571771428571

00:59:40.651 --> 00:59:43.178 our top end would be better even

NOTE Confidence: 0.915571771428571

 $00:59:43.178 \longrightarrow 00:59:45.540$  when combined with a high dose.

NOTE Confidence: 0.915571771428571

 $00:59:45.540 \longrightarrow 00:59:47.570$  Of course there are some early stage,

 $\begin{aligned} & \text{NOTE Confidence: } 0.915571771428571 \\ & 00:59:47.570 --> 00:59:48.478 \text{ you know,} \end{aligned}$ 

NOTE Confidence: 0.915571771428571

 $00{:}59{:}48.478 \dashrightarrow 00{:}59{:}50.822$  small patient series of prospective

NOTE Confidence: 0.915571771428571

 $00{:}59{:}50.822 \dashrightarrow 00{:}59{:}54.259$  trials of doing of using our Bender

NOTE Confidence: 0.915571771428571

 $00:59:54.259 \longrightarrow 00:59:56.729$  alternative with our high dose side.

NOTE Confidence: 0.915571771428571

 $00:59:56.730 \longrightarrow 00:59:59.770$  So what all to to answer your question,

NOTE Confidence: 0.915571771428571

 $00:59:59.770 \longrightarrow 01:00:01.398$  there are multiple possibilities

NOTE Confidence: 0.915571771428571

 $01{:}00{:}01.398 \dashrightarrow 01{:}00{:}03.433$  in frontline mantle cell lymphoma

NOTE Confidence: 0.915571771428571

 $01:00:03.433 \longrightarrow 01:00:05.201$  and we really haven't established

NOTE Confidence: 0.915571771428571

 $01{:}00{:}05.201 \dashrightarrow 01{:}00{:}07.831$ 1 standard of care like we have in

NOTE Confidence: 0.915571771428571

01:00:07.831 --> 01:00:09.742 diffuse large B cell lymphoma and

NOTE Confidence: 0.915571771428571

 $01:00:09.742 \longrightarrow 01:00:12.346$  that's something it remains still a bit

NOTE Confidence: 0.915571771428571

 $01:00:12.346 \longrightarrow 01:00:15.026$  elusive as to what will we'll all use,

01:00:15.030 --> 01:00:15.807 but you know,

NOTE Confidence: 0.915571771428571

01:00:15.807 --> 01:00:17.993 I think it's it's a good problem to

NOTE Confidence: 0.915571771428571

 $01:00:17.993 \longrightarrow 01:00:20.163$  have where you know you can really

NOTE Confidence: 0.915571771428571

01:00:20.163 --> 01:00:22.029 customize therapy based on the patient,

NOTE Confidence: 0.915571771428571

 $01:00:22.030 \longrightarrow 01:00:26.610$  comorbidities and age and stratification.

NOTE Confidence: 0.915571771428571 01:00:26.610 --> 01:00:26.860 Thank NOTE Confidence: 0.818028969411765

110 1E Confidence: 0.010020003411709

 $01:00:26.870 \longrightarrow 01:00:29.040$  you why we're over the hour and I want to

NOTE Confidence: 0.818028969411765

 $01:00:29.095 \longrightarrow 01:00:31.314$  thank all the attendees for joining today.

NOTE Confidence: 0.818028969411765

 $01:00:31.320 \longrightarrow 01:00:33.448$  Feel free to email each of us if

NOTE Confidence: 0.818028969411765

 $01{:}00{:}33.448 \dashrightarrow 01{:}00{:}35.643$  you have questions about specific

NOTE Confidence: 0.818028969411765

01:00:35.643 --> 01:00:37.630 presentations we you know went over

NOTE Confidence: 0.818028969411765

 $01:00:37.630 \longrightarrow 01:00:39.010$  today and how we interpret that

NOTE Confidence: 0.818028969411765

 $01{:}00{:}39.060 \dashrightarrow 01{:}00{:}40.578$  and how we approach our patients.

NOTE Confidence: 0.818028969411765

 $01:00:40.580 \longrightarrow 01:00:42.980$  We'd be happy to to engage over that,

NOTE Confidence: 0.818028969411765

 $01:00:42.980 \longrightarrow 01:00:45.996$  but enjoy your Friday and thanks for joining.