WEBVTT

NOTE duration: "01:12:11.1040000"

NOTE language:en-us

NOTE Confidence: 0.8132291

 $00:00:00.000 \longrightarrow 00:00:00.840$ Disclosures.

NOTE Confidence: 0.8046678

 $00:00:03.080 \longrightarrow 00:00:05.762$ An outline for my talk today would be to

NOTE Confidence: 0.8046678

 $00:00:05.762 \longrightarrow 00:00:08.049$ briefly talk about 6 important studies.

NOTE Confidence: 0.8046678

 $00{:}00{:}08.050 \dashrightarrow 00{:}00{:}10.246$ One is a randomized trial comparing

NOTE Confidence: 0.8046678

 $00:00:10.246 \longrightarrow 00:00:11.710$ best supportive care against

NOTE Confidence: 0.8046678

00:00:11.775 --> 00:00:13.171 allogeneic transplant for patients

NOTE Confidence: 0.8046678

00:00:13.171 --> 00:00:16.305 with MD S between ages of. 50 to 75.

NOTE Confidence: 0.8046678

 $00:00:16.305 \longrightarrow 00:00:18.720$ Yes second study would be looking into

NOTE Confidence: 0.8046678

00:00:18.798 --> 00:00:21.388 an owl way of mobilizing stem cells.

NOTE Confidence: 0.8046678

 $00:00:21.390 \longrightarrow 00:00:23.562$ Studies 3, four and five are

NOTE Confidence: 0.8046678

00:00:23.562 --> 00:00:25.010 addressing pharmacologic and cellular

NOTE Confidence: 0.8046678

 $00{:}00{:}25.072 \dashrightarrow 00{:}00{:}26.476$ manipulations to decrease the

NOTE Confidence: 0.8046678

 $00:00:26.476 \longrightarrow 00:00:28.582$ risk of graft versus host disease.

NOTE Confidence: 0.8046678

00:00:28.590 --> 00:00:30.030 Post allogeneic stem cell

 $00:00:30.030 \longrightarrow 00:00:31.830$ transplant and the final study.

NOTE Confidence: 0.8046678

 $00:00:31.830 \longrightarrow 00:00:33.858$ We will briefly talk about evolving

NOTE Confidence: 0.8046678

 $00{:}00{:}33.858 \dashrightarrow 00{:}00{:}36.419$ role of what consolidation is prior to

NOTE Confidence: 0.8046678

 $00:00:36.419 \longrightarrow 00:00:37.947$ allogeneic stem cell transplantation.

NOTE Confidence: 0.8046678

 $00:00:37.950 \longrightarrow 00:00:38.778$ In modern era,

NOTE Confidence: 0.8046678

 $00:00:38.778 \longrightarrow 00:00:40.710$ we will not focus too much about

NOTE Confidence: 0.8046678

 $00:00:40.774 \longrightarrow 00:00:42.678$ autologous transplantation because my

NOTE Confidence: 0.8046678

 $00:00:42.678 \longrightarrow 00:00:45.534$ colleagues in lymphoma and myeloma section.

NOTE Confidence: 0.8046678

 $00:00:45.540 \longrightarrow 00:00:48.516$ I have tested on that concept and once

NOTE Confidence: 0.8046678

 $00:00:48.516 \longrightarrow 00:00:51.259$ the arrows done I'm going to pass on

NOTE Confidence: 0.8046678

 $00:00:51.259 \longrightarrow 00:00:54.517$ the talk to Iris for chimeric T cell talk.

NOTE Confidence: 0.8046678

 $00:00:54.520 \longrightarrow 00:00:58.012$ So the first study was a BMT CTN 1102.

NOTE Confidence: 0.8046678

 $00:00:58.020 \longrightarrow 00:00:59.710$ This randomized study was a

NOTE Confidence: 0.8046678

00:00:59.710 --> 00:01:01.400 biologic assessment study to be

NOTE Confidence: 0.8046678

 $00:01:01.457 \longrightarrow 00:01:03.213$ biologically assigned to receive

 $00:01:03.213 \longrightarrow 00:01:05.408$ another public stem cell transplant.

NOTE Confidence: 0.8046678

 $00{:}01{:}05.410 \dashrightarrow 00{:}01{:}06.970$ People should have identified

NOTE Confidence: 0.8046678

 $00:01:06.970 \longrightarrow 00:01:09.757$ a donor between the 90 days of

NOTE Confidence: 0.8046678

00:01:09.757 --> 00:01:11.637 consenting for this MDS study.

NOTE Confidence: 0.8046678

 $00:01:11.640 \longrightarrow 00:01:13.580$ Math sibling donors and matched

NOTE Confidence: 0.8046678

 $00:01:13.580 \longrightarrow 00:01:15.132$ unrelated donors were load.

NOTE Confidence: 0.8046678

 $00:01:15.140 \longrightarrow 00:01:18.325$ They were all expected to undergo stem

NOTE Confidence: 0.8046678

 $00:01:18.325 \longrightarrow 00:01:20.519$ cell transplantation within six months.

NOTE Confidence: 0.8046678

 $00:01:20.520 \longrightarrow 00:01:23.816$ Subjects between ages 50 to 75 were included.

NOTE Confidence: 0.8046678

00:01:23.820 --> 00:01:26.802 Only primary Arduino MD S with the

NOTE Confidence: 0.8046678

 $00{:}01{:}26.802 \dashrightarrow 00{:}01{:}29.322$ intermediate two or high risk by

NOTE Confidence: 0.8046678

 $00:01:29.322 \longrightarrow 00:01:31.638$ PSS were included in the study.

NOTE Confidence: 0.8046678

 $00:01:31.640 \longrightarrow 00:01:33.330$ All these candidates were meant

NOTE Confidence: 0.8046678

 $00:01:33.330 \longrightarrow 00:01:36.059$ to be in a traditional sense be

NOTE Confidence: 0.8046678

00:01:36.059 --> 00:01:38.007 acceptable to undergo reduced

NOTE Confidence: 0.8046678

 $00{:}01{:}38.007 \dashrightarrow 00{:}01{:}39.468$ intensity transportation study.

 $00:01:39.470 \longrightarrow 00:01:41.942$ Randomized people to either get randomized

NOTE Confidence: 0.8046678

00:01:41.942 --> 00:01:43.590 260 questions to transplantation,

NOTE Confidence: 0.8046678

 $00:01:43.590 \longrightarrow 00:01:44.721$ or 124 patients.

NOTE Confidence: 0.8046678

00:01:44.721 --> 00:01:46.983 2 best supportive care or whatever

NOTE Confidence: 0.8046678

 $00:01:46.983 \longrightarrow 00:01:48.785$ other options individual centers

NOTE Confidence: 0.8046678

 $00:01:48.785 \longrightarrow 00:01:50.597$ would offer to those.

NOTE Confidence: 0.8365025

00:01:55.410 --> 00:01:57.826 So here are the results from that study.

NOTE Confidence: 0.8365025

 $00:01:57.830 \longrightarrow 00:01:59.996$ The primary endpoint of the trial

NOTE Confidence: 0.8365025

 $00{:}01{:}59.996 \dashrightarrow 00{:}02{:}02{:}130$ was a prior overall survival.

NOTE Confidence: 0.8365025

 $00:02:02.130 \longrightarrow 00:02:04.050$ Looking into the donor and the

NOTE Confidence: 0.8365025

 $00:02:04.050 \longrightarrow 00:02:06.516$ no donor arms here 3 or estimate

NOTE Confidence: 0.8365025

00:02:06.516 --> 00:02:08.356 overall survival was 47.9% for

NOTE Confidence: 0.8365025

 $00{:}02{:}08.356 \dashrightarrow 00{:}02{:}10.778$ those who had a donor against at

NOTE Confidence: 0.8365025

00:02:10.778 --> 00:02:13.468 26.6% for people who did not have a

NOTE Confidence: 0.8365025

 $00:02:13.468 \longrightarrow 00:02:16.299$ donor at the time of randomization.

00:02:16.300 --> 00:02:18.757 Game when they do the sensitivity analysis,

NOTE Confidence: 0.8365025

00:02:18.760 --> 00:02:19.468 excluding subjects,

NOTE Confidence: 0.8365025

 $00:02:19.468 \longrightarrow 00:02:21.946$ are assigned to the node on around

NOTE Confidence: 0.8365025

 $00:02:21.946 \longrightarrow 00:02:24.067$ who either died or withdrew prior

NOTE Confidence: 0.8365025

 $00:02:24.067 \longrightarrow 00:02:25.772$ to the 90 research window.

NOTE Confidence: 0.8365025

 $00:02:25.780 \longrightarrow 00:02:28.125$ For the sooner the eventual outcome did

NOTE Confidence: 0.8365025

 $00:02:28.125 \longrightarrow 00:02:30.290$ not change with the adjusted overall

NOTE Confidence: 0.8365025

 $00{:}02{:}30.290 \dashrightarrow 00{:}02{:}32.794$ survival of 48% for the donor arm

NOTE Confidence: 0.8365025

 $00:02:32.794 \longrightarrow 00:02:35.070$ against the 28.1% for the non donor

NOTE Confidence: 0.8365025

00:02:35.070 --> 00:02:36.595 when they specifically looked into

NOTE Confidence: 0.8365025

 $00{:}02{:}36.595 \dashrightarrow 00{:}02{:}38.760$ the different subgroups for analysis.

NOTE Confidence: 0.8365025

 $00:02:38.760 \longrightarrow 00:02:40.520$ Use of rat hyperventilation agents.

NOTE Confidence: 0.8365025

 $00:02:40.520 \longrightarrow 00:02:42.728$ Age groups less than 65 against

NOTE Confidence: 0.8365025

00:02:42.728 --> 00:02:44.730 greater than 65 duration of MBS,

NOTE Confidence: 0.8365025

 $00:02:44.730 \longrightarrow 00:02:47.285$ less than three months or greater than.

NOTE Confidence: 0.8365025

00:02:47.290 --> 00:02:50.125 Reminds I PS is risk groups that

00:02:50.125 --> 00:02:53.233 donor am sent it to do better

NOTE Confidence: 0.8365025

 $00:02:53.233 \longrightarrow 00:02:55.037$ for the overall survival.

NOTE Confidence: 0.8365025

 $00:02:55.040 \longrightarrow 00:02:56.482$ One of the secondary endpoints of this

NOTE Confidence: 0.8365025

 $00:02:56.482 \longrightarrow 00:02:58.507$ video is to look into leukemia free survival.

NOTE Confidence: 0.8365025

00:02:58.510 --> 00:03:00.025 Understanding the risk of my

NOTE Confidence: 0.8365025

00:03:00.025 --> 00:03:00.934 latest plastic syndromes.

NOTE Confidence: 0.8365025

 $00:03:00.940 \longrightarrow 00:03:02.170$ Clonal evolution here.

NOTE Confidence: 0.8365025

 $00:03:02.170 \longrightarrow 00:03:05.040$ They don't around again came out superior.

NOTE Confidence: 0.8365025

 $00{:}03{:}05.040 \dashrightarrow 00{:}03{:}07.090$ Three year leukemia free survival

NOTE Confidence: 0.8365025

 $00{:}03{:}07.090 \dashrightarrow 00{:}03{:}09.550$ of 35.8% compared to the node

NOTE Confidence: 0.8365025

 $00:03:09.550 \longrightarrow 00:03:11.600$ on around which was 20.6%.

NOTE Confidence: 0.8365025

 $00:03:11.600 \longrightarrow 00:03:13.730$ Adjusting with the sensitivity analysis

NOTE Confidence: 0.8365025

 $00:03:13.730 \dashrightarrow 00:03:16.519$ again the leukemia free survival was 35.9%.

NOTE Confidence: 0.8365025

 $00{:}03{:}16.520 \dashrightarrow 00{:}03{:}18.980$ The donor arm against the 21.8%

NOTE Confidence: 0.8365025

 $00:03:18.980 \longrightarrow 00:03:21.241$ for the node and are similar to

00:03:21.241 --> 00:03:23.266 the prior slide within subgroups

NOTE Confidence: 0.8365025

 $00{:}03{:}23.266 \rightarrow 00{:}03{:}25.711$ for all different variables that

NOTE Confidence: 0.8365025

00:03:25.711 --> 00:03:27.178 looked into leukemia.

NOTE Confidence: 0.8365025

 $00:03:27.180 \longrightarrow 00:03:29.624$ Free survival advantage was

NOTE Confidence: 0.8365025

 $00:03:29.624 \longrightarrow 00:03:32.068$ seen with the transplantation.

NOTE Confidence: 0.8365025

 $00:03:32.070 \longrightarrow 00:03:33.936$ This is a slide that is

NOTE Confidence: 0.8365025

 $00{:}03{:}33.936 \dashrightarrow 00{:}03{:}35.180$ showing as treated analysis.

NOTE Confidence: 0.8365025

 $00:03:35.180 \longrightarrow 00:03:35.568$ Again,

NOTE Confidence: 0.8365025

 $00{:}03{:}35.568 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}$ of showing the superiority for both overall

NOTE Confidence: 0.8365025

 $00:03:37.896 \longrightarrow 00:03:39.910$ survival and leukemia free survival.

NOTE Confidence: 0.8365025

 $00:03:39.910 \longrightarrow 00:03:41.089$ Absolute improvement for

NOTE Confidence: 0.8365025

00:03:41.089 --> 00:03:42.268 overall survival study,

NOTE Confidence: 0.8365025

00:03:42.270 --> 00:03:44.634 one point 4% for the transplantation

NOTE Confidence: 0.8365025

 $00:03:44.634 \longrightarrow 00:03:47.392$ arm was 28.4% for the leukemia free

NOTE Confidence: 0.8365025

 $00:03:47.392 \longrightarrow 00:03:49.357$ survival again for the transplantation.

NOTE Confidence: 0.79592305

 $00:03:52.680 \longrightarrow 00:03:55.214$ So one of the conclusions of this

00:03:55.214 --> 00:03:57.510 randomized study for a very long time,

NOTE Confidence: 0.79592305

 $00:03:57.510 \longrightarrow 00:03:59.240$ the field of Miller Park,

NOTE Confidence: 0.79592305

 $00:03:59.240 \longrightarrow 00:04:00.272$ stem cell transplantation

NOTE Confidence: 0.79592305

 $00:04:00.272 \longrightarrow 00:04:01.648$ and who to transplant,

NOTE Confidence: 0.79592305

 $00{:}04{:}01.650 \dashrightarrow 00{:}04{:}03.720$ who not to transplant was based

NOTE Confidence: 0.79592305

00:04:03.720 --> 00:04:05.100 upon Markov decision modeling.

NOTE Confidence: 0.79592305

 $00:04:05.100 \longrightarrow 00:04:07.230$ This is the first randomized trial

NOTE Confidence: 0.79592305

 $00:04:07.230 \longrightarrow 00:04:09.066$ comparing best supportive care of

NOTE Confidence: 0.79592305

00:04:09.066 --> 00:04:10.841 best available care against the

NOTE Confidence: 0.79592305

 $00{:}04{:}10.841 \dashrightarrow 00{:}04{:}12.723$ random against allogeneic stem cell

NOTE Confidence: 0.79592305

 $00{:}04{:}12.723 \dashrightarrow 00{:}04{:}14.728$ transplantation in a randomized manner.

NOTE Confidence: 0.79592305

00:04:14.730 --> 00:04:16.704 Specifically, in a Common Age group

NOTE Confidence: 0.79592305

 $00:04:16.704 \longrightarrow 00:04:18.510$ where we encountered this disease,

NOTE Confidence: 0.79592305

 $00:04:18.510 \longrightarrow 00:04:19.542$ so such patients,

NOTE Confidence: 0.79592305

 $00:04:19.542 \longrightarrow 00:04:21.606$ if they have a suitable donor,

 $00:04:21.610 \longrightarrow 00:04:23.405$ this leads to improved overall

NOTE Confidence: 0.79592305

 $00{:}04{:}23.405 \dashrightarrow 00{:}04{:}24.841$ survival through leukemia free

NOTE Confidence: 0.79592305

 $00{:}04{:}24.841 \dashrightarrow 00{:}04{:}27.193$ survival and again after we ask our

NOTE Confidence: 0.79592305

00:04:27.193 --> 00:04:28.485 patients to undergo transplantation,

NOTE Confidence: 0.79592305

 $00:04:28.490 \longrightarrow 00:04:31.586$ a question that gets asked is can you know,

NOTE Confidence: 0.79592305

 $00:04:31.590 \longrightarrow 00:04:33.310$ is this covered by Medicare?

NOTE Confidence: 0.79592305

 $00:04:33.310 \longrightarrow 00:04:35.025$ There's most of these patients

NOTE Confidence: 0.79592305

 $00:04:35.025 \longrightarrow 00:04:36.397$ are greater than 65.

NOTE Confidence: 0.79592305

00:04:36.400 --> 00:04:36.713 Historically,

NOTE Confidence: 0.79592305

 $00:04:36.713 \longrightarrow 00:04:38.591$ we had to report those outcomes

NOTE Confidence: 0.79592305

 $00{:}04{:}38.591 \dashrightarrow 00{:}04{:}40.529$ now within the subgroup analysis,

NOTE Confidence: 0.79592305

 $00:04:40.530 \longrightarrow 00:04:43.218$ we're clearly able to show that for

NOTE Confidence: 0.79592305

 $00:04:43.218 \longrightarrow 00:04:45.768$ people greater than 65 in less than 65.

NOTE Confidence: 0.79592305

 $00{:}04{:}45.770 \dashrightarrow 00{:}04{:}47.280$ Transportation is a good option.

NOTE Confidence: 0.79592305

 $00:04:47.280 \longrightarrow 00:04:49.086$ I think that goes against transportation.

NOTE Confidence: 0.79592305

 $00{:}04{:}49.090 \dashrightarrow 00{:}04{:}50.686$ Is there are reports that talk

 $00:04:50.686 \longrightarrow 00:04:51.750$ about decreased quality of

NOTE Confidence: 0.79592305

 $00{:}04{:}51.804 \dashrightarrow 00{:}04{:}53.019$ life post transplantation,

NOTE Confidence: 0.79592305

 $00:04:53.020 \longrightarrow 00:04:54.530$ so the study had designed.

NOTE Confidence: 0.79592305

00:04:54.530 --> 00:04:56.938 I didn't show you that like the study.

NOTE Confidence: 0.79592305

 $00{:}04{:}56.940 \dashrightarrow 00{:}04{:}59.236$ I designed a quality of life measurement

NOTE Confidence: 0.79592305

 $00:04:59.236 \longrightarrow 00:05:01.321$ at different time points for both the

NOTE Confidence: 0.79592305

00:05:01.321 --> 00:05:03.552 arms and it shows that the quality of

NOTE Confidence: 0.79592305

 $00:05:03.552 \longrightarrow 00:05:05.382$ life was no different or definitely

NOTE Confidence: 0.79592305

 $00:05:05.382 \longrightarrow 00:05:08.380$ was not included in the transportation.

NOTE Confidence: 0.79592305

00:05:08.380 --> 00:05:08.747 Finally,

NOTE Confidence: 0.79592305

00:05:08.747 --> 00:05:11.316 as I want to emphasize that overall,

NOTE Confidence: 0.79592305

 $00:05:11.320 \longrightarrow 00:05:13.150$ there's a very strong advantage

NOTE Confidence: 0.79592305

 $00:05:13.150 \longrightarrow 00:05:14.614$ for stem cell transplantation,

NOTE Confidence: 0.79592305

 $00:05:14.620 \longrightarrow 00:05:17.273$ particularly to have a match sibling donor

NOTE Confidence: 0.79592305

 $00:05:17.273 \longrightarrow 00:05:19.936$ or a mass unrelated donor identified

 $00:05:19.936 \longrightarrow 00:05:23.310$ early in the course of their treatment.

NOTE Confidence: 0.79592305

 $00{:}05{:}23.310 \dashrightarrow 00{:}05{:}25.458$ I have next study talks about

NOTE Confidence: 0.79592305

 $00{:}05{:}25.458 \dashrightarrow 00{:}05{:}27.609$ how to mobilize stem cells at.

NOTE Confidence: 0.79592305

 $00:05:27.610 \longrightarrow 00:05:29.400$ Traditionally we walked in stem

NOTE Confidence: 0.79592305

 $00:05:29.400 \longrightarrow 00:05:31.190$ cell sources through several modes,

NOTE Confidence: 0.79592305

 $00:05:31.190 \longrightarrow 00:05:32.120$ either with G,

NOTE Confidence: 0.79592305

 $00:05:32.120 \longrightarrow 00:05:33.670$ CSF mobilized the donor bone

NOTE Confidence: 0.79592305

 $00{:}05{:}33.670 \dashrightarrow 00{:}05{:}35.600$ for bone marrow transplant ago

NOTE Confidence: 0.79592305

 $00{:}05{:}35.600 \dashrightarrow 00{:}05{:}37.268$ for bone marrow as piration,

NOTE Confidence: 0.79592305

 $00:05:37.270 \longrightarrow 00:05:39.060$ or resemble cord blood transplants.

NOTE Confidence: 0.79592305

 $00{:}05{:}39.060 \dashrightarrow 00{:}05{:}40.790$ There are many different limitations

NOTE Confidence: 0.79592305

 $00:05:40.790 \longrightarrow 00:05:43.000$ for each one of those things,

NOTE Confidence: 0.79592305

 $00:05:43.000 \longrightarrow 00:05:45.148$ but the communist platform is G.

NOTE Confidence: 0.79592305

 $00:05:45.150 \longrightarrow 00:05:48.380$ CSF mobilized peripheral blood graphs.

NOTE Confidence: 0.79592305

00:05:48.380 --> 00:05:49.826 Usually, in order to achieve that,

NOTE Confidence: 0.79592305

 $00:05:49.830 \longrightarrow 00:05:51.372$ we have to give about four

 $00:05:51.372 \longrightarrow 00:05:53.080$ to five days of injection.

NOTE Confidence: 0.79592305

 $00:05:53.080 \longrightarrow 00:05:55.180$ This is kind of a time sensitive

NOTE Confidence: 0.79592305

 $00:05:55.180 \longrightarrow 00:05:57.368$ process and with every day we keep

NOTE Confidence: 0.79592305

00:05:57.368 --> 00:05:59.650 giving G CSF phenotype of sounds that

NOTE Confidence: 0.79592305

 $00:05:59.650 \longrightarrow 00:06:01.930$ we generate along with Democratic stem

NOTE Confidence: 0.79592305

 $00:06:01.930 \longrightarrow 00:06:04.254$ cells changes with those T cells that

NOTE Confidence: 0.79592305

 $00:06:04.254 \longrightarrow 00:06:06.465$ are then more likely to induce both

NOTE Confidence: 0.79592305

 $00{:}06{:}06.465 \dashrightarrow 00{:}06{:}09.055$ acute and chronic graft versus host disease.

NOTE Confidence: 0.79592305

 $00{:}06{:}09.060 \dashrightarrow 00{:}06{:}11.209$ Currently there is an urgent need rather

NOTE Confidence: 0.79592305

 $00:06:11.209 \longrightarrow 00:06:13.728$ than unmet need for rapid mobilizing agents.

NOTE Confidence: 0.79592305

 $00{:}06{:}13.730 \dashrightarrow 00{:}06{:}16.124$ One compound that we tend to use

NOTE Confidence: 0.79592305

 $00{:}06{:}16.124 \dashrightarrow 00{:}06{:}17.843$ Explorer EXE firing people who

NOTE Confidence: 0.79592305

00:06:17.843 --> 00:06:19.715 do not mobilize with G CSF.

NOTE Confidence: 0.79592305

 $00:06:19.720 \longrightarrow 00:06:21.718$ It's a CX here for inhibitor.

NOTE Confidence: 0.79592305

 $00:06:21.720 \longrightarrow 00:06:24.380$ It does generate a lot of cells.

 $00:06:24.380 \longrightarrow 00:06:26.060$ But can only mobilize adequate number

NOTE Confidence: 0.79592305

 $00{:}06{:}26.060 \dashrightarrow 00{:}06{:}27.949$ of cells that we feel are desirable

NOTE Confidence: 0.79592305

 $00:06:27.949 \longrightarrow 00:06:29.626$ in about 60 to 65% of patients.

NOTE Confidence: 0.79592305

00:06:29.626 --> 00:06:32.070 So in order to come with a rapid solution,

NOTE Confidence: 0.79592305

 $00:06:32.070 \longrightarrow 00:06:34.098$ people have been looking for alternative

NOTE Confidence: 0.79592305

 $00:06:34.098 \longrightarrow 00:06:36.079$ options in terms of how to do.

NOTE Confidence: 0.79592305

00:06:36.080 --> 00:06:38.688 CXE R2 seems to be a potential target,

NOTE Confidence: 0.79592305

 $00:06:38.690 \longrightarrow 00:06:41.298$ so here in this study that we should

NOTE Confidence: 0.79592305

 $00{:}06{:}41.298 \dashrightarrow 00{:}06{:}43.342$ have presented by the audience they

NOTE Confidence: 0.79592305

00:06:43.342 --> 00:06:45.334 using akcija to organist MDT at

NOTE Confidence: 0.767422140000001

00:06:45.402 --> 00:06:47.544 145 along with product support to try

NOTE Confidence: 0.767422140000001

 $00:06:47.544 \longrightarrow 00:06:50.095$ and see if a single day mobilization is

NOTE Confidence: 0.767422140000001

 $00{:}06{:}50.095 \dashrightarrow 00{:}06{:}52.519$ possible to generate * **** wit emitter

NOTE Confidence: 0.767422140000001

 $00:06:52.519 \longrightarrow 00:06:55.130$ Partick stem cells in addition to Olympus

NOTE Confidence: 0.767422140000001

 $00:06:55.195 \longrightarrow 00:06:57.637$ suppressive properties of the T cells.

NOTE Confidence: 0.767422140000001

 $00:06:57.640 \longrightarrow 00:06:59.761$ So here is a condensed version of

00:06:59.761 --> 00:07:01.649 the results that I'm presenting.

NOTE Confidence: 0.767422140000001

 $00:07:01.650 \longrightarrow 00:07:03.320$ The study included healthy volunteers,

NOTE Confidence: 0.767422140000001

 $00:07:03.320 \longrightarrow 00:07:05.993$ about 12 of them, of which 92% of

NOTE Confidence: 0.767422140000001

 $00:07:05.993 \longrightarrow 00:07:07.658$ those volunteers mobilized 20 CD,

NOTE Confidence: 0.767422140000001

 $00:07:07.660 \longrightarrow 00:07:09.330$ 34 cells per microliters combination.

NOTE Confidence: 0.767422140000001

 $00:07:09.330 \longrightarrow 00:07:11.689$ That is the M GTA145 plus player

NOTE Confidence: 0.767422140000001

 $00:07:11.689 \longrightarrow 00:07:14.022$ XFR compared to only 57% of the

NOTE Confidence: 0.767422140000001

 $00{:}07{:}14.022 \to 00{:}07{:}15.727$ patients achieving the same target

NOTE Confidence: 0.767422140000001

 $00{:}07{:}15.727 \dashrightarrow 00{:}07{:}17.679$ with single agent product so far.

NOTE Confidence: 0.767422140000001

 $00:07:17.680 \longrightarrow 00:07:20.152$ Just in case you're wondering what is the

NOTE Confidence: 0.767422140000001

00:07:20.152 --> 00:07:22.966 20 CD 34 cells for Michael later before

NOTE Confidence: 0.767422140000001

00:07:22.966 --> 00:07:26.027 the subjects are put on a fresh this machine,

NOTE Confidence: 0.767422140000001

 $00{:}07{:}26.030 \to 00{:}07{:}29.158$ we do a peripheral blood CD 4 count.

NOTE Confidence: 0.767422140000001

 $00:07:29.160 \longrightarrow 00:07:31.239$ Most centers would not put people in

NOTE Confidence: 0.767422140000001

 $00:07:31.239 \longrightarrow 00:07:33.469$ machine if the count is less than 10.

00:07:33.470 --> 00:07:34.870 Here it's showing that they've

NOTE Confidence: 0.767422140000001

 $00{:}07{:}34.870 \dashrightarrow 00{:}07{:}36.902$ got a decent number of count 2020

NOTE Confidence: 0.767422140000001

00:07:36.902 --> 00:07:38.337 CD 34 cells per microliter,

NOTE Confidence: 0.767422140000001

 $00:07:38.340 \longrightarrow 00:07:39.432$ suggesting that the eel,

NOTE Confidence: 0.767422140000001

 $00:07:39.432 \longrightarrow 00:07:41.500$ what we can predict preparing the machine.

NOTE Confidence: 0.767422140000001

 $00:07:41.500 \longrightarrow 00:07:42.940$ This is a decent deal,

NOTE Confidence: 0.767422140000001

 $00:07:42.940 \longrightarrow 00:07:45.412$ expecting a good outcome for decent

NOTE Confidence: 0.767422140000001

 $00:07:45.412 \longrightarrow 00:07:47.929$ collection at the end of the day.

NOTE Confidence: 0.767422140000001

 $00:07:47.930 \longrightarrow 00:07:49.595$ The Peaks cell concentration that

NOTE Confidence: 0.767422140000001

 $00:07:49.595 \longrightarrow 00:07:51.868$ we found in the peripheral with the

NOTE Confidence: 0.767422140000001

 $00{:}07{:}51.868 \dashrightarrow 00{:}07{:}54.044$ combination was 40 CD 34 cells from Mike

NOTE Confidence: 0.767422140000001

 $00{:}07{:}54.106 \to 00{:}07{:}56.479$ later again that suggest that the robust

NOTE Confidence: 0.767422140000001

 $00:07:56.479 \longrightarrow 00:07:58.454$ aggressive the cells that they were

NOTE Confidence: 0.767422140000001

 $00:07:58.454 \longrightarrow 00:08:00.362$ able to achieve with this combinations.

NOTE Confidence: 0.767422140000001

 $00:08:00.370 \longrightarrow 00:08:02.284$ Eight of those donors went voted

NOTE Confidence: 0.767422140000001

 $00:08:02.284 \longrightarrow 00:08:03.916$ the combination underwent a phrases

 $00:08:03.916 \longrightarrow 00:08:06.037$ and the median sell those that were

NOTE Confidence: 0.767422140000001

 $00:08:06.037 \longrightarrow 00:08:07.993$ collected was 4,000,000 cells per cagey

NOTE Confidence: 0.767422140000001

 $00:08:07.993 \longrightarrow 00:08:09.937$ of their sippy and what's expected.

NOTE Confidence: 0.767422140000001

 $00:08:09.940 \longrightarrow 00:08:11.872$ So that's a very good number in

NOTE Confidence: 0.767422140000001

00:08:11.872 --> 00:08:13.769 terms of the overall picture.

NOTE Confidence: 0.767422140000001

 $00:08:13.770 \longrightarrow 00:08:17.066$ How we look at it. Then the design.

NOTE Confidence: 0.767422140000001

 $00:08:17.066 \longrightarrow 00:08:17.710$ Some industry.

NOTE Confidence: 0.767422140000001

 $00:08:17.710 \longrightarrow 00:08:19.756$ Most experiment with the primary transparent

NOTE Confidence: 0.767422140000001

 $00{:}08{:}19.756 \dashrightarrow 00{:}08{:}21.880$ secondary transplant on the left hand side.

NOTE Confidence: 0.767422140000001

 $00{:}08{:}21.880 \longrightarrow 00{:}08{:}24.127$ There able to show that using this

NOTE Confidence: 0.767422140000001

00:08:24.127 --> 00:08:26.383 combination they were able to show at

NOTE Confidence: 0.767422140000001

 $00:08:26.383 \longrightarrow 00:08:28.237$ 23 fold higher engraftment compared to

NOTE Confidence: 0.767422140000001

 $00{:}08{:}28.300 \dashrightarrow 00{:}08{:}30.226$ using donors were mobilized with just

NOTE Confidence: 0.767422140000001

 $00{:}08{:}30.226 \dashrightarrow 00{:}08{:}32.698$ five days alone or plexi for single agent.

NOTE Confidence: 0.767422140000001

00:08:32.698 --> 00:08:34.889 The graph on the right hand side

 $00:08:34.889 \longrightarrow 00:08:37.290$ basically show the survival for such mice.

NOTE Confidence: 0.767422140000001

 $00{:}08{:}37.290 \dashrightarrow 00{:}08{:}39.275$ Post engraftment was pretty good

NOTE Confidence: 0.767422140000001

 $00:08:39.275 \longrightarrow 00:08:41.260$ compared to the alternative options.

NOTE Confidence: 0.767422140000001

00:08:41.260 --> 00:08:43.980 This study has kind of been an exciting

NOTE Confidence: 0.767422140000001

00:08:43.980 --> 00:08:46.186 development in that now people are

NOTE Confidence: 0.767422140000001

 $00:08:46.186 \longrightarrow 00:08:48.006$ now exploring alternatives to G,

NOTE Confidence: 0.767422140000001

 $00{:}08{:}48.010 \dashrightarrow 00{:}08{:}50.068$ CSF and basically trying to mobilize

NOTE Confidence: 0.767422140000001

 $00:08:50.068 \longrightarrow 00:08:52.222$ a phenotype of cells that are

NOTE Confidence: 0.767422140000001

 $00{:}08{:}52.222 \dashrightarrow 00{:}08{:}53.666$ immunosuppressive to make sure

NOTE Confidence: 0.767422140000001

 $00:08:53.666 \longrightarrow 00:08:55.110$ the graph can stain.

NOTE Confidence: 0.767422140000001

 $00{:}08{:}55.110 \dashrightarrow 00{:}08{:}57.566$ But at the same time they're able to

NOTE Confidence: 0.767422140000001

00:08:57.566 --> 00:09:00.244 generate enough of HSBC's to re populate

NOTE Confidence: 0.767422140000001

 $00:09:00.244 \longrightarrow 00:09:01.844$ post updated conditioning therapies.

NOTE Confidence: 0.7914078

 $00:09:04.160 \longrightarrow 00:09:06.664$ For the next three studies were going to

NOTE Confidence: 0.7914078

00:09:06.664 --> 00:09:08.949 talk about graph versus host disease,

NOTE Confidence: 0.7914078

 $00:09:08.950 \longrightarrow 00:09:10.660$ as many of you know,

 $00:09:10.660 \longrightarrow 00:09:12.028$ allogeneic stem cell transplantation

NOTE Confidence: 0.7914078

 $00:09:12.028 \longrightarrow 00:09:13.738$ is a curative intent treatment,

NOTE Confidence: 0.7914078

 $00:09:13.740 \longrightarrow 00:09:15.582$ but the graph versus host disease

NOTE Confidence: 0.7914078

 $00:09:15.582 \longrightarrow 00:09:17.267$ complication that ensures can have

NOTE Confidence: 0.7914078

00:09:17.267 --> 00:09:18.867 significant mortality and morbidity,

NOTE Confidence: 0.7914078

00:09:18.870 --> 00:09:20.916 especially chronic graft versus host disease,

NOTE Confidence: 0.7914078

 $00:09:20.920 \longrightarrow 00:09:23.993$ can be seen in about 30 to 70% of

NOTE Confidence: 0.7914078

 $00:09:23.993 \longrightarrow 00:09:25.708$ the patients main frontline therapy.

NOTE Confidence: 0.7914078

 $00:09:25.710 \longrightarrow 00:09:26.733$ For these patients,

NOTE Confidence: 0.7914078

 $00:09:26.733 \longrightarrow 00:09:28.097$ we do use corticosteroids.

NOTE Confidence: 0.7914078

 $00{:}09{:}28.100 \to 00{:}09{:}29.810$ Approximately about 50% of patients,

NOTE Confidence: 0.7914078

 $00:09:29.810 \longrightarrow 00:09:32.070$ either dependent on it or

NOTE Confidence: 0.7914078

 $00{:}09{:}32.070 \dashrightarrow 00{:}09{:}33.426$ eventually become refractory.

NOTE Confidence: 0.7914078

 $00:09:33.430 \longrightarrow 00:09:35.950$ The only FDA approved drugs in their second

NOTE Confidence: 0.7914078

 $00:09:35.950 \longrightarrow 00:09:37.989$ line setting is the drug in Brittany.

 $00:09:37.990 \longrightarrow 00:09:39.928$ People in the CLL vertebrae familiar

NOTE Confidence: 0.7914078

 $00{:}09{:}39.928 \dashrightarrow 00{:}09{:}42.195$ with this truck and that study was

NOTE Confidence: 0.7914078

 $00{:}09{:}42.195 \dashrightarrow 00{:}09{:}44.025$ not based on randomized trial is

NOTE Confidence: 0.7914078

00:09:44.025 --> 00:09:46.023 based on a single arm study where

NOTE Confidence: 0.7914078

 $00:09:46.023 \longrightarrow 00:09:47.413$ they study about 42 patients.

NOTE Confidence: 0.7914078

00:09:47.413 --> 00:09:49.231 The overall response rate was about

NOTE Confidence: 0.7914078

 $00:09:49.231 \longrightarrow 00:09:52.865$ 67% in that in the CRL about 21%.

NOTE Confidence: 0.7914078

 $00:09:52.870 \longrightarrow 00:09:54.535$ It's interesting to note the

NOTE Confidence: 0.7914078

 $00{:}09{:}54.535 \dashrightarrow 00{:}09{:}56.564$ median time to response was close

NOTE Confidence: 0.7914078

 $00:09:56.564 \longrightarrow 00:09:58.394$ to three months on that study.

NOTE Confidence: 0.7914078

 $00{:}09{:}58.400 \dashrightarrow 00{:}09{:}58.742 \ However,$

NOTE Confidence: 0.7914078

 $00:09:58.742 \longrightarrow 00:10:00.110$ there was a D.

NOTE Confidence: 0.7914078

 $00{:}10{:}00.110 \dashrightarrow 00{:}10{:}01.980$ Saint reduction in Cortico steroid

NOTE Confidence: 0.7914078

 $00{:}10{:}01.980 \dashrightarrow 00{:}10{:}04.500$ use from .29 two .125 again pretty

NOTE Confidence: 0.7914078

 $00:10:04.500 \longrightarrow 00:10:06.796$ late in the game by up by both

NOTE Confidence: 0.7914078

 $00{:}10{:}06.872 \dashrightarrow 00{:}10{:}08.876$ Week 49 after initiating at a

 $00:10:08.876 \longrightarrow 00:10:10.892$ median follow up for 14 months.

NOTE Confidence: 0.7914078

00:10:10.892 --> 00:10:14.028 In that study 71% of the patients at

NOTE Confidence: 0.7914078

 $00:10:14.028 \longrightarrow 00:10:16.710$ discontinue the drug due to toxicities.

NOTE Confidence: 0.7914078

00:10:16.710 --> 00:10:17.023 Again,

NOTE Confidence: 0.7914078

00:10:17.023 --> 00:10:18.901 the other important point to note

NOTE Confidence: 0.7914078

 $00:10:18.901 \longrightarrow 00:10:20.927$ here is that there are currently

NOTE Confidence: 0.7914078

 $00:10:20.927 \longrightarrow 00:10:22.973$ no drugs approved in this space.

NOTE Confidence: 0.7914078

 $00:10:22.980 \longrightarrow 00:10:24.100$ Based on the randomization.

NOTE Confidence: 0.7914078

 $00:10:24.100 \longrightarrow 00:10:26.545$ This led to the reach three study which

NOTE Confidence: 0.7914078

 $00{:}10{:}26.545 \dashrightarrow 00{:}10{:}28.325$ was studying ruxolitinib against best

NOTE Confidence: 0.7914078

 $00:10:28.325 \longrightarrow 00:10:30.568$ available therapy in patients with steroid,

NOTE Confidence: 0.7914078

 $00:10:30.570 \longrightarrow 00:10:31.890$ refractory or steroid dependent.

NOTE Confidence: 0.7914078

 $00:10:31.890 \longrightarrow 00:10:33.540$ Chronic graft versus host disease.

NOTE Confidence: 0.7914078

 $00:10:33.540 \longrightarrow 00:10:35.200$ This was a multinational

NOTE Confidence: 0.7914078

 $00:10:35.200 \longrightarrow 00:10:37.275$ trial led by Doctor Zaiser.

 $00:10:37.280 \longrightarrow 00:10:38.216$ Here's the study.

NOTE Confidence: 0.7914078

 $00{:}10{:}38.216 \dashrightarrow 00{:}10{:}39.464$ Design included patients greater

NOTE Confidence: 0.7914078

 $00:10:39.464 \longrightarrow 00:10:41.733$ than 12 years of age who either

NOTE Confidence: 0.7914078

 $00:10:41.733 \longrightarrow 00:10:43.017$ had steroid refractory independent

NOTE Confidence: 0.7914078

 $00{:}10{:}43.017 \dashrightarrow 00{:}10{:}44.690$ chronic graft versus host disease.

NOTE Confidence: 0.7914078

00:10:44.690 --> 00:10:46.937 It had to be moderate to severe,

NOTE Confidence: 0.7914078

 $00:10:46.940 \longrightarrow 00:10:48.088$ as defined here below.

NOTE Confidence: 0.7914078

 $00:10:48.088 \longrightarrow 00:10:50.258$ That is lack of response or disease

NOTE Confidence: 0.7914078

 $00{:}10{:}50.258 \dashrightarrow 00{:}10{:}52.183$ progression after Prednisone greater than

NOTE Confidence: 0.7914078

00:10:52.183 --> 00:10:54.988 a MacBook per day for more than a week,

NOTE Confidence: 0.7914078

 $00{:}10{:}54.990 \dashrightarrow 00{:}10{:}56.278$ or disease progression with

NOTE Confidence: 0.7914078

00:10:56.278 --> 00:10:57.566 Prednisone greater than point,

NOTE Confidence: 0.7914078

00:10:57.570 --> 00:10:59.684 buy mixed bag per day are a

NOTE Confidence: 0.7914078

 $00:10:59.684 \longrightarrow 00:11:01.352$ milligram per kilogram every other

NOTE Confidence: 0.7914078

 $00:11:01.352 \longrightarrow 00:11:03.802$ day for greater than four weeks are

NOTE Confidence: 0.7914078

 $00:11:03.802 \longrightarrow 00:11:05.665$ increasing the dose of Prednisone

NOTE Confidence: 0.7914078

00:11:07.480 --> 00:11:07.832 Today,

NOTE Confidence: 0.7914078

00:11:07.832 --> 00:11:09.240 after two unsuccessful attempts

NOTE Confidence: 0.7914078

 $00:11:09.240 \longrightarrow 00:11:10.648$ to taper the dose,

NOTE Confidence: 0.7914078

 $00:11:10.650 \longrightarrow 00:11:12.054$ obviously you're worried about

NOTE Confidence: 0.7914078

 $00:11:12.054 \longrightarrow 00:11:13.107$ the graft rejection.

NOTE Confidence: 0.7914078

00:11:13.110 --> 00:11:15.216 So prior to the study enrollment,

NOTE Confidence: 0.7914078

 $00:11:15.220 \longrightarrow 00:11:16.980$ we had to confirm every body

NOTE Confidence: 0.7914078

 $00:11:16.980 \longrightarrow 00:11:18.036$ had decent engraftment.

NOTE Confidence: 0.7914078

 $00:11:18.040 \longrightarrow 00:11:19.800$ The randomization was stratified by

NOTE Confidence: 0.7914078

00:11:19.800 --> 00:11:21.560 chronic graft versus host disease.

NOTE Confidence: 0.7914078

 $00:11:21.560 \longrightarrow 00:11:24.045$ Great people were allowed to go either

NOTE Confidence: 0.7914078

 $00{:}11{:}24.045 \dashrightarrow 00{:}11{:}26.543$ on ruxolitinib 10 milligrams to be ID

NOTE Confidence: 0.7914078

 $00:11:26.543 \longrightarrow 00:11:28.595$ those on the backbone of steroids.

NOTE Confidence: 0.7914078

 $00:11:28.600 \longrightarrow 00:11:30.652$ Percent minus calcineurin inhibitors

 $00:11:30.652 \longrightarrow 00:11:32.704$ or best available therapy.

NOTE Confidence: 0.7914078

00:11:32.710 --> 00:11:33.952 About six cycles.

NOTE Confidence: 0.7914078

 $00{:}11{:}33.952 \dashrightarrow 00{:}11{:}36.022$ Were given in the intervention

NOTE Confidence: 0.7914078

 $00:11:36.022 \longrightarrow 00:11:38.780$ alarm and then the analysis was done

NOTE Confidence: 0.7914078

 $00:11:38.780 \longrightarrow 00:11:41.639$ correctly to the start of summer cycle.

NOTE Confidence: 0.7914078

 $00{:}11{:}41.640 \dashrightarrow 00{:}11{:}43.752$ At the end of 6 cycle people around

NOTE Confidence: 0.7914078

 $00:11:43.752 \longrightarrow 00:11:45.976$ the best available therapy are what

NOTE Confidence: 0.7914078

 $00:11:45.976 \longrightarrow 00:11:48.670$ allowed indeed to crossover the excellent in.

NOTE Confidence: 0.7914078

 $00:11:48.670 \longrightarrow 00:11:50.350$ If there was a need,

NOTE Confidence: 0.7914078

00:11:50.350 --> 00:11:52.390 the primary endpoint of the study

NOTE Confidence: 0.7914078

 $00{:}11{:}52.390 \dashrightarrow 00{:}11{:}54.404$ was overall response rate at Week

NOTE Confidence: 0.7914078

 $00:11:54.404 \longrightarrow 00:11:56.462$ 24 as defined by the NIH consensus

NOTE Confidence: 0.7914078

00:11:56.462 --> 00:11:58.251 criteria and the key secondary

NOTE Confidence: 0.7914078

00:11:58.251 --> 00:11:59.683 endpoints were failure free

NOTE Confidence: 0.7914078

 $00:11:59.683 \longrightarrow 00:12:00.399$ survival and

NOTE Confidence: 0.8022639

 $00{:}12{:}00.400 \dashrightarrow 00{:}12{:}02.372$ modified lease symptom scale.

 $00:12:02.372 \longrightarrow 00:12:05.330$ Assessing the responses at Week 24.

NOTE Confidence: 0.8022639

 $00:12:05.330 \longrightarrow 00:12:08.658$ This is just a slide to show that

NOTE Confidence: 0.8022639

 $00:12:08.658 \longrightarrow 00:12:11.594$ across the two arms age, sex, TV,

NOTE Confidence: 0.8022639

00:12:11.594 --> 00:12:13.916 IDF, chronic GV HD the criterias

NOTE Confidence: 0.8022639

 $00{:}12{:}13.916 \dashrightarrow 00{:}12{:}16.720$ on the score were well matched.

NOTE Confidence: 0.82102114

 $00:12:18.840 \longrightarrow 00:12:20.360$ The overall response rate,

NOTE Confidence: 0.82102114

00:12:20.360 --> 00:12:23.279 when assessed after six months or weeks 24,

NOTE Confidence: 0.82102114

 $00:12:23.280 \longrightarrow 00:12:25.500$ was higher in the proximity bomb.

NOTE Confidence: 0.82102114

 $00:12:25.500 \longrightarrow 00:12:27.350$ It was 49.7% almost doubled

NOTE Confidence: 0.82102114

00:12:27.350 --> 00:12:29.570 compared to the 25.6% seen with

NOTE Confidence: 0.82102114

 $00:12:29.570 \longrightarrow 00:12:31.050$ the best available therapists.

NOTE Confidence: 0.82102114

00:12:31.050 --> 00:12:33.875 The CRH was about 6.7% or says 3%.

NOTE Confidence: 0.82102114

 $00:12:33.875 \longrightarrow 00:12:35.500$ Achieving a CR in the

NOTE Confidence: 0.82102114

00:12:35.500 --> 00:12:37.340 setting is extremely hard,

NOTE Confidence: 0.82102114

 $00:12:37.340 \longrightarrow 00:12:39.530$ although it may look like the

 $00:12:39.530 \longrightarrow 00:12:41.410$ sea animals aren't that high.

NOTE Confidence: 0.82102114

 $00:12:41.410 \longrightarrow 00:12:44.298$ What we really need to take into account

NOTE Confidence: 0.82102114

00:12:44.298 --> 00:12:47.354 is the OR or are you know when you

NOTE Confidence: 0.82102114

 $00:12:47.354 \longrightarrow 00:12:50.250$ talk to people who take transportation.

NOTE Confidence: 0.82102114

 $00:12:50.250 \longrightarrow 00:12:51.612$ It will be agrees that this

NOTE Confidence: 0.82102114

 $00:12:51.612 \longrightarrow 00:12:52.520$ is a good endpoint.

NOTE Confidence: 0.82102114

 $00{:}12{:}52.520 \dashrightarrow 00{:}12{:}55.850$ Rather than focusing on CR alone.

NOTE Confidence: 0.82102114

 $00:12:55.850 \longrightarrow 00:12:57.285$ When they looked into failure

NOTE Confidence: 0.82102114

 $00:12:57.285 \longrightarrow 00:12:58.720$ free survival at week 24,

NOTE Confidence: 0.82102114

00:12:58.720 --> 00:13:00.456 failure fix around being defined as a

NOTE Confidence: 0.82102114

 $00{:}13{:}00.456 \dashrightarrow 00{:}13{:}02.540$ time to the earliest of recurrence of

NOTE Confidence: 0.82102114

 $00:13:02.540 \longrightarrow 00:13:04.460$ underlying disease or the start menu.

NOTE Confidence: 0.82102114

 $00:13:04.460 \longrightarrow 00:13:06.028$ Systemic treatment for chronic

NOTE Confidence: 0.82102114

 $00:13:06.028 \longrightarrow 00:13:07.596$ GV HD or death.

NOTE Confidence: 0.82102114

 $00:13:07.600 \longrightarrow 00:13:09.325$ But the rock selection of

NOTE Confidence: 0.82102114

 $00:13:09.325 \longrightarrow 00:13:11.050$ arm it was not raised,

 $00:13:11.050 \longrightarrow 00:13:13.120$ but as it was 5.7 months

NOTE Confidence: 0.82102114

 $00:13:13.120 \longrightarrow 00:13:14.500$ with the observation log.

NOTE Confidence: 0.8165663

 $00:13:16.950 \longrightarrow 00:13:18.720$ One thing that is often

NOTE Confidence: 0.8165663

00:13:18.720 --> 00:13:19.428 understood understood,

NOTE Confidence: 0.8165663

 $00:13:19.430 \longrightarrow 00:13:21.195$ he did incorporate that is

NOTE Confidence: 0.8165663

 $00:13:21.195 \longrightarrow 00:13:22.607$ the symptom scale modified.

NOTE Confidence: 0.8165663

 $00:13:22.610 \longrightarrow 00:13:24.602$ Lee Symptom Scale is well validated

NOTE Confidence: 0.8165663

00:13:24.602 --> 00:13:26.510 in chronic GV HD setting,

NOTE Confidence: 0.8165663

 $00{:}13{:}26.510 \dashrightarrow 00{:}13{:}28.634$ investigators were able to show that

NOTE Confidence: 0.8165663

 $00:13:28.634 \longrightarrow 00:13:30.452$ for patients who are investigational

NOTE Confidence: 0.8165663

 $00{:}13{:}30.452 \dashrightarrow 00{:}13{:}33.132$ arm had a better quality of life as

NOTE Confidence: 0.8165663

 $00:13:33.132 \longrightarrow 00:13:35.332$ is being measured by the symptomatic

NOTE Confidence: 0.8165663

 $00:13:35.332 \longrightarrow 00:13:37.478$ score with a 24.2% here compared

NOTE Confidence: 0.8165663

 $00:13:37.478 \longrightarrow 00:13:40.640$ to the 11% the controller.

NOTE Confidence: 0.8165663

 $00:13:40.640 \longrightarrow 00:13:42.842$ Which is the best overall response

00:13:42.842 --> 00:13:44.360 rate right? But again,

NOTE Confidence: 0.8165663

 $00:13:44.360 \longrightarrow 00:13:46.700$ with the intervention arm with excellent

NOTE Confidence: 0.8165663

 $00:13:46.700 \longrightarrow 00:13:49.486$ and M it was 76.4% compared to 60.4%.

NOTE Confidence: 0.8165663

 $00:13:49.486 \longrightarrow 00:13:51.718$ But the best available therapy are

NOTE Confidence: 0.8165663

 $00{:}13{:}51.718 \dashrightarrow 00{:}13{:}54.114$ the median duration or best overall

NOTE Confidence: 0.8165663

00:13:54.114 --> 00:13:56.796 response was 6.2 four months unpaid but

NOTE Confidence: 0.8165663

 $00:13:56.796 \longrightarrow 00:14:01.000$ was not reached in their excellent in a bar.

NOTE Confidence: 0.8165663

 $00:14:01.000 \longrightarrow 00:14:03.994$ In conclusion this is the first

NOTE Confidence: 0.8165663

 $00{:}14{:}03.994 \dashrightarrow 00{:}14{:}05.990$ successful randomized phase three

NOTE Confidence: 0.8165663

00:14:06.069 --> 00:14:08.680 trial for the chronic GV HD space,

NOTE Confidence: 0.8165663

00:14:08.680 --> 00:14:11.428 or excellent in a demonstrated significantly

NOTE Confidence: 0.8165663

 $00:14:11.428 \longrightarrow 00:14:14.019$ higher overall response rate at Week 24.

NOTE Confidence: 0.8165663

 $00:14:14.020 \longrightarrow 00:14:16.310$ There was improvement in failure

NOTE Confidence: 0.8165663

 $00{:}14{:}16.310 \dashrightarrow 00{:}14{:}17.684$ free survival significantly

NOTE Confidence: 0.8165663

00:14:17.684 --> 00:14:19.380 improved symptom improvement.

NOTE Confidence: 0.8165663

 $00:14:19.380 \longrightarrow 00:14:20.454$ There was hype.

 $00:14:20.454 \longrightarrow 00:14:22.602$ It was the highest best overall

NOTE Confidence: 0.8165663

 $00{:}14{:}22.602 \dashrightarrow 00{:}14{:}25.019$ response rate at Week 24 with excellent.

NOTE Confidence: 0.8165663

 $00:14:25.020 \longrightarrow 00:14:26.800$ The most frequent adverse event

NOTE Confidence: 0.8165663

 $00:14:26.800 \longrightarrow 00:14:29.205$ seemed the setting was similar to what

NOTE Confidence: 0.8165663

 $00:14:29.205 \longrightarrow 00:14:30.891$ we've seen in acute GBS resetting

NOTE Confidence: 0.8165663

 $00:14:30.891 \longrightarrow 00:14:32.838$ when we use our excellent name,

NOTE Confidence: 0.8165663

 $00:14:32.840 \longrightarrow 00:14:34.384$ namely anemia and thrombocytopenia.

NOTE Confidence: 0.8165663

00:14:34.384 --> 00:14:35.928 Based on this finding,

NOTE Confidence: 0.8165663

 $00:14:35.930 \longrightarrow 00:14:37.664$ there is increasing enthusiasm to start

NOTE Confidence: 0.8165663

 $00:14:37.664 \longrightarrow 00:14:39.969$ using this drug as a second line setting.

NOTE Confidence: 0.7725647

 $00{:}14{:}42.080 \dashrightarrow 00{:}14{:}44.414$ The other important progress in the

NOTE Confidence: 0.7725647

 $00:14:44.414 \longrightarrow 00:14:47.519$ chronic GV HD space is in studying this

NOTE Confidence: 0.7725647

00:14:47.519 --> 00:14:50.283 pathway called the rock Pot Rock here

NOTE Confidence: 0.7725647

 $00{:}14{:}50.283 \dashrightarrow 00{:}14{:}52.688$ stands for through associated coiled

NOTE Confidence: 0.7725647

 $00:14:52.688 \longrightarrow 00:14:55.038$ coiled coil protein kinase pathway.

00:14:55.038 --> 00:14:57.546 Rock essentially comes in two isoforms,

NOTE Confidence: 0.7725647

 $00:14:57.550 \longrightarrow 00:14:59.850$ rock one and Rock 2.

NOTE Confidence: 0.7725647

 $00{:}14{:}59.850 \dashrightarrow 00{:}15{:}02.734$ These are sitting three on TuneIn kinases.

NOTE Confidence: 0.7725647

 $00:15:02.740 \longrightarrow 00:15:05.729$ Most of this study is coming systemic

NOTE Confidence: 0.7725647

00:15:05.729 --> 00:15:07.026 sclerosis, another autoimmune

NOTE Confidence: 0.7725647

 $00:15:07.026 \longrightarrow 00:15:09.191$ disease models where altering rock

NOTE Confidence: 0.7725647

00:15:09.191 --> 00:15:11.728 to re balance the immune system,

NOTE Confidence: 0.7725647

 $00:15:11.730 \longrightarrow 00:15:13.438$ which down regulates drugs

NOTE Confidence: 0.7725647

 $00{:}15{:}13.438 \dashrightarrow 00{:}15{:}15.146$ that's blocking the rock.

NOTE Confidence: 0.7725647

 $00:15:15.150 \longrightarrow 00:15:16.040$ Two parter.

NOTE Confidence: 0.7725647

 $00{:}15{:}16.040 \dashrightarrow 00{:}15{:}17.375$ Basically, downregulate proinflammatory

NOTE Confidence: 0.7725647

 $00:15:17.375 \longrightarrow 00:15:20.438$ side intensity at 17 and it also

NOTE Confidence: 0.7725647

 $00:15:20.438 \longrightarrow 00:15:21.998$ increases your Excel production.

NOTE Confidence: 0.7725647

 $00:15:22.000 \longrightarrow 00:15:22.788$ In addition,

NOTE Confidence: 0.7725647

 $00:15:22.788 \longrightarrow 00:15:24.758$ what is interesting about this

NOTE Confidence: 0.7725647

 $00{:}15{:}24.758 \dashrightarrow 00{:}15{:}27.408$ pathway is that it also controls

00:15:27.408 --> 00:15:29.276 multiple pro fibrotic processes,

NOTE Confidence: 0.7725647

 $00{:}15{:}29.280 \dashrightarrow 00{:}15{:}30.678$ including myofibroblast activation.

NOTE Confidence: 0.7725647

00:15:30.678 --> 00:15:33.940 Rock is a downstream of major Pro.

NOTE Confidence: 0.7725647

 $00:15:33.940 \longrightarrow 00:15:35.128$ Fibrotic mediators mediate

NOTE Confidence: 0.7725647

 $00:15:35.128 \longrightarrow 00:15:36.316$ stress fiber formation.

NOTE Confidence: 0.7725647

 $00{:}15{:}36.320 \dashrightarrow 00{:}15{:}37.900$ It also regulates transcription

NOTE Confidence: 0.7725647

 $00:15:37.900 \longrightarrow 00:15:39.875$ of several pro fibrotic genes.

NOTE Confidence: 0.7725647

 $00:15:39.880 \longrightarrow 00:15:41.860$ It is important because when

NOTE Confidence: 0.7725647

00:15:41.860 --> 00:15:43.840 you study chronic GV HD,

NOTE Confidence: 0.7725647

 $00{:}15{:}43.840 \dashrightarrow 00{:}15{:}47.024$ there are milder versions of GV HD where

NOTE Confidence: 0.7725647

 $00:15:47.024 \longrightarrow 00:15:49.779$ people are just ocular or oral GST,

NOTE Confidence: 0.7725647

 $00:15:49.780 \longrightarrow 00:15:53.344$ which is not really that much of morbid GST.

NOTE Confidence: 0.7725647

00:15:53.350 --> 00:15:54.930 In contrast, that sclerotic,

NOTE Confidence: 0.7725647

00:15:54.930 --> 00:15:56.115 longer sclerotic pericardium,

NOTE Confidence: 0.7725647

 $00{:}15{:}56.120 \dashrightarrow 00{:}15{:}58.544$ those are the most serious one

 $00:15:58.544 \longrightarrow 00:16:00.160$ where inflammation with fibrosis

NOTE Confidence: 0.7725647

 $00:16:00.227 \longrightarrow 00:16:02.277$ eventually lead to bad outcomes.

NOTE Confidence: 0.7725647

 $00{:}16{:}02.280 \dashrightarrow 00{:}16{:}04.518$ So a drug which controls inflammation

NOTE Confidence: 0.7725647

00:16:04.518 --> 00:16:06.010 alters the fibrotic trajectory

NOTE Confidence: 0.7725647

 $00:16:06.065 \longrightarrow 00:16:07.815$ is a big welcome into the field.

NOTE Confidence: 0.84766275

00:16:10.100 --> 00:16:12.074 Study results are being eagerly awaited

NOTE Confidence: 0.84766275

 $00:16:12.074 \longrightarrow 00:16:14.410$ in the field for the last couple

NOTE Confidence: 0.84766275

 $00:16:14.410 \longrightarrow 00:16:16.330$ of years based on its mechanisms.

NOTE Confidence: 0.84766275

 $00:16:16.330 \longrightarrow 00:16:18.437$ And here's a slide on the right

NOTE Confidence: 0.84766275

 $00:16:18.437 \longrightarrow 00:16:20.110$ hand side that was presented

NOTE Confidence: 0.84766275

 $00{:}16{:}20.110 \dashrightarrow 00{:}16{:}22.553$ initially in as 2018 and that ECT.

NOTE Confidence: 0.84766275

 $00:16:22.560 \longrightarrow 00:16:25.437$ And they're trying to find the dose.

NOTE Confidence: 0.84766275

 $00:16:25.440 \longrightarrow 00:16:27.115$ That intention to treat analysis

NOTE Confidence: 0.84766275

 $00:16:27.115 \longrightarrow 00:16:29.130$ about 59% of the patients showed

NOTE Confidence: 0.84766275

 $00:16:29.130 \longrightarrow 00:16:31.140$ overall response rate in that state.

NOTE Confidence: 0.84766275

 $00{:}16{:}31.140 \dashrightarrow 00{:}16{:}32.910$ The inclusion criteria included people

 $00:16:32.910 \longrightarrow 00:16:35.351$ or greater than two prior lines of

NOTE Confidence: 0.84766275

 $00{:}16{:}35.351 \dashrightarrow 00{:}16{:}37.479$ the rapy and a significant number of those

NOTE Confidence: 0.84766275

00:16:37.479 --> 00:16:39.507 have more than four organ involved,

NOTE Confidence: 0.84766275

 $00:16:39.510 \longrightarrow 00:16:42.180$ and many of those are traditionally

NOTE Confidence: 0.84766275

 $00:16:42.180 \longrightarrow 00:16:44.729$ classified as what we call as

NOTE Confidence: 0.84766275

 $00:16:44.729 \longrightarrow 00:16:46.454$ a severe chronic GV HD.

NOTE Confidence: 0.84766275

 $00:16:46.460 \longrightarrow 00:16:48.015$ This lady is recapitulating what

NOTE Confidence: 0.84766275

00:16:48.015 --> 00:16:50.309 the study design was on the left

NOTE Confidence: 0.84766275

00:16:50.309 --> 00:16:51.677 of the eligibility criteria,

NOTE Confidence: 0.84766275

 $00:16:51.680 \longrightarrow 00:16:53.702$ which is basically age greater than

NOTE Confidence: 0.84766275

00:16:53.702 --> 00:16:55.719 to all active chronic Jamie ST2

NOTE Confidence: 0.84766275

 $00:16:55.719 \longrightarrow 00:16:57.537$ to five prior lines of therapy.

NOTE Confidence: 0.84766275

 $00{:}16{:}57.540 \dashrightarrow 00{:}17{:}00.004$ They were allowed to go on the one

NOTE Confidence: 0.84766275

 $00:17:00.004 \longrightarrow 00:17:02.430$ of two arms either once a day.

NOTE Confidence: 0.84766275

 $00:17:02.430 \longrightarrow 00:17:04.060$ Those are twice a day.

00:17:04.060 --> 00:17:06.130 Those you would continue to tell

NOTE Confidence: 0.84766275

00:17:06.130 --> 00:17:07.165 clinically significant progression

NOTE Confidence: 0.84766275

 $00:17:07.165 \longrightarrow 00:17:08.871$ or unacceptable toxicity with the

NOTE Confidence: 0.84766275

00:17:08.871 --> 00:17:10.501 primary endpoint looking in four

NOTE Confidence: 0.84766275

 $00{:}17{:}10.501 \dashrightarrow 00{:}17{:}12.652$ or R as per the consensus criteria

NOTE Confidence: 0.84766275

 $00{:}17{:}12.652 \dashrightarrow 00{:}17{:}14.206$ and secondary endpoints with safety

NOTE Confidence: 0.84766275

 $00:17:14.206 \longrightarrow 00:17:16.768$ duration of response, at least symptoms care.

NOTE Confidence: 0.84766275

00:17:16.770 --> 00:17:19.570 Can you free survival and overall survival?

NOTE Confidence: 0.84766275

 $00{:}17{:}19.570 \dashrightarrow 00{:}17{:}21.000$ The study population was well

NOTE Confidence: 0.84766275

 $00:17:21.000 \longrightarrow 00:17:23.064$ balanced for both the once a day dose

NOTE Confidence: 0.84766275

 $00{:}17{:}23.064 \dashrightarrow 00{:}17{:}24.739$ and twice a day dose on the right

NOTE Confidence: 0.84766275

00:17:24.739 --> 00:17:26.594 hand side is giving you the overall

NOTE Confidence: 0.84766275

 $00:17:26.594 \longrightarrow 00:17:28.650$ output for all of those things.

NOTE Confidence: 0.84766275

 $00:17:28.650 \longrightarrow 00:17:30.170$ There was nothing significantly

NOTE Confidence: 0.84766275

00:17:30.170 --> 00:17:31.908 different between these two groups,

NOTE Confidence: 0.84766275

 $00:17:31.910 \longrightarrow 00:17:33.938$ but what is of interest here?

00:17:33.940 --> 00:17:35.630 Ways there were several people.

NOTE Confidence: 0.84766275

 $00{:}17{:}35.630 \dashrightarrow 00{:}17{:}37.315$ Approximately 30% of the patients

NOTE Confidence: 0.84766275

 $00:17:37.315 \longrightarrow 00:17:38.663$ had used up ibrutinib.

NOTE Confidence: 0.84766275

00:17:38.670 --> 00:17:40.698 Other option ruxolitinib bugs are option,

NOTE Confidence: 0.84766275

 $00:17:40.700 \longrightarrow 00:17:42.695$ suggesting that the drug the the design

NOTE Confidence: 0.84766275

 $00:17:42.695 \longrightarrow 00:17:45.149$ of the study should be interpreted taking

NOTE Confidence: 0.84766275

00:17:45.149 --> 00:17:47.453 into account what are currently approved,

NOTE Confidence: 0.84766275

 $00:17:47.460 \longrightarrow 00:17:49.865$ or at least what's commonly

NOTE Confidence: 0.84766275

 $00:17:49.865 \longrightarrow 00:17:51.789$ used in the field.

NOTE Confidence: 0.84766275

 $00:17:51.790 \longrightarrow 00:17:53.776$ Here is the safety and tolerability

NOTE Confidence: 0.84766275

00:17:53.776 --> 00:17:56.049 of the of the study design.

NOTE Confidence: 0.84766275

 $00{:}17{:}56.050 \dashrightarrow 00{:}17{:}57.825$ It has issues with gastroint estinal

NOTE Confidence: 0.84766275

 $00{:}17{:}57.825 \dashrightarrow 00{:}17{:}59.972$ stuff in terms of diarrhea, nausea,

NOTE Confidence: 0.84766275

 $00:17:59.972 \longrightarrow 00:18:02.576$ which is a common thing that we

NOTE Confidence: 0.84766275

 $00:18:02.576 \longrightarrow 00:18:05.048$ encounter in our patient population.

 $00:18:05.050 \longrightarrow 00:18:07.060$ When we looked at specifically the

NOTE Confidence: 0.84766275

 $00{:}18{:}07.060 \dashrightarrow 00{:}18{:}08.746$ great prior higher events, pneumonia,

NOTE Confidence: 0.84766275

00:18:08.746 --> 00:18:09.438 hypertension, hyperglycemia,

NOTE Confidence: 0.84766275

 $00:18:09.438 \longrightarrow 00:18:11.514$ or some of the common events

NOTE Confidence: 0.84766275

 $00:18:11.514 \longrightarrow 00:18:12.759$ that might come across.

NOTE Confidence: 0.84766275

00:18:12.760 --> 00:18:13.111 Again,

NOTE Confidence: 0.84766275

 $00:18:13.111 \longrightarrow 00:18:15.568$ keep in mind chronic GV HD patients

NOTE Confidence: 0.84766275

 $00:18:15.568 \longrightarrow 00:18:17.447$ are highly immunocompromised and

NOTE Confidence: 0.84766275

00:18:17.447 --> 00:18:19.655 infections are not uncommon.

NOTE Confidence: 0.84766275

00:18:19.660 --> 00:18:21.610 The primary endpoint was easily

NOTE Confidence: 0.84766275

 $00:18:21.610 \longrightarrow 00:18:23.560$ met for both the arms.

NOTE Confidence: 0.84766275

 $00:18:23.560 \longrightarrow 00:18:26.290$ It was 73% with once a day,

NOTE Confidence: 0.84766275

 $00:18:26.290 \longrightarrow 00:18:29.410$ those 77% with the twice a day dose.

NOTE Confidence: 0.84766275

 $00:18:29.410 \longrightarrow 00:18:31.588$ What was presented in this Patch

NOTE Confidence: 0.84766275

 $00:18:31.588 \longrightarrow 00:18:34.152$ was basically the 12 months follow

NOTE Confidence: 0.84766275

 $00:18:34.152 \longrightarrow 00:18:36.747$ compared to the previous presentations.

 $00:18:36.750 \longrightarrow 00:18:38.304$ Offered to show that seven patients

NOTE Confidence: 0.84766275

00:18:38.304 --> 00:18:40.162 were able to reach a CR Interestingly

NOTE Confidence: 0.84766275

 $00:18:40.162 \longrightarrow 00:18:41.692$ median time to the response in

NOTE Confidence: 0.84766275

00:18:41.692 --> 00:18:42.908 the studies four weeks,

NOTE Confidence: 0.84766275

 $00:18:42.910 \longrightarrow 00:18:45.800$ which is a welcome change.

NOTE Confidence: 0.84766275

 $00:18:45.800 \longrightarrow 00:18:47.612$ Here's the responses across the different

NOTE Confidence: 0.84766275

00:18:47.612 --> 00:18:48.990 subgroups they were interested in,

NOTE Confidence: 0.84766275

 $00{:}18{:}48.990 \dashrightarrow 00{:}18{:}51.174$ no matter whether using it once

NOTE Confidence: 0.84766275

00:18:51.174 --> 00:18:53.189 a day or twice a day.

NOTE Confidence: 0.84766275

 $00{:}18{:}53.190 \dashrightarrow 00{:}18{:}55.030$ Whether they had severe chronic

NOTE Confidence: 0.84766275

00:18:55.030 --> 00:18:56.870 GV HD screening or not,

NOTE Confidence: 0.84766275

 $00:18:56.870 \longrightarrow 00:18:59.078$ but it was refractory and refractory

NOTE Confidence: 0.84766275

 $00{:}18{:}59.078 \dashrightarrow 00{:}19{:}00.550$ number of organs involved.

NOTE Confidence: 0.84766275

 $00:19:00.550 \longrightarrow 00:19:02.932$ Number of prior lines of therapy

NOTE Confidence: 0.84766275

 $00:19:02.932 \longrightarrow 00:19:04.970$ prior originate are excellent in it,

 $00:19:04.970 \longrightarrow 00:19:08.144$ this drug was able to show

NOTE Confidence: 0.7602978

00:19:08.144 --> 00:19:10.260 good overall response rate.

NOTE Confidence: 0.7602978

 $00:19:10.260 \longrightarrow 00:19:12.540$ The duration of Response rather than

NOTE Confidence: 0.7602978

 $00:19:12.540 \longrightarrow 00:19:14.895$ median duration of response was 50 weeks

NOTE Confidence: 0.7602978

 $00:19:14.895 \dashrightarrow 00:19:17.566$ and about 60% of the patients maintain

NOTE Confidence: 0.7602978

 $00:19:17.566 \longrightarrow 00:19:20.410$ responses for greater than five months.

NOTE Confidence: 0.7602978

 $00:19:20.410 \longrightarrow 00:19:21.774$ Can you see survival

NOTE Confidence: 0.7602978

 $00:19:21.774 \longrightarrow 00:19:23.138$ Rasterizer reported six months?

NOTE Confidence: 0.7602978

 $00:19:23.140 \longrightarrow 00:19:25.688$ This ones reporting at 12 months of

NOTE Confidence: 0.7602978

 $00:19:25.688 \longrightarrow 00:19:28.172$ failure free survival at 58% is an

NOTE Confidence: 0.7602978

 $00{:}19{:}28.172 \dashrightarrow 00{:}19{:}30.998$ extremely encouraging data for this field.

NOTE Confidence: 0.7602978

00:19:31.000 --> 00:19:32.770 Overall survival again is impressive,

NOTE Confidence: 0.7602978

 $00:19:32.770 \longrightarrow 00:19:35.428$ but 89% understanding the mortality that

NOTE Confidence: 0.7602978

 $00:19:35.428 \longrightarrow 00:19:38.640$ comes with chronic graft versus host disease.

NOTE Confidence: 0.7602978

 $00:19:38.640 \longrightarrow 00:19:40.315$ Additional endpoints that they talk

NOTE Confidence: 0.7602978

 $00:19:40.315 \longrightarrow 00:19:42.380$ about is reduction in the doors.

 $00:19:42.380 \longrightarrow 00:19:44.964$ They were able to show that the main

NOTE Confidence: 0.7602978

 $00{:}19{:}44.964 \dashrightarrow 00{:}19{:}46.739$ cortico steroid dose reduction was

NOTE Confidence: 0.7602978

 $00:19:46.739 \longrightarrow 00:19:49.180$ possible in about 44% of the people.

NOTE Confidence: 0.7602978

 $00:19:49.180 \longrightarrow 00:19:51.560$ It was higher in those who responded.

NOTE Confidence: 0.7602978

 $00:19:51.560 \longrightarrow 00:19:54.320$ Obviously 52% and lower in those who are

NOTE Confidence: 0.7602978

 $00{:}19{:}54.320 \dashrightarrow 00{:}19{:}56.340$ not responding about 17% in addition

NOTE Confidence: 0.7602978

 $00:19:56.340 \longrightarrow 00:19:58.090$ to the steroids calcineurin inhibitor

NOTE Confidence: 0.7602978

 $00{:}19{:}58.090 \dashrightarrow 00{:}20{:}00.178$ dose reduction was also possible with.

NOTE Confidence: 0.7602978

 $00{:}20{:}00.180 \dashrightarrow 00{:}20{:}02.378$ More patients in the treatment arm able

NOTE Confidence: 0.7602978

 $00:20:02.378 \longrightarrow 00:20:05.329$ to do that with compared to what we've

NOTE Confidence: 0.7602978

 $00:20:05.329 \longrightarrow 00:20:07.274$ seen historically in other trials.

NOTE Confidence: 0.7602978

 $00{:}20{:}07.280 \dashrightarrow 00{:}20{:}09.170$ Symptoms scale The least scale

NOTE Confidence: 0.7602978

 $00{:}20{:}09.170 \dashrightarrow 00{:}20{:}11.330$ as I presented you earlier on.

NOTE Confidence: 0.7602978

00:20:11.330 --> 00:20:11.678 Again,

NOTE Confidence: 0.7602978

 $00:20:11.678 \longrightarrow 00:20:14.114$ it was a meaningful difference with both

00:20:14.114 --> 00:20:15.870 responders or nonresponders achieving

NOTE Confidence: 0.7602978

 $00{:}20{:}15.870 \dashrightarrow 00{:}20{:}18.360$ improvement in their symptoms scores.

NOTE Confidence: 0.7602978

 $00:20:18.360 \longrightarrow 00:20:20.820$ In conclusion this drug element Bell

NOTE Confidence: 0.7602978

 $00:20:20.820 \longrightarrow 00:20:23.566$ incident is well tolerated and has

NOTE Confidence: 0.7602978

 $00:20:23.566 \longrightarrow 00:20:25.646$ achieved clinically meaningful outcomes.

NOTE Confidence: 0.7602978

00:20:25.650 --> 00:20:27.705 Response rates are greater than

NOTE Confidence: 0.7602978

 $00:20:27.705 \longrightarrow 00:20:29.756$ 70% with both treatment arms,

NOTE Confidence: 0.7602978

00:20:29.756 --> 00:20:31.801 including in patients who failed

NOTE Confidence: 0.7602978

00:20:31.801 --> 00:20:33.479 ibrutinib and Jack inhibitors.

NOTE Confidence: 0.78034705

00:20:36.110 --> 00:20:37.727 Switching gears will talk about the cells.

NOTE Confidence: 0.78034705

 $00:20:37.730 \longrightarrow 00:20:39.550$ The reason for graft versus host disease

NOTE Confidence: 0.78034705

 $00{:}20{:}39.550 \dashrightarrow 00{:}20{:}41.827$ or the T cells that are coming here.

NOTE Confidence: 0.78034705

 $00:20:41.830 \longrightarrow 00:20:43.774$ The trial initially done at Stanford

NOTE Confidence: 0.78034705

 $00:20:43.774 \longrightarrow 00:20:46.519$ is explored to see if we can isolate

NOTE Confidence: 0.78034705

00:20:46.519 --> 00:20:48.254 self populations to decrease after

NOTE Confidence: 0.78034705

 $00:20:48.254 \longrightarrow 00:20:49.989$ sostis is historically the way

 $00:20:49.989 \longrightarrow 00:20:51.969$ we've tried to diploid cells are

NOTE Confidence: 0.78034705

 $00{:}20{:}51.970 \dashrightarrow 00{:}20{:}54.336$ XY or we try to extract panty celyn,

NOTE Confidence: 0.78034705

00:20:54.340 --> 00:20:57.036 plead or use drugs like ATG Witcher invite.

NOTE Confidence: 0.78034705

00:20:57.040 --> 00:20:59.168 We're depleting agents toxin is more recent

NOTE Confidence: 0.78034705

 $00:20:59.168 \longrightarrow 00:21:01.429$ addition to the field of transplantation,

NOTE Confidence: 0.78034705

 $00:21:01.430 \longrightarrow 00:21:03.718$ which kinds of depletes the cell in the

NOTE Confidence: 0.78034705

00:21:03.718 --> 00:21:06.129 setting of haploidentical transplantation?

NOTE Confidence: 0.78034705

 $00{:}21{:}06.130 \dashrightarrow 00{:}21{:}08.010$ What investigators at Stanford Ed.

NOTE Confidence: 0.78034705

 $00:21:08.010 \longrightarrow 00:21:09.880$ Was in the preclinical models.

NOTE Confidence: 0.78034705

 $00:21:09.880 \longrightarrow 00:21:11.820$ Initially, they showed that regulatory

NOTE Confidence: 0.78034705

 $00:21:11.820 \longrightarrow 00:21:14.890$ cells which in the PD 1 field with

NOTE Confidence: 0.78034705

00:21:14.890 --> 00:21:17.002 solid tumors as a different meaning,

NOTE Confidence: 0.78034705

 $00:21:17.010 \longrightarrow 00:21:19.761$ is a welcome change in the post

NOTE Confidence: 0.78034705

 $00:21:19.761 \longrightarrow 00:21:21.346$ transplantation setting because it

NOTE Confidence: 0.78034705

00:21:21.346 --> 00:21:23.380 in users tolerance decreases GV HD.

 $00:21:23.380 \longrightarrow 00:21:25.652$ So the design the study with the my

NOTE Confidence: 0.78034705

 $00{:}21{:}25.652 \dashrightarrow 00{:}21{:}27.588$ love letter transplant setting wherein

NOTE Confidence: 0.78034705

00:21:27.588 --> 00:21:29.763 you would give your chemotherapy

NOTE Confidence: 0.78034705

00:21:29.763 --> 00:21:31.878 or radiation and then subsequently

NOTE Confidence: 0.78034705

 $00:21:31.878 \longrightarrow 00:21:33.843$ confuse equal volumes of regulatory

NOTE Confidence: 0.78034705

 $00{:}21{:}33.843 \dashrightarrow 00{:}21{:}35.812$ T cells and conventional cells.

NOTE Confidence: 0.78034705

 $00:21:35.812 \longrightarrow 00:21:36.600$ So basically.

NOTE Confidence: 0.78034705

00:21:36.600 --> 00:21:39.015 And a -- 2 prior to transplantation.

NOTE Confidence: 0.78034705

 $00{:}21{:}39.020 \dashrightarrow 00{:}21{:}41.090$ A mateur quite stem cells and T.

NOTE Confidence: 0.78034705

00:21:41.090 --> 00:21:42.810 Rex cells were extracted out,

NOTE Confidence: 0.78034705

 $00:21:42.810 \longrightarrow 00:21:43.922$ kept and then infused,

NOTE Confidence: 0.78034705

 $00{:}21{:}43.922 \dashrightarrow 00{:}21{:}46.481$ and a 0 two days later the conventional

NOTE Confidence: 0.78034705

 $00:21:46.481 \longrightarrow 00:21:49.365$ cells were then infused into the recipient.

NOTE Confidence: 0.78034705

 $00:21:49.370 \longrightarrow 00:21:51.690$ Here instead of a conventional two or a

NOTE Confidence: 0.78034705

00:21:51.690 --> 00:21:53.509 combination of suppression regiments,

NOTE Confidence: 0.78034705

 $00:21:53.510 \longrightarrow 00:21:56.270$ they were able to show that single agent,

00:21:56.270 --> 00:21:57.305 even a suppressive.

NOTE Confidence: 0.78034705

 $00{:}21{:}57.305 \to 00{:}21{:}59.030$ Agents like tacrolimus was adequate.

NOTE Confidence: 0.8181829

 $00:22:01.340 \longrightarrow 00:22:02.948$ The amount of total cells that

NOTE Confidence: 0.8181829

 $00:22:02.948 \longrightarrow 00:22:04.579$ they chose would 3,000,000 T cells

NOTE Confidence: 0.8181829

00:22:04.579 --> 00:22:06.103 and almost everybody got more than

NOTE Confidence: 0.8181829

00:22:06.103 --> 00:22:07.649 two million CD 34 positive cells,

NOTE Confidence: 0.8181829

 $00:22:07.650 \longrightarrow 00:22:10.362$ which is what we normally like

NOTE Confidence: 0.8181829

 $00:22:10.362 \longrightarrow 00:22:12.170$ in the transportation context.

NOTE Confidence: 0.8181829

00:22:12.170 --> 00:22:13.304 Extrapolating the data,

NOTE Confidence: 0.8181829

 $00:22:13.304 \longrightarrow 00:22:16.761$ they now went at a multi site level and

NOTE Confidence: 0.8181829

 $00{:}22{:}16.761 \dashrightarrow 00{:}22{:}19.721$ showed that when you try to go commercial,

NOTE Confidence: 0.8181829

 $00:22:19.730 \longrightarrow 00:22:21.580$ it's feasible showed on the

NOTE Confidence: 0.8181829

00:22:21.580 --> 00:22:24.269 left hand side the CD 34 purity.

NOTE Confidence: 0.8181829

 $00{:}22{:}24.270 \dashrightarrow 00{:}22{:}26.846$ Here XL doses anti Rexel purity when

NOTE Confidence: 0.8181829

 $00:22:26.846 \longrightarrow 00:22:29.160$ taking into account the logistics that

 $00:22:29.160 \longrightarrow 00:22:31.827$ comes with it for mobilizing the donor.

NOTE Confidence: 0.8181829

 $00{:}22{:}31.830 \dashrightarrow 00{:}22{:}34.511$ Collecting at a site shipping it to

NOTE Confidence: 0.8181829

00:22:34.511 --> 00:22:36.762 this company would then analyze extract

NOTE Confidence: 0.8181829

 $00:22:36.762 \longrightarrow 00:22:40.037$ HSP season T Rex to one bag and then

NOTE Confidence: 0.8181829

 $00{:}22{:}40.037 \dashrightarrow 00{:}22{:}42.485$ conventional T cells to another back.

NOTE Confidence: 0.8181829

 $00:22:42.490 \longrightarrow 00:22:45.514$ They were able to show that that process

NOTE Confidence: 0.8181829

00:22:45.514 --> 00:22:47.739 work efficiently and the rest of this,

NOTE Confidence: 0.8181829

00:22:47.740 --> 00:22:49.840 like basically show the clinical data,

NOTE Confidence: 0.8181829

 $00{:}22{:}49.840 \dashrightarrow 00{:}22{:}51.868$ were able to show this interphil

NOTE Confidence: 0.8181829

00:22:51.868 --> 00:22:53.220 engraftment later engagement and

NOTE Confidence: 0.8181829

 $00{:}22{:}53.280 \dashrightarrow 00{:}22{:}54.740$ time of hospital discharges,

NOTE Confidence: 0.8181829

 $00:22:54.740 \longrightarrow 00:22:56.840$ or all favoring this novel approach.

NOTE Confidence: 0.8181829

 $00:22:56.840 \longrightarrow 00:22:58.164$ What is more important,

NOTE Confidence: 0.8181829

00:22:58.164 --> 00:23:00.690 or patients is graft versus host disease,

NOTE Confidence: 0.8181829

 $00:23:00.690 \longrightarrow 00:23:03.259$ both grades two or higher acute graft

NOTE Confidence: 0.8181829

 $00:23:03.259 \longrightarrow 00:23:05.534$ versus host disease and chronic GBS T

 $00:23:05.534 \longrightarrow 00:23:08.437$ as shown on the left hand side here was

NOTE Confidence: 0.8181829

 $00{:}23{:}08.437 \dashrightarrow 00{:}23{:}10.397$ significantly lowered when they use

NOTE Confidence: 0.8181829

 $00:23:10.397 \longrightarrow 00:23:13.080$ this design of infusing regulatory T cells.

NOTE Confidence: 0.8181829

 $00:23:13.080 \longrightarrow 00:23:14.744$ Along with the conventional

NOTE Confidence: 0.8181829

 $00:23:14.744 \longrightarrow 00:23:16.824$ cells at different time points.

NOTE Confidence: 0.8181829

00:23:16.830 --> 00:23:18.150 GPS direction is important,

NOTE Confidence: 0.8181829

 $00:23:18.150 \longrightarrow 00:23:20.130$ So what happens to the relapse?

NOTE Confidence: 0.8181829

00:23:20.130 --> 00:23:22.338 A good out point for that is what

NOTE Confidence: 0.8181829

00:23:22.338 --> 00:23:24.735 we call the GFS on the right hand

NOTE Confidence: 0.8181829

 $00{:}23{:}24.735 \dashrightarrow 00{:}23{:}27.605$ side there able to show that GFS was

NOTE Confidence: 0.8181829

 $00:23:27.605 \longrightarrow 00:23:29.625$ significantly better with using this

NOTE Confidence: 0.8181829

 $00{:}23{:}29.625 \dashrightarrow 00{:}23{:}31.680$ novel approach and TRM was almost

NOTE Confidence: 0.8181829

00:23:31.680 --> 00:23:33.000 nonexistent with this approach,

NOTE Confidence: 0.8181829

 $00:23:33.000 \longrightarrow 00:23:34.788$ suggesting and paving way for future

NOTE Confidence: 0.8181829

 $00:23:34.788 \longrightarrow 00:23:36.768$ study designs for cell manipulation to

00:23:36.768 --> 00:23:38.608 decrease graph versus host disease,

NOTE Confidence: 0.8181829

 $00:23:38.610 \longrightarrow 00:23:41.658$ with a special emphasis on regulatory

NOTE Confidence: 0.8181829

 $00:23:41.658 \longrightarrow 00:23:42.674$ T cells.

NOTE Confidence: 0.8181829

 $00:23:42.680 \longrightarrow 00:23:43.816$ In this last light,

NOTE Confidence: 0.8181829

 $00:23:43.816 \longrightarrow 00:23:45.961$ we're going to talk about how they

NOTE Confidence: 0.8181829

 $00:23:45.961 \longrightarrow 00:23:47.846$ feel if consolidation is evolving.

NOTE Confidence: 0.8181829

 $00:23:47.850 \longrightarrow 00:23:49.944$ Loading my colleague presented a couple

NOTE Confidence: 0.8181829

00:23:49.944 --> 00:23:52.064 of weeks ago and this interesting

NOTE Confidence: 0.8181829

 $00:23:52.064 \longrightarrow 00:23:54.374$ trial from oral is cited in in

NOTE Confidence: 0.8181829

 $00:23:54.374 \longrightarrow 00:23:56.598$ terms of how this is a game changer

NOTE Confidence: 0.8181829

 $00{:}23{:}56.598 \dashrightarrow 00{:}23{:}58.210$ to the field of transplantation,

NOTE Confidence: 0.8181829

 $00:23:58.210 \longrightarrow 00:24:00.670$ the drug has now been approved.

NOTE Confidence: 0.8181829

 $00:24:00.670 \longrightarrow 00:24:01.420$ To recap,

NOTE Confidence: 0.8181829

00:24:01.420 --> 00:24:02.920 essentially patients get intensive

NOTE Confidence: 0.8181829

 $00:24:02.920 \longrightarrow 00:24:05.299$ chemotherapy at the time of recruitment.

NOTE Confidence: 0.8181829

 $00:24:05.300 \longrightarrow 00:24:07.435$ These people are all in the older

 $00:24:07.435 \longrightarrow 00:24:09.891$ age group and were thought not

NOTE Confidence: 0.8181829

 $00{:}24{:}09.891 \dashrightarrow 00{:}24{:}11.855$ eligible to receive transplantation,

NOTE Confidence: 0.8181829

 $00:24:11.860 \longrightarrow 00:24:14.612$ but 44% of the patient get one cycle

NOTE Confidence: 0.8181829

00:24:14.612 --> 00:24:16.321 of intensive chemo consolidation

NOTE Confidence: 0.8181829

00:24:16.321 --> 00:24:19.435 and 38% get second layer of chemo

NOTE Confidence: 0.8181829

 $00:24:19.435 \longrightarrow 00:24:21.600$ consolidation and then their random

NOTE Confidence: 0.8181829

00:24:21.675 --> 00:24:24.015 honest to get either placebo osrs

NOTE Confidence: 0.8181829

00:24:24.015 --> 00:24:26.291 study agent which was CC-486 which

NOTE Confidence: 0.8181829

 $00:24:26.291 \longrightarrow 00:24:28.843$ is or a laser sighted in in that

NOTE Confidence: 0.8181829

 $00{:}24{:}28.850 \dashrightarrow 00{:}24{:}30.960$ there was overall survival advantage

NOTE Confidence: 0.8181829

 $00:24:30.960 \longrightarrow 00:24:33.949$ as shown in the right top corner.

NOTE Confidence: 0.8181829

 $00{:}24{:}33.950 \dashrightarrow 00{:}24{:}36.218$ I adore you present it as an extension of

NOTE Confidence: 0.8181829

 $00{:}24{:}36.218 \dashrightarrow 00{:}24{:}38.666$ that people have now done subgroup analysis,

NOTE Confidence: 0.8181829

00:24:38.670 --> 00:24:40.764 coming back to the left hand

NOTE Confidence: 0.8181829

 $00:24:40.764 \longrightarrow 00:24:43.153$ side here Doctor Way and up to

 $00:24:43.153 \longrightarrow 00:24:45.295$ remind you are able to show that.

NOTE Confidence: 0.8181829

00:24:45.300 --> 00:24:46.998 Irrespective of consolidation,

NOTE Confidence: 0.8181829

 $00:24:46.998 \longrightarrow 00:24:50.394$ whether they got consolidation or not.

NOTE Confidence: 0.8181829

 $00:24:50.400 \longrightarrow 00:24:52.040$ Are they got one consolidation

NOTE Confidence: 0.8181829

 $00:24:52.040 \longrightarrow 00:24:54.399$ or greater than or equal to two

NOTE Confidence: 0.8181829

00:24:54.399 --> 00:24:55.711 consolidation there showing that

NOTE Confidence: 0.8181829

00:24:55.711 --> 00:24:58.295 CC 4X6 was able to improve overall

NOTE Confidence: 0.8181829

00:24:58.295 --> 00:25:00.310 survival and relapse free survival?

NOTE Confidence: 0.8181829

 $00{:}25{:}00.310 \dashrightarrow 00{:}25{:}02.446$ I'm not showing the slide but

NOTE Confidence: 0.8181829

 $00:25:02.446 \longrightarrow 00:25:03.870$ in the more recent

NOTE Confidence: 0.82386875

 $00{:}25{:}03.945 \dashrightarrow 00{:}25{:}06.227$ ECD a couple of weeks ago as

NOTE Confidence: 0.82386875

 $00:25:06.227 \longrightarrow 00:25:08.100$ an extension of this study,

NOTE Confidence: 0.82386875

 $00:25:08.100 \longrightarrow 00:25:09.796$ investigators showed that many

NOTE Confidence: 0.82386875

 $00:25:09.796 \longrightarrow 00:25:11.916$ people in the place bo arm.

NOTE Confidence: 0.82386875

 $00:25:11.920 \longrightarrow 00:25:14.074$ Went on to get eventual allogeneic

NOTE Confidence: 0.82386875

 $00:25:14.074 \longrightarrow 00:25:15.861$ stem cell transplantation and they

 $00:25:15.861 \longrightarrow 00:25:17.613$ make a case suggesting that we

NOTE Confidence: 0.82386875

 $00{:}25{:}17.613 \dashrightarrow 00{:}25{:}18.930$ are getting more transplantation

NOTE Confidence: 0.82386875

 $00:25:18.930 \longrightarrow 00:25:21.240$ at higher frequency in that arm.

NOTE Confidence: 0.82386875

 $00:25:21.240 \longrightarrow 00:25:22.965$ Basically did not alter the

NOTE Confidence: 0.82386875

 $00{:}25{:}22.965 \rightarrow 00{:}25{:}24.305$ eventual overall survival, however,

NOTE Confidence: 0.82386875

00:25:24.305 --> 00:25:26.745 we should keep in mind the study was

NOTE Confidence: 0.82386875

00:25:26.745 --> 00:25:29.169 not designed to answer that question,

NOTE Confidence: 0.82386875

 $00:25:29.170 \longrightarrow 00:25:31.340$ so that leads us to the next

NOTE Confidence: 0.82386875

 $00{:}25{:}31.340 \dashrightarrow 00{:}25{:}34.224$ segment of this as to how we can

NOTE Confidence: 0.82386875

 $00:25:34.224 \longrightarrow 00:25:35.728$ address limitations and propel.

NOTE Confidence: 0.82386875

 $00:25:35.730 \longrightarrow 00:25:36.765$ Understands of allogeneic

NOTE Confidence: 0.82386875

00:25:36.765 --> 00:25:37.800 stem cell transplant,

NOTE Confidence: 0.82386875

 $00{:}25{:}37.800 \dashrightarrow 00{:}25{:}40.760$ so in this coming year ALR several study

NOTE Confidence: 0.82386875

 $00:25:40.760 \longrightarrow 00:25:43.540$ designs to do this in the backdrop of.

NOTE Confidence: 0.82386875

 $00:25:43.540 \longrightarrow 00:25:45.350$ Was that animal study design

00:25:45.350 --> 00:25:46.798 working with Doctor Probie?

NOTE Confidence: 0.82386875

 $00{:}25{:}46.800 \dashrightarrow 00{:}25{:}48.610$ We have a multicenter study

NOTE Confidence: 0.82386875

 $00:25:48.610 \longrightarrow 00:25:50.058$ that we we initiating's,

NOTE Confidence: 0.82386875

00:25:50.060 --> 00:25:51.344 been supported by Celgene.

NOTE Confidence: 0.82386875

 $00:25:51.344 \longrightarrow 00:25:52.628$ That is basically looking

NOTE Confidence: 0.82386875

 $00:25:52.628 \longrightarrow 00:25:54.586$ into the potential role of

NOTE Confidence: 0.82386875

 $00:25:54.586 \longrightarrow 00:25:55.849$ novel consolidation regiments.

NOTE Confidence: 0.82386875

 $00:25:55.850 \longrightarrow 00:25:58.088$ We all know that reaching CR

NOTE Confidence: 0.82386875

 $00{:}25{:}58.088 \dashrightarrow 00{:}26{:}00.189$ is a major milestone in AML.

NOTE Confidence: 0.82386875

 $00:26:00.190 \longrightarrow 00:26:01.189$ The question is,

NOTE Confidence: 0.82386875

 $00:26:01.189 \longrightarrow 00:26:03.520$ how long do you need to consolidate

NOTE Confidence: 0.82386875

 $00{:}26{:}03.586 \dashrightarrow 00{:}26{:}06.658$ them prior to you get them to the

NOTE Confidence: 0.82386875

00:26:06.658 --> 00:26:08.518 allogeneic transplantation in that premise,

NOTE Confidence: 0.82386875

 $00{:}26{:}08.520 \dashrightarrow 00{:}26{:}09.848$ using some immunological correlates

NOTE Confidence: 0.82386875

 $00:26:09.848 \longrightarrow 00:26:11.840$ will be studying the role of

NOTE Confidence: 0.82386875

 $00:26:11.896 \longrightarrow 00:26:13.868$ epigenetic priming post consolidation.

 $00:26:13.870 \longrightarrow 00:26:15.893$ And also using the concept of Fortaleza

NOTE Confidence: 0.82386875

00:26:15.893 --> 00:26:17.298 cited in increasing regulatory T

NOTE Confidence: 0.82386875

 $00{:}26{:}17.298 \dashrightarrow 00{:}26{:}18.978$ cell output to decrease GV HD in

NOTE Confidence: 0.82386875

00:26:18.978 --> 00:26:20.700 the post transplantation setting,

NOTE Confidence: 0.82386875

 $00:26:20.700 \longrightarrow 00:26:22.122$ we have designed a study that

NOTE Confidence: 0.82386875

00:26:22.122 --> 00:26:23.798 will look into an extended period

NOTE Confidence: 0.82386875

 $00:26:23.798 \longrightarrow 00:26:25.802$ use of over laser setting prior

NOTE Confidence: 0.82386875

 $00:26:25.802 \longrightarrow 00:26:27.138$ to transplantation and post

NOTE Confidence: 0.82386875

 $00{:}26{:}27.138 \to 00{:}26{:}28.678$ transplantation with the hope of

NOTE Confidence: 0.82386875

 $00{:}26{:}28.678 \dashrightarrow 00{:}26{:}30.204$ decreasing both GST and relaxed

NOTE Confidence: 0.82386875

 $00{:}26{:}30.204 \dashrightarrow 00{:}26{:}31.986$ survival and that would start recording.

NOTE Confidence: 0.82386875

 $00:26:31.990 \longrightarrow 00:26:33.910$ So this study has implications to

NOTE Confidence: 0.82386875

 $00:26:33.910 \longrightarrow 00:26:35.539$ the satellite centers because many

NOTE Confidence: 0.82386875

 $00:26:35.539 \longrightarrow 00:26:36.989$ of these patients after transferring

NOTE Confidence: 0.82386875

00:26:36.989 --> 00:26:39.278 will go back to you as primary and

00:26:39.278 --> 00:26:40.892 that's something you guys would be

NOTE Confidence: 0.82386875

 $00{:}26{:}40.900 \dashrightarrow 00{:}26{:}43.000$ able to get access to the drugs

NOTE Confidence: 0.82386875

 $00:26:43.000 \longrightarrow 00:26:45.018$ and treat them in the practice.

NOTE Confidence: 0.82386875

 $00:26:45.020 \longrightarrow 00:26:46.754$ The other two studies of interest

NOTE Confidence: 0.82386875

 $00:26:46.754 \longrightarrow 00:26:49.178$ is led by my boss that are open.

NOTE Confidence: 0.82386875

00:26:49.180 --> 00:26:51.161 We looking into the role of allogeneic

NOTE Confidence: 0.82386875

 $00:26:51.161 \longrightarrow 00:26:52.679$ stem cell transplantation for patients

NOTE Confidence: 0.82386875

 $00:26:52.679 \longrightarrow 00:26:54.229$ who are relapsed refractory setting.

NOTE Confidence: 0.82386875

 $00{:}26{:}54.230 \dashrightarrow 00{:}26{:}56.598$ There are many new drugs that are coming.

NOTE Confidence: 0.82386875

 $00:26:56.600 \longrightarrow 00:26:59.064$ I didn't have a chance to talk all

NOTE Confidence: 0.82386875

 $00:26:59.064 \longrightarrow 00:27:01.056$ about them up for all of them,

NOTE Confidence: 0.82386875

 $00:27:01.060 \longrightarrow 00:27:03.004$ but I have is 1 set strike which is

NOTE Confidence: 0.82386875

 $00{:}27{:}03.004 \dashrightarrow 00{:}27{:}04.121$ using Radionucleotide radionucleotide

NOTE Confidence: 0.82386875

 $00{:}27{:}04.121 --> 00{:}27{:}05.809$ to target CD 45.

NOTE Confidence: 0.82386875

 $00:27:05.810 \longrightarrow 00:27:07.010$ Comparing against the conventional

NOTE Confidence: 0.82386875

 $00:27:07.010 \longrightarrow 00:27:08.810$ care which is currently ongoing and

 $00:27:08.855 \longrightarrow 00:27:10.270$ there's also a multicenter trial.

NOTE Confidence: 0.82386875

00:27:10.270 --> 00:27:11.155 As you know,

NOTE Confidence: 0.82386875

 $00:27:11.155 \longrightarrow 00:27:12.925$ afflict Rena bitter guilty name is

NOTE Confidence: 0.82386875

00:27:12.925 --> 00:27:15.018 approved to treat relapsed refractory AML.

NOTE Confidence: 0.82386875

 $00:27:15.020 \longrightarrow 00:27:16.882$ But now we're studying that in a

NOTE Confidence: 0.82386875

 $00:27:16.882 \longrightarrow 00:27:18.707$ randomized fashion to see if preventing

NOTE Confidence: 0.82386875

 $00:27:18.707 \longrightarrow 00:27:20.657$ relapse is better rather than treating

NOTE Confidence: 0.82386875

 $00{:}27{:}20.657 \dashrightarrow 00{:}27{:}22.170$ relapsing relapse refractory AML.

NOTE Confidence: 0.82386875

 $00:27:22.170 \longrightarrow 00:27:23.725$ And that's a study that's

NOTE Confidence: 0.82386875

00:27:23.725 --> 00:27:24.969 currently ongoing with that.

NOTE Confidence: 0.82386875

 $00:27:24.970 \longrightarrow 00:27:27.910$ I'd like to thank you all and.

NOTE Confidence: 0.82386875

 $00{:}27{:}27.910 \dashrightarrow 00{:}27{:}30.412$ I would ask you all to hold your questions

NOTE Confidence: 0.82386875

 $00:27:30.412 \longrightarrow 00:27:32.617$ at the end of it while I pass on.

NOTE Confidence: 0.82386875

 $00:27:32.620 \longrightarrow 00:27:34.860$ So the more interesting phase of T cell

NOTE Confidence: 0.82386875

 $00:27:34.860 \longrightarrow 00:27:36.259$ engineering talks by my colleague,

00:27:36.260 --> 00:27:36.820 Doctor Sophie,

NOTE Confidence: 0.82386875

 $00:27:36.820 \longrightarrow 00:27:37.940$ thank you very much.

NOTE Confidence: 0.5139432

00:27:45.490 --> 00:27:46.618 Thank you, Louise.

NOTE Confidence: 0.84160817

 $00{:}28{:}03.250 \dashrightarrow 00{:}28{:}06.850$ So I'll focus my talk today on cellular

NOTE Confidence: 0.84160817

 $00:28:06.850 \longrightarrow 00:28:09.538$ therapies for B cell malignancy's.

NOTE Confidence: 0.84160817

 $00:28:09.540 \longrightarrow 00:28:11.272$ These are my disclosures.

NOTE Confidence: 0.84160817

00:28:11.272 --> 00:28:14.523 And I'd like to start by reminding

NOTE Confidence: 0.84160817

 $00:28:14.523 \longrightarrow 00:28:17.338$ everyone of the approved city

NOTE Confidence: 0.84160817

 $00{:}28{:}17.338 \dashrightarrow 00{:}28{:}20.102$ 19 cortisol products that are

NOTE Confidence: 0.84160817

 $00:28:20.102 \longrightarrow 00:28:23.056$ currently on the market for B cell.

NOTE Confidence: 0.84160817

 $00{:}28{:}23.060 \dashrightarrow 00{:}28{:}25.616$ Non Hodgkin lymphoma is we have

NOTE Confidence: 0.84160817

 $00{:}28{:}25.616 \to 00{:}28{:}27.881$ exit Captain James I'll alusil

NOTE Confidence: 0.84160817

00:28:27.881 --> 00:28:31.241 targeting City 19 with the city 28

NOTE Confidence: 0.84160817

 $00:28:31.241 \longrightarrow 00:28:33.120$ costimulatory domain tyssa gentle

NOTE Confidence: 0.84160817

 $00{:}28{:}33.120 \dashrightarrow 00{:}28{:}36.046$ occlusal also targeting CD 19 with a

NOTE Confidence: 0.84160817

 $00:28:36.046 \longrightarrow 00:28:38.254$ four one baby costimulatory domain.

 $00:28:38.254 \longrightarrow 00:28:40.038$ The newly approved lie.

NOTE Confidence: 0.84160817

 $00:28:40.040 \longrightarrow 00:28:42.124$ So Captain Jean meluso.

NOTE Confidence: 0.84160817

00:28:42.124 --> 00:28:45.970 With a four one baby costimulatory domain,

NOTE Confidence: 0.84160817

 $00:28:45.970 \longrightarrow 00:28:49.092$ these are all approved for large cell

NOTE Confidence: 0.84160817

 $00{:}28{:}49.092 \dashrightarrow 00{:}28{:}51.939$ lymphoma and transformed follicular lymphoma,

NOTE Confidence: 0.84160817

00:28:51.940 --> 00:28:54.430 whereas T Sergeant occlusal is

NOTE Confidence: 0.84160817

 $00:28:54.430 \longrightarrow 00:28:56.920$ currently the only approved product.

NOTE Confidence: 0.84160817

 $00:28:56.920 \longrightarrow 00:28:59.950$ Also for the treatment of relapsed

NOTE Confidence: 0.84160817

 $00{:}28{:}59.950 \dashrightarrow 00{:}29{:}02.532$ refractory pediatric LL and then

NOTE Confidence: 0.84160817

 $00:29:02.532 \longrightarrow 00:29:04.897$ finally a recent another recent

NOTE Confidence: 0.84160817

00:29:04.897 --> 00:29:07.871 approval last year of Brexit captain

NOTE Confidence: 0.84160817

00:29:07.871 --> 00:29:10.865 Jean Autolux so in mental relapse,

NOTE Confidence: 0.84160817

 $00{:}29{:}10.870 \dashrightarrow 00{:}29{:}12.782$ refractory mantle cell lymphoma.

NOTE Confidence: 0.84160817

00:29:12.782 --> 00:29:15.650 Targeting CD19 with the CD 28

NOTE Confidence: 0.84160817

 $00:29:15.728 \longrightarrow 00:29:18.232$ costimulatory domain for relapsed

00:29:18.232 --> 00:29:20.736 refractory large cell lymphoma,

NOTE Confidence: 0.84160817

 $00{:}29{:}20.740 \dashrightarrow 00{:}29{:}22.627$ transformed follicular lymphoma.

NOTE Confidence: 0.84160817

 $00:29:22.627 \longrightarrow 00:29:25.772$ The overall response rates seen

NOTE Confidence: 0.84160817

 $00:29:25.772 \longrightarrow 00:29:28.464$ in clinical trials have varied

NOTE Confidence: 0.84160817

 $00:29:28.464 \longrightarrow 00:29:31.164$ between 50 and upwards of 80%.

NOTE Confidence: 0.84160817

00:29:31.170 --> 00:29:33.574 Complete remission rates, however,

NOTE Confidence: 0.84160817

 $00:29:33.574 \longrightarrow 00:29:38.298$ are only in the order of 40 to 50%.

NOTE Confidence: 0.84160817

 $00:29:38.300 \longrightarrow 00:29:40.808$ This is significantly improved

NOTE Confidence: 0.84160817

 $00{:}29{:}40.808 \dashrightarrow 00{:}29{:}43.316$ compared to the previously

NOTE Confidence: 0.84160817

00:29:43.316 --> 00:29:45.289 established standards of care.

NOTE Confidence: 0.84160817

 $00{:}29{:}45.290 \dashrightarrow 00{:}29{:}47.900$ But still leaves some room for

NOTE Confidence: 0.84160817

00:29:47.900 --> 00:29:50.245 improvement and then with Brexit

NOTE Confidence: 0.84160817

 $00:29:50.245 \longrightarrow 00:29:52.835$ catagen and mantle cell lymphoma.

NOTE Confidence: 0.84160817

 $00:29:52.840 \longrightarrow 00:29:55.200$ Also very remarkable results with

NOTE Confidence: 0.84160817

 $00:29:55.200 \longrightarrow 00:29:58.031$ overall response rates of 93% and

NOTE Confidence: 0.84160817

00:29:58.031 --> 00:30:00.386 complete response rates of 67%.

 $00:30:02.440 \longrightarrow 00:30:05.140$ Looking at studies of these cellular

NOTE Confidence: 0.8383559

 $00{:}30{:}05.140 \longrightarrow 00{:}30{:}08.724$ the rapies and some of the risk factors

NOTE Confidence: 0.8383559

 $00:30:08.724 \longrightarrow 00:30:10.988$ associated with worse progression,

NOTE Confidence: 0.8383559

00:30:10.990 --> 00:30:13.510 free survival and overall survival,

NOTE Confidence: 0.8383559

 $00{:}30{:}13.510 \dashrightarrow 00{:}30{:}16.695$ it has become clear that there are

NOTE Confidence: 0.8383559

 $00:30:16.695 \longrightarrow 00:30:19.789$ some factors that are patient related

NOTE Confidence: 0.8383559

 $00:30:19.789 \longrightarrow 00:30:23.059$ and some that are treatment related.

NOTE Confidence: 0.8383559

 $00:30:23.060 \dashrightarrow 00:30:26.574$ For example, having a very poor performance,

NOTE Confidence: 0.8383559

 $00{:}30{:}26.580 {\:{\mbox{--}}\!>}\ 00{:}30{:}29.225$ equal performance status prior to

NOTE Confidence: 0.8383559

 $00:30:29.225 \longrightarrow 00:30:32.729$ receiving car T cell therapy and also.

NOTE Confidence: 0.8383559

 $00{:}30{:}32.730 \dashrightarrow 00{:}30{:}35.222$ Very elevated LDH have actually been shown

NOTE Confidence: 0.8383559

 $00:30:35.222 \longrightarrow 00:30:38.338$ to be very poor prognostic markers for

NOTE Confidence: 0.8383559

 $00{:}30{:}38.338 \dashrightarrow 00{:}30{:}40.803$ progression free and overall survival.

NOTE Confidence: 0.8383559

 $00:30:40.810 \longrightarrow 00:30:44.350$ Post car T cell therapy.

NOTE Confidence: 0.8383559

 $00:30:44.350 \longrightarrow 00:30:47.126$ And and this is a study just published

00:30:47.126 --> 00:30:50.403 in JCO this year where they did

NOTE Confidence: 0.8383559

 $00{:}30{:}50.403 \dashrightarrow 00{:}30{:}52.407$ multivariable models in patients

NOTE Confidence: 0.8383559

 $00:30:52.407 \dashrightarrow 00:30:55.379$ treated with AXI cottage inside a lusil.

NOTE Confidence: 0.8383559

 $00:30:55.380 \longrightarrow 00:30:58.170$ And again they really showed clear

NOTE Confidence: 0.8383559

 $00:30:58.170 \longrightarrow 00:31:00.512$ distinction between the progression free

NOTE Confidence: 0.8383559

 $00:31:00.512 \longrightarrow 00:31:02.572$ survival and overall survival curves

NOTE Confidence: 0.8383559

 $00:31:02.572 \longrightarrow 00:31:05.153$ in patients that had poor performance

NOTE Confidence: 0.8383559

 $00:31:05.153 \longrightarrow 00:31:07.745$ status and high disease burden as

NOTE Confidence: 0.8383559

 $00{:}31{:}07.745 \dashrightarrow 00{:}31{:}09.930$ represented by elevated LDH levels.

NOTE Confidence: 0.8386046

00:31:11.970 --> 00:31:14.676 You know what about what about

NOTE Confidence: 0.8386046

 $00:31:14.676 \longrightarrow 00:31:17.769$ the biology of the tumor itself?

NOTE Confidence: 0.8386046

 $00:31:17.770 \longrightarrow 00:31:22.153$ What we know now is that anywhere from 1/4

NOTE Confidence: 0.8386046

00:31:22.153 --> 00:31:25.490 to 30\% of patients with relapsed refractory,

NOTE Confidence: 0.8386046

 $00:31:25.490 \longrightarrow 00:31:27.488$ large cell lymphoma,

NOTE Confidence: 0.8386046

 $00:31:27.488 \longrightarrow 00:31:30.818$ who progress after cortisol therapy.

NOTE Confidence: 0.8386046

 $00:31:30.820 \longrightarrow 00:31:32.969 1/4$ of them will have loss of

 $00:31:32.969 \longrightarrow 00:31:35.668$ CD 19 in their tumor biopsies.

NOTE Confidence: 0.8386046

 $00:31:35.670 \longrightarrow 00:31:37.126$ So not all patients,

NOTE Confidence: 0.8386046

 $00:31:37.126 \longrightarrow 00:31:39.879$ but at least in some this is

NOTE Confidence: 0.8386046

 $00:31:39.879 \longrightarrow 00:31:42.795$ responsible for their for their relapse.

NOTE Confidence: 0.8386046

 $00:31:42.800 \longrightarrow 00:31:45.938$ So how can we circumvent that?

NOTE Confidence: 0.8386046

 $00{:}31{:}45.940 {\:{\circ}{\circ}{\circ}}>00{:}31{:}49.138$ A very important study published in

NOTE Confidence: 0.8386046

00:31:49.138 --> 00:31:52.868 Nature of Medicine also this year by

NOTE Confidence: 0.8386046

 $00:31:52.868 \longrightarrow 00:31:55.880$ Nirav Shah at University of Medicine,

NOTE Confidence: 0.8386046

00:31:55.880 --> 00:31:59.012 Wisconsin, looked at by specific anti

NOTE Confidence: 0.8386046

 $00{:}31{:}59.012 \dashrightarrow 00{:}32{:}03.461$ CD 20 and CD19 car sales for relapsed

NOTE Confidence: 0.8386046

 $00:32:03.461 \longrightarrow 00:32:06.839$ diffuse large B cell lymphoma and

NOTE Confidence: 0.8386046

 $00:32:06.939 \longrightarrow 00:32:09.996$ they have seen a 40% of patients

NOTE Confidence: 0.8386046

 $00{:}32{:}09.996 \dashrightarrow 00{:}32{:}12.088$ having ongoing response rates.

NOTE Confidence: 0.8386046

 $00:32:12.090 \longrightarrow 00:32:12.924$ There's the.

NOTE Confidence: 0.8386046

 $00:32:12.924 \longrightarrow 00:32:16.260$ The follow-up is still short on this study,

 $00:32:16.260 \longrightarrow 00:32:17.704$ but there were definitely

NOTE Confidence: 0.8386046

00:32:17.704 --> 00:32:18.787 complete remission rates,

NOTE Confidence: 0.8386046

 $00:32:18.790 \longrightarrow 00:32:20.230$ including in patients with

NOTE Confidence: 0.8386046

00:32:20.230 --> 00:32:21.670 previously received CD 19,

NOTE Confidence: 0.8386046

 $00:32:21.670 \longrightarrow 00:32:23.022$ car T cell therapy,

NOTE Confidence: 0.8386046

 $00:32:23.022 \longrightarrow 00:32:26.634$ and they did not see loss of CD 19 in

NOTE Confidence: 0.8386046

 $00:32:26.634 \longrightarrow 00:32:28.890$ any of the progressing patient tumors.

NOTE Confidence: 0.84797

00:32:31.100 --> 00:32:34.684 In addition to antigen CD 19 antigen Escape,

NOTE Confidence: 0.84797

 $00:32:34.690 \longrightarrow 00:32:36.482$ the tumor micro environment

NOTE Confidence: 0.84797

 $00:32:36.482 \longrightarrow 00:32:38.722$ is very important as well,

NOTE Confidence: 0.84797

00:32:38.730 --> 00:32:41.196 with PDL one upregulation which can

NOTE Confidence: 0.84797

00:32:41.196 --> 00:32:44.120 contribute to car T cell exhaustion,

NOTE Confidence: 0.84797

 $00:32:44.120 \longrightarrow 00:32:47.136$ and so this brings me to a very

NOTE Confidence: 0.84797

00:32:47.136 --> 00:32:49.053 important study called Alexander

NOTE Confidence: 0.84797

 $00:32:49.053 \longrightarrow 00:32:51.748$ Auto Three that was presented.

NOTE Confidence: 0.8052864

00:32:54.010 --> 00:32:56.360 Initially at ASCO where they

00:32:56.360 --> 00:32:58.240 looked at targeting Bicistronic,

NOTE Confidence: 0.8052864

 $00:32:58.240 \dashrightarrow 00:33:00.885$ assisting with a bicistronic vector

NOTE Confidence: 0.8052864

00:33:00.885 --> 00:33:04.803 target targeting CD 19 and CD 22 and

NOTE Confidence: 0.8052864

00:33:04.803 --> 00:33:07.554 the importance of this is that there

NOTE Confidence: 0.8052864

 $00:33:07.640 \longrightarrow 00:33:10.460$ are two independent cars that are

NOTE Confidence: 0.8052864

 $00:33:10.460 \longrightarrow 00:33:13.262$ delivered in a single retroviral vector.

NOTE Confidence: 0.8052864

 $00:33:13.262 \longrightarrow 00:33:16.489$ They have humanized binders and in addition

NOTE Confidence: 0.8052864

00:33:16.489 --> 00:33:19.860 to the four one baby costimulatory domains,

NOTE Confidence: 0.8052864

 $00:33:19.860 \longrightarrow 00:33:21.740$ there's also an OX40

NOTE Confidence: 0.8052864

00:33:21.740 --> 00:33:23.245 costimulatory domain, which.

NOTE Confidence: 0.8052864

 $00{:}33{:}23.245 \dashrightarrow 00{:}33{:}26.070$ Would lead to improved persistence,

NOTE Confidence: 0.8052864

 $00{:}33{:}26.070 \dashrightarrow 00{:}33{:}28.611$ and so from this study presented at

NOTE Confidence: 0.8052864

00:33:28.611 --> 00:33:31.824 ASCO now we have the Auto 3 Alexander

NOTE Confidence: 0.8052864

00:33:31.824 --> 00:33:34.384 study that was presented at this

NOTE Confidence: 0.8052864

 $00:33:34.384 \longrightarrow 00:33:37.408$ year's ASH where in addition to dewali

00:33:37.408 --> 00:33:40.500 targeting CD 19 and CD 22 they also

NOTE Confidence: 0.8052864

00:33:40.500 --> 00:33:43.178 edit Pember Lizum app in relapsed

NOTE Confidence: 0.8052864

 $00{:}33{:}43.178 \dashrightarrow 00{:}33{:}46.520$ refractory diffuse large B cell lymphoma.

NOTE Confidence: 0.8052864

 $00:33:46.520 \longrightarrow 00:33:49.327$ They had a cohort of patients that

NOTE Confidence: 0.8052864

00:33:49.327 --> 00:33:51.038 received the cortisol therapy

NOTE Confidence: 0.8052864

 $00:33:51.038 \longrightarrow 00:33:53.618$ alone and then they had another

NOTE Confidence: 0.8052864

 $00:33:53.618 \longrightarrow 00:33:55.905$ cohort that received three doses

NOTE Confidence: 0.8052864

00:33:55.905 --> 00:33:58.210 of pembrolizumab every two weeks,

NOTE Confidence: 0.8052864

 $00{:}33{:}58.210 \dashrightarrow 00{:}34{:}01.754$ as well as a third cord that received

NOTE Confidence: 0.8052864

 $00:34:01.754 \longrightarrow 00:34:05.680$ just one dose of Pembroke on day

NOTE Confidence: 0.8052864

 $00{:}34{:}05.680 \dashrightarrow 00{:}34{:}08.032$ one following conditioning and.

NOTE Confidence: 0.8052864

 $00:34:08.040 \longrightarrow 00:34:10.488$ Based on the.

NOTE Confidence: 0.8052864

 $00:34:10.490 \longrightarrow 00:34:13.666$ MTD that was established from the phase one.

NOTE Confidence: 0.8052864

 $00{:}34{:}13.670 \dashrightarrow 00{:}34{:}15.896$ There is currently an ongoing phase

NOTE Confidence: 0.8052864

00:34:15.896 --> 00:34:18.292 two looking at efficacy for relapsed

NOTE Confidence: 0.8052864

 $00:34:18.292 \longrightarrow 00:34:20.836$ refractory diffuse large B cell lymphoma.

 $00:34:20.840 \longrightarrow 00:34:23.619$ So these are some of the characteristics.

NOTE Confidence: 0.8052864

 $00:34:23.620 \longrightarrow 00:34:25.212$ As you can see,

NOTE Confidence: 0.8052864

 $00:34:25.212 \longrightarrow 00:34:27.600$ the median age was 59 years,

NOTE Confidence: 0.8052864

 $00:34:27.600 \longrightarrow 00:34:30.729$ but they did give this cortisol therapy

NOTE Confidence: 0.8052864

 $00:34:30.729 \longrightarrow 00:34:33.570$ to patients up to the age of 83.

NOTE Confidence: 0.8052864

00:34:33.570 --> 00:34:36.754 The majority of them had high risk features,

NOTE Confidence: 0.8052864

 $00:34:36.760 \longrightarrow 00:34:38.48855\%$ were double hit,

NOTE Confidence: 0.8052864

 $00:34:38.488 \longrightarrow 00:34:41.080$ dual overexpresses or even triple hits.

NOTE Confidence: 0.8052864

 $00:34:41.080 \longrightarrow 00:34:44.314$ At the majority, 71% had stage four

NOTE Confidence: 0.8052864

 $00:34:44.314 \longrightarrow 00:34:47.880$ disease and the majority were relapsed.

NOTE Confidence: 0.8052864

00:34:47.880 --> 00:34:48.403 Actually,

NOTE Confidence: 0.8052864

00:34:48.403 --> 00:34:51.541 about 50% were both relapsed and

NOTE Confidence: 0.8052864

 $00{:}34{:}51.541 \dashrightarrow 00{:}34{:}53.734$ refractory and interesting, Lee.

NOTE Confidence: 0.8052864

 $00:34:53.734 \longrightarrow 00:34:56.230$ With this novel technology,

NOTE Confidence: 0.8052864

 $00:34:56.230 \longrightarrow 00:34:59.086$ they saw that great three of

00:34:59.086 --> 00:35:00.514 cytokine release syndrome,

NOTE Confidence: 0.8052864

 $00:35:00.520 \longrightarrow 00:35:03.382$ or grades three and above of

NOTE Confidence: 0.8052864

 $00:35:03.382 \longrightarrow 00:35:05.290$ neurotoxicity were quite low.

NOTE Confidence: 0.8052864

 $00:35:05.290 \longrightarrow 00:35:08.629$ So CRS over grades three and above.

NOTE Confidence: 0.8052864

 $00:35:08.630 \longrightarrow 00:35:11.015$ Only 2% and neurotoxicity City

NOTE Confidence: 0.8052864

 $00:35:11.015 \longrightarrow 00:35:13.400$ green above only four percent.

NOTE Confidence: 0.8052864

 $00:35:13.400 \longrightarrow 00:35:13.885$ Importantly,

NOTE Confidence: 0.8052864

 $00:35:13.885 \longrightarrow 00:35:16.795$ none of these patients received any

NOTE Confidence: 0.8052864

 $00{:}35{:}16.795 {\:{\circ}{\circ}{\circ}}>00{:}35{:}19.229$ prophylactic measures to prevent the

NOTE Confidence: 0.8052864

00:35:19.229 --> 00:35:21.504 development of CRS or neurotoxicity.

NOTE Confidence: 0.8052864

 $00:35:21.510 \longrightarrow 00:35:22.630$ An overall,

NOTE Confidence: 0.8052864

 $00:35:22.630 \longrightarrow 00:35:25.990$ the number of patients that received

NOTE Confidence: 0.8052864

00:35:25.990 --> 00:35:28.169 to cilizumab was low at 16%.

NOTE Confidence: 0.8052864

 $00{:}35{:}28.170 \longrightarrow 00{:}35{:}30.837$ And an patients did not receive steroids.

NOTE Confidence: 0.89521617

 $00:35:33.350 \longrightarrow 00:35:35.280$ So what are the results?

NOTE Confidence: 0.89521617

00:35:35.280 --> 00:35:37.266 As you can see, particularly if

 $00:35:37.266 \longrightarrow 00:35:39.996$ we go to the higher dose levels

NOTE Confidence: 0.89521617

00:35:39.996 --> 00:35:42.206 of the cell therapy product,

NOTE Confidence: 0.89521617

 $00:35:42.210 \longrightarrow 00:35:43.833$ the overall response.

NOTE Confidence: 0.89521617

 $00:35:43.833 \longrightarrow 00:35:50.260$ Rate is 87% with 73% complete response rates.

NOTE Confidence: 0.89521617

 $00:35:50.260 \longrightarrow 00:35:51.811$ It's still early,

NOTE Confidence: 0.89521617

00:35:51.811 --> 00:35:53.879 so durability remains unclear,

NOTE Confidence: 0.89521617

00:35:53.880 --> 00:35:56.976 but the patients, particularly the patients,

NOTE Confidence: 0.89521617

 $00:35:56.980 \longrightarrow 00:35:58.038$ were achieved.

NOTE Confidence: 0.89521617

 $00{:}35{:}58.038 \dashrightarrow 00{:}35{:}59.625$ Complete remission actually

NOTE Confidence: 0.89521617

00:35:59.625 --> 00:36:01.741 have had ongoing complete

NOTE Confidence: 0.89521617

 $00{:}36{:}01.741 \dashrightarrow 00{:}36{:}03.698$ remission beyond three months.

NOTE Confidence: 0.8766074

 $00{:}36{:}06.140 \dashrightarrow 00{:}36{:}08.620$ And also when we look at the cellular

NOTE Confidence: 0.8766074

 $00{:}36{:}08.620 \dashrightarrow 00{:}36{:}10.699$ kinetics by best overall response,

NOTE Confidence: 0.8766074

 $00:36:10.700 \longrightarrow 00:36:13.380$ you can see that.

NOTE Confidence: 0.8766074

 $00:36:13.380 \longrightarrow 00:36:16.145$ Particularly in patients who achieved

00:36:16.145 --> 00:36:19.810 CR PR as designated here in green,

NOTE Confidence: 0.8766074

 $00{:}36{:}19.810 \dashrightarrow 00{:}36{:}22.802$ they have ongoing persistency

NOTE Confidence: 0.8766074

 $00:36:22.802 \longrightarrow 00:36:25.046$ beyond 18 months.

NOTE Confidence: 0.8766074

 $00:36:25.050 \longrightarrow 00:36:27.684$ So CRP are associated with higher

NOTE Confidence: 0.8766074

 $00:36:27.684 \longrightarrow 00:36:29.440$ expansion and longer persistence.

NOTE Confidence: 0.8766074

 $00:36:29.440 \longrightarrow 00:36:32.248$ So in conclusion, auto three is

NOTE Confidence: 0.8766074

 $00:36:32.248 \longrightarrow 00:36:35.149$ well tolerated with low rates of C,

NOTE Confidence: 0.8766074

 $00:36:35.150 \longrightarrow 00:36:36.464$ Rs and neurotoxicity.

NOTE Confidence: 0.8766074

 $00{:}36{:}36.464 \dashrightarrow 00{:}36{:}37.778$ Particularly higher grades.

NOTE Confidence: 0.8766074

 $00:36:37.780 \longrightarrow 00:36:40.180$ They did also include an outpatient

NOTE Confidence: 0.8766074

 $00{:}36{:}40.180 \dashrightarrow 00{:}36{:}43.122$ cohort and more than half of the

NOTE Confidence: 0.8766074

 $00{:}36{:}43.122 \dashrightarrow 00{:}36{:}45.654$ patients were managed in the outpatient

NOTE Confidence: 0.8766074

 $00:36:45.654 \longrightarrow 00:36:47.599$ setting without requiring admission

NOTE Confidence: 0.8766074

 $00{:}36{:}47.599 \dashrightarrow 00{:}36{:}50.503$ of the patients who got admitted.

NOTE Confidence: 0.8766074

 $00:36:50.510 \longrightarrow 00:36:53.150$ None of them were into baited,

NOTE Confidence: 0.8766074

 $00:36:53.150 \longrightarrow 00:36:54.930$ and the complete response

 $00:36:54.930 \longrightarrow 00:36:56.710$ rates were particularly high.

NOTE Confidence: 0.8766074

 $00{:}36{:}56.710 --> 00{:}37{:}00.064$ Especially if we look at the

NOTE Confidence: 0.8766074

 $00:37:00.064 \longrightarrow 00:37:02.300$ higher cortisol dose levels.

NOTE Confidence: 0.8766074

 $00:37:02.300 \longrightarrow 00:37:06.800$ With a CR rate of 73%.

NOTE Confidence: 0.8766074

 $00:37:06.800 \longrightarrow 00:37:09.140 \text{ Um}$?

NOTE Confidence: 0.8766074

 $00:37:09.140 \longrightarrow 00:37:12.129$ So the next study that I will

NOTE Confidence: 0.8766074

 $00:37:12.129 \longrightarrow 00:37:14.896$ talk about that I found very

NOTE Confidence: 0.8766074

 $00:37:14.896 \dashrightarrow 00:37:17.680$ interesting and I will just give

NOTE Confidence: 0.8766074

 $00:37:17.680 \longrightarrow 00:37:20.810$ you a bit of a background here,

NOTE Confidence: 0.8766074

 $00:37:20.810 \longrightarrow 00:37:24.482$ is that about 20 to 30% of these

NOTE Confidence: 0.8766074

 $00{:}37{:}24.482 \dashrightarrow 00{:}37{:}26.426$ relapsed refractory diffuse large

NOTE Confidence: 0.8766074

00:37:26.426 --> 00:37:28.895 B cell informers were actually

NOTE Confidence: 0.8766074

 $00{:}37{:}28.895 \to 00{:}37{:}31.135$ found to have either mutations

NOTE Confidence: 0.8766074

00:37:31.135 --> 00:37:33.838 or copy number loss in City 58.

NOTE Confidence: 0.8766074

 $00:37:33.840 \longrightarrow 00:37:36.450$ And there was this study that

 $00{:}37{:}36.450 \dashrightarrow 00{:}37{:}38.860$ was published in Uncle Target.

NOTE Confidence: 0.8766074

 $00:37:38.860 \longrightarrow 00:37:42.199$ That has looked at TP 53 and 358 and

NOTE Confidence: 0.8766074

00:37:42.199 --> 00:37:45.640 here just to focus on wild type CD

NOTE Confidence: 0.8766074

 $00:37:45.640 \longrightarrow 00:37:49.186$ 58 versus mutated both in terms of

NOTE Confidence: 0.8766074

 $00:37:49.186 \longrightarrow 00:37:52.444$ progression free but also overall survival.

NOTE Confidence: 0.8766074

 $00{:}37{:}52.450 \dashrightarrow 00{:}37{:}55.324$ Both patients who had mutations in

NOTE Confidence: 0.8766074

 $00:37:55.324 \longrightarrow 00:37:58.665$ city 58 and patients who had copy

NOTE Confidence: 0.8766074

 $00{:}37{:}58.665 \dashrightarrow 00{:}38{:}01.329$ number loss actually had a much

NOTE Confidence: 0.8766074

 $00{:}38{:}01.329 \dashrightarrow 00{:}38{:}05.177$ poorer progression free and overall survival.

NOTE Confidence: 0.8766074

 $00:38:05.180 \longrightarrow 00:38:06.740$ And why is that important?

NOTE Confidence: 0.8766074

 $00{:}38{:}06.740 --> 00{:}38{:}07.117 \ \mathrm{Well},$

NOTE Confidence: 0.8766074

 $00:38:07.117 \longrightarrow 00:38:10.133$ it turns out to be 58 is actually

NOTE Confidence: 0.8766074

 $00:38:10.133 \longrightarrow 00:38:12.799$ the receptor of for the city.

NOTE Confidence: 0.8766074

 $00:38:12.800 \longrightarrow 00:38:15.278$ Of the city to molecule that's

NOTE Confidence: 0.8766074

00:38:15.278 --> 00:38:17.894 expressed by T cells and also

NOTE Confidence: 0.8766074

 $00:38:17.894 \longrightarrow 00:38:20.522$ by natural killer cells and its

 $00{:}38{:}20.522 \dashrightarrow 00{:}38{:}23.459$ expression is necessary for T cell

NOTE Confidence: 0.8766074

 $00{:}38{:}23.459 \dashrightarrow 00{:}38{:}25.934$ and NK cell mediated cytotoxicity.

NOTE Confidence: 0.8766074

 $00:38:25.940 \longrightarrow 00:38:28.200$ So in this study published,

NOTE Confidence: 0.8766074

 $00:38:28.200 \longrightarrow 00:38:30.616$ it actually presented as

NOTE Confidence: 0.8766074

00:38:30.616 --> 00:38:33.636 an oral abstract by Misner.

NOTE Confidence: 0.8766074

 $00:38:33.640 \longrightarrow 00:38:34.596$ Stanford group.

NOTE Confidence: 0.8766074

 $00:38:34.596 \longrightarrow 00:38:37.942$ They looked at city 58 mutations in

NOTE Confidence: 0.8766074

 $00:38:37.942 \dashrightarrow 00:38:40.725$ circulating tumor DNA by cap seek and also

NOTE Confidence: 0.8766074

00:38:40.725 --> 00:38:43.889 looked at a city 58 expression by email,

NOTE Confidence: 0.8766074

00:38:43.890 --> 00:38:44.300 history,

NOTE Confidence: 0.8766074

 $00:38:44.300 \longrightarrow 00:38:46.760$ chemistry and as you can see,

NOTE Confidence: 0.8766074

 $00:38:46.760 \longrightarrow 00:38:49.256$ patients who carried these city 58

NOTE Confidence: 0.8766074

 $00{:}38{:}49.256 \dashrightarrow 00{:}38{:}51.915$ mutations in their tumors actually had

NOTE Confidence: 0.8766074

 $00:38:51.915 \longrightarrow 00:38:54.205$ much worse progression free survival

NOTE Confidence: 0.8766074

 $00:38:54.205 \longrightarrow 00:38:56.675$ compared to wild type patients and

 $00:38:56.675 \longrightarrow 00:38:59.055$ also when it looked at city 58,

NOTE Confidence: 0.8766074

 $00{:}38{:}59.060 \dashrightarrow 00{:}39{:}00.515$ expression by IHC.

NOTE Confidence: 0.8766074

 $00:39:00.515 \dashrightarrow 00:39:03.910$ And again this is a pre treatment.

NOTE Confidence: 0.8766074

 $00:39:03.910 \longrightarrow 00:39:07.278$ Precarity and this is.

NOTE Confidence: 0.8766074

 $00:39:07.280 \longrightarrow 00:39:09.716$ Post treatment with Corti

NOTE Confidence: 0.8766074

 $00:39:09.716 \longrightarrow 00:39:13.370$ in the study that looked at.

NOTE Confidence: 0.8766074

 $00:39:13.370 \longrightarrow 00:39:16.914$ They had used exit captain Jean style Alusil.

NOTE Confidence: 0.8766074

 $00:39:16.920 \longrightarrow 00:39:20.574$ What they saw is that the complete

NOTE Confidence: 0.8766074

 $00{:}39{:}20.574 \dashrightarrow 00{:}39{:}23.271$ remission rates were actually much

NOTE Confidence: 0.8766074

 $00:39:23.271 \longrightarrow 00:39:26.890$ lower in the patient group who had.

NOTE Confidence: 0.8766074

00:39:26.890 --> 00:39:32.330 Low levels of CD 58. Expression and.

NOTE Confidence: 0.8766074

 $00:39:32.330 \longrightarrow 00:39:35.210$ Even though even in the patients with a

NOTE Confidence: 0.8766074

00:39:35.210 --> 00:39:38.627 C 58 loss who responded to treatment,

NOTE Confidence: 0.8766074

 $00:39:38.630 \longrightarrow 00:39:42.270$ at best they had a short PR and

NOTE Confidence: 0.8766074

 $00:39:42.270 \longrightarrow 00:39:47.340$ then they progressed. And so, um.

NOTE Confidence: 0.8766074

 $00:39:47.340 \longrightarrow 00:39:49.370$ So this was very interesting.

 $00:39:49.370 \longrightarrow 00:39:51.806$ So how can we circumvent that and

NOTE Confidence: 0.8766074

 $00:39:51.806 \longrightarrow 00:39:54.609$ how can we probe the biology of

NOTE Confidence: 0.8766074

 $00:39:54.609 \longrightarrow 00:39:57.123$ the car T cell responses towards

NOTE Confidence: 0.8766074

 $00:39:57.210 \longrightarrow 00:39:59.110$ tumors that are lacking?

NOTE Confidence: 0.8766074

 $00:39:59.110 \longrightarrow 00:40:02.274$ This functional city 58 So what the

NOTE Confidence: 0.8766074

 $00:40:02.274 \longrightarrow 00:40:05.242$ authors did is they generated the

NOTE Confidence: 0.8766074

00:40:05.242 --> 00:40:08.784 city 58 knockout via CRISPR and they.

NOTE Confidence: 0.8078168

 $00{:}40{:}08.790 \dashrightarrow 00{:}40{:}11.260$ Integrated a city to Costimulation

NOTE Confidence: 0.8078168

 $00{:}40{:}11.260 \dashrightarrow 00{:}40{:}15.289$ within cars so when you look here on

NOTE Confidence: 0.8078168

 $00:40:15.289 \longrightarrow 00:40:17.739$ the left they actually generated.

NOTE Confidence: 0.8078168

 $00:40:17.740 \longrightarrow 00:40:20.694$ They looked as a control it either

NOTE Confidence: 0.8078168

 $00{:}40{:}20.694 \dashrightarrow 00{:}40{:}24.275$ CD19 or CD22 targeting cars that were

NOTE Confidence: 0.8078168

 $00:40:24.275 \longrightarrow 00:40:28.204$ similar to exit cottage inside Alusil or

NOTE Confidence: 0.8078168

 $00:40:28.204 \longrightarrow 00:40:31.662$ Tisagenlecleucel that are on the market and

NOTE Confidence: 0.8078168

 $00:40:31.662 \longrightarrow 00:40:35.626$ and they actually did not see any response.

 $00:40:35.630 \longrightarrow 00:40:39.186$ However, when they integrated a city too.

NOTE Confidence: 0.8078168

 $00{:}40{:}39.190 \dashrightarrow 00{:}40{:}41.545$ Costimulation here represented in red

NOTE Confidence: 0.8078168

 $00:40:41.545 \longrightarrow 00:40:44.762$ what they saw is that that actually

NOTE Confidence: 0.8078168

 $00:40:44.762 \longrightarrow 00:40:48.450$ overcame the loss of CD 58 in tumor cells.

NOTE Confidence: 0.8078168

 $00:40:48.450 \longrightarrow 00:40:51.677$ And when you look at the percent

NOTE Confidence: 0.8078168

 $00{:}40{:}51.677 \dashrightarrow 00{:}40{:}53.720$ survival that was significantly

NOTE Confidence: 0.8078168

 $00:40:53.720 \longrightarrow 00:40:57.116$ higher in the cells that had.

NOTE Confidence: 0.8078168

00:40:57.120 --> 00:41:01.384 That contained CV 2 and you know initially

NOTE Confidence: 0.8078168

 $00{:}41{:}01.384 \to 00{:}41{:}04.412$ they incorporated city two in SIS and

NOTE Confidence: 0.8078168

 $00:41:04.412 \longrightarrow 00:41:08.329$ that did not result in any responses in vivo.

NOTE Confidence: 0.8078168

 $00{:}41{:}08.330 \dashrightarrow 00{:}41{:}11.744$ However, when they introduced it in

NOTE Confidence: 0.8078168

 $00:41:11.744 \longrightarrow 00:41:15.069$ trends that actually did the trick.

NOTE Confidence: 0.8078168

00:41:15.070 --> 00:41:17.608 So they put in an additional,

NOTE Confidence: 0.8078168

 $00:41:17.610 \longrightarrow 00:41:18.882$ so to speak.

NOTE Confidence: 0.8078168

00:41:18.882 --> 00:41:20.578 City two receptor entrance,

NOTE Confidence: 0.8078168

 $00:41:20.580 \longrightarrow 00:41:22.775$ and that's what mediated significant

00:41:22.775 --> 00:41:25.428 antitumor activity in in Vivo Anet

NOTE Confidence: 0.8078168

 $00:41:25.428 \longrightarrow 00:41:27.368$ overcame the city 58 knockout.

NOTE Confidence: 0.8078168

00:41:27.370 --> 00:41:29.902 So this data was actually extremely

NOTE Confidence: 0.8078168

00:41:29.902 --> 00:41:31.620 important, in my view,

NOTE Confidence: 0.8078168

 $00:41:31.620 \longrightarrow 00:41:35.419$ because it it shows us that City two Co.

NOTE Confidence: 0.8078168

 $00:41:35.420 \longrightarrow 00:41:37.116$ Stimulation is very important.

NOTE Confidence: 0.8078168

 $00:41:37.116 \longrightarrow 00:41:39.236$ This wasn't known before we,

NOTE Confidence: 0.8078168

 $00:41:39.240 \longrightarrow 00:41:42.552$ we thought that these car T cells were

NOTE Confidence: 0.8078168

 $00:41:42.552 \longrightarrow 00:41:45.526$ already endowed with all the necessary

NOTE Confidence: 0.8078168

 $00{:}41{:}45.526 \dashrightarrow 00{:}41{:}47.594$ costimulation that they needed.

NOTE Confidence: 0.8078168

00:41:47.600 --> 00:41:50.896 However, we now know based on this study,

NOTE Confidence: 0.8078168

 $00:41:50.900 \longrightarrow 00:41:53.336$ that there are other Co stimulators

NOTE Confidence: 0.8078168

00:41:53.336 --> 00:41:56.270 on the surface of the tumor cells,

NOTE Confidence: 0.8078168

 $00{:}41{:}56.270 \dashrightarrow 00{:}41{:}59.807$ such as CD 58 that also really matter and

NOTE Confidence: 0.8078168

 $00:41:59.807 \longrightarrow 00:42:03.290$ that they can drive car T cell efficacy.

 $00:42:05.440 \longrightarrow 00:42:08.457$ So this CD 5832 is a novel

NOTE Confidence: 0.82577026

00:42:08.457 --> 00:42:11.080 axis for car resistance.

NOTE Confidence: 0.82577026

 $00:42:11.080 \longrightarrow 00:42:13.128$ It's important in large

NOTE Confidence: 0.82577026

 $00:42:13.128 \longrightarrow 00:42:14.664$ cell lymphoma because,

NOTE Confidence: 0.82577026

 $00:42:14.670 \longrightarrow 00:42:19.806$ as I said to you 25 to 30% of patients

NOTE Confidence: 0.82577026

00:42:19.806 --> 00:42:23.910 will have either city 58 loss or mutations.

NOTE Confidence: 0.82577026

 $00:42:23.910 \longrightarrow 00:42:26.470$ And if we engineer cars,

NOTE Confidence: 0.82577026

00:42:26.470 --> 00:42:28.598 integrating City two signaling

NOTE Confidence: 0.82577026

 $00{:}42{:}28.598 \dashrightarrow 00{:}42{:}32.120$ entrance we can overcome this city 58.

NOTE Confidence: 0.82577026

00:42:32.120 --> 00:42:33.840 Lawson reestablished car efficacy.

NOTE Confidence: 0.82577026

 $00{:}42{:}33.840 \dashrightarrow 00{:}42{:}36.904$ And and this is important because there

NOTE Confidence: 0.82577026

00:42:36.904 --> 00:42:39.400 are other cancers like multiple myeloma,

NOTE Confidence: 0.82577026

 $00:42:39.400 \longrightarrow 00:42:42.172$ Hodgkin lymphoma as well as solid tumors

NOTE Confidence: 0.82577026

 $00:42:42.172 \longrightarrow 00:42:44.521$ like colon cancer for example that

NOTE Confidence: 0.82577026

00:42:44.521 --> 00:42:47.055 do carry city 58 loss and mutations,

NOTE Confidence: 0.82577026

 $00:42:47.060 \longrightarrow 00:42:49.685$ and we expect that in the next

 $00:42:49.685 \longrightarrow 00:42:52.040$ couple of years there will be.

NOTE Confidence: 0.71786034

 $00:42:54.070 \longrightarrow 00:43:00.580$ Cortisol studies looking at this.

NOTE Confidence: 0.71786034

 $00:43:00.580 \longrightarrow 00:43:05.915$ In humans. Another study that I found

NOTE Confidence: 0.71786034

 $00:43:05.915 \longrightarrow 00:43:10.020$ of interest was also this abstract.

NOTE Confidence: 0.71786034

00:43:10.020 --> 00:43:12.978 1194, where they looked at Amick,

NOTE Confidence: 0.71786034

 $00{:}43{:}12.980 \dashrightarrow 00{:}43{:}15.935$ expression and tumor infiltrated the

NOTE Confidence: 0.71786034

 $00:43:15.935 \longrightarrow 00:43:19.455$ cells in patients who received his

NOTE Confidence: 0.71786034

 $00{:}43{:}19.455 \dashrightarrow 00{:}43{:}22.787$ agenda cluzel in the Juliet study for

NOTE Confidence: 0.71786034

00:43:22.787 --> 00:43:25.815 lymphoma and what they were able to

NOTE Confidence: 0.71786034

 $00:43:25.815 \longrightarrow 00:43:28.830$ show was that having a baseline Nick

NOTE Confidence: 0.71786034

 $00{:}43{:}28.830 \dashrightarrow 00{:}43{:}31.405$ negative Myc positive studies make

NOTE Confidence: 0.71786034

 $00:43:31.405 \longrightarrow 00:43:34.720$ positive study was actually here in blue.

NOTE Confidence: 0.71786034

 $00{:}43{:}34.720 \dashrightarrow 00{:}43{:}38.818$ Associated with a worse probability of.

NOTE Confidence: 0.71786034

 $00:43:38.820 \longrightarrow 00:43:42.761$ Survival and then also having fewer tumor

NOTE Confidence: 0.71786034

00:43:42.761 --> 00:43:46.488 infiltrating CD 3 positive cells were

 $00:43:46.488 \longrightarrow 00:43:50.370$ was also associated with poorer outcomes.

NOTE Confidence: 0.71786034

00:43:50.370 --> 00:43:51.864 And particularly,

NOTE Confidence: 0.71786034

 $00:43:51.864 \longrightarrow 00:43:55.599$ if those infiltrating cells had.

NOTE Confidence: 0.71786034

00:43:55.600 --> 00:43:57.420 Exhausted immunophenotype

NOTE Confidence: 0.83085793

 $00:43:59.750 \longrightarrow 00:44:03.040$ so I I talked to you about you know how

NOTE Confidence: 0.83085793

 $00:44:03.134 \longrightarrow 00:44:05.972$ this works in the relapse refractory

NOTE Confidence: 0.83085793

 $00:44:05.972 \longrightarrow 00:44:09.795$ setting and what we can do in that

NOTE Confidence: 0.83085793

 $00:44:09.795 \longrightarrow 00:44:12.095$ setting to to overcome resistance.

NOTE Confidence: 0.83085793

00:44:12.100 --> 00:44:15.164 But what about patients who never go into

NOTE Confidence: 0.83085793

 $00:44:15.164 \longrightarrow 00:44:17.640$ remission with their frontline therapy?

NOTE Confidence: 0.83085793

00:44:17.640 --> 00:44:19.770 So this study Zooma, 12,

NOTE Confidence: 0.83085793

00:44:19.770 --> 00:44:22.326 looked at exit cottage inside Alusil,

NOTE Confidence: 0.83085793

00:44:22.330 --> 00:44:24.880 in patients with very high risk,

NOTE Confidence: 0.83085793

 $00:44:24.880 \longrightarrow 00:44:27.320$ large diffuse large B cell

NOTE Confidence: 0.83085793

 $00:44:27.320 \longrightarrow 00:44:29.760$ lymphoma in the first line.

NOTE Confidence: 0.83085793

 $00:44:29.760 \longrightarrow 00:44:32.298$ Um and and at ash they

00:44:32.298 --> 00:44:33.990 presented the interim efficacy,

NOTE Confidence: 0.83085793

 $00:44:33.990 \longrightarrow 00:44:35.818$ safety and PK data,

NOTE Confidence: 0.83085793

 $00:44:35.818 \longrightarrow 00:44:38.103$ so patients qualified for this

NOTE Confidence: 0.83085793

00:44:38.103 --> 00:44:40.997 study if they had high grade B

NOTE Confidence: 0.83085793

00:44:40.997 --> 00:44:43.299 cell lymphoma with Mick and BCL,

NOTE Confidence: 0.83085793

00:44:43.300 --> 00:44:45.410 two or BCL six translocations,

NOTE Confidence: 0.83085793

 $00:44:45.410 \longrightarrow 00:44:49.026$ so double hit or triple hit large cell

NOTE Confidence: 0.83085793

 $00:44:49.026 \longrightarrow 00:44:52.362$ lymphoma with an epic score of three

NOTE Confidence: 0.83085793

 $00:44:52.362 \longrightarrow 00:44:55.457$ or above before enrollment they had to

NOTE Confidence: 0.83085793

 $00:44:55.457 \longrightarrow 00:44:59.160$ have had at least 2 lines of an anti CD.

NOTE Confidence: 0.83085793

00:44:59.160 --> 00:45:00.750 20 monoclonal antibody.

NOTE Confidence: 0.83085793

 $00:45:00.750 \longrightarrow 00:45:03.630$ Sorry not 2 lines but two cycles and

NOTE Confidence: 0.83085793

 $00{:}45{:}03.630 \dashrightarrow 00{:}45{:}06.015$ enter second containing regimen and they

NOTE Confidence: 0.83085793

 $00{:}45{:}06.015 \dashrightarrow 00{:}45{:}09.207$ had to have had a positive PET scan

NOTE Confidence: 0.83085793

 $00:45:09.207 \longrightarrow 00:45:11.776$ after two Step 2 cycles of treatment

 $00{:}45{:}11.776 \dashrightarrow 00{:}45{:}14.430$ they enrolled them look at free stem.

NOTE Confidence: 0.83085793

 $00:45:14.430 \longrightarrow 00:45:17.076$ They had the option of getting some

NOTE Confidence: 0.83085793

 $00:45:17.076 \longrightarrow 00:45:18.649$ non chemotherapy bridging such

NOTE Confidence: 0.83085793

 $00:45:18.649 \longrightarrow 00:45:20.509$ as radiation or maybe REVLIMID.

NOTE Confidence: 0.83085793

 $00:45:20.510 \longrightarrow 00:45:23.126$ And then they give them flu

NOTE Confidence: 0.83085793

 $00{:}45{:}23.126 \dashrightarrow 00{:}45{:}25.488$ side conditioning and a single

NOTE Confidence: 0.83085793

 $00:45:25.488 \longrightarrow 00:45:27.608$ infusion of access cell.

NOTE Confidence: 0.83085793

00:45:27.610 --> 00:45:30.238 Again, median was 61 years old,

NOTE Confidence: 0.83085793

 $00{:}45{:}30.240 \dashrightarrow 00{:}45{:}31.996 \text{ but they treated patients}$

NOTE Confidence: 0.83085793

 $00:45:31.996 \longrightarrow 00:45:34.630$ up to the age of 86.

NOTE Confidence: 0.83085793

 $00{:}45{:}34.630 \dashrightarrow 00{:}45{:}37.270$ They all had advanced stage disease,

NOTE Confidence: 0.83085793

 $00:45:37.270 \longrightarrow 00:45:39.856$ 53% were double hit or triple

NOTE Confidence: 0.83085793

 $00:45:39.856 \longrightarrow 00:45:42.100$ hit as determined by fish.

NOTE Confidence: 0.83085793

00:45:42.100 --> 00:45:43.426 A 72% had.

NOTE Confidence: 0.83085793

 $00:45:43.426 \longrightarrow 00:45:47.070$ Keeping score of greater than or equal to 3.

NOTE Confidence: 0.84949166

 $00:45:49.290 \longrightarrow 00:45:51.882$ And when they looked at overall

00:45:51.882 --> 00:45:54.494 response rates, remarkably high 85% and

NOTE Confidence: 0.84949166

 $00{:}45{:}54.494 \dashrightarrow 00{:}45{:}57.520$ CR rate for these patients was 74%,

NOTE Confidence: 0.84949166

 $00:45:57.520 \longrightarrow 00:45:59.680$ and they have followed them.

NOTE Confidence: 0.84949166

 $00:45:59.680 \longrightarrow 00:46:02.704$ The median follow-up was a 9.5 months,

NOTE Confidence: 0.84949166

00:46:02.710 --> 00:46:05.734 so not very long follow up yet,

NOTE Confidence: 0.84949166

 $00:46:05.740 \longrightarrow 00:46:08.164$ but it's important to realize that

NOTE Confidence: 0.84949166

 $00:46:08.164 \longrightarrow 00:46:10.806$ the majority of these patients with

NOTE Confidence: 0.84949166

 $00{:}46{:}10.806 \dashrightarrow 00{:}46{:}13.662$ double or triple hit INFORMALS will

NOTE Confidence: 0.84949166

 $00:46:13.662 \longrightarrow 00:46:15.698$ actually relapse within a year.

NOTE Confidence: 0.84949166

 $00:46:15.700 \longrightarrow 00:46:16.996$ Post initial therapy.

NOTE Confidence: 0.84949166

 $00:46:16.996 \longrightarrow 00:46:19.153$ So so you know, really.

NOTE Confidence: 0.84949166

 $00{:}46{:}19.153 \dashrightarrow 00{:}46{:}21.268$ Really great outcomes and the

NOTE Confidence: 0.84949166

 $00{:}46{:}21.268 \dashrightarrow 00{:}46{:}24.069$ most common grade three and above

NOTE Confidence: 0.84949166

 $00:46:24.069 \longrightarrow 00:46:26.149$ adverse events were encephalopathy.

NOTE Confidence: 0.84949166

 $00:46:26.150 \longrightarrow 00:46:29.643$ In 16% of the patients and cytopenias

 $00:46:29.643 \longrightarrow 00:46:33.779$ there was one grade 5 adverse event that

NOTE Confidence: 0.84949166

 $00:46:33.779 \longrightarrow 00:46:37.600$ occurred on the study due to COVID-19.

NOTE Confidence: 0.84949166

 $00:46:37.600 \longrightarrow 00:46:39.730$ When they looked at cortisol

NOTE Confidence: 0.84949166

 $00:46:39.730 \longrightarrow 00:46:42.374$ expansion and compared that to their

NOTE Confidence: 0.84949166

 $00:46:42.374 \longrightarrow 00:46:45.014$ Zuma one study where people had

NOTE Confidence: 0.84949166

00:46:45.014 --> 00:46:46.990 had relapsed refractory disease,

NOTE Confidence: 0.84949166

 $00:46:46.990 \longrightarrow 00:46:51.031$ what they saw is that the car T cell

NOTE Confidence: 0.84949166

 $00:46:51.031 \longrightarrow 00:46:53.961$ expansion was significantly greater in

NOTE Confidence: 0.84949166

00:46:53.961 --> 00:46:58.808 this study in summer 12 compared to Zuma one.

NOTE Confidence: 0.84949166

 $00:46:58.810 \longrightarrow 00:47:00.289$ And that perhaps,

NOTE Confidence: 0.84949166

 $00:47:00.289 \longrightarrow 00:47:03.740$ maybe because these patients had very little

NOTE Confidence: 0.84949166

 $00:47:03.819 \longrightarrow 00:47:06.920$ treatment before they went on to party.

NOTE Confidence: 0.84949166 00:47:06.920 --> 00:47:07.958 Um?

NOTE Confidence: 0.84949166

00:47:07.958 --> 00:47:12.110 And in Zuma 12.

NOTE Confidence: 0.84949166

00:47:12.110 --> 00:47:15.166 There was higher frequency of CCR seven 3045

NOTE Confidence: 0.84949166

00:47:15.166 --> 00:47:18.337 RAT cells in the pre infusion product which

 $00:47:18.337 \longrightarrow 00:47:21.240$ was associated with a greater expansion.

NOTE Confidence: 0.84949166

 $00{:}47{:}21.240 \to 00{:}47{:}24.586$ Again, this is suggestive of improved T

NOTE Confidence: 0.84949166

 $00:47:24.586 \longrightarrow 00:47:28.290$ cell fitness in the first line treatment.

NOTE Confidence: 0.84949166

00:47:28.290 --> 00:47:31.195 So it's this study you know well

NOTE Confidence: 0.84949166

 $00{:}47{:}31.195 \to 00{:}47{:}33.780$ doesn't have very long follow up.

NOTE Confidence: 0.84949166

 $00:47:33.780 \longrightarrow 00:47:36.384$ It does provide us with some

NOTE Confidence: 0.84949166

00:47:36.384 --> 00:47:38.120 insights into the pharmacology

NOTE Confidence: 0.84949166

 $00{:}47{:}38.199 \dashrightarrow 00{:}47{:}40.719$ of access L for patients who are

NOTE Confidence: 0.84949166

 $00{:}47{:}40.719 \dashrightarrow 00{:}47{:}43.060$ exposed to fewer prior the rapies.

NOTE Confidence: 0.84949166

 $00:47:43.060 \longrightarrow 00:47:46.252$ Now I'm going to shift gears to relapse

NOTE Confidence: 0.84949166

 $00{:}47{:}46.252 \dashrightarrow 00{:}47{:}48.549$ refractory indolent non Hodgkin lymphoma.

NOTE Confidence: 0.84949166

 $00:47:48.550 \longrightarrow 00:47:51.469$ I'll present you the data from Zuma

NOTE Confidence: 0.84949166

 $00{:}47{:}51.469 \dashrightarrow 00{:}47{:}55.866$ five with AXI Cap to Gene and then from

NOTE Confidence: 0.84949166

 $00:47:55.866 \longrightarrow 00:47:58.679$ ilaris study with tisagenlecleucel cell so.

NOTE Confidence: 0.84949166

 $00:47:58.680 \longrightarrow 00:48:00.312$ In this study zoomify,

 $00:48:00.312 \longrightarrow 00:48:02.760$ they looked at follicular and marginal

NOTE Confidence: 0.84949166

 $00:48:02.834 \longrightarrow 00:48:05.126$ zone lymphoma patients who had relapsed

NOTE Confidence: 0.84949166

00:48:05.126 --> 00:48:07.858 after two or more lines of the rapy.

NOTE Confidence: 0.84949166

 $00:48:07.860 \longrightarrow 00:48:09.850$ This was the study design.

NOTE Confidence: 0.84949166

00:48:09.850 --> 00:48:10.249 Again,

NOTE Confidence: 0.84949166

00:48:10.249 --> 00:48:13.840 very standard flu Cy followed by by Access L.

NOTE Confidence: 0.84949166

 $00:48:13.840 \longrightarrow 00:48:17.305$ They all had to have had anti CD 20

NOTE Confidence: 0.84949166

00:48:17.305 --> 00:48:20.055 monoclonal antibody plus an alkylating

NOTE Confidence: 0.84949166

 $00{:}48{:}20.055 \dashrightarrow 00{:}48{:}22.895$ agent with their prior the rapies.

NOTE Confidence: 0.84949166

 $00:48:22.900 \longrightarrow 00:48:25.684$ 68% of the patients had refractory

NOTE Confidence: 0.84949166

00:48:25.684 --> 00:48:27.076 disease and importantly,

NOTE Confidence: 0.84949166

 $00:48:27.080 \longrightarrow 00:48:29.744$ over half of the patients had

NOTE Confidence: 0.84949166

 $00:48:29.744 \longrightarrow 00:48:31.520$ actually progressed within two

NOTE Confidence: 0.84949166

00:48:31.597 --> 00:48:34.037 years from their initial therapy,

NOTE Confidence: 0.84949166

 $00:48:34.040 \longrightarrow 00:48:36.360$ which is this P OH,

NOTE Confidence: 0.84949166

 $00:48:36.360 \longrightarrow 00:48:39.111$ D20 four group that we now know

 $00{:}48{:}39.111 \dashrightarrow 00{:}48{:}41.455$ is associated with worse survival

NOTE Confidence: 0.84949166

00:48:41.455 --> 00:48:44.165 in both follicular lymphoma and

NOTE Confidence: 0.84949166

00:48:44.165 --> 00:48:46.756 marginal zone lymphoma when they

NOTE Confidence: 0.84949166

 $00:48:46.756 \longrightarrow 00:48:49.396$ looked at the overall response rates

NOTE Confidence: 0.84949166

 $00:48:49.396 \longrightarrow 00:48:52.890$ very high again in the above 90%.

NOTE Confidence: 0.84949166

00:48:52.890 --> 00:48:53.878 And CRA,

NOTE Confidence: 0.84949166

 $00:48:53.878 \longrightarrow 00:48:56.348$ it's also very high anywhere

NOTE Confidence: 0.84949166

 $00:48:56.348 \longrightarrow 00:48:59.190$ from 70 to 80% progression free.

NOTE Confidence: 0.84949166

 $00:48:59.190 \longrightarrow 00:49:02.010$ Survival was actually noted to be

NOTE Confidence: 0.84949166

 $00{:}49{:}02.010 \dashrightarrow 00{:}49{:}05.040$ longer in the follicular lymphoma group

NOTE Confidence: 0.84949166

 $00{:}49{:}05.040 \dashrightarrow 00{:}49{:}08.046$ compared to the marginal as opposed

NOTE Confidence: 0.84949166

 $00:49:08.131 \longrightarrow 00:49:10.909$ to the marginal Zone lymphoma group.

NOTE Confidence: 0.84949166

 $00{:}49{:}10.910 \dashrightarrow 00{:}49{:}13.748$ But the response rates importantly were

NOTE Confidence: 0.84949166

00:49:13.748 --> 00:49:16.749 consistent across all of the subgroups,

NOTE Confidence: 0.84949166

 $00:49:16.750 \longrightarrow 00:49:18.616$ including Flipi score,

00:49:18.616 --> 00:49:22.348 high tumor burden or prior therapies.

NOTE Confidence: 0.84949166

 $00{:}49{:}22.350 \to 00{:}49{:}25.608$ And the median duration of response,

NOTE Confidence: 0.84949166

 $00:49:25.610 \longrightarrow 00:49:28.335$ particularly in the follicular lymphoma

NOTE Confidence: 0.84949166

 $00:49:28.335 \longrightarrow 00:49:33.110$ Group, has not been reached and.

NOTE Confidence: 0.84949166

00:49:33.110 --> 00:49:38.241 Is a 78% duration of response in

NOTE Confidence: 0.84949166

00:49:38.241 --> 00:49:41.906 patients who, with follicular lymphoma,

NOTE Confidence: 0.84949166

 $00:49:41.906 \longrightarrow 00:49:44.834$ who achieved a CR.

NOTE Confidence: 0.84090036

 $00:49:46.960 \longrightarrow 00:49:49.744$ There were important to note a

NOTE Confidence: 0.84090036

 $00:49:49.744 \longrightarrow 00:49:52.163$ grade three and above adverse

NOTE Confidence: 0.84090036

 $00:49:52.163 \longrightarrow 00:49:55.010$ events in 86% of the patients.

NOTE Confidence: 0.84090036

00:49:55.010 --> 00:49:57.410 Most of them were cytopenias

NOTE Confidence: 0.84090036

 $00:49:57.410 \longrightarrow 00:49:59.806$ and infections and their worst

NOTE Confidence: 0.84090036

 $00:49:59.806 \longrightarrow 00:50:02.056$ three Grade 5 adverse events,

NOTE Confidence: 0.84090036

 $00:50:02.060 \longrightarrow 00:50:05.140$ one of which was related to multisystem

NOTE Confidence: 0.84090036

 $00:50:05.140 \longrightarrow 00:50:07.727$ organ failure with cytokine release

NOTE Confidence: 0.84090036

 $00:50:07.727 \longrightarrow 00:50:11.279$ syndrome and another one due to

 $00:50:11.279 \longrightarrow 00:50:12.463$ coccidioidomycosis infection.

NOTE Confidence: 0.84090036

 $00{:}50{:}12.470 \dashrightarrow 00{:}50{:}16.306$ So the the other important thing to

NOTE Confidence: 0.84090036

 $00:50:16.306 \longrightarrow 00:50:20.030$ note is that 82% of patients experienced

NOTE Confidence: 0.84090036

 $00:50:20.030 \longrightarrow 00:50:23.270$ some grade of cytokine release syndrome.

NOTE Confidence: 0.84090036

00:50:23.270 --> 00:50:25.430 The only 7% experienced

NOTE Confidence: 0.84090036

 $00:50:25.430 \longrightarrow 00:50:27.590$ grade three and above.

NOTE Confidence: 0.84090036

00:50:27.590 --> 00:50:30.830 Almost half the patients received socialism

NOTE Confidence: 0.84090036

 $00:50:30.830 \longrightarrow 00:50:35.510$ AB and 17% received corticosteroids.

NOTE Confidence: 0.84090036

00:50:35.510 --> 00:50:37.840 As far as neurologic events,

NOTE Confidence: 0.84090036

 $00:50:37.840 \longrightarrow 00:50:39.700$ 60% at any grade,

NOTE Confidence: 0.84090036

 $00{:}50{:}39.700 \dashrightarrow 00{:}50{:}42.497$ neurologic events an almost 20% had

NOTE Confidence: 0.84090036

 $00:50:42.497 \longrightarrow 00:50:45.299$ grade three and above neurologic events.

NOTE Confidence: 0.84090036

 $00:50:45.300 \longrightarrow 00:50:47.625$ 36% of patients received steroids

NOTE Confidence: 0.84090036

00:50:47.625 --> 00:50:49.020 for neurologic toxicity,

NOTE Confidence: 0.84090036

 $00:50:49.020 \longrightarrow 00:50:52.748$ so when they looked at serum cytokine levels,

 $00:50:52.750 \longrightarrow 00:50:56.551$ they saw that cortisol peak levels were

NOTE Confidence: 0.84090036

 $00:50:56.551 \longrightarrow 00:50:59.371$ associated with grade three and above

NOTE Confidence: 0.84090036

 $00{:}50{:}59.371 \dashrightarrow 00{:}51{:}03.000$ CR S and then some of the other side.

NOTE Confidence: 0.84090036

 $00:51:03.000 \longrightarrow 00:51:06.800$ It kinds like interferon gamma L6 TNF Alpha.

NOTE Confidence: 0.84090036

 $00:51:06.800 \longrightarrow 00:51:09.460$ Were also associated with grade

NOTE Confidence: 0.84090036

 $00:51:09.460 \longrightarrow 00:51:12.120$ three and above neurologic events.

NOTE Confidence: 0.84090036

00:51:12.120 --> 00:51:15.627 So the response rates were very high,

NOTE Confidence: 0.84090036

00:51:15.630 --> 00:51:19.653 but as I've just shown you there is still

NOTE Confidence: 0.84090036

 $00{:}51{:}19.653 \to 00{:}51{:}22.639$ significant toxicity with this treatment,

NOTE Confidence: 0.84090036

00:51:22.640 --> 00:51:24.143 particularly for follicular

NOTE Confidence: 0.84090036

 $00:51:24.143 \longrightarrow 00:51:25.646$ and marginal zone.

NOTE Confidence: 0.84090036

 $00:51:25.650 \longrightarrow 00:51:29.178$ Lymphoma is where we now do have available

NOTE Confidence: 0.84090036

 $00:51:29.178 \longrightarrow 00:51:31.660$ other available the rapeutic options.

NOTE Confidence: 0.84090036

 $00:51:31.660 \longrightarrow 00:51:36.169$ This is a sort of a similar design study.

NOTE Confidence: 0.84090036

00:51:36.170 --> 00:51:39.642 The Ilara which looked at this urgent

NOTE Confidence: 0.84090036

 $00:51:39.642 \longrightarrow 00:51:42.269$ occlusal for follicular lymphoma and.

00:51:42.270 --> 00:51:45.007 And I will not spend much time.

NOTE Confidence: 0.84090036

 $00{:}51{:}45.010 \dashrightarrow 00{:}51{:}47.866$ Suffice it to say that the complete response

NOTE Confidence: 0.84090036

 $00:51:47.866 \longrightarrow 00:51:50.320$ rates and overall response rates were

NOTE Confidence: 0.84090036

 $00:51:50.320 \longrightarrow 00:51:53.220$ extremely high with this therapy as well,

NOTE Confidence: 0.84090036

 $00:51:53.220 \longrightarrow 00:51:55.170$ but it was better tolerated,

NOTE Confidence: 0.84090036

00:51:55.170 --> 00:51:58.284 and indeed they did not have any cases of

NOTE Confidence: 0.84090036

 $00:51:58.284 \longrightarrow 00:52:01.429$ Grade 3 or above cytokine release syndrome.

NOTE Confidence: 0.84090036

 $00{:}52{:}01.430 \dashrightarrow 00{:}52{:}04.188$ There was very little use of anti

NOTE Confidence: 0.84090036

00:52:04.188 --> 00:52:06.970 cytokine therapy and very low rate of

NOTE Confidence: 0.84090036

 $00:52:06.970 \longrightarrow 00:52:11.440$ severe neurologic events of only 1% so.

NOTE Confidence: 0.84090036

00:52:11.440 --> 00:52:12.076 You know,

NOTE Confidence: 0.84090036

00:52:12.076 --> 00:52:13.984 it's important to again keep in

NOTE Confidence: 0.84090036

 $00{:}52{:}13.984 \dashrightarrow 00{:}52{:}15.748$ mind that these treatments are

NOTE Confidence: 0.84090036

 $00{:}52{:}15.748 \dashrightarrow 00{:}52{:}17.878$ not created equal and that there

NOTE Confidence: 0.84090036

 $00:52:17.878 \longrightarrow 00:52:19.858$ are differences between them,

 $00:52:19.860 \longrightarrow 00:52:22.422$ some of which have to do with

NOTE Confidence: 0.84090036

 $00:52:22.422 \longrightarrow 00:52:23.520$ the costimulatory domain,

NOTE Confidence: 0.84090036

 $00:52:23.520 \longrightarrow 00:52:26.019$ but many of which have to do

NOTE Confidence: 0.84090036

 $00:52:26.019 \longrightarrow 00:52:28.279$ with other parts of the design.

NOTE Confidence: 0.84090036

 $00:52:28.280 \longrightarrow 00:52:30.260$ So toxicities are very different

NOTE Confidence: 0.84090036

 $00:52:30.260 \longrightarrow 00:52:32.855$ and and there's much work to be

NOTE Confidence: 0.84090036

 $00:52:32.855 \longrightarrow 00:52:35.039$ done to see how they will stack up

NOTE Confidence: 0.84090036

00:52:35.108 -> 00:52:37.428 against other types of treatments,

NOTE Confidence: 0.84090036

00:52:37.430 --> 00:52:40.130 particularly these novel.

NOTE Confidence: 0.84090036

00:52:40.130 --> 00:52:45.362 Body drug conjugates or or CD20

NOTE Confidence: 0.84090036

 $00{:}52{:}45.362 \dashrightarrow 00{:}52{:}48.850$ CD 1963 by specifics.

NOTE Confidence: 0.84090036

 $00:52:48.850 \longrightarrow 00:52:51.724$ I will now briefly shift gears

NOTE Confidence: 0.84090036

 $00:52:51.724 \longrightarrow 00:52:53.640$ to mantle cell lymphoma,

NOTE Confidence: 0.84090036

 $00:52:53.640 \longrightarrow 00:52:56.508$ which also remains an unmet need.

NOTE Confidence: 0.84090036

00:52:56.510 --> 00:52:59.238 As you can see with one year and

NOTE Confidence: 0.84090036

 $00:52:59.238 \longrightarrow 00:53:02.013$ five year outcomes relative in terms

 $00:53:02.013 \longrightarrow 00:53:05.031$ of relative survival that are worse

NOTE Confidence: 0.84090036

 $00{:}53{:}05.116 \dashrightarrow 00{:}53{:}07.420$ compared to follicular lymphoma

NOTE Confidence: 0.84090036

 $00:53:07.420 \longrightarrow 00:53:10.300$ in marginal zone lymphoma and

NOTE Confidence: 0.84090036

 $00:53:10.300 \longrightarrow 00:53:12.796$ certainly lower cure rates compared

NOTE Confidence: 0.84090036

 $00{:}53{:}12.796 \to 00{:}53{:}15.670$ to diffuse large B cell lymphoma.

NOTE Confidence: 0.84090036

 $00:53:15.670 \longrightarrow 00:53:19.590$ So this is the study that got.

NOTE Confidence: 0.84090036

00:53:19.590 --> 00:53:21.690 Actually, that got Brexit.

NOTE Confidence: 0.84090036

 $00:53:21.690 \longrightarrow 00:53:23.265$ Captain Jean approved,

NOTE Confidence: 0.84090036

00:53:23.270 --> 00:53:25.900 published in New England Journal

NOTE Confidence: 0.84090036

00:53:25.900 --> 00:53:28.530 in 2020 targeting CD 19,

NOTE Confidence: 0.84090036

 $00{:}53{:}28.530 \dashrightarrow 00{:}53{:}31.650$ where you see that the overall

NOTE Confidence: 0.84090036

00:53:31.650 --> 00:53:34.320 response rate was very high,

NOTE Confidence: 0.84090036

 $00:53:34.320 \longrightarrow 00:53:37.470$ 93% and 67% of patients actually

NOTE Confidence: 0.84090036

 $00{:}53{:}37.470 \dashrightarrow 00{:}53{:}39.045$ achieved complete remission.

NOTE Confidence: 0.84090036

 $00:53:39.050 \longrightarrow 00:53:42.188$ These were patients that had relapsed

 $00:53:42.188 \longrightarrow 00:53:44.881$ refractory disease and the duration

NOTE Confidence: 0.84090036

 $00:53:44.881 \longrightarrow 00:53:47.466$ of response is quite durable,

NOTE Confidence: 0.84090036

 $00:53:47.470 \longrightarrow 00:53:51.320$ with with a plateau in this curve.

NOTE Confidence: 0.9070388

 $00:53:51.320 \longrightarrow 00:53:54.140$ I'm reaching three years now.

NOTE Confidence: 0.9070388

 $00:53:54.140 \longrightarrow 00:53:57.756$ As so, um, this is the transcendent study.

NOTE Confidence: 0.9070388

 $00:53:57.760 \longrightarrow 00:53:59.540$ The mantle cell cohort.

NOTE Confidence: 0.9070388

 $00:53:59.540 \longrightarrow 00:54:02.210$ This was just presented at ASH

NOTE Confidence: 0.9070388

 $00:54:02.299 \longrightarrow 00:54:04.771$ and this is looking at lysosome

NOTE Confidence: 0.9070388

 $00{:}54{:}04.771 \dashrightarrow 00{:}54{:}07.250$ now in mantle cell lymphoma.

NOTE Confidence: 0.9070388

00:54:07.250 --> 00:54:09.914 This product is different from AXA

NOTE Confidence: 0.9070388

 $00:54:09.914 \longrightarrow 00:54:12.826$ capture Gene because it has a defined

NOTE Confidence: 0.9070388

00:54:12.826 --> 00:54:15.290 composition of T of CD8 and CD4T

NOTE Confidence: 0.9070388

 $00{:}54{:}15.371 \dashrightarrow 00{:}54{:}18.086$ cell components that are administered

NOTE Confidence: 0.9070388

 $00{:}54{:}18.086 \dashrightarrow 00{:}54{:}20.801$ separately at equal target doses.

NOTE Confidence: 0.9070388

 $00:54:20.810 \longrightarrow 00:54:23.408$ So flu Cy conditioning lies to

NOTE Confidence: 0.9070388

 $00:54:23.408 \longrightarrow 00:54:26.678$ sell and they had two dose levels.

 $00:54:28.770 \longrightarrow 00:54:31.843$ 70% of patients had more than or

NOTE Confidence: 0.820293

 $00{:}54{:}31.843 \dashrightarrow 00{:}54{:}34.760$ equal to three prior the rapies.

NOTE Confidence: 0.820293

00:54:34.760 --> 00:54:37.748 A 75% had received prior ibrutinib,

NOTE Confidence: 0.820293

 $00:54:37.750 \longrightarrow 00:54:39.750$ including 31% that were

NOTE Confidence: 0.820293

00:54:39.750 --> 00:54:41.250 refractory to ibrutinib,

NOTE Confidence: 0.820293

00:54:41.250 --> 00:54:44.834 25% a quarter had received prior Boneta

NOTE Confidence: 0.820293

 $00:54:44.834 \longrightarrow 00:54:48.227$ klaxon there were 16% of patients that

NOTE Confidence: 0.820293

 $00:54:48.227 \longrightarrow 00:54:51.720$ were also refractory to prior Boneta clocks.

NOTE Confidence: 0.820293

 $00:54:51.720 \longrightarrow 00:54:55.220$ There was a significant number of patients,

NOTE Confidence: 0.820293

00:54:55.220 --> 00:54:57.710 41% that had blastoid morphology,

NOTE Confidence: 0.820293

 $00:54:57.710 \longrightarrow 00:54:59.069$ 22% with P50.

NOTE Confidence: 0.820293

 $00:54:59.069 \longrightarrow 00:55:02.240$ Three mutations and the majority of patients.

NOTE Confidence: 0.820293

 $00:55:02.240 \dashrightarrow 00:55:05.640$ 2/3 of patients actually had an elevated key.

NOTE Confidence: 0.820293

 $00:55:05.640 \longrightarrow 00:55:06.873$ 67 proliferation index,

NOTE Confidence: 0.820293

 $00:55:06.873 \longrightarrow 00:55:09.750$ which we know is associated with worse

 $00:55:09.820 \longrightarrow 00:55:12.010$ outcomes in mantle cell lymphoma.

NOTE Confidence: 0.820293

 $00:55:12.010 \longrightarrow 00:55:15.490$ When we look at the toxicity.

NOTE Confidence: 0.820293

 $00{:}55{:}15.490 \dashrightarrow 00{:}55{:}19.928$ I'm with Lisa cell CRS grade three

NOTE Confidence: 0.820293

 $00:55:19.928 \longrightarrow 00:55:24.422$ and above very low 3% and Grade

NOTE Confidence: 0.820293

 $00:55:24.422 \longrightarrow 00:55:28.627$ 3 or above neurotoxicity 12.5%.

NOTE Confidence: 0.820293

 $00:55:28.630 \longrightarrow 00:55:31.780$ When they looked at response by subgroup,

NOTE Confidence: 0.820293

 $00:55:31.780 \longrightarrow 00:55:34.300$ again remarkable that the overall

NOTE Confidence: 0.820293

 $00:55:34.300 \longrightarrow 00:55:36.820$ response rates and complete response

NOTE Confidence: 0.820293

 $00{:}55{:}36.893 \mathrel{--}{>} 00{:}55{:}39.311$ rates in patients with High Ki

NOTE Confidence: 0.820293

00:55:39.311 --> 00:55:41.430 67 blastoid morphology or P53

NOTE Confidence: 0.820293

 $00{:}55{:}41.430 \dashrightarrow 00{:}55{:}43.590$ mutations are actually quite so.

NOTE Confidence: 0.820293

00:55:43.590 --> 00:55:46.453 Miller to the group that does not

NOTE Confidence: 0.820293

 $00:55:46.453 \longrightarrow 00:55:49.600$ have any of these poor features.

NOTE Confidence: 0.820293

 $00:55:49.600 \longrightarrow 00:55:51.905$ The median follow-up is still

NOTE Confidence: 0.820293

 $00:55:51.905 \longrightarrow 00:55:53.749$ relatively short 5.9 months.

NOTE Confidence: 0.820293

00:55:53.750 --> 00:55:56.522 This type of therapy works fast

 $00:55:56.522 \longrightarrow 00:56:00.990$ within a month. You see the responses.

NOTE Confidence: 0.820293

 $00:56:00.990 \longrightarrow 00:56:03.738$ And when they looked at the

NOTE Confidence: 0.820293

 $00:56:03.738 \longrightarrow 00:56:04.654$ cellular kinetics,

NOTE Confidence: 0.820293

 $00:56:04.660 \longrightarrow 00:56:08.020$ what they saw is that at one year

NOTE Confidence: 0.820293

 $00:56:08.020 \longrightarrow 00:56:10.991$ sick there was life cell persistence

NOTE Confidence: 0.820293

 $00:56:10.991 \longrightarrow 00:56:16.000$ in 67% and 33% even out to two years.

NOTE Confidence: 0.820293

 $00:56:16.000 \longrightarrow 00:56:19.010$ Am so now they are ongoing with

NOTE Confidence: 0.820293

 $00:56:19.010 \longrightarrow 00:56:21.978$ enrollment at the higher dose level.

NOTE Confidence: 0.820293

 $00:56:21.980 \longrightarrow 00:56:24.848$ Dose level 2.

NOTE Confidence: 0.820293

00:56:24.850 --> 00:56:26.533 And and again,

NOTE Confidence: 0.820293

00:56:26.533 --> 00:56:29.899 this is remarkable for mantle cell

NOTE Confidence: 0.820293

 $00:56:29.899 \longrightarrow 00:56:33.850$ lymphoma with with no significant toxicity,

NOTE Confidence: 0.820293

 $00:56:33.850 \longrightarrow 00:56:37.618$ grade three toxicity.

NOTE Confidence: 0.820293

 $00:56:37.620 \longrightarrow 00:56:41.298$ What about CLL?

NOTE Confidence: 0.820293

 $00:56:41.300 \longrightarrow 00:56:44.090$ This study transcend CLL 004,

 $00:56:44.090 \longrightarrow 00:56:46.958$ looked at lice or sell in

NOTE Confidence: 0.820293

 $00:56:46.958 \longrightarrow 00:56:50.230$ relapse CLL and very interesting.

NOTE Confidence: 0.820293

 $00:56:50.230 \longrightarrow 00:56:53.572$ Lee had very high complete response

NOTE Confidence: 0.820293

 $00:56:53.572 \longrightarrow 00:56:56.921$ rates of 45% and and really

NOTE Confidence: 0.820293

00:56:56.921 --> 00:56:59.706 high rates of undetectable MRD,

NOTE Confidence: 0.820293

 $00:56:59.710 \longrightarrow 00:57:03.483$ both in the blood flow and in

NOTE Confidence: 0.820293

 $00{:}57{:}03.483 \dashrightarrow 00{:}57{:}07.571$ the bone marrow by NGS and even

NOTE Confidence: 0.820293

 $00:57:07.571 \longrightarrow 00:57:11.093$ when they looked at patients with

NOTE Confidence: 0.820293

00:57:11.215 --> 00:57:14.809 failed BTK here in the second.

NOTE Confidence: 0.820293

 $00:57:14.810 \longrightarrow 00:57:18.210$ Bar what failed BTK or or phonetic lacks.

NOTE Confidence: 0.820293

 $00{:}57{:}18.210 \dashrightarrow 00{:}57{:}20.335$ They had a very impressive

NOTE Confidence: 0.820293

 $00:57:20.335 \longrightarrow 00:57:22.035$ rates of complete response,

NOTE Confidence: 0.820293

 $00:57:22.040 \longrightarrow 00:57:25.148$ so so this was already presented at

NOTE Confidence: 0.820293

00:57:25.148 --> 00:57:28.587 Ash of 2019 and what was actually

NOTE Confidence: 0.820293

 $00:57:28.587 \longrightarrow 00:57:31.593$ presented this year at Ash was.

NOTE Confidence: 0.820293

 $00:57:31.600 \longrightarrow 00:57:33.164$ A combination of lice,

 $00:57:33.164 \longrightarrow 00:57:36.573$ a cell with a brute nip based on

NOTE Confidence: 0.820293

 $00{:}57{:}36.573 \dashrightarrow 00{:}57{:}38.998$ preclinical data that shows that

NOTE Confidence: 0.820293

00:57:38.998 --> 00:57:42.158 imbrued nip can improve car T cell,

NOTE Confidence: 0.820293

00:57:42.160 --> 00:57:44.644 anti tumor efficacy and reduce the

NOTE Confidence: 0.820293

 $00{:}57{:}44.644 \to 00{:}57{:}47.000$ rates of cytokine release syndrome.

NOTE Confidence: 0.820293

 $00:57:47.000 \longrightarrow 00:57:49.863$ So so this was the study patients

NOTE Confidence: 0.820293

 $00:57:49.863 \longrightarrow 00:57:52.401$ had progressed on ibrutinib or they

NOTE Confidence: 0.820293

 $00:57:52.401 \longrightarrow 00:57:56.054$ had mutations of BTK and they had no

NOTE Confidence: 0.820293

 $00:57:56.054 \dashrightarrow 00:57:58.878$ contrain dication to restarting ibrutinib.

NOTE Confidence: 0.820293

 $00:57:58.880 \longrightarrow 00:58:01.586$ And they were again very high

NOTE Confidence: 0.820293

 $00:58:01.586 \longrightarrow 00:58:04.120$ risk patients in all groups.

NOTE Confidence: 0.820293

00:58:04.120 --> 00:58:06.970 100% had some high risk features

NOTE Confidence: 0.820293

00:58:06.970 --> 00:58:09.352 like deletion 17, P 53,

NOTE Confidence: 0.820293

00:58:09.352 --> 00:58:10.780 mutation complex karyotype,

NOTE Confidence: 0.820293

00:58:10.780 --> 00:58:13.636 100% had had priori brute Nip,

 $00:58:13.640 \longrightarrow 00:58:16.444 \ 100\%$ were relapsed refractory

NOTE Confidence: 0.820293

 $00:58:16.444 \longrightarrow 00:58:18.547$ to ibrutinib and.

NOTE Confidence: 0.820293

 $00:58:18.550 \longrightarrow 00:58:20.570$ Half of the patients had

NOTE Confidence: 0.820293

00:58:20.570 --> 00:58:22.186 actually seen vanetta clocks,

NOTE Confidence: 0.820293

00:58:22.190 --> 00:58:25.568 in addition to two BTK inhibitors.

NOTE Confidence: 0.820293

 $00:58:25.570 \longrightarrow 00:58:28.048$ When we looked at grade three

NOTE Confidence: 0.820293

00:58:28.048 --> 00:58:29.287 cytokine release syndrome,

NOTE Confidence: 0.820293

00:58:29.290 --> 00:58:31.534 only 5\% again and or logic

NOTE Confidence: 0.820293

 $00{:}58{:}31.534 \dashrightarrow 00{:}58{:}33.574$ toxicity grade three and above

NOTE Confidence: 0.820293

 $00:58:33.574 \longrightarrow 00:58:35.899$ similar to mantle cell lymphoma.

NOTE Confidence: 0.820293

 $00:58:35.900 \longrightarrow 00:58:37.216$ Only 16%.

NOTE Confidence: 0.820293

 $00:58:37.216 \longrightarrow 00:58:37.874 \text{ Um},$

NOTE Confidence: 0.820293

 $00:58:37.874 \longrightarrow 00:58:39.848$ complete response rates,

NOTE Confidence: 0.820293

00:58:39.850 --> 00:58:42.154 particularly when you look

NOTE Confidence: 0.820293

 $00:58:42.154 \longrightarrow 00:58:44.458$ at dose level 200%

NOTE Confidence: 0.8644943

 $00:58:44.460 \dashrightarrow 00:58:47.565$ overall response rate 67% complete

00:58:47.565 --> 00:58:51.397 response rate and the majority of

NOTE Confidence: 0.8644943

 $00:58:51.397 \longrightarrow 00:58:53.917$ patients had undetectable MRD.

NOTE Confidence: 0.8644943

 $00:58:53.920 \longrightarrow 00:58:56.960$ In their in their blood.

NOTE Confidence: 0.8644943

00:58:56.960 --> 00:59:00.456 So in summary, you have very rapid responses,

NOTE Confidence: 0.8644943

 $00:59:00.460 \longrightarrow 00:59:02.956$ high overall response rate, high rates

NOTE Confidence: 0.8644943

 $00:59:02.956 \longrightarrow 00:59:06.138$ of CR with lysis cell and ibrutinib.

NOTE Confidence: 0.8644943

00:59:06.140 --> 00:59:09.628 And even though this is no direct comparison,

NOTE Confidence: 0.8644943

 $00:59:09.630 \longrightarrow 00:59:11.630$ it certainly looks better than

NOTE Confidence: 0.8644943

 $00{:}59{:}11.630 \dashrightarrow 00{:}59{:}14.207$ the data with lysis cell alone

NOTE Confidence: 0.8644943

 $00:59:14.207 \longrightarrow 00:59:16.187$ for relapsed refractory CLL.

NOTE Confidence: 0.8644943

00:59:16.190 --> 00:59:19.235 So I just wanted to I know

NOTE Confidence: 0.8644943

00:59:19.235 --> 00:59:21.429 we're running out of time,

NOTE Confidence: 0.8644943

 $00{:}59{:}21.430 \to 00{:}59{:}24.046$ but for people who treat leukemia,

NOTE Confidence: 0.8644943

 $00:59:24.050 \longrightarrow 00:59:28.082$ I did want to mention some of the upcoming.

NOTE Confidence: 0.8644943

 $00:59:28.090 \longrightarrow 00:59:31.247$ Studies in a allow that are important,

 $00:59:31.250 \longrightarrow 00:59:33.805$ including the comparison of tisagenlecleucel

NOTE Confidence: 0.8644943

 $00:59:33.805 \longrightarrow 00:59:37.129$ cell versus plain attuma Bob or I know,

NOTE Confidence: 0.8644943

00:59:37.130 --> 00:59:40.056 choose a map, Osaka mice and this

NOTE Confidence: 0.8644943

00:59:40.056 --> 00:59:43.008 is the Auburn phase three study,

NOTE Confidence: 0.8644943

00:59:43.010 --> 00:59:43.510 Cassiopeia,

NOTE Confidence: 0.8644943

 $00:59:43.510 \longrightarrow 00:59:47.010$ which looks at his agenda occlusal in

NOTE Confidence: 0.8644943

 $00{:}59{:}47.010 \dashrightarrow 00{:}59{:}49.867$ patients who are MRD positive after

NOTE Confidence: 0.8644943

 $00:59:49.867 \longrightarrow 00:59:53.010$ first line therapy and then also summa

NOTE Confidence: 0.8644943

 $00{:}59{:}53.010 \dashrightarrow 00{:}59{:}56.170$ for looking at exit cap to gene in

NOTE Confidence: 0.8644943

 $00:59:56.170 \longrightarrow 00:59:58.370$ patients with relapsed refractory LL.

NOTE Confidence: 0.8644943

 $00:59:58.370 \longrightarrow 01:00:00.170$ So so with that,

NOTE Confidence: 0.8644943

 $01:00:00.170 \longrightarrow 01:00:02.634$ you know I'd like to end and and

NOTE Confidence: 0.8644943

 $01:00:02.634 \longrightarrow 01:00:04.948$ I'm happy to take any questions.

NOTE Confidence: 0.9340173

01:00:16.570 --> 01:00:20.450 OK. So, Doctor Gordon Dr Sophie.

NOTE Confidence: 0.8303818

 $01:00:20.450 \longrightarrow 01:00:22.520$ Thanks for those great reviews.

NOTE Confidence: 0.8303818

 $01{:}00{:}22.520 \dashrightarrow 01{:}00{:}25.425$ We do have a number of questions.

 $01:00:25.430 \longrightarrow 01:00:27.920$ All remind people who are listening.

NOTE Confidence: 0.8303818

 $01:00:27.920 \longrightarrow 01:00:29.688$ If you have questions,

NOTE Confidence: 0.8303818

 $01:00:29.688 \longrightarrow 01:00:33.090$ submit them in the Chatter Q&A section.

NOTE Confidence: 0.8303818

 $01:00:33.090 \longrightarrow 01:00:37.318$ I and. I'll start with some

NOTE Confidence: 0.8303818

 $01:00:37.318 \longrightarrow 01:00:38.806$ questions about Milo dysplasia,

NOTE Confidence: 0.8303818

 $01:00:38.810 \longrightarrow 01:00:41.098$ starting from the top.

NOTE Confidence: 0.8303818

 $01:00:41.098 \longrightarrow 01:00:43.958$ This is for Doctor Gowda.

NOTE Confidence: 0.8303818

 $01:00:43.960 \longrightarrow 01:00:46.660$ And I'll just, I'll paraphrase this,

NOTE Confidence: 0.8303818

 $01:00:46.660 \longrightarrow 01:00:49.252$ given the results of the randomized

NOTE Confidence: 0.8303818

 $01:00:49.252 \longrightarrow 01:00:51.610$ trial led by Doctor Cutler.

NOTE Confidence: 0.8303818

 $01:00:51.610 \longrightarrow 01:00:54.050$ Mild displeasure.

NOTE Confidence: 0.8303818

 $01:00:54.050 \longrightarrow 01:00:55.106$ Should we in?

NOTE Confidence: 0.8303818

 $01{:}00{:}55.106 \dashrightarrow 01{:}00{:}56.866$ This isn't naturally to do nor.

NOTE Confidence: 0.8303818

 $01:00:56.870 \longrightarrow 01:00:58.306$ Should we be considering

NOTE Confidence: 0.8303818

 $01:00:58.306 \longrightarrow 01:00:59.742$ haploidentical transplant in older

01:00:59.742 --> 01:01:01.460 high risk MD's patients low?

NOTE Confidence: 0.8303818

 $01:01:01.460 \longrightarrow 01:01:04.120$ What do you think?

NOTE Confidence: 0.8303818 01:01:04.120 --> 01:01:04.370 It's NOTE Confidence: 0.9250498

 $01:01:04.370 \longrightarrow 01:01:06.340$ a great question, I think.

NOTE Confidence: 0.9250498

01:01:06.340 --> 01:01:08.340 It was an exclusion criteria in this trial,

NOTE Confidence: 0.9250498

 $01:01:08.340 \longrightarrow 01:01:10.746$ so that's the number one point.

NOTE Confidence: 0.9250498

 $01:01:10.750 \longrightarrow 01:01:12.222$ Essentially, this pistol betas

NOTE Confidence: 0.9250498

01:01:12.222 --> 01:01:14.430 lingered on for as many years

NOTE Confidence: 0.9250498

 $01:01:14.491 \longrightarrow 01:01:16.267$ as we've all been doing this.

NOTE Confidence: 0.9250498

 $01:01:16.270 \longrightarrow 01:01:19.396$ That haploidentical outcomes similar to

NOTE Confidence: 0.9250498

 $01{:}01{:}19.396 \dashrightarrow 01{:}01{:}21.580$ match siblings and matched unrelated donors.

NOTE Confidence: 0.9250498

 $01:01:21.580 \longrightarrow 01:01:23.764$ There has never been a randomized

NOTE Confidence: 0.9250498

 $01:01:23.764 \longrightarrow 01:01:25.220$ study in this population.

NOTE Confidence: 0.9250498

 $01:01:25.220 \longrightarrow 01:01:27.355$ There are multiple registry studies

NOTE Confidence: 0.9250498

 $01:01:27.355 \longrightarrow 01:01:29.063$ that have shown feasibility's.

NOTE Confidence: 0.9250498

 $01:01:29.070 \longrightarrow 01:01:31.310$ And then also just studies that shows

01:01:31.310 --> 01:01:34.181 you kind of laid these people so you have

NOTE Confidence: 0.9250498

01:01:34.181 --> 01:01:36.847 to take all those with a pinch of salt.

NOTE Confidence: 0.9250498

 $01:01:36.850 \longrightarrow 01:01:39.020$ I would say enter specific protocol based.

NOTE Confidence: 0.9250498

01:01:39.020 --> 01:01:40.845 Certainly worth considering that the

NOTE Confidence: 0.9250498

 $01:01:40.845 \longrightarrow 01:01:42.987$ reason that prospective study that says

NOTE Confidence: 0.9250498

 $01:01:42.987 \longrightarrow 01:01:45.043$ in elderly people Apple may not be that

NOTE Confidence: 0.9250498

01:01:45.043 --> 01:01:47.110 great for email from the registry again,

NOTE Confidence: 0.9250498

 $01:01:47.110 \longrightarrow 01:01:49.460$ but there are at the same time you do the

NOTE Confidence: 0.9250498

 $01{:}01{:}49.526 \dashrightarrow 01{:}01{:}51.766$ mis matches in the registry limitations.

NOTE Confidence: 0.9250498

 $01:01:51.770 \longrightarrow 01:01:53.325$ There are equal numbers that

NOTE Confidence: 0.9250498

 $01:01:53.325 \longrightarrow 01:01:54.258$ suggest it's efficacious.

NOTE Confidence: 0.9250498

 $01:01:54.260 \longrightarrow 01:01:56.684$ So if you think there's a high risk

NOTE Confidence: 0.9250498

 $01{:}01{:}56.684 \dashrightarrow 01{:}01{:}59.297$ disease and there's no really good option.

NOTE Confidence: 0.9250498

 $01:01:59.300 \longrightarrow 01:02:00.395$ I would certainly get an

NOTE Confidence: 0.9250498

 $01:02:00.395 \longrightarrow 01:02:01.490$ Apple down and go forward.

 $01:02:02.870 \longrightarrow 01:02:05.505$ OK alright thanks Doctor Assoufia

NOTE Confidence: 0.7872994

01:02:05.505 --> 01:02:08.140 question about car T cells.

NOTE Confidence: 0.7872994

 $01:02:08.140 \longrightarrow 01:02:10.825$ Given the encouraging Zuma 12

NOTE Confidence: 0.7872994

 $01:02:10.825 \longrightarrow 01:02:14.760$ results or were car T cells child

NOTE Confidence: 0.7872994

 $01:02:14.760 \longrightarrow 01:02:17.605$ at all and frontline setting

NOTE Confidence: 0.7872994

 $01{:}02{:}17.605 --> 01{:}02{:}20.740$ for high risk lymphoma. So

NOTE Confidence: 0.8666774

 $01:02:20.740 \longrightarrow 01:02:23.225$ this is this is the first study

NOTE Confidence: 0.8666774

 $01:02:23.225 \longrightarrow 01:02:25.918$ that I know of where this is

NOTE Confidence: 0.8666774

01:02:25.918 --> 01:02:27.843 being tested in up front,

NOTE Confidence: 0.8666774

01:02:27.850 --> 01:02:29.980 in upfront lymphoma and that's why

NOTE Confidence: 0.8666774

 $01{:}02{:}29.980 \dashrightarrow 01{:}02{:}32.708$ they chose such a high disease risk.

NOTE Confidence: 0.8666774

01:02:32.710 --> 01:02:34.918 Group of patients that had double

NOTE Confidence: 0.8666774

01:02:34.918 --> 01:02:37.205 or triple hit disease or were

NOTE Confidence: 0.8666774

 $01:02:37.205 \longrightarrow 01:02:39.070$ primary refractory on PET scan.

NOTE Confidence: 0.8725645

01:02:40.830 --> 01:02:43.357 I'll follow up with my own question.

NOTE Confidence: 0.8725645

 $01:02:43.360 \longrightarrow 01:02:45.880$ Do you think this data is sufficient?

 $01:02:45.880 \longrightarrow 01:02:48.540$ We should consider this.

NOTE Confidence: 0.8725645

 $01:02:48.540 \longrightarrow 01:02:50.958$ Or this requires further study and

NOTE Confidence: 0.8725645

 $01:02:50.958 \longrightarrow 01:02:52.970$ end insurance approval, of course.

NOTE Confidence: 0.86581653

01:02:53.630 --> 01:02:56.006 Yeah, I mean, I think that

NOTE Confidence: 0.86581653

 $01:02:56.006 \longrightarrow 01:02:58.200$ the the duration is short,

NOTE Confidence: 0.86581653

 $01:02:58.200 \longrightarrow 01:02:59.856$ we need longer duration,

NOTE Confidence: 0.86581653

 $01:02:59.856 \longrightarrow 01:03:01.926$ at least beyond the year.

NOTE Confidence: 0.86581653

 $01{:}03{:}01.930 \dashrightarrow 01{:}03{:}04.010$ For these patients, you know.

NOTE Confidence: 0.86581653

 $01:03:04.010 \longrightarrow 01:03:05.060$ That being said,

NOTE Confidence: 0.86581653

 $01{:}03{:}05.060 \dashrightarrow 01{:}03{:}07.510$ we we have treated here and also

NOTE Confidence: 0.86581653

 $01{:}03{:}07.588 \dashrightarrow 01{:}03{:}09.838$ other institutions have reported that

NOTE Confidence: 0.86581653

 $01:03:09.838 \longrightarrow 01:03:13.025$ PET scan after two cycles of therapy

NOTE Confidence: 0.86581653

 $01{:}03{:}13.025 \dashrightarrow 01{:}03{:}15.599$ does not have the same prognostic

NOTE Confidence: 0.86581653

 $01:03:15.599 \longrightarrow 01:03:17.702$ significance in large cell lymphoma

NOTE Confidence: 0.86581653

01:03:17.702 --> 01:03:20.186 that it has in Hodgkin lymphoma,

 $01:03:20.190 \longrightarrow 01:03:23.638$ and that indeed we are able to cure.

NOTE Confidence: 0.86581653

 $01{:}03{:}23.640 \dashrightarrow 01{:}03{:}27.217$ Um, many of those patients when we

NOTE Confidence: 0.86581653

 $01:03:27.217 \longrightarrow 01:03:30.168$ complete six cycles of therapy so.

NOTE Confidence: 0.86581653

01:03:30.170 --> 01:03:31.802 I certainly don't think

NOTE Confidence: 0.86581653

 $01:03:31.802 \longrightarrow 01:03:33.842$ that based on these data,

NOTE Confidence: 0.86581653

01:03:33.850 --> 01:03:37.114 you know we would change standard of care.

NOTE Confidence: 0.86581653

01:03:37.120 --> 01:03:39.574 I think that this requires you

NOTE Confidence: 0.86581653

01:03:39.574 --> 01:03:42.790 know further further follow up.

NOTE Confidence: 0.86581653

 $01{:}03{:}42.790 \dashrightarrow 01{:}03{:}45.340$ Right, and I think that most importantly,

NOTE Confidence: 0.86581653

 $01:03:45.340 \longrightarrow 01:03:47.727$ we really need to see the data

NOTE Confidence: 0.86581653

 $01:03:47.727 \longrightarrow 01:03:49.340$ in relapsed refractory disease.

NOTE Confidence: 0.86581653

 $01:03:49.340 \longrightarrow 01:03:52.250$ As to how this stacks up to too high dose

NOTE Confidence: 0.86581653

 $01:03:52.326 \longrightarrow 01:03:55.170$ therapy and autologous stem cell rescue,

NOTE Confidence: 0.86581653

 $01:03:55.170 \longrightarrow 01:03:57.826$ I think if indeed there is an improvement

NOTE Confidence: 0.86581653

 $01:03:57.826 \longrightarrow 01:04:00.259$ in cure rates with that approach.

NOTE Confidence: 0.86581653

 $01:04:00.260 \longrightarrow 01:04:01.352$ For these patients,

 $01{:}04{:}01{:}352 \dashrightarrow 01{:}04{:}04{.}683$ I think that will be a stronger push to

NOTE Confidence: 0.86581653

 $01:04:04.683 \longrightarrow 01:04:07.531$ move it to frontline for high risk groups.

NOTE Confidence: 0.826792846153846 01:04:09.140 --> 01:04:10.396 Right, right?

NOTE Confidence: 0.826792846153846

01:04:10.396 --> 01:04:14.164 OK couple of questions on the

NOTE Confidence: 0.826792846153846

 $01{:}04{:}14.164 \dashrightarrow 01{:}04{:}17.889$ graft versus host disease studies.

NOTE Confidence: 0.826792846153846

01:04:17.890 --> 01:04:19.570 I from Doctor Challace,

NOTE Confidence: 0.826792846153846

 $01:04:19.570 \longrightarrow 01:04:22.650$ do we have a sense of what?

NOTE Confidence: 0.826792846153846

 $01:04:22.650 \longrightarrow 01:04:25.740$ Best alternative therapies patients received.

NOTE Confidence: 0.826792846153846

 $01:04:25.740 \longrightarrow 01:04:27.380$ Monoclonal antibodies.

NOTE Confidence: 0.826792846153846

 $01:04:27.380 \longrightarrow 01:04:32.300$ Did any receive a brute nib?

NOTE Confidence: 0.826792846153846

01:04:32.300 --> 01:04:33.620 And now it's just.

NOTE Confidence: 0.826792846153846

 $01:04:33.620 \longrightarrow 01:04:34.940$ Did anyone receive rocks?

NOTE Confidence: 0.826792846153846

 $01{:}04{:}34.940 \dashrightarrow 01{:}04{:}39.007$ Although that may refer to the crossover.

NOTE Confidence: 0.826792846153846 01:04:39.010 --> 01:04:39.412 Hello diary, NOTE Confidence: 0.826792846153846

 $01:04:39.412 \longrightarrow 01:04:41.020$ I probably also know the answer to this.

 $01:04:41.020 \longrightarrow 01:04:43.068$ I don't know if you want me to

NOTE Confidence: 0.826792846153846

 $01:04:43.068 \longrightarrow 01:04:44.099$ feel this one or.

NOTE Confidence: 0.826792846153846

01:04:44.100 --> 01:04:45.400 Yeah, sure yeah.

NOTE Confidence: 0.82679284615384601:04:45.400 --> 01:04:46.262 So yes. NOTE Confidence: 0.826792846153846

 $01:04:46.262 \longrightarrow 01:04:47.986$ It says it says.

NOTE Confidence: 0.826792846153846

 $01:04:47.990 \longrightarrow 01:04:50.270$ Why was the local investigator on

NOTE Confidence: 0.826792846153846

 $01:04:50.270 \longrightarrow 01:04:52.740$ this study so best alternative?

NOTE Confidence: 0.826792846153846

01:04:52.740 --> 01:04:55.435 Therapy was a long list of standard

NOTE Confidence: 0.826792846153846

 $01{:}04{:}55.435 \mathrel{--}{>} 01{:}04{:}57.649$ non FDA approved treatments 'cause

NOTE Confidence: 0.826792846153846

 $01:04:57.649 \longrightarrow 01:05:00.094$ there aren't any FDA approved

NOTE Confidence: 0.826792846153846

 $01{:}05{:}00.094 \dashrightarrow 01{:}05{:}02.679$ treatments for for chronic GV HD,

NOTE Confidence: 0.826792846153846

 $01:05:02.680 \longrightarrow 01:05:04.840$ but they did include ibrutinib.

NOTE Confidence: 0.826792846153846

 $01:05:04.840 \longrightarrow 01:05:06.564$ They included photo pheresis.

NOTE Confidence: 0.826792846153846

 $01:05:06.564 \longrightarrow 01:05:08.288$ Those were common ones.

NOTE Confidence: 0.826792846153846

 $01:05:08.290 \longrightarrow 01:05:10.278$ Other agents for Mycophenolate

NOTE Confidence: 0.826792846153846

 $01:05:10.278 \longrightarrow 01:05:12.266$ sirolimus occasionally and the

 $01:05:12.266 \longrightarrow 01:05:14.987$ brute name was added to this trial.

NOTE Confidence: 0.826792846153846

 $01:05:14.990 \longrightarrow 01:05:15.851$ Pretty early on,

NOTE Confidence: 0.826792846153846

 $01:05:15.851 \longrightarrow 01:05:17.860$ and so patients did receive many of

NOTE Confidence: 0.826792846153846

 $01:05:17.917 \longrightarrow 01:05:19.737$ those best alternative therapies.

NOTE Confidence: 0.7581872

 $01:05:21.860 \longrightarrow 01:05:24.380$ In comparison, and that was up to

NOTE Confidence: 0.7581872

01:05:24.380 --> 01:05:25.521 investigators choice, corollary,

NOTE Confidence: 0.7581872

01:05:25.521 --> 01:05:28.047 question, how do you recite decide

NOTE Confidence: 0.7581872

 $01{:}05{:}28.047 \dashrightarrow 01{:}05{:}29.945$ between ruxolitinib and a brute

NOTE Confidence: 0.7581872

01:05:29.945 --> 01:05:31.940 knipfer GV HD based on this phase,

NOTE Confidence: 0.7581872

 $01:05:31.940 \longrightarrow 01:05:33.380$ three data looks like.

NOTE Confidence: 0.7581872

01:05:33.380 --> 01:05:36.260 Take a stab at that. Yeah, I think

NOTE Confidence: 0.7581872

 $01:05:36.260 \longrightarrow 01:05:38.964$ we should understand that I put in the

NOTE Confidence: 0.7581872

 $01{:}05{:}38.964 \dashrightarrow 01{:}05{:}41.656$ beta was approved based on Phase 1B.

NOTE Confidence: 0.7581872

01:05:41.660 --> 01:05:43.300 Phase two study design.

NOTE Confidence: 0.7581872

 $01:05:43.300 \longrightarrow 01:05:46.100$ In another, we really didn't have many drugs.

 $01:05:46.100 \longrightarrow 01:05:47.424$ Well, certainly it's challenging.

NOTE Confidence: 0.7581872

 $01{:}05{:}47.424 \dashrightarrow 01{:}05{:}48.443$ You know, practice.

NOTE Confidence: 0.7581872

 $01{:}05{:}48.443 \dashrightarrow 01{:}05{:}51.267$ We see a lot of cases with Orange

NOTE Confidence: 0.7581872

01:05:51.267 --> 01:05:53.707 ebstein a little bit of Raskin GV HD.

NOTE Confidence: 0.7581872

 $01:05:53.710 \longrightarrow 01:05:55.370$ Those stones care of us.

NOTE Confidence: 0.7581872

 $01:05:55.370 \longrightarrow 01:05:57.025$ I'm really excited about this

NOTE Confidence: 0.7581872

01:05:57.025 --> 01:05:58.707 new drug that Katie, 025,

NOTE Confidence: 0.7581872

 $01:05:58.707 \longrightarrow 01:06:00.492$ especially for what we traditionally

NOTE Confidence: 0.7581872

 $01:06:00.492 \longrightarrow 01:06:02.319$ called the marleybone versions of GST,

NOTE Confidence: 0.7581872

01:06:02.320 --> 01:06:04.020 including highly fibrotic questions of

NOTE Confidence: 0.7581872

 $01{:}06{:}04.020 \dashrightarrow 01{:}06{:}06.619$ that and those are the ones that kill.

NOTE Confidence: 0.7581872

 $01:06:06.620 \longrightarrow 01:06:08.275$ Your patience is defining it

NOTE Confidence: 0.7581872

01:06:08.275 --> 01:06:09.271 highly immunosuppressive, right?

NOTE Confidence: 0.7581872

 $01:06:09.271 \longrightarrow 01:06:11.257$ So, coming back to her then,

NOTE Confidence: 0.7581872

 $01:06:11.260 \longrightarrow 01:06:14.005$ I think I might be tempted to use it

NOTE Confidence: 0.7581872

01:06:14.005 --> 01:06:16.874 earlier on again in a clinical trial design,

 $01:06:16.880 \longrightarrow 01:06:17.228$ because.

NOTE Confidence: 0.7581872

01:06:17.228 --> 01:06:18.620 It's not a prude,

NOTE Confidence: 0.7581872

 $01:06:18.620 \longrightarrow 01:06:20.608$ although we are waiting for the approval

NOTE Confidence: 0.7581872

01:06:20.608 --> 01:06:22.449 to come through anytime I might be

NOTE Confidence: 0.7581872

 $01:06:22.449 \longrightarrow 01:06:24.515$ tempted to try that if it's a highly

NOTE Confidence: 0.7581872

 $01:06:24.515 \longrightarrow 01:06:26.040$ fibrotic question earlier on but.

NOTE Confidence: 0.7581872

 $01:06:26.040 \longrightarrow 01:06:27.452$ Side effects of reboot.

NOTE Confidence: 0.7581872

 $01{:}06{:}27.452 \dashrightarrow 01{:}06{:}29.217$ Your name can be significant

NOTE Confidence: 0.7581872

01:06:29.217 --> 01:06:31.379 in my personal biased opinion.

NOTE Confidence: 0.7581872

 $01:06:31.380 \longrightarrow 01:06:33.207$ Set opinions with Rocks is an issue,

NOTE Confidence: 0.7581872

01:06:33.210 --> 01:06:33.672 but again,

NOTE Confidence: 0.7581872

 $01:06:33.672 \longrightarrow 01:06:35.058$ in this trial the show that

NOTE Confidence: 0.7581872

 $01{:}06{:}35.058 \dashrightarrow 01{:}06{:}36.394$ quality of life cytopenias taking

NOTE Confidence: 0.7581872

 $01:06:36.394 \longrightarrow 01:06:38.038$ all that into account rocks was

NOTE Confidence: 0.7581872

 $01:06:38.038 \longrightarrow 01:06:39.730$ way better compared to the other,

 $01:06:39.730 \longrightarrow 01:06:41.610$ so I may be tempted to use that

NOTE Confidence: 0.7581872

01:06:41.610 --> 01:06:43.230 up front and we're already doing

NOTE Confidence: 0.7581872

 $01:06:43.230 \longrightarrow 01:06:45.210$ it in some of our case this,

NOTE Confidence: 0.7581872

 $01:06:45.210 \longrightarrow 01:06:47.298$ but it's not studied in a randomized fashion.

NOTE Confidence: 0.7581872

 $01:06:47.300 \longrightarrow 01:06:48.380$ It's worth studying it.

NOTE Confidence: 0.7581872

01:06:48.380 --> 01:06:50.429 If somebody sponsors that kind of a study.

NOTE Confidence: 0.7981567

 $01:06:52.990 \longrightarrow 01:06:56.329$ So when you short answer the data support for

NOTE Confidence: 0.7981567

 $01:06:56.329 \longrightarrow 01:06:58.855$ ruxolitinib is probably a more active agent.

NOTE Confidence: 0.7981567

 $01:06:58.860 \longrightarrow 01:07:01.842$ The I'll add the ibrutinib study required

NOTE Confidence: 0.7981567

 $01:07:01.842 \longrightarrow 01:07:04.366$ inflammatory erythema in the skin or oral

NOTE Confidence: 0.7981567

 $01{:}07{:}04.366 \dashrightarrow 01{:}07{:}07.140$ GV HD is entry criteria. So as you said,

NOTE Confidence: 0.7981567

 $01:07:07.140 \longrightarrow 01:07:09.870$ it was probably a group of patients.

NOTE Confidence: 0.7981567

 $01:07:09.870 \longrightarrow 01:07:12.438$ Might be a little bit easier to treat

NOTE Confidence: 0.7981567

01:07:12.438 --> 01:07:14.280 those particular clinical scenarios,

NOTE Confidence: 0.7981567

 $01:07:14.280 \dashrightarrow 01:07:16.332$ whereas ruxolitinib seems to be a

NOTE Confidence: 0.7981567

 $01:07:16.332 \longrightarrow 01:07:18.561$ more broadly active agent and it

01:07:18.561 --> 01:07:20.149 doesn't cause atrial fibrillation,

NOTE Confidence: 0.7981567

 $01:07:20.150 \dashrightarrow 01:07:23.426$ which is an issue with the brunette.

NOTE Confidence: 0.7981567

01:07:23.430 --> 01:07:29.250 Um? OK, another Milo dysplasia question.

NOTE Confidence: 0.7981567

 $01:07:29.250 \longrightarrow 01:07:31.338$ Given the recent randomized study from

NOTE Confidence: 0.7981567

 $01:07:31.338 \longrightarrow 01:07:33.244$ MD Anderson showing no improvement

NOTE Confidence: 0.7981567

 $01:07:33.244 \longrightarrow 01:07:35.068$ in outcome with maintenance,

NOTE Confidence: 0.7981567

 $01:07:35.070 \longrightarrow 01:07:37.786$ Ivy is a sighted in versus placebo.

NOTE Confidence: 0.7981567

 $01:07:37.790 \longrightarrow 01:07:42.515$ This is post transplant in AML and MD S.

NOTE Confidence: 0.7981567

01:07:42.520 --> 01:07:45.256 Do we think or Eliza would be different?

NOTE Confidence: 0.8174205

 $01:07:48.000 \longrightarrow 01:07:49.869$ So I'm glad I'm with paying attention

NOTE Confidence: 0.8174205

 $01:07:49.869 \longrightarrow 01:07:51.799$ to MD Anderson clinical trial output

NOTE Confidence: 0.8174205

01:07:51.799 --> 01:07:54.585 very closely, and I guess he likes

NOTE Confidence: 0.8174205

 $01:07:54.585 \longrightarrow 01:07:56.650$ those results with that background.

NOTE Confidence: 0.8174205

 $01:07:56.650 \longrightarrow 01:07:58.810$ I think we should first

NOTE Confidence: 0.8174205

 $01:07:58.810 \longrightarrow 01:08:00.538$ dichotomize those two things,

 $01:08:00.540 \longrightarrow 01:08:03.390$ So what battle showed was.

NOTE Confidence: 0.8174205

 $01:08:03.390 \longrightarrow 01:08:05.070$ Every every come are getting

NOTE Confidence: 0.8174205

 $01:08:05.070 \longrightarrow 01:08:06.750$ randomized and they've only median

NOTE Confidence: 0.8174205

 $01:08:06.810 \longrightarrow 01:08:08.674$ of 4 four cycles of that was given.

NOTE Confidence: 0.8174205

 $01:08:08.680 \longrightarrow 01:08:10.150$ As for the trial right?

NOTE Confidence: 0.8174205

 $01:08:10.150 \longrightarrow 01:08:13.435$ And it was it was tested in a randomized

NOTE Confidence: 0.8174205

 $01:08:13.435 \longrightarrow 01:08:16.238$ fashion that turned out to be negative.

NOTE Confidence: 0.8174205

01:08:16.240 --> 01:08:18.725 We can argue that Ivy and oral,

NOTE Confidence: 0.8174205

 $01{:}08{:}18.730 \dashrightarrow 01{:}08{:}19.798$ despite mechanistic things,

NOTE Confidence: 0.8174205

 $01:08:19.798 \longrightarrow 01:08:21.578$ are not the same drug.

NOTE Confidence: 0.8174205

 $01{:}08{:}21.580 \dashrightarrow 01{:}08{:}24.010$ What we're trying to achieve is

NOTE Confidence: 0.8174205

01:08:24.010 --> 01:08:26.220 couple of two different things.

NOTE Confidence: 0.8174205

 $01{:}08{:}26.220 \dashrightarrow 01{:}08{:}28.068$ There's some confusion now with the

NOTE Confidence: 0.8174205

 $01:08:28.068 \longrightarrow 01:08:30.097$ CC-486 clinical trial data as to what

NOTE Confidence: 0.8174205

 $01:08:30.097 \longrightarrow 01:08:31.833$ is the right timing for the transplant,

NOTE Confidence: 0.8174205

 $01:08:31.840 \longrightarrow 01:08:33.344$ because it's very cleverly

 $01:08:33.344 \longrightarrow 01:08:35.600$ articulated by the company in terms

NOTE Confidence: 0.8174205

 $01:08:35.661 \longrightarrow 01:08:37.418$ of how this needs to be done.

NOTE Confidence: 0.8174205

 $01:08:37.420 \longrightarrow 01:08:39.415$ So we all agree CR one is

NOTE Confidence: 0.8174205

01:08:39.415 --> 01:08:40.790 a major entry point,

NOTE Confidence: 0.8174205

01:08:40.790 --> 01:08:41.705 especially for intermediate

NOTE Confidence: 0.8174205

 $01:08:41.705 \longrightarrow 01:08:42.620$ and advanced rest.

NOTE Confidence: 0.8174205

01:08:42.620 --> 01:08:44.755 How many cycles of consolidations are needed?

NOTE Confidence: 0.8174205

 $01:08:44.760 \longrightarrow 01:08:46.108$ It's an open field,

NOTE Confidence: 0.8174205

 $01:08:46.108 \longrightarrow 01:08:49.030$ unlike the hydac for the good risk groups.

NOTE Confidence: 0.8174205

 $01{:}08{:}49.030 \dashrightarrow 01{:}08{:}51.232$ So if we can create outpatient

NOTE Confidence: 0.8174205

 $01:08:51.232 \longrightarrow 01:08:52.700$ based regiments with oral

NOTE Confidence: 0.8174205

 $01:08:52.772 \longrightarrow 01:08:54.608$ set aside in equal and drug.

NOTE Confidence: 0.8174205

 $01{:}08{:}54.610 \dashrightarrow 01{:}08{:}56.356$ And the rationale that we build

NOTE Confidence: 0.8174205

 $01:08:56.356 \longrightarrow 01:08:58.399$ for the trial is the initial

NOTE Confidence: 0.8174205

 $01:08:58.399 \longrightarrow 01:09:00.019$ scandura trial from Cornell,

 $01:09:00.020 \longrightarrow 01:09:02.090$ where they show that epigenetic priming

NOTE Confidence: 0.8174205

 $01{:}09{:}02.090 \dashrightarrow 01{:}09{:}04.205$ enhances cancer test is an antigen

NOTE Confidence: 0.8174205

 $01:09:04.205 \longrightarrow 01:09:05.900$ exposure now antigen expression that

NOTE Confidence: 0.8174205

 $01:09:05.900 \longrightarrow 01:09:08.127$ then makes the T cell attack better.

NOTE Confidence: 0.8174205

 $01:09:08.130 \longrightarrow 01:09:10.426$ You generate a lot of tumor infiltrating

NOTE Confidence: 0.8174205

01:09:10.426 --> 01:09:11.850 lymphocytes with epigenetic priming,

NOTE Confidence: 0.8174205

 $01:09:11.850 \longrightarrow 01:09:13.740$ so you kind of also make the

NOTE Confidence: 0.8174205

01:09:13.740 --> 01:09:15.353 people less fragile coming into

NOTE Confidence: 0.8174205

 $01{:}09{:}15.353 \dashrightarrow 01{:}09{:}17.208$ the transparent by rather than

NOTE Confidence: 0.8174205

01:09:17.208 --> 01:09:18.950 giving hydac equivalent intensity,

NOTE Confidence: 0.8174205

 $01:09:18.950 \longrightarrow 01:09:20.302$ you make it better.

NOTE Confidence: 0.8174205

01:09:20.302 --> 01:09:20.640 Third,

NOTE Confidence: 0.8174205

 $01:09:20.640 \longrightarrow 01:09:21.920$ in the pre transplantation

NOTE Confidence: 0.8174205

01:09:21.920 --> 01:09:23.520 setting this synergy when you

NOTE Confidence: 0.8174205

 $01:09:23.520 \longrightarrow 01:09:25.088$ prime with epigenetic agents.

NOTE Confidence: 0.8174205

01:09:25.090 --> 01:09:26.450 Bracton Alcalay to yourself

 $01{:}09{:}26.450 \dashrightarrow 01{:}09{:}27.130$ and cyclophosphamide.

NOTE Confidence: 0.8174205

 $01:09:27.130 \longrightarrow 01:09:28.950$ So those are the 3 three concepts

NOTE Confidence: 0.8174205

 $01:09:28.950 \longrightarrow 01:09:31.209$ in the pre transplantation setting.

NOTE Confidence: 0.8174205

 $01:09:31.210 \longrightarrow 01:09:32.454$ The post transplantation setting.

NOTE Confidence: 0.8174205

 $01:09:32.454 \longrightarrow 01:09:33.698$ When you continue that

NOTE Confidence: 0.8174205

 $01:09:33.698 \longrightarrow 01:09:35.290$ as a maintenance again,

NOTE Confidence: 0.8174205

 $01:09:35.290 \longrightarrow 01:09:36.650$ that's the dichotomy between

NOTE Confidence: 0.8174205

 $01:09:36.650 \longrightarrow 01:09:38.350$ BI tools file and mine.

NOTE Confidence: 0.8174205

 $01:09:38.350 \longrightarrow 01:09:40.050$ Is that increase the regulatory

NOTE Confidence: 0.8174205

 $01:09:40.050 \longrightarrow 01:09:41.070$ T cell expressions,

NOTE Confidence: 0.8174205

 $01:09:41.070 \longrightarrow 01:09:42.770$ which is beneficial for GST.

NOTE Confidence: 0.8174205

 $01:09:42.770 \longrightarrow 01:09:45.474$ But there's also a lot of data that

NOTE Confidence: 0.8174205

 $01{:}09{:}45.474 \dashrightarrow 01{:}09{:}47.224$ epigenetics increases hedging idea or

NOTE Confidence: 0.8174205

 $01:09:47.224 \longrightarrow 01:09:49.252$ expression which then makes it easier

NOTE Confidence: 0.8174205

 $01:09:49.252 \longrightarrow 01:09:51.641$ for the T cell attack that makes

 $01:09:51.641 \longrightarrow 01:09:53.340$ relapse less likely because there's

NOTE Confidence: 0.8174205

 $01{:}09{:}53.340 \dashrightarrow 01{:}09{:}55.560$ an ongoing TNR GVL surveillance so.

NOTE Confidence: 0.8174205

 $01:09:55.560 \longrightarrow 01:09:57.476$ We're redefining consolidation differently.

NOTE Confidence: 0.8174205

 $01:09:57.476 \longrightarrow 01:10:01.156$ Trying to get into the space of a

NOTE Confidence: 0.8174205

 $01:10:01.156 \longrightarrow 01:10:03.021$ traditional hydac plus hydac against

NOTE Confidence: 0.8174205

01:10:03.021 --> 01:10:04.529 probably lower intensity therapy,

NOTE Confidence: 0.8174205

 $01:10:04.530 \longrightarrow 01:10:06.414$ which can be given an extended

NOTE Confidence: 0.8174205

 $01:10:06.414 \longrightarrow 01:10:09.149$ period of time at the target on

NOTE Confidence: 0.8174205

 $01{:}10{:}09.149 \dashrightarrow 01{:}10{:}10{:}556$ decreasing events downstream,

NOTE Confidence: 0.8174205

 $01:10:10.560 \longrightarrow 01:10:13.288$ either due to relapse GST so that those

NOTE Confidence: 0.8174205

 $01{:}10{:}13.288 \dashrightarrow 01{:}10{:}15.665$ are some of the subtle differences

NOTE Confidence: 0.8174205

 $01:10:15.665 \longrightarrow 01:10:18.095$ in how this can be interpreted.

NOTE Confidence: 0.7608803

 $01:10:20.090 \longrightarrow 01:10:22.278$ OK, one last question.

NOTE Confidence: 0.7608803

 $01:10:22.278 \longrightarrow 01:10:25.013$ I were there patients with

NOTE Confidence: 0.7608803

 $01:10:25.013 \longrightarrow 01:10:27.215$ bronchiolitis obliterans and the

NOTE Confidence: 0.7608803

 $01:10:27.215 \longrightarrow 01:10:30.372$ Rockstar study an important question.

01:10:30.372 --> 01:10:32.196 Alright, do you recall?

NOTE Confidence: 0.7608803

 $01:10:32.196 \longrightarrow 01:10:34.930$ It's not clear to me. I mean, I

NOTE Confidence: 0.81454706

 $01:10:34.930 \longrightarrow 01:10:36.290$ think this is abstract.

NOTE Confidence: 0.81454706

 $01:10:36.290 \longrightarrow 01:10:38.741$ I want to look at the paper

NOTE Confidence: 0.81454706

 $01:10:38.741 \longrightarrow 01:10:40.745$ myself to see what it is,

NOTE Confidence: 0.81454706

 $01:10:40.750 \longrightarrow 01:10:42.310$ but the initial dose finding

NOTE Confidence: 0.81454706

 $01:10:42.310 \longrightarrow 01:10:43.558$ study they said greater

NOTE Confidence: 0.81454706

 $01:10:43.558 \longrightarrow 01:10:45.189$ than four organ involvement.

NOTE Confidence: 0.81454706

 $01:10:45.190 \longrightarrow 01:10:47.871$ And there was a lot of multiple

NOTE Confidence: 0.81454706

01:10:47.871 --> 01:10:50.218 people at severe chronic GV HD.

NOTE Confidence: 0.81454706

 $01:10:50.220 \longrightarrow 01:10:51.755$ I'm assuming there was some

NOTE Confidence: 0.81454706

01:10:51.755 --> 01:10:52.676 representation of Bill,

NOTE Confidence: 0.81454706

 $01{:}10{:}52.680 {\:{\mbox{--}}\!>}\ 01{:}10{:}55.088$ but I want to look at the fine

NOTE Confidence: 0.81454706

01:10:55.088 --> 01:10:56.669 print before it comes out,

NOTE Confidence: 0.81454706

01:10:56.670 --> 01:10:58.296 especially for all the noise it's

01:10:58.296 --> 01:10:59.380 making saying it's antifibrotic

NOTE Confidence: 0.81454706

01:10:59.430 --> 01:11:00.350 and anti-inflammatory.

NOTE Confidence: 0.81454706

 $01:11:00.350 \longrightarrow 01:11:01.890$ That would be a breakthrough.

NOTE Confidence: 0.7963529

 $01:11:04.350 \longrightarrow 01:11:06.612$ Right, so I think we we

NOTE Confidence: 0.7963529

 $01:11:06.612 \longrightarrow 01:11:08.460$ probably need to wrap up.

NOTE Confidence: 0.7963529

01:11:08.460 --> 01:11:11.490 There's a kudos to Doctor Trophy

NOTE Confidence: 0.7963529

 $01:11:11.490 \longrightarrow 01:11:14.120$ for pronouncing the Carty names.

NOTE Confidence: 0.7963529

01:11:14.120 --> 01:11:15.444 I'm sure I was.

NOTE Confidence: 0.7963529

 $01{:}11{:}15.444 \dashrightarrow 01{:}11{:}17.672$ I was very impressed actually and

NOTE Confidence: 0.7963529

01:11:17.672 --> 01:11:21.104 thank you so much buddy else.

NOTE Confidence: 0.7963529

 $01{:}11{:}21.110 \dashrightarrow 01{:}11{:}23.742$ Can do that? Yeah yeah thank you so

NOTE Confidence: 0.7963529

01:11:23.742 --> 01:11:25.979 much Stewart for moderating such a,

NOTE Confidence: 0.7963529

 $01:11:25.980 \longrightarrow 01:11:28.068$ you know, a very lively Q&A.

NOTE Confidence: 0.7963529

 $01:11:28.070 \longrightarrow 01:11:30.116$ And thank you Doctor Sufyan doctor

NOTE Confidence: 0.7963529

01:11:30.116 --> 01:11:31.900 Gowda for such a mazing talks.

NOTE Confidence: 0.7963529

 $01:11:31.900 \longrightarrow 01:11:33.982$ I would also like to thank

 $01:11:33.982 \longrightarrow 01:11:36.070$ me go day to work very

NOTE Confidence: 0.8184527

 $01:11:36.070 \longrightarrow 01:11:38.507$ hard behind the scenes to get this

NOTE Confidence: 0.8184527

 $01:11:38.507 \longrightarrow 01:11:40.950$ series going and this is recorded as

NOTE Confidence: 0.8184527

 $01:11:40.950 \longrightarrow 01:11:42.685$ we discussed all of the

NOTE Confidence: 0.8184527

01:11:42.685 --> 01:11:44.073 recordings will be available.

NOTE Confidence: 0.8184527

01:11:44.080 --> 01:11:46.376 You can claim CME credit if you

NOTE Confidence: 0.8184527

01:11:46.376 --> 01:11:49.027 provide us some feedback about how we

NOTE Confidence: 0.8184527

 $01:11:49.027 \longrightarrow 01:11:51.415$ can improve this going forward and.

NOTE Confidence: 0.8184527

01:11:51.420 --> 01:11:53.959 Hopefully next year we will have

NOTE Confidence: 0.8184527

 $01:11:53.960 \longrightarrow 01:11:56.795$ a hybrid model of in person and

NOTE Confidence: 0.8184527

 $01{:}11{:}56.795 \dashrightarrow 01{:}11{:}59.055$ virtual component and looking forward

NOTE Confidence: 0.8184527

 $01:11:59.055 \longrightarrow 01:12:01.600$ for a great 2021 for everybody.

NOTE Confidence: 0.8184527

01:12:01.600 --> 01:12:04.138 Thank you so much and looking

NOTE Confidence: 0.8184527

01:12:04.138 --> 01:12:06.680 forward to next year post Ash.

NOTE Confidence: 0.8184527

01:12:06.680 --> 01:12:11.104 Thank you. Excellent, thank you.