WEBVTT

NOTE duration:"01:03:34"

NOTE recognizability:0.759

NOTE language:en-us

NOTE Confidence: 0.824394778571429

 $00:00:00.000 \rightarrow 00:00:02.936$ Today we're going to give an update on

NOTE Confidence: 0.824394778571429

 $00:00:02.936 \rightarrow 00:00:05.347$ cellular therapies and stem cell transplant.

NOTE Confidence: 0.815958789166667

 $00{:}00{:}08.180 \dashrightarrow 00{:}00{:}11.708$ From ash, this session will be

NOTE Confidence: 0.815958789166667

 $00:00:11.708 \rightarrow 00:00:14.937$ moderated by myself and Doctor

NOTE Confidence: 0.815958789166667

00:00:14.937 --> 00:00:19.188 Delgado and Doctor Stuart Seropian,

NOTE Confidence: 0.815958789166667

 $00{:}00{:}19.188 \dashrightarrow 00{:}00{:}21.540$ who's our director of the stem

NOTE Confidence: 0.815958789166667

 $00{:}00{:}21.540 \dashrightarrow 00{:}00{:}23.020$ Cell Transplant Program and Co.

NOTE Confidence: 0.815958789166667

00:00:23.020 --> 00:00:26.080 Director of the Cellular Therapy program,

NOTE Confidence: 0.815958789166667

 $00:00:26.080 \longrightarrow 00:00:29.720$ has also joined us and.

NOTE Confidence: 0.815958789166667

 $00{:}00{:}29.720 \dashrightarrow 00{:}00{:}31.905$ Will help moderate the session

NOTE Confidence: 0.815958789166667

 $00:00:31.905 \rightarrow 00:00:34.700$ together with low Heath and myself.

NOTE Confidence: 0.815958789166667

 $00{:}00{:}34.700 \dashrightarrow 00{:}00{:}37.470$ So we will get started.

NOTE Confidence: 0.815958789166667

 $00{:}00{:}37{.}470 \dashrightarrow 00{:}00{:}41{.}134$ The first, the first half of the talk

 $00:00:41.134 \rightarrow 00:00:45.168$ will give some updates on cortisol

NOTE Confidence: 0.815958789166667

 $00{:}00{:}45.168 \dashrightarrow 00{:}00{:}48.188$ the rapy for hematologic malignancies,

NOTE Confidence: 0.815958789166667

 $00:00:48.190 \rightarrow 00:00:50.827$ so I'm going to go ahead and get started,

NOTE Confidence: 0.815958789166667

 $00:00:50.830 \rightarrow 00:00:53.980$ so thank you again for joining everyone.

NOTE Confidence: 0.815958789166667

 $00:00:53.980 \longrightarrow 00:00:55.760$ I will probably leave the

NOTE Confidence: 0.815958789166667

 $00{:}00{:}55{.}760 \dashrightarrow 00{:}00{:}57{.}184$ questions for the end.

NOTE Confidence: 0.882645712

 $00:01:00.760 \longrightarrow 00:01:03.870$ So these are my disclosures.

NOTE Confidence: 0.875363766428572

 $00:01:05.900 \longrightarrow 00:01:09.668$ And just to to give everyone a little

NOTE Confidence: 0.875363766428572

 $00{:}01{:}09{.}668 \dashrightarrow 00{:}01{:}13{.}290$ bit of a of a background today.

NOTE Confidence: 0.79119031

 $00:01:15.540 \longrightarrow 00:01:17.500$ I'm just going to show a general

NOTE Confidence: 0.79119031

00:01:17.500 --> 00:01:18.849 schematic for car T cells,

NOTE Confidence: 0.79119031

00:01:18.850 --> 00:01:22.770 so as you know, car T cell therapy.

NOTE Confidence: 0.79119031

 $00{:}01{:}22.770 \dashrightarrow 00{:}01{:}25.546$ Has been approved in the last in the

NOTE Confidence: 0.79119031

 $00:01:25.546 \longrightarrow 00:01:28.162$ last five years to treat patients

NOTE Confidence: 0.79119031

 $00:01:28.162 \dashrightarrow 00:01:30.467$ with him to logic malignancies.

NOTE Confidence: 0.79119031

 $00:01:30.470 \longrightarrow 00:01:34.642$ The the T cells are genetically modified

- NOTE Confidence: 0.79119031
- $00{:}01{:}34.642 \dashrightarrow 00{:}01{:}38.406$ to target tumor cells and this can be

 $00{:}01{:}38{.}406 \dashrightarrow 00{:}01{:}41{.}448$ done in the absence of MHC one and two.

NOTE Confidence: 0.79119031

 $00:01:41.450 \rightarrow 00:01:44.194$ Expression on the surface of the tumor cells.

NOTE Confidence: 0.79119031

 $00:01:44.200 \rightarrow 00:01:46.910$ So there's a targeting domain.

NOTE Confidence: 0.79119031

 $00:01:46.910 \longrightarrow 00:01:48.520$ That binds to the antigen

NOTE Confidence: 0.79119031

 $00{:}01{:}48.520 \dashrightarrow 00{:}01{:}49.808$ on the cell surface.

NOTE Confidence: 0.79119031

00:01:49.810 --> 00:01:51.046 There's a linker,

NOTE Confidence: 0.79119031

 $00{:}01{:}51{.}046 \dashrightarrow 00{:}01{:}53{.}106$ and then there's a costimulatory

NOTE Confidence: 0.79119031

 $00:01:53.106 \dashrightarrow 00:01:55.530$ domain that gives this car T cells,

NOTE Confidence: 0.79119031

00:01:55.530 - 00:01:57.410 proliferative capacity,

NOTE Confidence: 0.79119031

 $00{:}01{:}57{.}410 \dashrightarrow 00{:}02{:}02{.}110$ and AT cell activation domain.

NOTE Confidence: 0.79119031

 $00{:}02{:}02{.}110 \dashrightarrow 00{:}02{:}05{.}086$ So we have currently multiple FDA

NOTE Confidence: 0.79119031

 $00:02:05.086 \dashrightarrow 00:02:08.110$ approved car T cell the rapies.

NOTE Confidence: 0.79119031

00:02:08.110 --> 00:02:11.463 It's hard to believe the majority of

NOTE Confidence: 0.79119031

 $00{:}02{:}11.463 \dashrightarrow 00{:}02{:}14.588$ them are approved in the setting of.

- $00:02:14.590 \rightarrow 00:02:16.366$ B cell lymphoma.
- NOTE Confidence: 0.79119031
- $00:02:16.366 \longrightarrow 00:02:19.918$ So we have four products currently
- NOTE Confidence: 0.79119031
- $00:02:19.918 \dashrightarrow 00:02:23.560$ axicabtagene sailu so Brexit.
- NOTE Confidence: 0.79119031
- 00:02:23.560 --> 00:02:26.675 Also counted in Merluza Lantis again coucil,
- NOTE Confidence: 0.79119031
- $00{:}02{:}26.680 \dashrightarrow 00{:}02{:}29.355$ and they're currently approved for
- NOTE Confidence: 0.79119031
- $00{:}02{:}29{.}355 \dashrightarrow 00{:}02{:}31{.}495$ patients with relapsed refractory
- NOTE Confidence: 0.79119031
- 00:02:31.495 --> 00:02:34.364 B cell lymphoma after at least
- NOTE Confidence: 0.79119031
- $00:02:34.364 \rightarrow 00:02:36.619$ two lines of systemic therapy.
- NOTE Confidence: 0.79119031
- 00:02:36.620 --> 00:02:38.645 Brecksville Cottage in was recently
- NOTE Confidence: 0.79119031
- $00{:}02{:}38.645 \dashrightarrow 00{:}02{:}40.670$ approved in patients with mantle
- NOTE Confidence: 0.79119031
- $00:02:40.734 \longrightarrow 00:02:42.840$ cell lymphoma as well as in
- NOTE Confidence: 0.79119031
- $00:02:42.840 \rightarrow 00:02:44.430$ adults with relapsed refractory B.
- NOTE Confidence: 0.79119031
- $00:02:44.430 \dashrightarrow 00:02:47.102$ Cell A allows so these are two more
- NOTE Confidence: 0.79119031
- $00{:}02{:}47.102 \dashrightarrow 00{:}02{:}49.498$ recent approvals and then in the
- NOTE Confidence: 0.79119031
- $00:02:49.498 \dashrightarrow 00:02:52.228$ multiple myeloma arena the target NOTE Confidence: 0.79119031
- $00:02:52.228 \rightarrow 00:02:57.010$ is bmet and I'm happy to say that

 $00:02:57.010 \rightarrow 00:03:00.012$ we not only have I decapped agenda

NOTE Confidence: 0.79119031

00:03:00.012 --> 00:03:02.010 cluzel approved in patients with

NOTE Confidence: 0.79119031

 $00{:}03{:}02{.}010 \dashrightarrow 00{:}03{:}04{.}390$ with failed at least four lines of

NOTE Confidence: 0.79119031

 $00:03:04.390 \dashrightarrow 00:03:06.399$ prior the rapy but very recently.

NOTE Confidence: 0.79119031

 $00{:}03{:}06{.}400 \dashrightarrow 00{:}03{:}08{.}704$ There's a new approval of Celtic

NOTE Confidence: 0.79119031

 $00{:}03{:}08{.}704 \dashrightarrow 00{:}03{:}12{.}400$ captain or the Loosle in the same

NOTE Confidence: 0.79119031

00:03:12.400 --> 00:03:14.560 refractory patient population.

NOTE Confidence: 0.79119031

 $00:03:14.560 \longrightarrow 00:03:16.737$ So this is the summary of the

NOTE Confidence: 0.79119031

 $00{:}03{:}16.737 \dashrightarrow 00{:}03{:}19.030$ efficacy after two lines of the rapy

NOTE Confidence: 0.79119031

 $00:03:19.030 \longrightarrow 00:03:21.180$ for the currently approved products.

NOTE Confidence: 0.79119031

 $00:03:21.180 \longrightarrow 00:03:22.524$ As you can see,

NOTE Confidence: 0.79119031

 $00:03:22.524 \rightarrow 00:03:24.540$ there are very high overall response

NOTE Confidence: 0.79119031

 $00{:}03{:}24.610 \dashrightarrow 00{:}03{:}26.670$ rates from the three randomized

NOTE Confidence: 0.79119031

 $00:03:26.670 \longrightarrow 00:03:27.906$ phase three trials.

NOTE Confidence: 0.79119031

 $00:03:27.910 \longrightarrow 00:03:30.785$ Complete response rates vary anywhere

 $00{:}03{:}30{.}785 \dashrightarrow 00{:}03{:}35{.}132$ between 40 to 58% and you can see that

NOTE Confidence: 0.79119031

 $00:03:35.132 \longrightarrow 00:03:38.426$ at two years about 40% of patients.

NOTE Confidence: 0.79119031

00:03:38.426 --> 00:03:41.116 There's a 40% progression free survival.

NOTE Confidence: 0.79119031

 $00:03:41.116 \longrightarrow 00:03:42.724$ Basically at two years,

NOTE Confidence: 0.79119031

 $00:03:42.730 \longrightarrow 00:03:46.720$ which is definitely not bad for.

NOTE Confidence: 0.79119031

 $00{:}03{:}46.720 \dashrightarrow 00{:}03{:}49.126$ Refractory patient population

NOTE Confidence: 0.79119031

 $00:03:49.126 \longrightarrow 00:03:52.334$ that otherwise would have.

NOTE Confidence: 0.79119031

 $00:03:52.340 \longrightarrow 00:03:56.020$ Expected very poor outcomes.

NOTE Confidence: 0.79119031

 $00{:}03{:}56{.}020 \dashrightarrow 00{:}03{:}58{.}780$ The toxicity is as you are

NOTE Confidence: 0.79119031

 $00{:}03{:}58{.}780 \dashrightarrow 00{:}04{:}01{.}110$ familiar with by now are.

NOTE Confidence: 0.79119031

00:04:01.110-->00:04:03.618 Twofold cytokine release syndrome

NOTE Confidence: 0.79119031

00:04:03.618 --> 00:04:07.900 and neurologic toxicity, which.

NOTE Confidence: 0.79119031

00:04:07.900 --> 00:04:09.979 It happens in the majority of patients,

NOTE Confidence: 0.79119031

 $00:04:09.980 \longrightarrow 00:04:10.512$ however,

NOTE Confidence: 0.79119031

 $00{:}04{:}10.512 \dashrightarrow 00{:}04{:}14.236$ grade three to four CRS and neurologic

NOTE Confidence: 0.79119031

 $00:04:14.236 \rightarrow 00:04:16.640$ toxicity fortunately are less common,

- NOTE Confidence: 0.79119031
- $00:04:16.640 \longrightarrow 00:04:18.344$ and there's some variability

 $00:04:18.344 \longrightarrow 00:04:20.900$ between the products in terms of

NOTE Confidence: 0.79119031

 $00:04:20.973 \rightarrow 00:04:23.139$ the grades and severity of CRS,

NOTE Confidence: 0.79119031

 $00:04:23.140 \longrightarrow 00:04:24.808$ and neurologic toxicity.

NOTE Confidence: 0.8164898

 $00{:}04{:}26.850 \dashrightarrow 00{:}04{:}31.760$ So what was exciting at this year's

NOTE Confidence: 0.8164898

 $00{:}04{:}31.760 \dashrightarrow 00{:}04{:}35.114$ ASH was that there have been efforts

NOTE Confidence: 0.8164898

 $00{:}04{:}35{.}114 \dashrightarrow 00{:}04{:}38{.}690$ made to move these CAR T cell

NOTE Confidence: 0.8164898

 $00:04:38.690 \longrightarrow 00:04:41.825$ the rapies further up front in the

NOTE Confidence: 0.8164898

 $00{:}04{:}41.825 \dashrightarrow 00{:}04{:}44.280$ treatment of patients with lymphoma.

NOTE Confidence: 0.8164898

 $00{:}04{:}44{.}280 \dashrightarrow 00{:}04{:}47{.}199$ And you know the question arose well.

NOTE Confidence: 0.8164898

00:04:47.200 - 00:04:49.108 Given that this type of therapy

NOTE Confidence: 0.8164898

 $00{:}04{:}49{.}108 \dashrightarrow 00{:}04{:}51{.}818$ is doing so well in the relapse

NOTE Confidence: 0.8164898

 $00{:}04{:}51{.}818$ --> $00{:}04{:}53{.}638$ refracts that refractory setting,

NOTE Confidence: 0.8164898

 $00{:}04{:}53.640 \dashrightarrow 00{:}04{:}55.705$ could it potentially replace autologous

NOTE Confidence: 0.8164898

 $00:04:55.705 \dashrightarrow 00:04:58.623$ stem cell transplant so there were three NOTE Confidence: 0.8164898

 $00:04:58.623 \rightarrow 00:05:00.993$ studies that were presented and are NOTE Confidence: 0.8164898 $00:05:00.993 \rightarrow 00:05:02.967$ currently published and those resume NOTE Confidence: 0.8164898 $00{:}05{:}02{.}967 \dashrightarrow 00{:}05{:}04{.}837$ as seven with Axicabtagene sailu. NOTE Confidence: 0.8164898 $00:05:04.840 \longrightarrow 00:05:07.618$ So Belinda with the decision Cluzel NOTE Confidence: 0.8164898 $00:05:07.618 \rightarrow 00:05:10.398$ and the transform study with Lisa NOTE Confidence: 0.8164898 $00:05:10.398 \rightarrow 00:05:12.898$ Captain Marlow so and they looked at NOTE Confidence: 0.8164898 $00{:}05{:}12.898 \dashrightarrow 00{:}05{:}15.285$ high risk diffuse large B cell lymphoma NOTE Confidence: 0.8164898 $00:05:15.285 \rightarrow 00:05:17.685$ patients that were either refractory. NOTE Confidence: 0.8164898 00:05:17.690 --> 00:05:19.010 First line treatment, NOTE Confidence: 0.8164898 $00:05:19.010 \rightarrow 00:05:21.210$ which is usually our job. NOTE Confidence: 0.8164898 $00:05:21.210 \longrightarrow 00:05:23.695$ Or that relapse early after NOTE Confidence: 0.8164898 00:05:23.695 --> 00:05:25.186 first line treatment, NOTE Confidence: 0.8164898 $00:05:25.190 \rightarrow 00:05:27.584$ and patients were randomized to either NOTE Confidence: 0.8164898 $00{:}05{:}27.584 \dashrightarrow 00{:}05{:}30.048$ cortisol the rapy or the standard of NOTE Confidence: 0.8164898 $00:05:30.048 \rightarrow 00:05:32.442$ care which is salvage therapy with NOTE Confidence: 0.8164898 $00:05:32.442 \longrightarrow 00:05:34.339$ autologous stem cell transplant.

 $00:05:37.400 \longrightarrow 00:05:41.026$ So I will start with Zooma 7.

NOTE Confidence: 0.84452435

 $00:05:41.030 \rightarrow 00:05:43.784$ Basically, this is again an autologous

NOTE Confidence: 0.84452435

00:05:43.784 --> 00:05:46.483 second generation CD19 directed car T NOTE Confidence: 0.84452435

 $00:05:46.483 \dashrightarrow 00:05:48.453$ cell therapy that's currently approved NOTE Confidence: 0.84452435

 $00{:}05{:}48{.}453 \dashrightarrow 00{:}05{:}52{.}205$ after two lines of the rapy and in the

NOTE Confidence: 0.84452435

 $00{:}05{:}52{.}205 \dashrightarrow 00{:}05{:}55{.}895$ study design is that patients had

NOTE Confidence: 0.84452435

 $00:05:55.895 \dashrightarrow 00:05:58.382$ relapsed refractory disease within 12

NOTE Confidence: 0.84452435

 $00{:}05{:}58.382 \dashrightarrow 00{:}06{:}01.190$ months of adequate first line chemo

NOTE Confidence: 0.84452435

 $00{:}06{:}01{.}268 \dashrightarrow 00{:}06{:}03{.}683$ immuno therapy and that were intended

NOTE Confidence: 0.84452435

 $00{:}06{:}03.683 \dashrightarrow 00{:}06{:}06.611$ to proceed to autologous stem cell

NOTE Confidence: 0.84452435

 $00{:}06{:}06{.}611 \dashrightarrow 00{:}06{:}09{.}158$ transplant so they were stratified

NOTE Confidence: 0.84452435

 $00{:}06{:}09{.}158 \dashrightarrow 00{:}06{:}11{.}938$ by first line treatment response.

NOTE Confidence: 0.84452435

00:06:11.940 --> 00:06:15.559 And second line age adjusted it be

NOTE Confidence: 0.84452435

00:06:15.560 --> 00:06:19.584 they were in demised access L 2 * 10

NOTE Confidence: 0.84452435

 $00:06:19.584 \rightarrow 00:06:22.124$ to the 6th chord, T cells per KG.

00:06:22.124 --> 00:06:23.828 After receiving some Lymphodepletion

NOTE Confidence: 0.84452435

00:06:23.828 --> 00:06:24.680 Kiem Lympho,

NOTE Confidence: 0.84452435

 $00:06:24.680 \rightarrow 00:06:26.604$ depleting chemotherapy and cytoxan,

NOTE Confidence: 0.84452435

 $00:06:26.604 \dashrightarrow 00:06:30.476$ or the standard of care which was two NOTE Confidence: 0.84452435

 $00:06:30.476 \rightarrow 00:06:33.194$ to three cycles of investigator selected.

NOTE Confidence: 0.84452435

 $00:06:33.200 \rightarrow 00:06:34.472$ Usually platinum based chemotherapy.

NOTE Confidence: 0.84452435

 $00{:}06{:}34.472 \dashrightarrow 00{:}06{:}36.880$ 'cause that's what we use in practice,

NOTE Confidence: 0.84452435

 $00:06:36.880 \longrightarrow 00:06:40.160$ either rice or our depth.

NOTE Confidence: 0.84452435

 $00{:}06{:}40{.}160 \dashrightarrow 00{:}06{:}43{.}490$ And patients that achieved either complete

NOTE Confidence: 0.84452435

 $00{:}06{:}43.490 \dashrightarrow 00{:}06{:}47.125$ or partial response went on to achieve

NOTE Confidence: 0.84452435

 $00{:}06{:}47.125 \dashrightarrow 00{:}06{:}49.777$ to receive a stem cell transplant.

NOTE Confidence: 0.84452435

 $00:06:49.780 \longrightarrow 00:06:52.210$ Whereas patients that did not achieve

NOTE Confidence: 0.84452435

 $00{:}06{:}52{.}210 \dashrightarrow 00{:}06{:}55{.}795$ a CR or PR were off protocol and

NOTE Confidence: 0.84452435

 $00{:}06{:}55{.}795 \dashrightarrow 00{:}06{:}59{.}275$ this is important as you'll see in a

NOTE Confidence: 0.84452435

 $00{:}06{:}59{.}275 \dashrightarrow 00{:}07{:}01{.}542$ distinction with Belinda trial this

NOTE Confidence: 0.84452435

 $00:07:01.542 \longrightarrow 00:07:05.100$ the Zuma seven study did not allow for

 $00:07:05.100 \rightarrow 00:07:08.096$ any bridging therapy prior to car T.

NOTE Confidence: 0.84452435

 $00:07:08.100 \longrightarrow 00:07:10.400$ And there was no crossover,

NOTE Confidence: 0.84452435

 $00:07:10.400 \longrightarrow 00:07:12.633$ so patients who did not respond and

NOTE Confidence: 0.84452435

 $00:07:12.633 \longrightarrow 00:07:15.227$ could not go on to transplant or

NOTE Confidence: 0.84452435

 $00{:}07{:}15.227 \dashrightarrow 00{:}07{:}18.776$ did not crossover to the Axis alarm.

NOTE Confidence: 0.84452435

 $00:07:18.780 \longrightarrow 00:07:21.676$ Some of them actually 56% did receive

NOTE Confidence: 0.84452435

 $00:07:21.676 \rightarrow 00:07:23.416$ subsequent cellular in no therapy.

NOTE Confidence: 0.84452435

 $00:07:23.420 \longrightarrow 00:07:26.535$ But that was not done on trial.

NOTE Confidence: 0.84452435

 $00:07:26.540 \longrightarrow 00:07:29.180$ So you know what happened to these patients?

NOTE Confidence: 0.84452435

00:07:29.180 --> 00:07:29.706 Well,

NOTE Confidence: 0.84452435

 $00:07:29.706 \longrightarrow 00:07:33.404$ you see that they enrolled 359 a

NOTE Confidence: 0.84452435

 $00{:}07{:}33{.}404 \dashrightarrow 00{:}07{:}35{.}000$ 180 received access.

NOTE Confidence: 0.84452435

00:07:35.000 --> 00:07:35.560 Actually,

NOTE Confidence: 0.84452435

 $00{:}07{:}35{.}560 \dashrightarrow 00{:}07{:}38{.}360$ we randomized accela 179 the

NOTE Confidence: 0.84452435

 $00:07:38.360 \longrightarrow 00:07:40.040$ standard of care,

 $00:07:40.040 \longrightarrow 00:07:41.972$ and then when you look at what

NOTE Confidence: 0.84452435

 $00:07:41.972 \longrightarrow 00:07:46.120$ happened to them out of 100 and 8178

NOTE Confidence: 0.84452435

00:07:46.120-->00:07:49.312 underwent leukapheresis 172 receiving NOTE Confidence: 0.84452435

 $00:07:49.312 \longrightarrow 00:07:52.104$ for depletion chemotherapy and 170

NOTE Confidence: 0.84452435

 $00{:}07{:}52{.}104 \dashrightarrow 00{:}07{:}53{.}880$ received access selling fusion.

NOTE Confidence: 0.84452435

 $00{:}07{:}53.880 \dashrightarrow 00{:}07{:}56.526$ So 94% of the starting patients.

NOTE Confidence: 0.84452435

 $00{:}07{:}56{.}530 \dashrightarrow 00{:}07{:}59{.}395$ Actually received access out which

NOTE Confidence: 0.84452435

00:07:59.395 - 00:08:01.687 they were randomized to,

NOTE Confidence: 0.84452435

 $00{:}08{:}01.690 \dashrightarrow 00{:}08{:}03.970$ whereas in the standard of care

NOTE Confidence: 0.84452435

 $00:08:03.970 \longrightarrow 00:08:07.760$ arm out of 179 patients.

NOTE Confidence: 0.84452435

 $00{:}08{:}07{.}760 \dashrightarrow 00{:}08{:}12{.}248$ Only about 64 of them received.

NOTE Confidence: 0.84452435

00:08:12.250 --> 00:08:14.090 Stem cell trench transplant,

NOTE Confidence: 0.84452435

 $00:08:14.090 \rightarrow 00:08:16.330$ which is 36% of patients,

NOTE Confidence: 0.84452435

 $00:08:16.330 \rightarrow 00:08:18.970$ and this actually is not uncommon

NOTE Confidence: 0.84452435

00:08:18.970 --> 00:08:21.977 in clinical practice because many

NOTE Confidence: 0.84452435

 $00:08:21.977 \longrightarrow 00:08:24.826$ of these patients end up for one

- NOTE Confidence: 0.84452435
- $00:08:24.826 \longrightarrow 00:08:26.430$ reason or another.

 $00:08:26.430 \rightarrow 00:08:29.028$ Not responding to the salvage chemotherapy,

NOTE Confidence: 0.84452435

 $00:08:29.030 \rightarrow 00:08:31.450$ or they develop organ toxicity.

NOTE Confidence: 0.84452435

 $00:08:31.450 \longrightarrow 00:08:32.978$ They may not have.

NOTE Confidence: 0.84452435

00:08:32.978 --> 00:08:35.078 By that point, their lympho depleted,

NOTE Confidence: 0.84452435

 $00:08:35.078 \rightarrow 00:08:37.750$ so they may not have fit T cells.

NOTE Confidence: 0.84452435

 $00:08:37.750 \longrightarrow 00:08:38.686$ They may not.

NOTE Confidence: 0.84452435

 $00:08:38.686 \rightarrow 00:08:40.870$ They may not have fit stem cells

NOTE Confidence: 0.84452435

 $00:08:40.941 \longrightarrow 00:08:42.908$ for us to be able to collect.

NOTE Confidence: 0.84452435

 $00:08:42.910 \rightarrow 00:08:46.870$ So a minority actually made it to transplant.

NOTE Confidence: 0.84452435

 $00:08:46.870 \longrightarrow 00:08:49.888$ So when we look at the

NOTE Confidence: 0.84452435

00:08:49.890 --> 00:08:50.942 baseline characteristics,

NOTE Confidence: 0.84452435

 $00:08:50.942 \rightarrow 00:08:53.572$ they were pretty well distributed

NOTE Confidence: 0.84452435

 $00{:}08{:}53{.}572 \dashrightarrow 00{:}08{:}55{.}150$ among the groups.

NOTE Confidence: 0.84452435

 $00:08:55.150 \longrightarrow 00:08:56.734$ As you can see,

- $00:08:56.734 \rightarrow 00:08:59.59074\%$ of patients were primary refractory.
- NOTE Confidence: 0.84452435
- $00{:}08{:}59{.}590 \dashrightarrow 00{:}09{:}02{.}116$ And then 26% of patients had
- NOTE Confidence: 0.84452435
- $00:09:02.116 \longrightarrow 00:09:04.490$ relapsed within a 12 months.
- NOTE Confidence: 0.84452435
- $00:09:04.490 \rightarrow 00:09:07.210$ There were some high grade B cell lymphomas,
- NOTE Confidence: 0.84452435
- 00:09:07.210 --> 00:09:09.350 including double and triple hit,
- NOTE Confidence: 0.84452435
- $00{:}09{:}09{.}350 \dashrightarrow 00{:}09{:}11.470$ 17% duel over X pressers,
- NOTE Confidence: 0.84452435
- $00:09:11.470 \dashrightarrow 00:09:14.530$ and Mick rearranged patients.
- NOTE Confidence: 0.84452435
- $00:09:14.530 \longrightarrow 00:09:17.509$ So when we look at the event free survival,
- NOTE Confidence: 0.84452435
- $00{:}09{:}17{.}510 \dashrightarrow 00{:}09{:}18{.}754$ which was their primary
- NOTE Confidence: 0.84452435
- $00:09:18.754 \longrightarrow 00:09:20.309$ end point for the study,
- NOTE Confidence: 0.84452435
- $00:09:20.310 \longrightarrow 00:09:22.818$ you can see that the 24
- NOTE Confidence: 0.84452435
- $00{:}09{:}22.818 \dashrightarrow 00{:}09{:}24.840$ month event free survival was
- NOTE Confidence: 0.818740913
- 00:09:24.840 --> 00:09:27.385 40.5% in the access of
- NOTE Confidence: 0.818740913
- $00:09:27.385 \longrightarrow 00:09:29.930$ ARM compared to only 16.
- NOTE Confidence: 0.818740913
- $00:09:29.930 \longrightarrow 00:09:32.240$.3% in the standard of care arm,
- NOTE Confidence: 0.818740913
- $00:09:32.240 \rightarrow 00:09:34.487$ and that was actually true when they

- NOTE Confidence: 0.818740913
- $00:09:34.487 \longrightarrow 00:09:36.650$ looked at each of the individual.

 $00{:}09{:}36.650 \dashrightarrow 00{:}09{:}39.812$ Subgroups by age response to first

NOTE Confidence: 0.818740913

 $00:09:39.812 \rightarrow 00:09:42.082$ line therapy and whether they had

NOTE Confidence: 0.818740913

00:09:42.082 --> 00:09:43.900 high grades at B cell lymphoma,

NOTE Confidence: 0.818740913

 $00:09:43.900 \longrightarrow 00:09:44.966$ including double,

NOTE Confidence: 0.818740913

 $00:09:44.966 \dashrightarrow 00:09:48.164$ triple hit or double expresser lymphoma.

NOTE Confidence: 0.818740913

 $00:09:48.170 \longrightarrow 00:09:51.194$ And when you look at the

NOTE Confidence: 0.818740913

00:09:51.194 --> 00:09:52.706 complete response rates,

NOTE Confidence: 0.818740913

 $00:09:52.710 \longrightarrow 00:09:55.694$ so overall response was 83% in

NOTE Confidence: 0.818740913

 $00{:}09{:}55{.}694 \dashrightarrow 00{:}09{:}58{.}230$ the access a larm and 50% in

NOTE Confidence: 0.818740913

 $00{:}09{:}58{.}230 \dashrightarrow 00{:}10{:}00{.}430$ standard of care and complete

NOTE Confidence: 0.818740913

00:10:00.430 --> 00:10:05.518 remission rates were 65 versus 32%.

NOTE Confidence: 0.818740913

 $00{:}10{:}05{.}520 \dashrightarrow 00{:}10{:}09{.}384$ So there is some confounding in terms of

NOTE Confidence: 0.818740913

 $00:10:09.384 \rightarrow 00:10:13.298$ looking at the overall survival benefits,

NOTE Confidence: 0.818740913

00:10:13.300 --> 00:10:15.570 because as I mentioned earlier,

 $00:10:15.570 \longrightarrow 00:10:17.652$ 56% of patients in the standard

NOTE Confidence: 0.818740913

00:10:17.652 --> 00:10:19.723 of care arm received subsequent

NOTE Confidence: 0.818740913

 $00:10:19.723 \rightarrow 00:10:22.179$ cellular immunotherapy of protocol.

NOTE Confidence: 0.818740913

 $00:10:22.180 \rightarrow 00:10:25.300$ So this is the event free survival curve,

NOTE Confidence: 0.818740913

 $00{:}10{:}25{.}300 \dashrightarrow 00{:}10{:}29{.}158$ here again showing a dramatic improvement.

NOTE Confidence: 0.818740913

 $00{:}10{:}29{.}160 \dashrightarrow 00{:}10{:}31{.}830$ Median event free survival two months

NOTE Confidence: 0.818740913

 $00:10:31.830 \longrightarrow 00:10:34.638$ versus 8.3 months in the access alarm,

NOTE Confidence: 0.818740913

 $00:10:34.640 \longrightarrow 00:10:37.020$ the hazard ratio favored accessible

NOTE Confidence: 0.818740913

 $00:10:37.020 \rightarrow 00:10:40.280$ for all of the different subgroups,

NOTE Confidence: 0.818740913

00:10:40.280 --> 00:10:45.500 including really high risk disease.

NOTE Confidence: 0.818740913

00:10:45.500 --> 00:10:45.992 Again,

NOTE Confidence: 0.818740913

 $00:10:45.992 \rightarrow 00:10:48.944$ this is reflected in the progression

NOTE Confidence: 0.818740913

 $00{:}10{:}48{.}944 \dashrightarrow 00{:}10{:}51{.}579$ free survival curves that separated

NOTE Confidence: 0.818740913

 $00{:}10{:}51{.}580 \dashrightarrow 00{:}10{:}54{.}124$ and then when you look at the median

NOTE Confidence: 0.818740913

 $00{:}10{:}54{.}124 \dashrightarrow 00{:}10{:}56{.}281$ overall survival was 35 months in

NOTE Confidence: 0.818740913

 $00{:}10{:}56.281 \dashrightarrow 00{:}10{:}59.809$ the standard of care arm and it was

- NOTE Confidence: 0.818740913
- $00{:}10{:}59{.}809 \dashrightarrow 00{:}11{:}02{.}868$ not reached in the axle arm and.
- NOTE Confidence: 0.818740913
- 00:11:02.870 --> 00:11:03.986 You know it,
- NOTE Confidence: 0.818740913
- $00:11:03.986 \rightarrow 00:11:07.220$ it's going again to be difficult to to see.
- NOTE Confidence: 0.818740913
- $00:11:07.220 \longrightarrow 00:11:10.104$ It's curbs here that in terms of
- NOTE Confidence: 0.818740913
- $00:11:10.104 \rightarrow 00:11:12.512$ overall survival that are dramatically
- NOTE Confidence: 0.818740913
- $00:11:12.512 \longrightarrow 00:11:14.700$ different from each other.
- NOTE Confidence: 0.818740913
- 00:11:14.700 --> 00:11:17.310 So again,
- NOTE Confidence: 0.818740913
- $00:11:17.310 \longrightarrow 00:11:19.638$ nearly three times more patients that
- NOTE Confidence: 0.818740913
- $00{:}11{:}19.638 \dashrightarrow 00{:}11{:}22.083$ were randomized to access L received
- NOTE Confidence: 0.818740913
- $00:11:22.083 \rightarrow 00:11:24.573$ definitive therapy versus standard of care,
- NOTE Confidence: 0.818740913
- $00:11:24.580 \rightarrow 00:11:26.794$ and there was a significant improvement
- NOTE Confidence: 0.818740913
- $00{:}11{:}26.794 \dashrightarrow 00{:}11{:}29.037$ in event free survival and response
- NOTE Confidence: 0.818740913
- $00{:}11{:}29{.}037 \dashrightarrow 00{:}11{:}31{.}137$ rate compared to standard of care.
- NOTE Confidence: 0.818740913
- 00:11:31.140 --> 00:11:33.876 So this Soma 7 May actually mark a
- NOTE Confidence: 0.818740913
- 00:11:33.876 --> 00:11:36.195 paradigm shift where you access L
- NOTE Confidence: 0.818740913

 $00{:}11{:}36{.}195 \dashrightarrow 00{:}11{:}38{.}855$ should be considered the new standard of

NOTE Confidence: 0.818740913

 $00:11:38.855 \rightarrow 00:11:41.980$ care for patients with second line relapse.

NOTE Confidence: 0.818740913

00:11:41.980 --> 00:11:45.230 Refractory large B cell lymphoma.

NOTE Confidence: 0.818740913

 $00:11:45.230 \rightarrow 00:11:47.090$ This is the transform study,

NOTE Confidence: 0.818740913

00:11:47.090 --> 00:11:49.386 so it looked at Lisa Captain Marlow,

NOTE Confidence: 0.818740913

00:11:49.390 --> 00:11:51.757 so I will not go into a lot of

NOTE Confidence: 0.818740913

00:11:51.757 --> 00:11:53.949 detail because it's very similar,

NOTE Confidence: 0.818740913

 $00:11:53.950 \longrightarrow 00:11:56.767$ but the I just want to point out that

NOTE Confidence: 0.818740913

00:11:56.767 --> 00:11:59.578 this car T cell therapy is slightly

NOTE Confidence: 0.818740913

00:11:59.578 --> 00:12:01.714 different from access L because

NOTE Confidence: 0.818740913

 $00{:}12{:}01.714 \dashrightarrow 00{:}12{:}04.402$ there's a defined composition of CD8

NOTE Confidence: 0.818740913

 $00{:}12{:}04{.}402 \dashrightarrow 00{:}12{:}08{.}210$ and CD4T cell components that are.

NOTE Confidence: 0.818740913

00:12:08.210 --> 00:12:09.232 Expanded separately,

NOTE Confidence: 0.818740913

 $00:12:09.232 \rightarrow 00:12:11.787$ and then they're administered to

NOTE Confidence: 0.818740913

 $00{:}12{:}11.787 \dashrightarrow 00{:}12{:}14.910$ the patient in equal target dosing.

NOTE Confidence: 0.818740913

 $00:12:14.910 \longrightarrow 00:12:18.534$ So when we looked at the study design,

- NOTE Confidence: 0.818740913
- 00:12:18.540 --> 00:12:20.043 it's very similar.
- NOTE Confidence: 0.818740913
- $00:12:20.043 \rightarrow 00:12:23.049$ This did allow some bridging therapy,
- NOTE Confidence: 0.818740913
- $00{:}12{:}23.050 \dashrightarrow 00{:}12{:}25.318$ but then they.
- NOTE Confidence: 0.818740913
- $00:12:25.320 \longrightarrow 00:12:29.220$ Performed a pet scan prior to
- NOTE Confidence: 0.818740913
- 00:12:29.220 --> 00:12:32.600 LYMPHODEPLETION and Light and Lisle.
- NOTE Confidence: 0.818740913
- $00{:}12{:}32{.}600 \dashrightarrow 00{:}12{:}35{.}296$ And if there was no response by 9
- NOTE Confidence: 0.818740913
- 00:12:35.296 --> 00:12:37.898 weeks or progression at anytime,
- NOTE Confidence: 0.818740913
- $00:12:37.900 \rightarrow 00:12:43.740$ a crossover to the lysis alarm was allowed.
- NOTE Confidence: 0.818740913
- $00:12:43.740 \longrightarrow 00:12:46.617$ So when you look at the event
- NOTE Confidence: 0.818740913
- $00{:}12{:}46.617 \dashrightarrow 00{:}12{:}49.044$ free survival again with a median
- NOTE Confidence: 0.818740913
- 00:12:49.044 --> 00:12:50.636 follow-up of six months,
- NOTE Confidence: 0.818740913
- $00{:}12{:}50{.}640 \dashrightarrow 00{:}12{:}53{.}005$ there was a significant improvement
- NOTE Confidence: 0.818740913
- 00:12:53.005 --> 00:12:57.606 in event free survival of 63.3%
- NOTE Confidence: 0.818740913
- $00{:}12{:}57.606 \dashrightarrow 00{:}13{:}01.428$ compared to 33.4% at six months,
- NOTE Confidence: 0.818740913
- $00{:}13{:}01{.}428 \dashrightarrow 00{:}13{:}04{.}519$ and that held continue to hold at 12
- NOTE Confidence: 0.818740913

 $00:13:04.519 \rightarrow 00:13:07.242$ months even though there was some decline.

NOTE Confidence: 0.818740913

00:13:07.250 --> 00:13:11.133 So 44.5% versus 23.7%.

NOTE Confidence: 0.818740913

00:13:11.133 --> 00:13:13.498 Now again very similar results.

NOTE Confidence: 0.818740913

 $00:13:13.500 \longrightarrow 00:13:17.329$ So what we saw in Zuma 7?

NOTE Confidence: 0.818740913

 $00{:}13{:}17{.}330 \dashrightarrow 00{:}13{:}19{.}542$ The complete response rates

NOTE Confidence: 0.818740913

 $00{:}13{:}19{.}542 \dashrightarrow 00{:}13{:}22{.}307$ in the Lisle arm were

NOTE Confidence: 0.9454830566666667

 $00{:}13{:}22{.}310 \dashrightarrow 00{:}13{:}24{.}710$ 66% versus only 39% in

NOTE Confidence: 0.9454830566666667

 $00{:}13{:}24.710 \dashrightarrow 00{:}13{:}27.220$ the standard of care arm.

NOTE Confidence: 0.87196846

00:13:29.830 --> 00:13:32.350 This is progression free survival.

NOTE Confidence: 0.87196846

 $00:13:32.350 \longrightarrow 00:13:36.316$ Again, even looking at 12 month

NOTE Confidence: 0.87196846

 $00{:}13{:}36{.}316 \dashrightarrow 00{:}13{:}40{.}580$ data that is 52% in the Lisle

NOTE Confidence: 0.87196846

 $00:13:40.580 \longrightarrow 00:13:44.014$ arm compared to 33.9% in the in.

NOTE Confidence: 0.87196846

 $00{:}13{:}44.014 \dashrightarrow 00{:}13{:}46.169$ The standard of care arm.

NOTE Confidence: 0.87196846

00:13:46.170 --> 00:13:49.224 So significant improvement in PFS median

NOTE Confidence: 0.87196846

 $00:13:49.224 \rightarrow 00:13:53.587$ PFS in the light in the Lysol CAP to gene.

NOTE Confidence: 0.87196846

 $00:13:53.590 \rightarrow 00:13:58.790$ The lysis alarm was 14.8 months.

- NOTE Confidence: 0.87196846
- $00:13:58.790 \longrightarrow 00:14:01.050$ Versus only 5.7 months in
- NOTE Confidence: 0.87196846
- $00:14:01.050 \dashrightarrow 00:14:03.310$ the standard of care arm,
- NOTE Confidence: 0.87196846
- $00:14:03.310 \longrightarrow 00:14:07.147$ which was the transplant arm and
- NOTE Confidence: 0.87196846
- $00:14:07.147 \longrightarrow 00:14:11.509$ you know this is overall survival.
- NOTE Confidence: 0.87196846
- 00:14:11.510 --> 00:14:14.546 Median overall survival was not reached
- NOTE Confidence: 0.87196846
- $00{:}14{:}14{.}546 \dashrightarrow 00{:}14{:}17{.}956$ in the Lisle arm and it was 16.4
- NOTE Confidence: 0.87196846
- $00{:}14{:}17{.}956 \dashrightarrow 00{:}14{:}20{.}658$ months in the standard of care arm.
- NOTE Confidence: 0.778544301428571
- $00:14:24.480 \rightarrow 00:14:29.240$ The third phase three study was Belinda,
- NOTE Confidence: 0.778544301428571
- $00:14:29.240 \longrightarrow 00:14:31.448$ which this is kymriah.
- NOTE Confidence: 0.778544301428571
- $00{:}14{:}31{.}448 \dashrightarrow 00{:}14{:}35{.}428$ Basically the autologous CD19 CAR T cell
- NOTE Confidence: 0.778544301428571
- $00:14:35.428 \rightarrow 00:14:38.838$ therapy and this is the study design.
- NOTE Confidence: 0.778544301428571
- $00:14:38.840 \longrightarrow 00:14:40.046$ Patients were looking
- NOTE Confidence: 0.778544301428571
- $00{:}14{:}40.046 \dashrightarrow 00{:}14{:}41.654$ for ease that screening.
- NOTE Confidence: 0.778544301428571
- 00:14:41.660 --> 00:14:44.360 They did receive optional bridging
- NOTE Confidence: 0.778544301428571
- $00:14:44.360 \rightarrow 00:14:49.200$ with a platinum based chemotherapy and.
- NOTE Confidence: 0.778544301428571

 $00{:}14{:}49{.}200 \dashrightarrow 00{:}14{:}52{.}128$ The standard of care arm received

NOTE Confidence: 0.778544301428571

00:14:52.130 --> 00:14:56.250 salvage rice or or depth

NOTE Confidence: 0.778544301428571

 $00:14:56.250 \rightarrow 00:14:58.438$ investigators investigators choice.

NOTE Confidence: 0.778544301428571

 $00:14:58.438 \rightarrow 00:15:03.280$ They then underwent a week week six pet scan,

NOTE Confidence: 0.778544301428571

 $00{:}15{:}03.280 \dashrightarrow 00{:}15{:}06.718$ and then they were they received

NOTE Confidence: 0.778544301428571

 $00:15:06.718 \longrightarrow 00:15:08.437$ either to sigend,

NOTE Confidence: 0.778544301428571

 $00{:}15{:}08{.}440 \dashrightarrow 00{:}15{:}11{.}710$ occlus al or standard of Care now the

NOTE Confidence: 0.778544301428571

 $00:15:11.710 \longrightarrow 00:15:13.685$ difference here being that patients

NOTE Confidence: 0.778544301428571

00:15:13.685 --> 00:15:16.485 who did not achieve a complete

NOTE Confidence: 0.778544301428571

 $00:15:16.485 \rightarrow 00:15:19.045$ remission actually ended up receiving.

NOTE Confidence: 0.778544301428571

00:15:19.050 --> 00:15:22.055 Multiple lines of platinum based

NOTE Confidence: 0.778544301428571

 $00:15:22.055 \rightarrow 00:15:24.340$ therapy and including a different

NOTE Confidence: 0.778544301428571

 $00:15:24.340 \longrightarrow 00:15:26.440$ platinum based therapy altogether so

NOTE Confidence: 0.778544301428571

 $00{:}15{:}26{.}440 \dashrightarrow 00{:}15{:}29{.}428$ they may have had two different two or

NOTE Confidence: 0.778544301428571

 $00:15:29.428 \rightarrow 00:15:31.449$ three different salvage regimens here.

NOTE Confidence: 0.778544301428571

 $00:15:31.450 \longrightarrow 00:15:33.490$ By the time they actually made

- NOTE Confidence: 0.778544301428571
- $00:15:33.490 \longrightarrow 00:15:37.389$ it to stem cell transplant.
- NOTE Confidence: 0.778544301428571
- $00:15:37.390 \longrightarrow 00:15:37.950$ And.
- NOTE Confidence: 0.942135833333333
- $00:15:40.290 \longrightarrow 00:15:44.454$ The fact that. They looked at this.
- NOTE Confidence: 0.942135833333333
- $00:15:44.454 \rightarrow 00:15:47.499$ They they based a lot of the UM.
- NOTE Confidence: 0.942135833333333
- $00{:}15{:}47{.}500 \dashrightarrow 00{:}15{:}52{.}529$ A lot of the criteria for non response
- NOTE Confidence: 0.942135833333333
- $00{:}15{:}52{.}529 \dashrightarrow 00{:}15{:}55{.}490$ on the Week 6 assessment actually did
- NOTE Confidence: 0.942135833333333
- $00{:}15{:}55{.}572 \dashrightarrow 00{:}15{:}58{.}628$ affect the outcomes as I will show you.
- NOTE Confidence: 0.942135833333333
- $00{:}15{:}58{.}630 \dashrightarrow 00{:}16{:}02{.}406$ So the patient characteristics
- NOTE Confidence: 0.942135833333333
- $00:16:02.406 \longrightarrow 00:16:04.358$ were relatively equally
- NOTE Confidence: 0.942135833333333
- $00{:}16{:}04.358 \dashrightarrow 00{:}16{:}06.878$ distributed between the two arms.
- NOTE Confidence: 0.942135833333333
- $00{:}16{:}06{.}880 \dashrightarrow 00{:}16{:}09{.}538$ The median time from initial diagnosis.
- NOTE Confidence: 0.942135833333333
- $00{:}16{:}09{.}540 \dashrightarrow 00{:}16{:}11{.}188$ The randomization was similar
- NOTE Confidence: 0.942135833333333
- $00:16:11.188 \longrightarrow 00:16:13.660$ about 8 months in both groups
- NOTE Confidence: 0.942135833333333
- $00{:}16{:}13.660 \dashrightarrow 00{:}16{:}15.844$ and the median time from the most
- NOTE Confidence: 0.942135833333333
- $00{:}16{:}15{.}844 \dashrightarrow 00{:}16{:}17{.}781$ recent relapse or progression to
- NOTE Confidence: 0.942135833333333

 $00:16:17.781 \longrightarrow 00:16:19.990$ randomization was about 1.4 months.

NOTE Confidence: 0.942135833333333

 $00{:}16{:}19{.}990 \dashrightarrow 00{:}16{:}22{.}408$ In the decision Lochloosa and 1.1

NOTE Confidence: 0.942135833333333

 $00:16:22.408 \longrightarrow 00:16:25.124$ months in the standard of care arm.

NOTE Confidence: 0.942135833333333

00:16:25.130 --> 00:16:28.196 So if you look now at,

NOTE Confidence: 0.942135833333333

 $00:16:28.200 \rightarrow 00:16:30.426$ you know what patients are received.

NOTE Confidence: 0.942135833333333

 $00{:}16{:}30{.}430 \dashrightarrow 00{:}16{:}32{.}854$ You can see that in the

NOTE Confidence: 0.942135833333333

00:16:32.854 --> 00:16:34.470 T sigend occlusal arm,

NOTE Confidence: 0.942135833333333

 $00:16:34.470 \longrightarrow 00:16:36.835$ almost 50% of patients received

NOTE Confidence: 0.942135833333333

 $00:16:36.835 \longrightarrow 00:16:40.460$ more than one cycle of.

NOTE Confidence: 0.942135833333333

00:16:40.460 --> 00:16:43.060 Chemotherapy prior to their lymphodepletion

NOTE Confidence: 0.942135833333333

 $00{:}16{:}43.060 \dashrightarrow 00{:}16{:}46.659$ and then in the standard of care arm,

NOTE Confidence: 0.942135833333333

00:16:46.660 --> 00:16:49.295 97% of patients received multiple

NOTE Confidence: 0.942135833333333

00:16:49.295 --> 00:16:50.876 cycles of chemotherapy,

NOTE Confidence: 0.942135833333333

 $00:16:50.880 \longrightarrow 00:16:51.840$ and, importantly,

NOTE Confidence: 0.942135833333333

 $00{:}16{:}51{.}840 \dashrightarrow 00{:}16{:}55{.}200$ the median time to the actual infusion

NOTE Confidence: 0.942135833333333

 $00:16:55.200 \longrightarrow 00:16:58.842$ of the T cells and that is agen occlusal

- NOTE Confidence: 0.942135833333333
- $00:16:58.842 \rightarrow 00:17:02.059$ arm was extremely long at 52 days and
- NOTE Confidence: 0.942135833333333
- $00{:}17{:}02.059 \dashrightarrow 00{:}17{:}05.520$ even in the United States was 41 days.
- NOTE Confidence: 0.942135833333333
- 00:17:05.520 --> 00:17:07.860 But particularly in Europe,
- NOTE Confidence: 0.942135833333333
- $00:17:07.860 \longrightarrow 00:17:10.785$ was longer at 57 days.
- NOTE Confidence: 0.942135833333333
- $00:17:10.790 \longrightarrow 00:17:12.950$ So when they looked,
- NOTE Confidence: 0.942135833333333
- 00:17:12.950 --> 00:17:13.490 surprisingly,
- NOTE Confidence: 0.942135833333333
- $00:17:13.490 \rightarrow 00:17:15.834$ when they looked at the event free survival,
- NOTE Confidence: 0.942135833333333
- $00:17:15.840 \rightarrow 00:17:17.830$ which was their primary endpoint,
- NOTE Confidence: 0.942135833333333
- $00{:}17{:}17.830 \dashrightarrow 00{:}17{:}19.794$ that was actually disappointingly
- NOTE Confidence: 0.942135833333333
- $00:17:19.794 \longrightarrow 00:17:22.740$ the same in both the tisagenlecleucel
- NOTE Confidence: 0.942135833333333
- $00:17:22.818 \rightarrow 00:17:27.070$ and standard of care arm, so.
- NOTE Confidence: 0.942135833333333
- 00:17:27.070 --> 00:17:29.268 You know why? Why did this happen?
- NOTE Confidence: 0.942135833333333
- 00:17:29.270 --> 00:17:30.034 I mean,
- NOTE Confidence: 0.942135833333333
- $00{:}17{:}30{.}034 \dashrightarrow 00{:}17{:}32{.}326$ why was this study different from
- NOTE Confidence: 0.942135833333333
- $00{:}17{:}32{.}326 \dashrightarrow 00{:}17{:}35{.}219$ the prior to when you look at the
- NOTE Confidence: 0.942135833333333

 $00:17:35.219 \longrightarrow 00:17:38.094$ Week 6 assessment that they did after

NOTE Confidence: 0.942135833333333

 $00{:}17{:}38{.}094 \dashrightarrow 00{:}17{:}39{.}938$ these patients received bridging

NOTE Confidence: 0.942135833333333

 $00:17:39.938 \rightarrow 00:17:42.469$ therapy or salvage chemotherapy,

NOTE Confidence: 0.942135833333333

 $00:17:42.470 \longrightarrow 00:17:44.654$ you can see that in that isagen

NOTE Confidence: 0.942135833333333

 $00{:}17{:}44.654 \dashrightarrow 00{:}17{:}45.278$ lochloosa ORM.

NOTE Confidence: 0.907126013333333

 $00{:}17{:}48.290 \dashrightarrow 00{:}17{:}50.990$ 26% of patients actually had

NOTE Confidence: 0.907126013333333

 $00{:}17{:}50{.}990 \dashrightarrow 00{:}17{:}53{.}150$ progressive disease compared to

NOTE Confidence: 0.907126013333333

 $00:17:53.150 \longrightarrow 00:17:55.124$ 14% in the standard of care arm,

NOTE Confidence: 0.907126013333333

 $00:17:55.130 \longrightarrow 00:17:57.445$ so they progressed before they

NOTE Confidence: 0.907126013333333

00:17:57.445 - 00:18:00.433 were able to receive the lympho

NOTE Confidence: 0.907126013333333

00:18:00.433 --> 00:18:02.789 depleting regimen and Corti.

NOTE Confidence: 0.907126013333333

 $00:18:02.790 \longrightarrow 00:18:07.295$ So they they investigators for

NOTE Confidence: 0.907126013333333

 $00:18:07.295 \longrightarrow 00:18:10.640$ the study did point that out,

NOTE Confidence: 0.907126013333333

 $00:18:10.640 \longrightarrow 00:18:12.565$ that the progressive disease at

NOTE Confidence: 0.907126013333333

00:18:12.565 --> 00:18:15.019 week six was more frequent in

NOTE Confidence: 0.907126013333333

 $00:18:15.019 \rightarrow 00:18:17.014$ patients in that isagen lochloosa

 $00{:}18{:}17.086 \dashrightarrow 00{:}18{:}21.510$ arm versus the standard of care and.

NOTE Confidence: 0.907126013333333

 $00{:}18{:}21.510 \dashrightarrow 00{:}18{:}24.186$ There were multiple meetings and and

NOTE Confidence: 0.907126013333333

 $00{:}18{:}24.186 \dashrightarrow 00{:}18{:}27.369$ experts in the field were asked about

NOTE Confidence: 0.907126013333333

 $00{:}18{:}27{.}369 \dashrightarrow 00{:}18{:}30{.}435$ why they thought that Belinda failed to

NOTE Confidence: 0.907126013333333

 $00:18:30.521 \rightarrow 00:18:33.888$ show an improvement in event free survival.

NOTE Confidence: 0.907126013333333

 $00{:}18{:}33{.}890 \dashrightarrow 00{:}18{:}36{.}270$ And there are several factors for this

NOTE Confidence: 0.907126013333333

 $00:18:36.270 \longrightarrow 00:18:38.907$ that I'm sure will guide their the

NOTE Confidence: 0.907126013333333

 $00:18:38.907 \rightarrow 00:18:41.223$ development of future trials for them.

NOTE Confidence: 0.907126013333333

 $00:18:41.230 \longrightarrow 00:18:43.300$ So the first was the long time

NOTE Confidence: 0.907126013333333

 $00:18:43.300 \longrightarrow 00:18:45.563$ to infusion with that Kymriah in

NOTE Confidence: 0.907126013333333

 $00:18:45.563 \rightarrow 00:18:49.740$ Belinda 52 days compared to 29 days

NOTE Confidence: 0.907126013333333

 $00:18:49.740 \longrightarrow 00:18:51.930$ with this card and Zuma 7.

NOTE Confidence: 0.907126013333333

00:18:51.930 --> 00:18:53.448 Abelinda allowed multiple

NOTE Confidence: 0.907126013333333

 $00:18:53.448 \longrightarrow 00:18:54.966$ lines of chemotherapy,

NOTE Confidence: 0.907126013333333

 $00:18:54.970 \longrightarrow 00:18:56.371$ as bridging therapy,

 $00{:}18{:}56{.}371 \dashrightarrow 00{:}18{:}58{.}239$ which was different from

NOTE Confidence: 0.907126013333333

 $00{:}18{:}58{.}239 \dashrightarrow 00{:}19{:}00{.}560$ Zuma 7 and transform.

NOTE Confidence: 0.907126013333333

00:19:00.560 --> 00:19:03.335 And Belinda also used lower

NOTE Confidence: 0.907126013333333

 $00:19:03.335 \rightarrow 00:19:06.110$ dosing of lympho depleting agents,

NOTE Confidence: 0.907126013333333

 $00:19:06.110 \longrightarrow 00:19:08.426$ which are important for to obtain

NOTE Confidence: 0.907126013333333

 $00:19:08.426 \rightarrow 00:19:10.458$ Disease Control in these patients

NOTE Confidence: 0.907126013333333

 $00:19:10.458 \rightarrow 00:19:12.972$ that are not as heavily pretreated

NOTE Confidence: 0.907126013333333

 $00:19:12.972 \rightarrow 00:19:15.477$ right because these patients had only

NOTE Confidence: 0.907126013333333

00:19:15.477 --> 00:19:17.829 received one prior line of the rapy.

NOTE Confidence: 0.907126013333333

00:19:17.830 --> 00:19:18.970 So in Belinda,

NOTE Confidence: 0.907126013333333

00:19:18.970 --> 00:19:21.250 Cytoxan was only 900 milligram per

NOTE Confidence: 0.907126013333333

 $00:19:21.250 \rightarrow 00:19:23.368$ meter squared over three days,

NOTE Confidence: 0.907126013333333

 $00:19:23.370 \rightarrow 00:19:26.387$ and fludarabine was 75 per meter squared,

NOTE Confidence: 0.907126013333333

 $00{:}19{:}26{.}390 \dashrightarrow 00{:}19{:}28{.}832$ whereas the other two trials had

NOTE Confidence: 0.907126013333333

 $00:19:28.832 \longrightarrow 00:19:31.198$ a higher cytoxan dose of 1500

NOTE Confidence: 0.907126013333333

00:19:31.198 --> 00:19:33.230 milligrams and 90 milligrams.

- NOTE Confidence: 0.907126013333333
- $00:19:33.230 \rightarrow 00:19:35.780$ Perimeter squared off loader being
- NOTE Confidence: 0.907126013333333
- $00:19:35.780 \longrightarrow 00:19:38.420$ over three days. There were some.
- NOTE Confidence: 0.907126013333333
- $00{:}19{:}38{.}420 \dashrightarrow 00{:}19{:}39{.}900$ There were some differences
- NOTE Confidence: 0.907126013333333
- $00:19:39.900 \longrightarrow 00:19:41.010$ in disease criteria.
- NOTE Confidence: 0.907126013333333
- 00:19:41.010 --> 00:19:42.830 So Zuma 7 for example,
- NOTE Confidence: 0.907126013333333
- 00:19:42.830 --> 00:19:45.866 enrolled only diffuse large B cell
- NOTE Confidence: 0.907126013333333
- $00:19:45.866 \rightarrow 00:19:48.032$ lymphoma patients whereas transform
- NOTE Confidence: 0.907126013333333
- $00{:}19{:}48.032 \dashrightarrow 00{:}19{:}50.600$ and Belinda allowed patients
- NOTE Confidence: 0.907126013333333
- 00:19:50.600 --> 00:19:53.168 with 3B follicular lymphoma,
- NOTE Confidence: 0.907126013333333
- $00:19:53.170 \rightarrow 00:19:56.290$ which one could argue may be less aggressive.
- NOTE Confidence: 0.907126013333333
- $00{:}19{:}56{.}290 \dashrightarrow 00{:}19{:}59{.}428$ And the Belinda Trials definition of
- NOTE Confidence: 0.907126013333333
- $00:19:59.428 \rightarrow 00:20:02.092$ event free survival actually counts
- NOTE Confidence: 0.907126013333333
- $00{:}20{:}02{.}092 \dashrightarrow 00{:}20{:}05{.}322$ failure to achieve a response at the
- NOTE Confidence: 0.907126013333333
- $00{:}20{:}05{.}322 \dashrightarrow 00{:}20{:}08{.}164$ week 12 assessment as a negative incident.
- NOTE Confidence: 0.907126013333333
- $00{:}20{:}08.170 \dashrightarrow 00{:}20{:}10.706$ But due to the long gap to treatment,
- NOTE Confidence: 0.907126013333333

00:20:10.710 --> 00:20:13.248 some patients may did not adequately

NOTE Confidence: 0.907126013333333

 $00:20:13.248 \rightarrow 00:20:15.819$ respond to kymriah at that point,

NOTE Confidence: 0.907126013333333

 $00{:}20{:}15.820 \dashrightarrow 00{:}20{:}19.388$ and they responded to kymriah after the 12

NOTE Confidence: 0.907126013333333

 $00:20:19.388 \rightarrow 00:20:23.029$ week mark without any additional therapy.

NOTE Confidence: 0.907126013333333

 $00{:}20{:}23.030 \dashrightarrow 00{:}20{:}25.400$ So several factors for White failed.

NOTE Confidence: 0.907126013333333

 $00:20:25.400 \rightarrow 00:20:27.374$ So what is Novartis going to do?

NOTE Confidence: 0.907126013333333

 $00:20:27.380 \longrightarrow 00:20:29.575$ Are they gonna pursue another

NOTE Confidence: 0.907126013333333

 $00:20:29.575 \rightarrow 00:20:31.770$ trial using the same product?

NOTE Confidence: 0.907126013333333

00:20:31.770 --> 00:20:32.656 You know,

NOTE Confidence: 0.907126013333333

00:20:32.656 - 00:20:35.757 trying to mimic the other two studies?

NOTE Confidence: 0.907126013333333

 $00:20:35.760 \longrightarrow 00:20:37.380$ They have moved away from that.

NOTE Confidence: 0.907126013333333

 $00:20:37.380 \longrightarrow 00:20:40.383$ They have moved on and what they

NOTE Confidence: 0.907126013333333

 $00:20:40.383 \longrightarrow 00:20:42.870$ actually announced was this a next

NOTE Confidence: 0.907126013333333

 $00:20:42.870 \rightarrow 00:20:44.490$ generation platform that's called

NOTE Confidence: 0.907126013333333

 $00{:}20{:}44.490 \dashrightarrow 00{:}20{:}46.894$ T Charge that aims to revolutionize

NOTE Confidence: 0.907126013333333

 $00:20:46.894 \rightarrow 00:20:49.750$ car T cell therapy and what it does

 $00:20:49.818 \rightarrow 00:20:52.268$ is that it preserves T cell stemness

NOTE Confidence: 0.907126013333333

 $00:20:52.268 \rightarrow 00:20:54.824$ the ability to self renew and mature

NOTE Confidence: 0.907126013333333

 $00{:}20{:}54{.}824 \dashrightarrow 00{:}20{:}57{.}659$ that results in a product that has

NOTE Confidence: 0.907126013333333

 $00:20:57.659 \rightarrow 00:20:59.177$ greater proliferative potential

NOTE Confidence: 0.907126013333333

 $00{:}20{:}59{.}177 \dashrightarrow 00{:}21{:}02{.}330$ and fewer exhausted T cells and.

NOTE Confidence: 0.907126013333333

 $00:21:02.330 \longrightarrow 00:21:05.430$ They already presented at Ash.

NOTE Confidence: 0.907126013333333

 $00{:}21{:}05{.}430 \dashrightarrow 00{:}21{:}08{.}986$ Now data from two first in human

NOTE Confidence: 0.907126013333333

 $00:21:08.986 \longrightarrow 00:21:10.510$ dose escalation trials.

NOTE Confidence: 0.907126013333333

 $00{:}21{:}10{.}510 \dashrightarrow 00{:}21{:}14{.}745$ So Y TB323IN lymphoma and PHE

NOTE Confidence: 0.907126013333333

 $00:21:14.745 \longrightarrow 00:21:17.093$ 885 in multiple myeloma.

NOTE Confidence: 0.907126013333333

 $00{:}21{:}17.100 \dashrightarrow 00{:}21{:}19.812$ So there were two scientific posters

NOTE Confidence: 0.907126013333333

 $00{:}21{:}19{.}812 \dashrightarrow 00{:}21{:}23{.}038$ that went along with the 1st in

NOTE Confidence: 0.907126013333333

 $00{:}21{:}23.038 \dashrightarrow 00{:}21{:}25.702$ human clinical trials and what they

NOTE Confidence: 0.907126013333333

00:21:25.702 --> 00:21:29.397 basically showed is that this T cell T

NOTE Confidence: 0.907126013333333

00:21:29.397 --> 00:21:33.370 charge manufacturing process actually.

- $00:21:33.370 \rightarrow 00:21:34.130$ Uhm?
- NOTE Confidence: 0.8136206225
- $00{:}21{:}36{.}730 \dashrightarrow 00{:}21{:}39{.}215$ Give us a product that
- NOTE Confidence: 0.8136206225
- 00:21:39.215 --> 00:21:40.706 retains the immunophenotype,
- NOTE Confidence: 0.8136206225
- $00:21:40.710 \rightarrow 00:21:43.218$ the of the input leukapheresis material,
- NOTE Confidence: 0.8136206225
- $00{:}21{:}43{.}220 \dashrightarrow 00{:}21{:}47{.}606$ where naive and T central memory
- NOTE Confidence: 0.8136206225
- $00:21:47.606 \rightarrow 00:21:51.190$ cells that are city 45 RO negative
- NOTE Confidence: 0.8136206225
- 00:21:51.190 --> 00:21:54.152 and CCR 7 positive are actually
- NOTE Confidence: 0.8136206225
- $00:21:54.152 \longrightarrow 00:21:56.807$ preserved as you see here.
- NOTE Confidence: 0.8136206225
- 00:21:56.810 --> 00:21:58.556 I don't know if you can
- NOTE Confidence: 0.8136206225
- $00:21:58.556 \rightarrow 00:22:00.529$ see this here on the right.
- NOTE Confidence: 0.8136206225
- $00{:}22{:}00{.}530 \dashrightarrow 00{:}22{:}04{.}694$ As opposed to the traditional manufacturing
- NOTE Confidence: 0.8136206225
- $00{:}22{:}04.694 \dashrightarrow 00{:}22{:}08.298$ approaches where the cells are.
- NOTE Confidence: 0.514413965
- 00:22:11.350 --> 00:22:16.620 City 45 Arrow positive CCR, seven negative.
- NOTE Confidence: 0.514413965
- $00:22:16.620 \longrightarrow 00:22:21.266$ So the the thought is that these cells
- NOTE Confidence: 0.514413965
- $00{:}22{:}21{.}266 \dashrightarrow 00{:}22{:}24{.}645$ this is the time will reduce the
- NOTE Confidence: 0.514413965
- $00:22:24.645 \rightarrow 00:22:27.795$ manufacturing time basically to less than

 $00:22:27.881 \rightarrow 00:22:30.878$ than two days because these cells are

NOTE Confidence: 0.514413965

 $00{:}22{:}30.878 \dashrightarrow 00{:}22{:}34.860$ going to be able to go into the patient

NOTE Confidence: 0.514413965

 $00:22:34.860 \rightarrow 00:22:38.220$ and expand and proliferate in vivo.

NOTE Confidence: 0.8323023

 $00:22:40.570 \longrightarrow 00:22:43.894$ So when you look again,

NOTE Confidence: 0.8323023

 $00{:}22{:}43.894 \dashrightarrow 00{:}22{:}48.520$ these are called violent plots, there is.

NOTE Confidence: 0.8323023

00:22:48.520 --> 00:22:53.835 The. Y TB323 core T cells here actually

NOTE Confidence: 0.8323023

 $00:22:53.835 \rightarrow 00:22:55.900$ showed very similar central memory.

NOTE Confidence: 0.8323023

 $00:22:55.900 \rightarrow 00:22:58.540$ T cell phenotype and stemness gene

NOTE Confidence: 0.8323023

 $00{:}22{:}58{.}540 \dashrightarrow 00{:}23{:}00{.}760$ signatures as the input material

NOTE Confidence: 0.8323023

 $00:23:00.760 \longrightarrow 00:23:05.430$ here in red compared to to the

NOTE Confidence: 0.8323023

00:23:05.430 --> 00:23:07.680 standard autologous city 19 product

NOTE Confidence: 0.8323023

 $00{:}23{:}07{.}680 \dashrightarrow 00{:}23{:}10{.}139$ where there's more of a T factor,

NOTE Confidence: 0.8323023

 $00{:}23{:}10.140 \dashrightarrow 00{:}23{:}14.310$ memory phenotype and.

NOTE Confidence: 0.8323023

 $00{:}23{:}14.310 \dashrightarrow 00{:}23{:}18.360$ The Stemness high signature is retained

NOTE Confidence: 0.8323023

00:23:18.360 - 00:23:21.374 in the the new product where TP323

 $00:23:21.374 \rightarrow 00:23:24.698$ versus low stamina signature in the

NOTE Confidence: 0.8323023

 $00{:}23{:}24.698 \dashrightarrow 00{:}23{:}26.360$ conventional autologous product,

NOTE Confidence: 0.8323023

 $00:23:26.360 \longrightarrow 00:23:29.690$ and this what this did is that it actually

NOTE Confidence: 0.8323023

 $00:23:29.690 \rightarrow 00:23:31.610$ when you they looked at a tumor model,

NOTE Confidence: 0.8323023

 $00{:}23{:}31{.}610 \dashrightarrow 00{:}23{:}33{.}895$ it showed better in vivo

NOTE Confidence: 0.8323023

 $00{:}23{:}33{.}895 \dashrightarrow 00{:}23{:}35{.}723$ and to tumor efficacy.

NOTE Confidence: 0.8323023

 $00:23:35.730 \longrightarrow 00:23:37.475$ This is a traditional manufacturing

NOTE Confidence: 0.8323023

 $00{:}23{:}37{.}475 \dashrightarrow 00{:}23{:}39{.}945$ and this is the T charge platform

NOTE Confidence: 0.8323023

 $00{:}23{:}39{.}945 \dashrightarrow 00{:}23{:}41{.}919$ where you can see that even

NOTE Confidence: 0.8323023

 $00:23:41.919 \longrightarrow 00:23:44.027$ as low overdose as .1 times.

NOTE Confidence: 0.8323023

 $00{:}23{:}44.030 \dashrightarrow 00{:}23{:}47.446$ Went to the six here shown in blue.

NOTE Confidence: 0.8323023

 $00:23:47.450 \longrightarrow 00:23:50.396$ Gives a response compared to .5.

NOTE Confidence: 0.8323023

 $00:23:50.396 \longrightarrow 00:23:53.168$ Times tends to the six in the

NOTE Confidence: 0.8323023

 $00:23:53.168 \longrightarrow 00:23:54.360$ traditional manufacturing so

NOTE Confidence: 0.8323023

 $00:23:54.360 \longrightarrow 00:23:56.316$ fewer cells are actually a car.

NOTE Confidence: 0.8323023

 $00:23:56.320 \rightarrow 00:24:00.114$ T cells are required for tumor suppression

 $00:24:00.114 \rightarrow 00:24:04.646$ and even when they looked at the expansion.

NOTE Confidence: 0.8323023

 $00:24:04.650 \longrightarrow 00:24:07.177$ The that they looked at in the

NOTE Confidence: 0.8323023

 $00:24:07.177 \longrightarrow 00:24:09.170$ blood by flow cytometry.

NOTE Confidence: 0.8323023

 $00:24:09.170 \longrightarrow 00:24:11.879$ These cells were very potent and

NOTE Confidence: 0.8323023

 $00:24:11.879 \rightarrow 00:24:14.670$ they actually had much better expansion.

NOTE Confidence: 0.8323023

 $00{:}24{:}14.670 \dashrightarrow 00{:}24{:}17.958$ So there C Max was 40 times higher

NOTE Confidence: 0.8323023

 $00{:}24{:}17.958 \dashrightarrow 00{:}24{:}21.756$ and AUC in the 1st 21 days was 33

NOTE Confidence: 0.8323023

 $00{:}24{:}21.756 \dashrightarrow 00{:}24{:}24.830$ times higher for Y TB323 as compared

NOTE Confidence: 0.8323023

 $00{:}24{:}24{.}830 \dashrightarrow 00{:}24{:}26{.}670$ to their traditional manufacturing.

NOTE Confidence: 0.8323023

 $00:24:26.670 \longrightarrow 00:24:29.630$ So this is what they used in the

NOTE Confidence: 0.8323023

 $00:24:29.630 \longrightarrow 00:24:32.858$ first in human study in patients with

NOTE Confidence: 0.8323023

 $00{:}24{:}32.858 \dashrightarrow 00{:}24{:}35.198$ relapsed diffuse, large B cell lymphoma.

NOTE Confidence: 0.8323023

 $00{:}24{:}35{.}198 \dashrightarrow 00{:}24{:}37{.}690$ And they saw some very encouraging data.

NOTE Confidence: 0.8323023

 $00:24:37.690 \longrightarrow 00:24:40.336$ They had two dose levels and

NOTE Confidence: 0.8323023

 $00{:}24{:}40{.}336 \dashrightarrow 00{:}24{:}43{.}166$ they treated about 20 patients.

- $00:24:43.170 \longrightarrow 00:24:45.930$ 15 patients who received this
- NOTE Confidence: 0.8323023
- $00:24:45.930 \longrightarrow 00:24:48.490$ product at those level 2.
- NOTE Confidence: 0.8323023
- $00:24:48.490 \longrightarrow 00:24:50.650$ They had a very high complete
- NOTE Confidence: 0.8323023
- $00{:}24{:}50{.}650 \dashrightarrow 00{:}24{:}54{.}594$ response rate of 73%. And they didn't.
- NOTE Confidence: 0.8323023
- $00:24:54.594 \longrightarrow 00:24:55.310$ Importantly.
- NOTE Confidence: 0.8323023
- $00{:}24{:}55{.}310 \dashrightarrow 00{:}24{:}58{.}402$ Also they didn't see any safety
- NOTE Confidence: 0.8323023
- $00{:}24{:}58{.}402 \dashrightarrow 00{:}25{:}01{.}474$ signals beyond what was known and
- NOTE Confidence: 0.8323023
- $00:25:01.474 \rightarrow 00:25:05.794$ expected with the with the kymriah.
- NOTE Confidence: 0.8323023
- $00{:}25{:}05{.}794 \dashrightarrow 00{:}25{:}07{.}650$ So so.
- NOTE Confidence: 0.8323023
- $00{:}25{:}07{.}650 \dashrightarrow 00{:}25{:}10{.}364$ I think that all of the future studies
- NOTE Confidence: 0.8323023
- 00:25:10.364 --> 00:25:12.513 that we're going to see coming out
- NOTE Confidence: 0.8323023
- $00{:}25{:}12.513 \dashrightarrow 00{:}25{:}14.601$ of Novartis will be utilizing this
- NOTE Confidence: 0.8323023
- $00{:}25{:}14.601 \dashrightarrow 00{:}25{:}17.026$ platform and at some point they will
- NOTE Confidence: 0.8323023
- $00{:}25{:}17.026 \dashrightarrow 00{:}25{:}18.976$ probably compare this to the standard
- NOTE Confidence: 0.8323023
- $00{:}25{:}18.976 \dashrightarrow 00{:}25{:}21.595$ of care which is autologous stem cell
- NOTE Confidence: 0.8323023
- $00:25:21.595 \rightarrow 00:25:24.010$ transplant and this eventually I think,
- NOTE Confidence: 0.8323023
- 00:25:24.010 --> 00:25:25.615 will replace kymriah.

00:25:25.615 --> 00:25:28.825 So just to shift gears quickly

NOTE Confidence: 0.8323023

00:25:28.825 --> 00:25:30.969 towards multiple myeloma,

NOTE Confidence: 0.8323023

 $00:25:30.970 \longrightarrow 00:25:32.152$ as you know,

NOTE Confidence: 0.8323023

 $00:25:32.152 \rightarrow 00:25:34.516$ bmet is highly expressed and malignant.

NOTE Confidence: 0.8323023

 $00{:}25{:}34{.}520 \dashrightarrow 00{:}25{:}37{.}030$ Plasma cells and multiple myeloma,

NOTE Confidence: 0.8323023

 $00:25:37.030 \rightarrow 00:25:40.066$ and then higher concentrations of soluble

NOTE Confidence: 0.8323023

00:25:40.066 --> 00:25:43.239 BCMA are associated with poor outcomes,

NOTE Confidence: 0.8323023

 $00{:}25{:}43{.}240 \dashrightarrow 00{:}25{:}46{.}126$ and that's why this presented a

NOTE Confidence: 0.8323023

 $00:25:46.126 \longrightarrow 00:25:48.830$ very rational target for the rapy.

NOTE Confidence: 0.8323023

 $00{:}25{:}48{.}830 \dashrightarrow 00{:}25{:}51{.}146$ There's a lot of competition in

NOTE Confidence: 0.8323023

 $00{:}25{:}51{.}146 \dashrightarrow 00{:}25{:}53{.}425$ terms of antibody drug conjugates

NOTE Confidence: 0.8323023

 $00:25:53.425 \longrightarrow 00:25:55.408$ and bispecific antibodies,

NOTE Confidence: 0.8323023

 $00{:}25{:}55{.}410 \dashrightarrow 00{:}25{:}58{.}090$ but in terms of car T cell the rapies.

NOTE Confidence: 0.8323023

 $00{:}25{:}58.090 \dashrightarrow 00{:}25{:}59.410$ The advantages that hopefully

 $00:25:59.410 \longrightarrow 00:26:01.390$ it's a one and done deal.

NOTE Confidence: 0.8323023

 $00{:}26{:}01{.}390 \dashrightarrow 00{:}26{:}03{.}703$ If you have a good product and you don't

NOTE Confidence: 0.8323023

 $00{:}26{:}03.703 \dashrightarrow 00{:}26{:}05.968$ have to continuously infuse antibodies.

NOTE Confidence: 0.8323023

 $00:26:05.970 \longrightarrow 00:26:08.556$ So currently either captured in blue

NOTE Confidence: 0.8323023

 $00{:}26{:}08.556 \dashrightarrow 00{:}26{:}11.689$ so and Celtic after Geno Deluso are

NOTE Confidence: 0.8323023

 $00{:}26{:}11.689 \dashrightarrow 00{:}26{:}14.353$ both approved in patients who've had

NOTE Confidence: 0.8323023

 $00{:}26{:}14.360 \dashrightarrow 00{:}26{:}18.434$ four lines of the rapy exposures to

NOTE Confidence: 0.8323023

 $00:26:18.434 \rightarrow 00:26:20.471$ immunomodulatory agent proteasome

NOTE Confidence: 0.8323023

 $00{:}26{:}20{.}471 \dashrightarrow 00{:}26{:}23{.}970$ inhibitors and also anti CD 38

NOTE Confidence: 0.8323023

 $00{:}26{:}23.970 \dashrightarrow 00{:}26{:}26.150$ monoclonal antibody like daratum umab.

NOTE Confidence: 0.8323023

 $00{:}26{:}26{.}150 \dashrightarrow 00{:}26{:}28{.}150$ So.

NOTE Confidence: 0.8323023

00:26:28.150 --> 00:26:30.950 This is the phase one two data

NOTE Confidence: 0.8323023

00:26:30.950 --> 00:26:32.150 with BCM a

NOTE Confidence: 0.784530236470588

 $00{:}26{:}32.249 \dashrightarrow 00{:}26{:}36.246$ directed CAR T cells in multiple myeloma.

NOTE Confidence: 0.784530236470588

 $00{:}26{:}36{.}250 \dashrightarrow 00{:}26{:}39{.}426$ So BB 2121 was the first product approved.

NOTE Confidence: 0.784530236470588

 $00:26:39.430 \rightarrow 00:26:44.270$ You see it has a 73% overall response rate,

- NOTE Confidence: 0.784530236470588
- $00:26:44.270 \longrightarrow 00:26:47.510$ 31% complete response rate in a
- NOTE Confidence: 0.784530236470588
- $00{:}26{:}47{.}510 \dashrightarrow 00{:}26{:}49{.}670$ heavily pretreated patient population.
- NOTE Confidence: 0.784530236470588
- 00:26:49.670 --> 00:26:50.650 However, disappointingly,
- NOTE Confidence: 0.784530236470588
- $00:26:50.650 \longrightarrow 00:26:52.610$ the median progression free
- NOTE Confidence: 0.784530236470588
- $00:26:52.610 \longrightarrow 00:26:55.470$ survival was only about a year,
- NOTE Confidence: 0.784530236470588
- $00{:}26{:}55{.}470 \dashrightarrow 00{:}26{:}58{.}620$ and so people realize very early that.
- NOTE Confidence: 0.784530236470588
- $00:26:58.620 \rightarrow 00:27:01.190$ Uhm? Something else that needed
- NOTE Confidence: 0.784530236470588
- $00{:}27{:}01{.}190 \dashrightarrow 00{:}27{:}03{.}497$ to be done and that we need to
- NOTE Confidence: 0.784530236470588
- $00{:}27{:}03.497 \dashrightarrow 00{:}27{:}05.534$ improve upon upon this product.
- NOTE Confidence: 0.784530236470588
- 00:27:05.534 --> 00:27:09.667 So Elk, RB 38 M is a car construct
- NOTE Confidence: 0.784530236470588
- 00:27:09.667 --> 00:27:12.205 that actually has CV targeting
- NOTE Confidence: 0.784530236470588
- $00:27:12.205 \longrightarrow 00:27:15.433$ 2 bfme epitopes instead of 1.
- NOTE Confidence: 0.784530236470588
- $00:27:15.440 \longrightarrow 00:27:19.184$ So it targets both VH1 and VH two,
- NOTE Confidence: 0.784530236470588
- 00:27:19.190 $\operatorname{-->}$ 00:27:21.710 and when they looked at the data,
- NOTE Confidence: 0.784530236470588
- $00:27:21.710 \longrightarrow 00:27:24.413$ the overall response rate was 100%
- NOTE Confidence: 0.784530236470588

 $00:27:24.413 \rightarrow 00:27:27.262$ with complete response rate of 76%.

NOTE Confidence: 0.784530236470588

 $00{:}27{:}27{.}262 \dashrightarrow 00{:}27{:}30{.}454$ And there's also another product where.

NOTE Confidence: 0.784530236470588

 $00:27:30.460 \longrightarrow 00:27:32.624$ Which is fully humanized,

NOTE Confidence: 0.784530236470588

 $00:27:32.624 \rightarrow 00:27:35.329$ and that's enriched for early

NOTE Confidence: 0.784530236470588

00:27:35.329 --> 00:27:36.840 memory phenotype,

NOTE Confidence: 0.784530236470588

 $00{:}27{:}36{.}840 \dashrightarrow 00{:}27{:}38{.}772$ so this kind of kills two

NOTE Confidence: 0.784530236470588

 $00:27:38.772 \longrightarrow 00:27:40.060$ birds with one stone.

NOTE Confidence: 0.784530236470588

 $00:27:40.060 \rightarrow 00:27:42.660$ The cells hopefully persist longer,

NOTE Confidence: 0.784530236470588

 $00{:}27{:}42.660 \dashrightarrow 00{:}27{:}45.820$ but because of their memory,

NOTE Confidence: 0.784530236470588

 $00:27:45.820 \longrightarrow 00:27:49.200$ early memory phenotype, but.

NOTE Confidence: 0.784530236470588

00:27:49.200 --> 00:27:49.964 Also,

NOTE Confidence: 0.784530236470588

 $00:27:49.964 \rightarrow 00:27:53.020$ and being fully humanized,

NOTE Confidence: 0.784530236470588

 $00{:}27{:}53.020 \dashrightarrow 00{:}27{:}56.562$ there is less development of of antibodies

NOTE Confidence: 0.784530236470588

 $00{:}27{:}56{.}562 \dashrightarrow 00{:}27{:}59{.}574$ that result in destruction of these.

NOTE Confidence: 0.784530236470588

00:27:59.580 --> 00:28:03.171 Court T cells soak artitude one was

NOTE Confidence: 0.784530236470588

00:28:03.171 --> 00:28:06.370 a phase 1B2 study of Celtic catagen

 $00:28:06.370 \longrightarrow 00:28:09.260$ all deluso and they presented at ash

NOTE Confidence: 0.784530236470588

 $00:28:09.260 \longrightarrow 00:28:12.568$ their two year update and this is

NOTE Confidence: 0.784530236470588

 $00:28:12.568 \rightarrow 00:28:15.940$ very similar in terms of leukapheresis

NOTE Confidence: 0.784530236470588

 $00:28:15.940 \longrightarrow 00:28:17.230$ lymphodepletion with fludarabine

NOTE Confidence: 0.784530236470588

 $00:28:17.230 \longrightarrow 00:28:20.608$ cytoxan and then they had the soul to sell.

NOTE Confidence: 0.784530236470588

 $00:28:20.610 \rightarrow 00:28:24.143$ Infusion the baseline characteristics.

NOTE Confidence: 0.784530236470588

00:28:24.143 --> 00:28:27.674 Just important to note that 87% of

NOTE Confidence: 0.784530236470588

 $00:28:27.674 \rightarrow 00:28:30.234$ patients were triple class refractory

NOTE Confidence: 0.784530236470588

 $00{:}28{:}30{.}234 \dashrightarrow 00{:}28{:}33{.}132$ and 42% were pentad drug refractory so

NOTE Confidence: 0.784530236470588

 $00:28:33.132 \rightarrow 00:28:35.430$ very heavily pretreated and resistant.

NOTE Confidence: 0.784530236470588

 $00:28:35.430 \longrightarrow 00:28:36.598$ Patient population.

NOTE Confidence: 0.784530236470588

 $00:28:36.598 \longrightarrow 00:28:40.102$ When you look at their overall

NOTE Confidence: 0.784530236470588

 $00{:}28{:}40{.}102 \dashrightarrow 00{:}28{:}41{.}270$ response rates.

NOTE Confidence: 0.784530236470588

00:28:41.270 --> 00:28:45.846 I mean dramatic 97.9% and when you

NOTE Confidence: 0.784530236470588

 $00{:}28{:}45.846 \dashrightarrow 00{:}28{:}48.766$ look at stringent complete response

 $00:28:48.766 \rightarrow 00:28:51.262$ extremely high 82.5% the median

NOTE Confidence: 0.784530236470588

00:28:51.262 --> 00:28:54.166 time to first response was quick

NOTE Confidence: 0.784530236470588

 $00{:}28{:}54{.}166 \dashrightarrow 00{:}28{:}57{.}546$ a month and median time to CR or

NOTE Confidence: 0.784530236470588

 $00:28:57.546 \longrightarrow 00:28:59.929$ better with two point 9 months.

NOTE Confidence: 0.784530236470588

 $00{:}28{:}59{.}930 \dashrightarrow 00{:}29{:}02{.}355$ The percentage of patients that

NOTE Confidence: 0.784530236470588

 $00{:}29{:}02{.}355 \dashrightarrow 00{:}29{:}04{.}295$ are remaining progression free

NOTE Confidence: 0.784530236470588

 $00:29:04.295 \longrightarrow 00:29:06.272$ at two years with 60.5%.

NOTE Confidence: 0.784530236470588

 $00{:}29{:}06{.}272 \dashrightarrow 00{:}29{:}08{.}806$ So that was better than what we

NOTE Confidence: 0.784530236470588

 $00:29:08.806 \rightarrow 00:29:11.192$ saw with the with Ida Captain Jean.

NOTE Confidence: 0.784530236470588

 $00{:}29{:}11{.}192 \dashrightarrow 00{:}29{:}14{.}164$ Then you can see that this is important

NOTE Confidence: 0.784530236470588

 $00:29:14.164 \rightarrow 00:29:16.774$ because basically for two years these

NOTE Confidence: 0.784530236470588

 $00{:}29{:}16.774 \dashrightarrow 00{:}29{:}19.646$ patients did not get any other the rapies.

NOTE Confidence: 0.784530236470588

 $00:29:19.650 \longrightarrow 00:29:21.845$ Which is you know important

NOTE Confidence: 0.784530236470588

 $00:29:21.845 \longrightarrow 00:29:24.570$ in terms of quality of life?

NOTE Confidence: 0.784530236470588

 $00{:}29{:}24.570 \dashrightarrow 00{:}29{:}27.080$ And preservation of organ function.

NOTE Confidence: 0.784530236470588

 $00:29:27.080 \rightarrow 00:29:30.203$ So when we look at PFS and overall survival,

- NOTE Confidence: 0.784530236470588
- $00{:}29{:}30{.}210 \dashrightarrow 00{:}29{:}36{.}580$ the two year PFS was a 71% median PFS
- NOTE Confidence: 0.784530236470588
- $00{:}29{:}36{.}580 \dashrightarrow 00{:}29{:}40{.}680$ and not reached compared to $60{.}5\%.$
- NOTE Confidence: 0.17822057
- $00:29:42.890 \rightarrow 00:29:43.540$ Uhm?
- NOTE Confidence: 0.89654931
- $00:29:46.420 \rightarrow 00:29:51.968$ Here in blue for patients who the all
- NOTE Confidence: 0.89654931
- $00{:}29{:}51{.}968 \dashrightarrow 00{:}29{:}54{.}542$ comers compared to patients who achieve
- NOTE Confidence: 0.89654931
- $00:29:54.542 \rightarrow 00:29:56.924$ stringent CR that did significantly
- NOTE Confidence: 0.89654931
- $00:29:56.924 \rightarrow 00:29:59.339$ better in terms of progression.
- NOTE Confidence: 0.89654931
- $00:29:59.340 \longrightarrow 00:30:02.000$ Free survival at two years.
- NOTE Confidence: 0.89654931
- $00:30:02.000 \dashrightarrow 00:30:05.213$ So, so that's what denoted here in blue and.
- NOTE Confidence: 0.89654931
- $00:30:05.220 \rightarrow 00:30:07.386$ And as expected, the stringent CR
- NOTE Confidence: 0.89654931
- $00:30:07.386 \longrightarrow 00:30:09.440$ patients would have better outcomes.
- NOTE Confidence: 0.89654931
- 00:30:09.440 --> 00:30:12.128 And if you look at progression free and
- NOTE Confidence: 0.89654931
- $00:30:12.128 \dashrightarrow 00:30:14.060$ overall survival by MRD status again,
- NOTE Confidence: 0.89654931
- $00{:}30{:}14.060 \dashrightarrow 00{:}30{:}15.522$ significantly better.
- NOTE Confidence: 0.89654931
- $00:30:15.522 \dashrightarrow 00:30:21.460$ In patients who were MRD negative.
- NOTE Confidence: 0.89654931

 $00:30:21.460 \longrightarrow 00:30:24.925$ And MRD negativity negative patients

NOTE Confidence: 0.89654931

 $00{:}30{:}24.925 \dashrightarrow 00{:}30{:}27.697$ actually maintain their progression

NOTE Confidence: 0.89654931

00:30:27.697 --> 00:30:30.740 free survival beyond the year.

NOTE Confidence: 0.89654931

 $00{:}30{:}30{.}740 \dashrightarrow 00{:}30{:}35{.}225$ So I'm going to switch gears

NOTE Confidence: 0.89654931

 $00{:}30{:}35{.}225 \dashrightarrow 00{:}30{:}38{.}200$ now finally to a LL briefly.

NOTE Confidence: 0.89654931

00:30:38.200 --> 00:30:39.246 But importantly,

NOTE Confidence: 0.89654931

 $00:30:39.246 \longrightarrow 00:30:42.907$ we now do not have just the

NOTE Confidence: 0.89654931

00:30:42.907 -> 00:30:43.876 tisagenlecleucel approval

NOTE Confidence: 0.89654931

 $00{:}30{:}43.876 \dashrightarrow 00{:}30{:}46.700$ for a LL up to 25 years old.

NOTE Confidence: 0.89654931

 $00:30:46.700 \dashrightarrow 00:30:49.156$ We also have Rex Cottage in Auto Lusso,

NOTE Confidence: 0.89654931

 $00:30:49.160 \longrightarrow 00:30:50.772$ recently approved in adults

NOTE Confidence: 0.89654931

 $00:30:50.772 \dashrightarrow 00:30:52.787$ with relapsed refractory B cell

NOTE Confidence: 0.71652823375

00:30:54.820 --> 00:30:57.704 LALLLA much anticipated approval.

NOTE Confidence: 0.71652823375

 $00{:}30{:}57{.}704 \dashrightarrow 00{:}31{:}00{.}588$ So Ileana was in.

NOTE Confidence: 0.71652823375

 $00{:}31{:}00{.}590 \dashrightarrow 00{:}31{:}03{.}025$ Children and young adults are

NOTE Confidence: 0.71652823375

 $00:31:03.025 \rightarrow 00:31:04.973$ showing a significant improvement

- NOTE Confidence: 0.71652823375
- $00{:}31{:}04{.}973 \dashrightarrow 00{:}31{:}07{.}912$ in event free and overall survival
- NOTE Confidence: 0.71652823375
- $00:31:07.912 \longrightarrow 00:31:09.812$ with this agenda Clouseau.
- NOTE Confidence: 0.71652823375
- 00:31:09.820 --> 00:31:11.708 In this patient population,
- NOTE Confidence: 0.71652823375
- 00:31:11.708 --> 00:31:14.068 including patients who did not
- NOTE Confidence: 0.71652823375
- $00{:}31{:}14.068 \dashrightarrow 00{:}31{:}16.908$ go onto to receive an allogeneic
- NOTE Confidence: 0.71652823375
- $00:31:16.908 \longrightarrow 00:31:19.193$ stem cell transplant and this
- NOTE Confidence: 0.71652823375
- 00:31:19.271 -> 00:31:21.683 is zooma 3 with Brexit captain
- NOTE Confidence: 0.71652823375
- $00:31:21.683 \rightarrow 00:31:24.700$ Jean with that showed 70.9% CR.
- NOTE Confidence: 0.71652823375
- 00:31:24.700 --> 00:31:28.900 Or CR with incomplete hematologic response.
- NOTE Confidence: 0.71652823375
- $00:31:28.900 \longrightarrow 00:31:31.475$ Pretty high in adults with
- NOTE Confidence: 0.71652823375
- 00:31:31.475 --> 00:31:33.020 relapsed refractory LL,
- NOTE Confidence: 0.71652823375
- $00{:}31{:}33{.}020 \dashrightarrow 00{:}31{:}34{.}975$ so this has already previously
- NOTE Confidence: 0.71652823375
- $00{:}31{:}34{.}975 \dashrightarrow 00{:}31{:}35{.}757$ been published.
- NOTE Confidence: 0.71652823375
- $00{:}31{:}35{.}760 \dashrightarrow 00{:}31{:}38{.}868$ But to point out what was interesting
- NOTE Confidence: 0.71652823375
- $00{:}31{:}38{.}868 \dashrightarrow 00{:}31{:}42{.}648$ at ASH is that patients are relapsing
- NOTE Confidence: 0.71652823375

 $00:31:42.648 \rightarrow 00:31:46.584$ mainly because they're losing CD 19

NOTE Confidence: 0.71652823375

 $00:31:46.584 \rightarrow 00:31:49.954$ and so a lot of effort has gone into

NOTE Confidence: 0.71652823375

 $00:31:49.954 \dashrightarrow 00:31:52.120$ finding ways to mitigate that risk.

NOTE Confidence: 0.71652823375

 $00:31:52.120 \longrightarrow 00:31:55.602$ So either by giving dual cars like City 1920.

NOTE Confidence: 0.71652823375

 $00{:}31{:}55{.}602 \dashrightarrow 00{:}31{:}58{.}498$ Two giving off the shelf CAR products or

NOTE Confidence: 0.71652823375

 $00:31:58.498 \dashrightarrow 00:32:01.323$ by re infusing CAR T cells in patients NOTE Confidence: 0.71652823375

 $00:32:01.323 \rightarrow 00:32:04.350$ who may be at high risk of free labs.

NOTE Confidence: 0.71652823375

 $00{:}32{:}04{.}350 \dashrightarrow 00{:}32{:}08{.}688$ And so this was a study from CHOP at

NOTE Confidence: 0.71652823375

 $00{:}32{:}08.688$ --> $00{:}32{:}11.420$ Upenn in children and young adults

NOTE Confidence: 0.71652823375

 $00:32:11.420 \longrightarrow 00:32:14.318$ with relapsed refractory LL and they

NOTE Confidence: 0.71652823375

 $00{:}32{:}14{.}318 \dashrightarrow 00{:}32{:}16{.}598$ basically followed patients from.

NOTE Confidence: 0.71652823375

 $00:32:16.600 \longrightarrow 00:32:18.136$ The time of their first scene,

NOTE Confidence: 0.71652823375

00:32:18.140 --> 00:32:21.290 19 Carty and if they had,

NOTE Confidence: 0.71652823375

 $00:32:21.290 \longrightarrow 00:32:23.060$ if they were minimal residual disease,

NOTE Confidence: 0.71652823375

 $00:32:23.060 \longrightarrow 00:32:24.612$ positive if they relapsed,

NOTE Confidence: 0.71652823375

 $00:32:24.612 \rightarrow 00:32:28.157$ or if they saw that they had early B

 $00{:}32{:}28.157 \dashrightarrow 00{:}32{:}30.955$ cell recovery and or city 19 hematogen's

NOTE Confidence: 0.71652823375

00:32:30.955 --> 00:32:34.021 in the bone marrow they basically re

NOTE Confidence: 0.71652823375

 $00:32:34.021 \rightarrow 00:32:36.493$ infuse them with the autologous CAR.

NOTE Confidence: 0.71652823375

 $00:32:36.493 \dashrightarrow 00:32:38.599$ T cell products within six months

NOTE Confidence: 0.71652823375

00:32:38.599 --> 00:32:41.035 of their initial treatment and

NOTE Confidence: 0.71652823375

00:32:41.035 - 00:32:45.060 you can see that in patients who.

NOTE Confidence: 0.71652823375

 $00:32:45.060 \rightarrow 00:32:49.239$ Were reinfused because of him at Agones.

NOTE Confidence: 0.71652823375

 $00:32:49.240 \longrightarrow 00:32:52.152$ Actually the majority of them 76%

NOTE Confidence: 0.71652823375

 $00{:}32{:}52{.}152 \dashrightarrow 00{:}32{:}56{.}180$ achieved a complete remission and also

NOTE Confidence: 0.71652823375

 $00:32:56.180 \rightarrow 00:32:59.974$ patients who had early B cell recovery

NOTE Confidence: 0.71652823375

 $00:32:59.974 \dashrightarrow 00:33:02.470$ but did not have measurable disease.

NOTE Confidence: 0.71652823375

 $00{:}33{:}02{.}470 \dashrightarrow 00{:}33{:}06{.}262$ A good proportion of them achieved CR without

NOTE Confidence: 0.71652823375

 $00:33:06.262 \rightarrow 00:33:08.560$ needing consolidation with a transplant.

NOTE Confidence: 0.71652823375

00:33:08.560 --> 00:33:09.049 However,

NOTE Confidence: 0.71652823375

 $00:33:09.049 \dashrightarrow 00:33:11.983$ patients who were reinfused for non

 $00:33:11.983 \rightarrow 00:33:15.007$ response actually all of them pretty much.

NOTE Confidence: 0.71652823375

 $00:33:15.010 \rightarrow 00:33:18.466$ Did not respond to the car T product,

NOTE Confidence: 0.71652823375

 $00:33:18.470 \longrightarrow 00:33:21.595$ so the clinical implications

NOTE Confidence: 0.71652823375

 $00:33:21.595 \longrightarrow 00:33:24.085$ for this are that cortisol re

NOTE Confidence: 0.71652823375

 $00:33:24.085 \longrightarrow 00:33:25.847$ infusions can prolong be sold.

NOTE Confidence: 0.71652823375

00:33:25.850 --> 00:33:28.664 A plasia in a subset of patients

NOTE Confidence: 0.71652823375

 $00{:}33{:}28.664 \dashrightarrow 00{:}33{:}30.986$ with short car persistence and

NOTE Confidence: 0.71652823375

 $00:33:30.986 \rightarrow 00:33:34.064$ this can reduce risk of relapse.

NOTE Confidence: 0.71652823375

00:33:34.070 --> 00:33:35.780 Rain fusions can induce remission

NOTE Confidence: 0.71652823375

 $00:33:35.780 \longrightarrow 00:33:37.490$ in patients with prior relapse,

NOTE Confidence: 0.71652823375

 $00:33:37.490 \rightarrow 00:33:40.286$ but the remissions have limited durability,

NOTE Confidence: 0.71652823375

 $00:33:40.290 \longrightarrow 00:33:42.922$ and really it does not make sense to

NOTE Confidence: 0.71652823375

 $00:33:42.922 \rightarrow 00:33:44.687$ reinfuse patients who were refractory

NOTE Confidence: 0.71652823375

 $00{:}33{:}44.687 \dashrightarrow 00{:}33{:}46.422$ the first time around because

NOTE Confidence: 0.71652823375

 $00:33:46.422 \rightarrow 00:33:48.649$ none of them actually responded.

NOTE Confidence: 0.71652823375

 $00:33:48.650 \rightarrow 00:33:51.135$ So this is just the class effects

- NOTE Confidence: 0.71652823375
- $00:33:51.135 \longrightarrow 00:33:53.040$ of the immune responses,
- NOTE Confidence: 0.71652823375
- 00:33:53.040 --> 00:33:54.736 CRS, and neurologic toxicity.
- NOTE Confidence: 0.71652823375
- $00:33:54.736 \rightarrow 00:33:57.870$ You see that they're very variable
- NOTE Confidence: 0.71652823375
- $00{:}33{:}57.870 \dashrightarrow 00{:}34{:}00.730$ amongst the products in terms of
- NOTE Confidence: 0.71652823375
- 00:34:00.730 --> 00:34:02.930 both CRS and neurologic toxicity,
- NOTE Confidence: 0.71652823375
- $00{:}34{:}02{.}930 \dashrightarrow 00{:}34{:}04{.}565$ and so then.
- NOTE Confidence: 0.71652823375
- $00:34:04.565 \rightarrow 00:34:08.124$ The the less disease burden patients have.
- NOTE Confidence: 0.71652823375
- $00:34:08.124 \longrightarrow 00:34:12.029$ At the time of treatment at the better,
- NOTE Confidence: 0.71652823375
- $00:34:12.030 \rightarrow 00:34:15.117$ the outcomes and and the less toxicity.
- NOTE Confidence: 0.71652823375
- $00:34:15.120 \longrightarrow 00:34:16.765$ And this is this is a lesson
- NOTE Confidence: 0.71652823375
- $00:34:16.765 \longrightarrow 00:34:17.470$ that we've learned.
- NOTE Confidence: 0.71652823375
- $00{:}34{:}17{.}470 \dashrightarrow 00{:}34{:}20{.}557$ So the studies now are moving to
- NOTE Confidence: 0.71652823375
- $00:34:20.560 \rightarrow 00:34:22.140$ incorporate these therapies earlier
- NOTE Confidence: 0.71652823375
- $00{:}34{:}22.140 \dashrightarrow 00{:}34{:}24.967$ in the disease course or to debulk
- NOTE Confidence: 0.71652823375
- 00:34:24.967 > 00:34:26.912 the patients before we actually
- NOTE Confidence: 0.71652823375

 $00:34:26.912 \longrightarrow 00:34:28.468$ give them the products.

NOTE Confidence: 0.71652823375

 $00{:}34{:}28{.}470 \dashrightarrow 00{:}34{:}31{.}406$ And and I think that's all I have.

NOTE Confidence: 0.71652823375

00:34:31.410 --> 00:34:33.831 So what I'm going to do is I'm going

NOTE Confidence: 0.71652823375

 $00:34:33.831 \longrightarrow 00:34:36.177$ to pass it over to to low heath.

NOTE Confidence: 0.96360756625

 $00{:}34{:}36{.}180 \dashrightarrow 00{:}34{:}38{.}084$ And then we'll do questions at the end.

NOTE Confidence: 0.742589505625

 $00:34:57.610 \longrightarrow 00:34:58.801$ Good afternoon everyone.

NOTE Confidence: 0.742589505625

00:34:58.801 --> 00:35:01.183 Anika I thank you for that

NOTE Confidence: 0.742589505625

 $00:35:01.183 \longrightarrow 00:35:02.737$ beautiful presentation that

NOTE Confidence: 0.742589505625

 $00{:}35{:}02{.}737 \dashrightarrow 00{:}35{:}04{.}909$ really indeed is transformative.

NOTE Confidence: 0.742589505625

 $00{:}35{:}04{.}910 \dashrightarrow 00{:}35{:}07{.}046$ Yeah, these are the people who led the

NOTE Confidence: 0.742589505625

 $00:35:07.046 \dashrightarrow 00:35:09.050$ studies that I'm going to be presenting.

NOTE Confidence: 0.742589505625

 $00{:}35{:}09{.}050 \dashrightarrow 00{:}35{:}10{.}527$ Most of them have said this slides.

NOTE Confidence: 0.742589505625

 $00:35:10.530 \longrightarrow 00:35:13.038$ I'm grateful for that.

NOTE Confidence: 0.742589505625

 $00:35:13.040 \rightarrow 00:35:15.422$ Objectives are DOC today would be

NOTE Confidence: 0.742589505625

 $00:35:15.422 \rightarrow 00:35:17.325$ to mainly look into the therapeutic

NOTE Confidence: 0.742589505625

 $00:35:17.325 \dashrightarrow 00:35:18.830$ avenues in which allogeneic stem

 $00:35:18.877 \rightarrow 00:35:20.242$ cell transplant has been making

NOTE Confidence: 0.742589505625

 $00:35:20.242 \rightarrow 00:35:22.250$ progress in order to reduce some of

NOTE Confidence: 0.742589505625

 $00:35:22.250 \rightarrow 00:35:23.735$ the complications associated with it,

NOTE Confidence: 0.742589505625

 $00:35:23.740 \longrightarrow 00:35:25.963$ which ultimately results in a better

NOTE Confidence: 0.742589505625

 $00:35:25.963 \rightarrow 00:35:28.364$ curative promise on the quality of life.

NOTE Confidence: 0.742589505625

 $00{:}35{:}28{.}370 \dashrightarrow 00{:}35{:}30{.}714$ I'm going to present a trial wherein we're

NOTE Confidence: 0.742589505625

 $00:35:30.714 \dashrightarrow 00:35:33.818$ going to use pre and post transplant.

NOTE Confidence: 0.742589505625

 $00:35:33.818 \dashrightarrow 00:35:36.826$ Uh, and I'll present some data from

NOTE Confidence: 0.742589505625

 $00{:}35{:}36{.}826 \dashrightarrow 00{:}35{:}39{.}340$ University of Minnesota that looked into.

NOTE Confidence: 0.742589505625

00:35:39.340 --> 00:35:40.848 One Cody Anaconda troping.

NOTE Confidence: 0.742589505625

 $00:35:40.848 \rightarrow 00:35:42.733$ In addition to standard immunosuppression,

NOTE Confidence: 0.742589505625

 $00{:}35{:}42.740 \dashrightarrow 00{:}35{:}44.950$ for patients with a cute GVHD,

NOTE Confidence: 0.742589505625

 $00{:}35{:}44{.}950 \dashrightarrow 00{:}35{:}48{.}806$ also present 2 two phase two trials looking

NOTE Confidence: 0.742589505625

 $00{:}35{:}48.806 \dashrightarrow 00{:}35{:}52.870$ a chronic DVT targeting different pathways.

NOTE Confidence: 0.742589505625

 $00:35:52.870 \dashrightarrow 00:35:55.190$ This this was a trial that was like that MGS.

00:35:55.190 -> 00:35:56.834 There was a multi site study

NOTE Confidence: 0.742589505625

00:35:56.834 --> 00:35:58.270 led by Doctor Hobson team.

NOTE Confidence: 0.742589505625

 $00:35:58.270 \longrightarrow 00:36:00.272$ Basically the study is looking to use

NOTE Confidence: 0.742589505625

 $00{:}36{:}00{.}272 \dashrightarrow 00{:}36{:}02{.}029$ of ruxolitinib which is a Jack any body

NOTE Confidence: 0.742589505625

 $00:36:02.030 \longrightarrow 00:36:04.319$ prior to during and after stem cell

NOTE Confidence: 0.742589505625

 $00{:}36{:}04{.}319 \dashrightarrow 00{:}36{:}05{.}718$ transplantation for patients with

NOTE Confidence: 0.742589505625

00:36:05.718 --> 00:36:07.548 primary or secondary modified process.

NOTE Confidence: 0.742589505625

00:36:07.550 - 00:36:09.062 So for those of you who manage my life,

NOTE Confidence: 0.742589505625

00:36:09.070 --> 00:36:09.594 I process.

NOTE Confidence: 0.742589505625

 $00:36:09.594 \rightarrow 00:36:11.166$ This is a very common slide.

NOTE Confidence: 0.742589505625

 $00{:}36{:}11{.}170 \dashrightarrow 00{:}36{:}13{.}010$ The disease can be classified

NOTE Confidence: 0.742589505625

 $00:36:13.010 \dashrightarrow 00:36:14.482$ into five different categories.

NOTE Confidence: 0.742589505625

 $00:36:14.490 \longrightarrow 00:36:16.596$ Things on the left here usually

NOTE Confidence: 0.742589505625

00:36:16.596 --> 00:36:17.649 get managed conservatively,

NOTE Confidence: 0.742589505625

 $00{:}36{:}17.650 \dashrightarrow 00{:}36{:}19.775$ or using cytokines and things

NOTE Confidence: 0.742589505625

 $00:36:19.775 \rightarrow 00:36:21.050$ symptomatic splenomegaly patients.

- NOTE Confidence: 0.742589505625
- 00:36:21.050 --> 00:36:21.875 We use ruxolitinib,
- NOTE Confidence: 0.742589505625
- 00:36:21.875 --> 00:36:23.250 and more recently the strike
- NOTE Confidence: 0.742589505625
- $00{:}36{:}23.250 \dashrightarrow 00{:}36{:}24.290$ has been approved.
- NOTE Confidence: 0.742589505625
- $00{:}36{:}24{.}290 \dashrightarrow 00{:}36{:}26{.}610$ Once they start coming intermediate
- NOTE Confidence: 0.742589505625
- $00{:}36{:}26{.}610 \dashrightarrow 00{:}36{:}29{.}104$ risk or have bad gene signatures
- NOTE Confidence: 0.742589505625
- $00:36:29.104 \rightarrow 00:36:30.689$ or higher very high risk.
- NOTE Confidence: 0.742589505625
- 00:36:30.690 --> 00:36:30.954 OK,
- NOTE Confidence: 0.742589505625
- $00:36:30.954 \longrightarrow 00:36:32.538$ those are the people if they're
- NOTE Confidence: 0.742589505625
- $00:36:32.538 \longrightarrow 00:36:33.330$ eligible for transplant,
- NOTE Confidence: 0.742589505625
- $00:36:33.330 \longrightarrow 00:36:35.646$ they'll be considered for stem cell
- NOTE Confidence: 0.742589505625
- $00{:}36{:}35{.}646 \dashrightarrow 00{:}36{:}37{.}190$ transplantation of clinical trials.
- NOTE Confidence: 0.742589505625
- $00{:}36{:}37{.}190 \dashrightarrow 00{:}36{:}38{.}606$ This is just a slide that
- NOTE Confidence: 0.742589505625
- $00:36:38.606 \rightarrow 00:36:40.250$ shows that for the groups here,
- NOTE Confidence: 0.742589505625
- $00:36:40.250 \longrightarrow 00:36:41.630$ starting from grey, yellow,
- NOTE Confidence: 0.742589505625
- $00:36:41.630 \dashrightarrow 00:36:43.630$ and blue median, overall survival is less.
- NOTE Confidence: 0.742589505625

 $00:36:43.630 \longrightarrow 00:36:45.070$ Those are the people that are

NOTE Confidence: 0.742589505625

 $00:36:45.123 \rightarrow 00:36:46.695$ normally considered for a stem cell.

NOTE Confidence: 0.742589505625

00:36:46.700 --> 00:36:49.380 Transplantation based on clinical scenarios.

NOTE Confidence: 0.742589505625

 $00:36:49.380 \rightarrow 00:36:52.133$ So why is it that stem cell transplantation,

NOTE Confidence: 0.742589505625

00:36:52.133 --> 00:36:53.246 although being curative,

NOTE Confidence: 0.742589505625

 $00:36:53.250 \dashrightarrow 00:36:55.700$ has been a little bit of a problem for us?

NOTE Confidence: 0.742589505625

00:36:55.700 --> 00:36:55.936 Well,

NOTE Confidence: 0.742589505625

 $00:36:55.936 \longrightarrow 00:36:57.116$ most of these patients have

NOTE Confidence: 0.742589505625

00:36:57.116 --> 00:36:58.128 a ***** fibrotic condition.

NOTE Confidence: 0.742589505625

 $00{:}36{:}58{.}128 \dashrightarrow 00{:}37{:}00{.}011$ Have you know Mega League and patients

NOTE Confidence: 0.742589505625

 $00{:}37{:}00{.}011 \dashrightarrow 00{:}37{:}02{.}053$ who come in with splenomegaly at the

NOTE Confidence: 0.742589505625

 $00:37:02.053 \rightarrow 00:37:03.201$ time of transplantation generally

NOTE Confidence: 0.742589505625

 $00:37:03.245 \longrightarrow 00:37:05.040$ tend to do poorly compared to others.

NOTE Confidence: 0.742589505625

 $00{:}37{:}05{.}040 \dashrightarrow 00{:}37{:}07{.}080$ You can consider options to take

NOTE Confidence: 0.742589505625

 $00:37:07.139 \longrightarrow 00:37:08.579$ over spleen do variation,

NOTE Confidence: 0.742589505625

 $00:37:08.580 \longrightarrow 00:37:09.820$ surgery and things like that,

- NOTE Confidence: 0.742589505625
- 00:37:09.820 --> 00:37:12.095 but it has its own infectious risk,
- NOTE Confidence: 0.742589505625
- 00:37:12.100 --> 00:37:13.836 robotic risk which ultimately
- NOTE Confidence: 0.742589505625
- $00{:}37{:}13.836 \dashrightarrow 00{:}37{:}16.006$ decreases the promise of transplant.
- NOTE Confidence: 0.742589505625
- 00:37:16.010 --> 00:37:16.700 In addition,
- NOTE Confidence: 0.742589505625
- 00:37:16.700 --> 00:37:18.770 we've seen people have poor graft
- NOTE Confidence: 0.742589505625
- $00:37:18.770 \longrightarrow 00:37:20.017$ function graph failure rates
- NOTE Confidence: 0.742589505625
- $00:37:20.017 \longrightarrow 00:37:21.267$ can be up to 15%.
- NOTE Confidence: 0.742589505625
- $00:37:21.270 \longrightarrow 00:37:23.370$ That all adds up to the non
- NOTE Confidence: 0.742589505625
- $00{:}37{:}23.370 \dashrightarrow 00{:}37{:}24.462$ relapse mortality and there
- NOTE Confidence: 0.742589505625
- $00:37:24.462 \longrightarrow 00:37:25.446$ are some transwitch reports.
- NOTE Confidence: 0.742589505625
- 00:37:25.450 --> 00:37:27.165 Pretty high rates of GVHD and on
- NOTE Confidence: 0.742589505625
- $00{:}37{:}27.165 \dashrightarrow 00{:}37{:}28.954$ the left mortality for my life I
- NOTE Confidence: 0.742589505625
- $00:37:28.954 \rightarrow 00:37:30.209$ process compared to other people.
- NOTE Confidence: 0.742589505625
- $00:37:30.210 \dashrightarrow 00:37:31.704$ The real question is if regulating
- NOTE Confidence: 0.742589505625
- $00:37:31.704 \longrightarrow 00:37:33.503$ even the rest of the drugs which
- NOTE Confidence: 0.742589505625

00:37:33.503 - > 00:37:34.997 are now making foray into the

NOTE Confidence: 0.742589505625

00:37:34.997 --> 00:37:36.327 field of my life I process,

NOTE Confidence: 0.742589505625

 $00{:}37{:}36{.}330 \dashrightarrow 00{:}37{:}37{.}530$ is it possible to continue

NOTE Confidence: 0.742589505625

 $00:37:37.530 \rightarrow 00:37:39.020$ this trucks in a longer term?

NOTE Confidence: 0.732006483363637

00:37:41.080 --> 00:37:42.652 Because, as I said,

NOTE Confidence: 0.732006483363637

 $00{:}37{:}42.652 \dashrightarrow 00{:}37{:}44.617$ Jackie Ken has implications on

NOTE Confidence: 0.732006483363637

 $00:37:44.617 \rightarrow 00:37:46.626$ symptomatic control for people who

NOTE Confidence: 0.732006483363637

 $00:37:46.626 \rightarrow 00:37:48.948$ have multiple process can decrease the

NOTE Confidence: 0.732006483363637

 $00{:}37{:}49{.}012 \dashrightarrow 00{:}37{:}50{.}856$ screen size or the last couple of years.

NOTE Confidence: 0.732006483363637

 $00{:}37{:}50.860 \dashrightarrow 00{:}37{:}52.897$ We've learned that this drug is pretty

NOTE Confidence: 0.732006483363637

 $00:37:52.897 \dashrightarrow 00:37:55.098$ active in both acute and chronic GVHD.

NOTE Confidence: 0.732006483363637

 $00{:}37{:}55{.}100 \dashrightarrow 00{:}37{:}57{.}326$ Now we have a label for it.

NOTE Confidence: 0.732006483363637

 $00{:}37{:}57{.}330 \dashrightarrow 00{:}37{:}59{.}184$ If people are being a Jack iffy and you

NOTE Confidence: 0.732006483363637

 $00{:}37{:}59{.}184 \dashrightarrow 00{:}38{:}00{.}808$ start with prior to transplantation,

NOTE Confidence: 0.732006483363637

 $00:38:00.810 \longrightarrow 00:38:02.610$ there are some reports which suggest that it

NOTE Confidence: 0.732006483363637

 $00:38:02.610 \rightarrow 00:38:04.247$ can manifest in cytokine release syndrome.

 $00:38:04.250 \rightarrow 00:38:06.506$ Kind of clinical spectrum and there have been

NOTE Confidence: 0.732006483363637

 $00:38:06.506 \dashrightarrow 00:38:08.784$ efforts to see if this drug can continue on.

NOTE Confidence: 0.732006483363637

 $00:38:08.790 \rightarrow 00:38:10.428$ And there are also people who think

NOTE Confidence: 0.732006483363637

00:38:10.428 --> 00:38:12.002 if you suddenly stop it will rebound

NOTE Confidence: 0.732006483363637

 $00:38:12.002 \dashrightarrow 00:38:13.906$ or bounce back and things like that

NOTE Confidence: 0.732006483363637

 $00:38:13.906 \dashrightarrow 00:38:15.410$ which ultimately has negative impact.

NOTE Confidence: 0.732006483363637

 $00{:}38{:}15{.}410 \dashrightarrow 00{:}38{:}17{.}188$ So the real question this study is

NOTE Confidence: 0.732006483363637

 $00:38:17.188 \longrightarrow 00:38:18.999$ trying to answer is, is it safe,

NOTE Confidence: 0.732006483363637

 $00{:}38{:}18{.}999 \dashrightarrow 00{:}38{:}21{.}747$ effective to use a drug pre and post

NOTE Confidence: 0.732006483363637

 $00{:}38{:}21.747 \dashrightarrow 00{:}38{:}24.060$ transplantation? This is a study schema.

NOTE Confidence: 0.732006483363637

 $00:38:24.060 \rightarrow 00:38:25.698$ It included patients with mild fibrosis,

NOTE Confidence: 0.732006483363637

 $00:38:25.700 \dashrightarrow 00:38:27.415$ both primary and secondary pre

NOTE Confidence: 0.732006483363637

 $00{:}38{:}27{.}415 \dashrightarrow 00{:}38{:}29{.}130$ transplantation they would start a

NOTE Confidence: 0.732006483363637

00:38:29.188 --> 00:38:31.260 drug at 5 milligrams which is a lower

NOTE Confidence: 0.732006483363637

 $00{:}38{:}31{.}260 \dashrightarrow 00{:}38{:}33{.}310$ dose around day minus 14 continued

 $00:38:33.310 \longrightarrow 00:38:34.420$ with conditioning regimen.

NOTE Confidence: 0.732006483363637

 $00:38:34.420 \rightarrow 00:38:36.114$ Use it in the post transplant period.

NOTE Confidence: 0.732006483363637

00:38:36.120 - > 00:38:38.045 Reevaluate the patients at day

NOTE Confidence: 0.732006483363637

00:38:38.045 --> 00:38:39.200 30 post transplantation,

NOTE Confidence: 0.732006483363637

 $00:38:39.200 \rightarrow 00:38:40.999$ at which time if the Council recovered,

NOTE Confidence: 0.732006483363637

 $00:38:41.000 \rightarrow 00:38:42.624$ you bump them up to the 10

NOTE Confidence: 0.732006483363637

00:38:42.624 --> 00:38:43.320 milligrams vid dose,

NOTE Confidence: 0.732006483363637

 $00:38:43.320 \dashrightarrow 00:38:47.380$ which is what we kind of use it in our set.

NOTE Confidence: 0.732006483363637

 $00:38:47.380 \rightarrow 00:38:49.102$ The key inclusion for mainly adult

NOTE Confidence: 0.732006483363637

 $00:38:49.102 \rightarrow 00:38:50.571$ patient population, as I said,

NOTE Confidence: 0.732006483363637

00:38:50.571 -> 00:38:51.759 both primary and secondary.

NOTE Confidence: 0.732006483363637

 $00{:}38{:}51{.}760 \dashrightarrow 00{:}38{:}53{.}180$ This is a classification system.

NOTE Confidence: 0.732006483363637

 $00:38:53.180 \longrightarrow 00:38:55.035$ This is a dip system that intermediate

NOTE Confidence: 0.732006483363637

 $00{:}38{:}55{.}035 \dashrightarrow 00{:}38{:}57{.}144$ one risk group in addition to adverse

NOTE Confidence: 0.732006483363637

 $00:38:57.144 \rightarrow 00:38:59.034$ molecular markers or people greater than

NOTE Confidence: 0.732006483363637

 $00:38:59.088 \rightarrow 00:39:00.888$ intermediate 2 running through that,

- NOTE Confidence: 0.732006483363637
- $00:39:00.890 \rightarrow 00:39:03.134$ they went with the Disney intensity
- NOTE Confidence: 0.732006483363637
- $00:39:03.134 \rightarrow 00:39:06.004$ regimen as receipts was 140 or lesser
- NOTE Confidence: 0.732006483363637
- 00:39:06.004 --> 00:39:08.392 dose commonly used regimen prophylaxis.
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}08{.}392 \dashrightarrow 00{:}39{:}10{.}344$ Methotrexate and climbers was
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}10{.}350 \dashrightarrow 00{:}39{:}12{.}530$ applied in the set.
- NOTE Confidence: 0.732006483363637
- 00:39:12.530 00:39:13.738 Here is some characteristics.
- NOTE Confidence: 0.732006483363637
- 00:39:13.738 --> 00:39:15.550 I know it's a busy slide,
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}15{.}550 \dashrightarrow 00{:}39{:}17{.}166$ but all that I want you to focus
- NOTE Confidence: 0.732006483363637
- 00:39:17.166 00:39:19.006 on is that most of these people,
- NOTE Confidence: 0.732006483363637
- $00:39:19.010 \longrightarrow 00:39:20.543$ about 85% of the people in this
- NOTE Confidence: 0.732006483363637
- $00:39:20.543 \rightarrow 00:39:22.428$ trial had a split omegle coming in.
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}22{.}430 \dashrightarrow 00{:}39{:}23{.}990$ The study largely consisted of
- NOTE Confidence: 0.732006483363637
- $00:39:23.990 \rightarrow 00:39:25.550$ match related and unrelated donors,
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}25{.}550 \dashrightarrow 00{:}39{:}27{.}806$ number of mismatched donors was less.
- NOTE Confidence: 0.732006483363637
- $00{:}39{:}27{.}810 \dashrightarrow 00{:}39{:}29{.}959$ The first thing that you think about
- NOTE Confidence: 0.732006483363637

 $00:39:29.959 \rightarrow 00:39:31.868$ when putting in a post transplant

NOTE Confidence: 0.732006483363637

 $00{:}39{:}31{.}868 \dashrightarrow 00{:}39{:}33{.}270$ period is housing grafman.

NOTE Confidence: 0.732006483363637

 $00:39:33.270 \rightarrow 00:39:35.790$ This is a pretty mild toxic drug.

NOTE Confidence: 0.732006483363637

00:39:35.790 --> 00:39:37.800 People can have deep cytopenias

NOTE Confidence: 0.732006483363637

 $00{:}39{:}37{.}800 \dashrightarrow 00{:}39{:}40{.}690$ and here's a report and they thirty

NOTE Confidence: 0.732006483363637

 $00:39:40.690 \longrightarrow 00:39:43.690$ 23124 patients had engrafted.

NOTE Confidence: 0.732006483363637

 $00:39:43.690 \rightarrow 00:39:45.898$ On the platelet count tend to lag behind

NOTE Confidence: 0.732006483363637

 $00:39:45.898 \longrightarrow 00:39:47.712$ a little bit, whether it's the drug,

NOTE Confidence: 0.732006483363637

 $00{:}39{:}47{.}712 \dashrightarrow 00{:}39{:}48{.}684$ whether it's the spleen.

NOTE Confidence: 0.732006483363637

00:39:48.690 --> 00:39:49.260 It's debatable,

NOTE Confidence: 0.732006483363637

00:39:49.260 --> 00:39:50.685 you follow them up today,

NOTE Confidence: 0.732006483363637

 $00:39:50.690 \rightarrow 00:39:52.262$ 60 neutrophils have recovered,

NOTE Confidence: 0.732006483363637

 $00:39:52.262 \rightarrow 00:39:54.975$ or the platelets still lags behind by

NOTE Confidence: 0.732006483363637

 $00:39:54.975 \rightarrow 00:39:56.984$ around a little more than 100 days,

NOTE Confidence: 0.732006483363637

 $00:39:56.990 \rightarrow 00:39:58.354$ almost everybody recovers their

NOTE Confidence: 0.732006483363637

 $00:39:58.354 \longrightarrow 00:39:59.036$ platelet count.

- NOTE Confidence: 0.797700432222222
- $00:40:01.280 \longrightarrow 00:40:02.760$ I'm here with the clinical
- NOTE Confidence: 0.797700432222222
- $00:40:02.760 \longrightarrow 00:40:03.944$ outcomes that are reported.
- NOTE Confidence: 0.797700432222222
- $00:40:03.950 \longrightarrow 00:40:06.924$ The one year OS is about 77% the
- NOTE Confidence: 0.797700432222222
- 00:40:06.924 --> 00:40:08.734 one year cumulative incidence of
- NOTE Confidence: 0.797700432222222
- $00{:}40{:}08{.}734 \dashrightarrow 00{:}40{:}11{.}131$ relapse is about 17%. One year.
- NOTE Confidence: 0.797700432222222
- 00:40:11.131 --> 00:40:13.611 Incidence of chronic GVHD is 14%.
- NOTE Confidence: 0.797700432222222
- $00{:}40{:}13.611 \dashrightarrow 00{:}40{:}15.939$ I think it's also important in the six
- NOTE Confidence: 0.797700432222222
- $00:40:15.939 \rightarrow 00:40:18.386$ months incidence of great leader for acute,
- NOTE Confidence: 0.797700432222222
- $00:40:18.390 \longrightarrow 00:40:20.166$ which can be lethal. It's about
- NOTE Confidence: 0.797700432222222
- 00:40:20.166 --> 00:40:21.976 four percent is kind of impressive.
- NOTE Confidence: 0.797700432222222
- $00:40:21.976 \longrightarrow 00:40:24.234$ So based on this trial now people
- NOTE Confidence: 0.797700432222222
- $00{:}40{:}24{.}234 \dashrightarrow 00{:}40{:}26{.}418$ are starting to contemplate the C.
- NOTE Confidence: 0.797700432222222
- $00:40:26.420 \longrightarrow 00:40:28.328$ Yes, this drug has benefits in
- NOTE Confidence: 0.797700432222222
- $00{:}40{:}28{.}328 \dashrightarrow 00{:}40{:}29{.}600$ pre and post transplantation
- NOTE Confidence: 0.797700432222222
- $00:40:29.663 \rightarrow 00:40:31.497$ setting in terms of the high risk.
- NOTE Confidence: 0.797700432222222

- 00:40:31.500 --> 00:40:31.988 In population,
- NOTE Confidence: 0.797700432222222
- $00{:}40{:}31{.}988$ --> $00{:}40{:}33{.}696$ maybe this can be translated into clinically.
- NOTE Confidence: 0.633647803583333
- 00:40:35.850 --> 00:40:38.328 We will now just switch gears and
- NOTE Confidence: 0.633647803583333
- $00:40:38.328 \longrightarrow 00:40:41.214$ go to an acute graft history that
- NOTE Confidence: 0.633647803583333
- $00:40:41.214 \rightarrow 00:40:43.224$ is presented by Minnesota Group.
- NOTE Confidence: 0.633647803583333
- $00:40:43.230 \longrightarrow 00:40:45.288$ This was a phase two study
- NOTE Confidence: 0.633647803583333
- $00:40:45.290 \longrightarrow 00:40:46.130$ a couple of years ago.
- NOTE Confidence: 0.633647803583333
- $00:40:46.130 \rightarrow 00:40:47.831$ They presented their phase one data that
- NOTE Confidence: 0.633647803583333
- $00{:}40{:}47.831 \dashrightarrow 00{:}40{:}49.598$ was published in Blood Advances, Dr.
- NOTE Confidence: 0.633647803583333
- 00:40:49.598 --> 00:40:52.718 Holton and ET al had led this study.
- NOTE Confidence: 0.633647803583333
- $00:40:52.718 \longrightarrow 00:40:54.602$ Basically, the rationale behind
- NOTE Confidence: 0.633647803583333
- $00:40:54.602 \rightarrow 00:40:57.022$ using human chorionic troepen and
- NOTE Confidence: 0.633647803583333
- $00:40:57.022 \longrightarrow 00:40:59.089$ epidermal growth factor is that.
- NOTE Confidence: 0.633647803583333
- $00{:}40{:}59{.}090 \dashrightarrow 00{:}41{:}00{.}017$ Acute GVHD happens.
- NOTE Confidence: 0.633647803583333
- 00:41:00.017 -> 00:41:02.180 It's usually in the setting of an
- NOTE Confidence: 0.633647803583333
- $00:41:02.244 \rightarrow 00:41:04.416$ immune attack due to the discordance

 $00{:}41{:}04{.}416 \dashrightarrow 00{:}41{:}06{.}450$ between the recipient and the host.

NOTE Confidence: 0.633647803583333

 $00:41:06.450 \longrightarrow 00:41:07.890$ Communist the rapeutic interventions that

NOTE Confidence: 0.633647803583333

 $00:41:07.890 \rightarrow 00:41:10.050$ we apply are all deeply immunosuppressive.

NOTE Confidence: 0.633647803583333

 $00{:}41{:}10{.}050 \dashrightarrow 00{:}41{:}12{.}732$ But by the time the immune cells have caused

NOTE Confidence: 0.633647803583333

 $00:41:12.732 \rightarrow 00:41:15.449$ an destruction to the epithelial lining.

NOTE Confidence: 0.633647803583333

 $00:41:15.450 \longrightarrow 00:41:16.728$ In the absence of anything else,

NOTE Confidence: 0.633647803583333

 $00:41:16.730 \rightarrow 00:41:18.826$ we continue to escalate him in a suppression,

NOTE Confidence: 0.633647803583333

 $00:41:18.830 \rightarrow 00:41:20.830$ but here they're trying to come up with

NOTE Confidence: 0.633647803583333

 $00:41:20.830 \longrightarrow 00:41:22.640$ the concept of using tissue repair

NOTE Confidence: 0.633647803583333

 $00:41:22.640 \rightarrow 00:41:24.524$ mechanisms by using growth factor support

NOTE Confidence: 0.633647803583333

 $00:41:24.576 \rightarrow 00:41:26.586$ mechanisms like epidermal growth factors.

NOTE Confidence: 0.633647803583333

 $00{:}41{:}26{.}590 \dashrightarrow 00{:}41{:}29{.}306$ We also know the concept of pregnancy.

NOTE Confidence: 0.633647803583333

 $00{:}41{:}29{.}310 \dashrightarrow 00{:}41{:}31{.}590$ We've all known that HCG is

NOTE Confidence: 0.633647803583333

 $00:41:31.590 \longrightarrow 00:41:33.528$ kind of taller rising rising,

NOTE Confidence: 0.633647803583333

 $00{:}41{:}33.528 \dashrightarrow 00{:}41{:}35.618$ it increases the regular population

 $00:41:35.618 \rightarrow 00:41:37.290$ compared to conventional subpopulation.

NOTE Confidence: 0.633647803583333

00:41:37.290 --> 00:41:39.414 It also has impact on anabolic

NOTE Confidence: 0.633647803583333

 $00:41:39.414 \rightarrow 00:41:40.830$ sides of metabol ISM,

NOTE Confidence: 0.633647803583333

 $00:41:40.830 \longrightarrow 00:41:43.018$ and as I said.

NOTE Confidence: 0.633647803583333

 $00{:}41{:}43.020 \dashrightarrow 00{:}41{:}46.920$ GF also decreases and regulation,

NOTE Confidence: 0.633647803583333

 $00:41:46.920 \longrightarrow 00:41:48.708$ which is kind of being thought

NOTE Confidence: 0.633647803583333

 $00:41:48.708 \longrightarrow 00:41:50.935$ as a marker of inflammation in

NOTE Confidence: 0.633647803583333

 $00:41:50.935 \rightarrow 00:41:53.350$ addition to promoting promoting it.

NOTE Confidence: 0.633647803583333

 $00{:}41{:}53{.}350 \dashrightarrow 00{:}41{:}55{.}708$ More and more T cell metabolic

NOTE Confidence: 0.633647803583333

 $00:41:55.708 \longrightarrow 00:41:57.723$ studies suggests that bit rate

NOTE Confidence: 0.633647803583333

 $00:41:57.723 \rightarrow 00:41:59.049$ seems to promote expansion,

NOTE Confidence: 0.633647803583333

00:41:59.049 $\operatorname{-->}$ 00:42:00.801 which is kind of a thing we like

NOTE Confidence: 0.633647803583333

 $00{:}42{:}00{.}801 \dashrightarrow 00{:}42{:}02{.}449$ in the field of transplantation.

NOTE Confidence: 0.633647803583333

 $00{:}42{:}02{.}450 \dashrightarrow 00{:}42{:}05{.}072$ Unlike neoplasms where T Rex are not

NOTE Confidence: 0.633647803583333

 $00:42:05.072 \rightarrow 00:42:07.389$ well liked upon but to develop tolerance,

NOTE Confidence: 0.633647803583333

 $00:42:07.390 \longrightarrow 00:42:09.832$ we, like any agents that increases

- NOTE Confidence: 0.633647803583333
- $00:42:09.832 \rightarrow 00:42:10.646$ direct population.
- NOTE Confidence: 0.633647803583333
- $00:42:10.650 \longrightarrow 00:42:13.517$ So based on their phase one design they
- NOTE Confidence: 0.633647803583333
- $00:42:13.517 \rightarrow 00:42:16.799$ now where they identified 2000 units.
- NOTE Confidence: 0.633647803583333
- 00:42:16.800 --> 00:42:19.686 Sorry, 2000 units as appropriate dose,
- NOTE Confidence: 0.633647803583333
- $00:42:19.690 \longrightarrow 00:42:20.986$ and they included two risk groups.
- NOTE Confidence: 0.633647803583333
- 00:42:20.990 --> 00:42:21.734 In Minnesota,
- NOTE Confidence: 0.633647803583333
- $00:42:21.734 \rightarrow 00:42:23.594$ High Risk Group and the.
- NOTE Confidence: 0.633647803583333
- $00:42:23.600 \rightarrow 00:42:24.868$ Second line the rapeutic group.
- NOTE Confidence: 0.633647803583333
- $00:42:24.868 \longrightarrow 00:42:26.770$ I can give references for this
- NOTE Confidence: 0.633647803583333
- $00:42:26.826 \longrightarrow 00:42:27.710$ at a later stage.
- NOTE Confidence: 0.633647803583333
- $00{:}42{:}27.710 \dashrightarrow 00{:}42{:}29.691$ They were used to drug subq every
- NOTE Confidence: 0.633647803583333
- $00{:}42{:}29.691 \dashrightarrow 00{:}42{:}31.581$ other day for seven days in
- NOTE Confidence: 0.633647803583333
- $00:42:31.581 \longrightarrow 00:42:33.543$ addition to the high dose steroids,
- NOTE Confidence: 0.633647803583333
- $00{:}42{:}33.550 \dashrightarrow 00{:}42{:}35.320$ which is the commonest Firstline agent
- NOTE Confidence: 0.633647803583333
- $00:42:35.320 \longrightarrow 00:42:37.710$ we use for the second line cohort,
- NOTE Confidence: 0.633647803583333

 $00:42:37.710 \longrightarrow 00:42:39.210$ they would use this combination

NOTE Confidence: 0.633647803583333

 $00{:}42{:}39{.}210 \dashrightarrow 00{:}42{:}40{.}337$ the same dose subq.

NOTE Confidence: 0.633647803583333

00:42:40.337 --> 00:42:42.380 Or if you're going to use it at 5000

NOTE Confidence: 0.633647803583333

 $00:42:42.443 \rightarrow 00:42:44.564$ units for those who are refractory was

NOTE Confidence: 0.633647803583333

 $00:42:44.564 \longrightarrow 00:42:46.780$ given every other day for 14 days in

NOTE Confidence: 0.633647803583333

 $00:42:46.780 \longrightarrow 00:42:48.706$ addition to the standard of care and NOTE Confidence: 0.633647803583333

 $00{:}42{:}48.706 \dashrightarrow 00{:}42{:}51.072$ that standard of care was left with

NOTE Confidence: 0.633647803583333

 $00:42:51.072 \rightarrow 00:42:53.809$ the physicians based on their choice.

NOTE Confidence: 0.633647803583333

 $00:42:53.810 \longrightarrow 00:42:55.376$ This is just a brief synopsis

NOTE Confidence: 0.633647803583333

 $00:42:55.376 \longrightarrow 00:42:57.219$ of what were the cohorts like.

NOTE Confidence: 0.633647803583333

00:42:57.220 --> 00:42:57.438 Largely,

NOTE Confidence: 0.633647803583333

 $00{:}42{:}57{.}438 \dashrightarrow 00{:}42{:}58{.}964$ I wanted to focus on the fact

NOTE Confidence: 0.633647803583333

 $00:42:58.964 \longrightarrow 00:43:00.487$ that in the first line cohort,

NOTE Confidence: 0.633647803583333

 $00:43:00.490 \longrightarrow 00:43:02.260 \text{ most of those people were stage}$

NOTE Confidence: 0.633647803583333

 $00:43:02.260 \rightarrow 00:43:03.970$ three to four lower GI GVHD,

NOTE Confidence: 0.633647803583333

 $00:43:03.970 \rightarrow 00:43:05.446$ which is what is more challenging

- NOTE Confidence: 0.633647803583333
- $00:43:05.446 \rightarrow 00:43:07.223$ to manage in the second line cohort
- NOTE Confidence: 0.633647803583333
- $00:43:07.223 \longrightarrow 00:43:08.945$ that did have a few skin cases,
- NOTE Confidence: 0.633647803583333
- $00:43:08.950 \longrightarrow 00:43:10.666$ that was stage three or four,
- NOTE Confidence: 0.633647803583333
- $00:43:10.670 \longrightarrow 00:43:11.880$ they have some pictures in
- NOTE Confidence: 0.633647803583333
- $00:43:11.880 \longrightarrow 00:43:12.364$ their presentation.
- NOTE Confidence: 0.633647803583333
- 00:43:12.370 --> 00:43:13.566 I'm not showing that,
- NOTE Confidence: 0.633647803583333
- 00:43:13.566 00:43:15.770 but they were pretty bad skin stays,
- NOTE Confidence: 0.633647803583333
- $00:43:15.770 \longrightarrow 00:43:16.402$ but regardless,
- NOTE Confidence: 0.633647803583333
- $00{:}43{:}16{.}402 \dashrightarrow 00{:}43{:}18{.}298$ most of them are a grade
- NOTE Confidence: 0.633647803583333
- 00:43:18.298 --> 00:43:20.029 three to four acute GVHD,
- NOTE Confidence: 0.633647803583333
- $00{:}43{:}20{.}030 \dashrightarrow 00{:}43{:}22.606$ which is kind of challenging to manage.
- NOTE Confidence: 0.633647803583333
- $00{:}43{:}22.610 \dashrightarrow 00{:}43{:}24.490$ Here are the response rates
- NOTE Confidence: 0.573978271428571
- $00:43:24.490 \rightarrow 00:43:27.528$ in the acute GVHD clinical drug development.
- NOTE Confidence: 0.573978271428571
- 00:43:27.530 --> 00:43:29.462 28 year responses being kind of validated
- NOTE Confidence: 0.573978271428571
- $00{:}43{:}29{.}462 \dashrightarrow 00{:}43{:}31{.}867$ as a nice marker to predict responses,
- NOTE Confidence: 0.573978271428571

 $00:43:31.870 \longrightarrow 00:43:35.048$ so date 28 for all patient cohorts.

NOTE Confidence: 0.573978271428571

 $00{:}43{:}35{.}050 \dashrightarrow 00{:}43{:}37{.}819$ There was a 57% CR and 11% had

NOTE Confidence: 0.573978271428571

 $00{:}43{:}37{.}819 \dashrightarrow 00{:}43{:}39{.}564$ partial responses for the high

NOTE Confidence: 0.573978271428571

00:43:39.564 --> 00:43:41.430 risk Minnesota Risk Group to see.

NOTE Confidence: 0.573978271428571

00:43:41.430 --> 00:43:43.686 Our rate was 64% in the second line,

NOTE Confidence: 0.573978271428571

00:43:43.690 --> 00:43:46.060 it was 50% CR rates.

NOTE Confidence: 0.573978271428571

 $00{:}43{:}46.060 \dashrightarrow 00{:}43{:}47.890$ And here's a non elapsed

NOTE Confidence: 0.573978271428571

 $00:43:47.890 \longrightarrow 00:43:50.380$ mortality can easily lead to that.

NOTE Confidence: 0.573978271428571

 $00{:}43{:}50{.}380 \dashrightarrow 00{:}43{:}52{.}068$ This is for the entire cohort in the

NOTE Confidence: 0.573978271428571

 $00{:}43{:}52{.}068 \dashrightarrow 00{:}43{:}53{.}577$ dark clients for the high risk group.

NOTE Confidence: 0.573978271428571

 $00{:}43{:}53{.}580 \dashrightarrow 00{:}43{:}55{.}268$ And this is for the second line group.

NOTE Confidence: 0.573978271428571

 $00{:}43{:}55{.}270 \dashrightarrow 00{:}43{:}57{.}118$ The P value was not significant,

NOTE Confidence: 0.573978271428571

 $00:43:57.120 \rightarrow 00:43:58.737$ but based on those who are responding,

NOTE Confidence: 0.573978271428571

 $00:43:58.740 \longrightarrow 00:44:00.978$ CR or PR is not responding.

NOTE Confidence: 0.573978271428571

 $00{:}44{:}00{.}980 \dashrightarrow 00{:}44{:}03{.}220$ There seems to be a train that the

NOTE Confidence: 0.573978271428571

 $00{:}44{:}03.220 \dashrightarrow 00{:}44{:}05.413$ non relapse mortality at two years

 $00:44:05.413 \rightarrow 00:44:07.373$ is declining with this information.

NOTE Confidence: 0.573978271428571

 $00{:}44{:}07{.}380 \dashrightarrow 00{:}44{:}10{.}004$ And here is the same analysis for overall

NOTE Confidence: 0.573978271428571

 $00{:}44{:}10.004 \dashrightarrow 00{:}44{:}11.898$ survival based on the whole cohort.

NOTE Confidence: 0.573978271428571

 $00{:}44{:}11{.}900 \dashrightarrow 00{:}44{:}13{.}996$ And this is for those who are responding

NOTE Confidence: 0.573978271428571

 $00:44:14.000 \longrightarrow 00:44:15.710$ based on this kind of response

NOTE Confidence: 0.573978271428571

 $00{:}44{:}15.710 \dashrightarrow 00{:}44{:}17.650$ we elicit with this intervention.

NOTE Confidence: 0.573978271428571

 $00:44:17.650 \rightarrow 00:44:19.904$ When they presented the causes of that,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}19{.}910 \dashrightarrow 00{:}44{:}22{.}304$ it's really interesting that happens to be

NOTE Confidence: 0.573978271428571

00:44:22.304 --> 00:44:24.467 still a communist cause of death, right?

NOTE Confidence: 0.573978271428571

00:44:24.467 --> 00:44:25.986 About half of the patients had died,

NOTE Confidence: 0.573978271428571

 $00:44:25.990 \longrightarrow 00:44:28.027$ with a median follow-up of 17 months.

NOTE Confidence: 0.573978271428571

 $00{:}44{:}28.030 \dashrightarrow 00{:}44{:}30.228$ Relapse is the second most common stuff,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}30{.}230 \dashrightarrow 00{:}44{:}31{.}680$ and infections and organ damage

NOTE Confidence: 0.573978271428571

 $00:44:31.680 \longrightarrow 00:44:32.550$ with common livery,

NOTE Confidence: 0.573978271428571

 $00:44:32.550 \longrightarrow 00:44:34.310$ and that didn't seem to be that much.

 $00{:}44{:}34{.}310 \dashrightarrow 00{:}44{:}37{.}348$ But again, it's a small patient population.

NOTE Confidence: 0.573978271428571

00:44:37.350 --> 00:44:37.920 In summary,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}37{.}920 \dashrightarrow 00{:}44{:}40{.}601$ I think they show that the response rate of

NOTE Confidence: 0.573978271428571

 $00:44:40.601 \rightarrow 00:44:42.665$ 68 percent is pretty reasonably accepted,

NOTE Confidence: 0.573978271428571

 $00:44:42.670 \longrightarrow 00:44:43.636$ and day 28,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}43.636 \dashrightarrow 00{:}44{:}45.568$ and doesn't significantly impact on relapse.

NOTE Confidence: 0.573978271428571

 $00{:}44{:}45{.}570 \dashrightarrow 00{:}44{:}47{.}593$ Mortality based on the fact that people

NOTE Confidence: 0.573978271428571

 $00:44:47.593 \rightarrow 00:44:49.670$ are still dying with GST and relapses,

NOTE Confidence: 0.573978271428571

00:44:49.670 --> 00:44:53.390 they're recommending either using biomarkers,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}53{.}390 \dashrightarrow 00{:}44{:}55{.}448$ and they have some nice profile of

NOTE Confidence: 0.573978271428571

 $00{:}44{:}55{.}448 \dashrightarrow 00{:}44{:}56{.}888$ metabolic stuff that they reported

NOTE Confidence: 0.573978271428571

 $00:44:56.888 \rightarrow 00:44:58.896$ which I can talk to you later on,

NOTE Confidence: 0.573978271428571

 $00{:}44{:}58{.}900 \dashrightarrow 00{:}45{:}00{.}573$ but it's kind of now in development

NOTE Confidence: 0.573978271428571

 $00{:}45{:}00{.}573 \dashrightarrow 00{:}45{:}02{.}622$ in the field that we don't necessarily

NOTE Confidence: 0.573978271428571

 $00{:}45{:}02.622 \dashrightarrow 00{:}45{:}04.536$ have to keep thinking about escalating

NOTE Confidence: 0.573978271428571

00:45:04.591 --> 00:45:05.490 immunosuppression,

 $00{:}45{:}05{.}490 \dashrightarrow 00{:}45{:}07{.}135$ but now we need to start focusing.

NOTE Confidence: 0.573978271428571

 $00:45:07.140 \longrightarrow 00:45:11.610$ On getting the right immunomodulation in

NOTE Confidence: 0.573978271428571

 $00:45:11.610 \rightarrow 00:45:15.080$ addition to tissue repair pathway drugs.

NOTE Confidence: 0.573978271428571

 $00:45:15.080 \rightarrow 00:45:17.600$ In the other half of the talk,

NOTE Confidence: 0.573978271428571

00:45:17.600 --> 00:45:20.687 I'm going to talk about chronic GVHD.

NOTE Confidence: 0.573978271428571

 $00{:}45{:}20.690 \dashrightarrow 00{:}45{:}23.320$ For some of us who do this on a daily basis,

NOTE Confidence: 0.573978271428571

 $00:45:23.320 \longrightarrow 00:45:24.904$ we see this in up to about 50%

NOTE Confidence: 0.573978271428571

00:45:24.910 --> 00:45:27.046 of patient population use of post

NOTE Confidence: 0.573978271428571

00:45:27.046 --> 00:45:28.114 transplant cyclophosphamide has

NOTE Confidence: 0.573978271428571

00:45:28.114 --> 00:45:29.349 brought that number down,

NOTE Confidence: 0.573978271428571

 $00:45:29.350 \longrightarrow 00:45:31.132$ but most people don't get it

NOTE Confidence: 0.573978271428571

 $00:45:31.132 \longrightarrow 00:45:32.320$ because cyclophosphamide does have

NOTE Confidence: 0.573978271428571

 $00{:}45{:}32{.}374 \dashrightarrow 00{:}45{:}33{.}976$ some issues in terms of infection,

NOTE Confidence: 0.573978271428571

 $00:45:33.980 \rightarrow 00:45:36.040$ cardiac toxicity and other things,

NOTE Confidence: 0.573978271428571

 $00{:}45{:}36{.}040 \dashrightarrow 00{:}45{:}37{.}570$ and again it's largely applied in

 $00:45:37.570 \longrightarrow 00:45:38.900$ the setting of unrelated donors

NOTE Confidence: 0.573978271428571

 $00:45:38.900 \rightarrow 00:45:40.832$ and not commonly used in massively

NOTE Confidence: 0.573978271428571

 $00:45:40.832 \longrightarrow 00:45:41.476$ donor transplantation.

NOTE Confidence: 0.573978271428571

 $00:45:41.480 \longrightarrow 00:45:43.000$ For those who develop,

NOTE Confidence: 0.573978271428571

 $00{:}45{:}43.000 \dashrightarrow 00{:}45{:}45.410$ chronic steroids has been the workhorse

NOTE Confidence: 0.573978271428571

 $00{:}45{:}45{.}410 \dashrightarrow 00{:}45{:}47{.}034$ for multiple multiple decades.

NOTE Confidence: 0.573978271428571

 $00{:}45{:}47.040 \dashrightarrow 00{:}45{:}48.520$ About half of those patients

NOTE Confidence: 0.573978271428571

 $00:45:48.520 \rightarrow 00:45:50.000$ eventually need second line treatment

NOTE Confidence: 0.573978271428571

 $00{:}45{:}50{.}051 \dashrightarrow 00{:}45{:}51{.}128$ for disease progression.

NOTE Confidence: 0.573978271428571

 $00:45:51.130 \longrightarrow 00:45:53.710$ And they don't tend to do well at that stage.

NOTE Confidence: 0.573978271428571

 $00{:}45{:}53{.}710 \dashrightarrow 00{:}45{:}54{.}886$ Up until a year,

NOTE Confidence: 0.573978271428571

 $00:45:54.886 \longrightarrow 00:45:56.650$ year and half ago really didn't

NOTE Confidence: 0.573978271428571

 $00:45:56.714 \rightarrow 00:45:58.570$ have that many drugs in Brittany

NOTE Confidence: 0.573978271428571

 $00:45:58.570 \rightarrow 00:46:00.460$ was approved a few years ago.

NOTE Confidence: 0.573978271428571

 $00:46:00.460 \longrightarrow 00:46:01.552$ Based on this trial,

NOTE Confidence: 0.573978271428571

 $00:46:01.552 \rightarrow 00:46:02.644$ it's a boutique inhibitor.
- NOTE Confidence: 0.573978271428571
- 00:46:02.650 --> 00:46:03.814 As you all know,
- NOTE Confidence: 0.573978271428571
- $00:46:03.814 \rightarrow 00:46:05.713$ the overall response rate was 67%,
- NOTE Confidence: 0.573978271428571
- 00:46:05.713 --> 00:46:07.928 CR was 21% in that
- NOTE Confidence: 0.794081502857143
- $00:46:07.930 \longrightarrow 00:46:09.498$ in the last 12 to 24 months.
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}09{.}500 \dashrightarrow 00{:}46{:}11{.}656$ Now we have two drugs belimo saddle
- NOTE Confidence: 0.794081502857143
- $00:46:11.656 \longrightarrow 00:46:13.930$ which is a rock to inhibition.
- NOTE Confidence: 0.794081502857143
- 00:46:13.930 --> 00:46:15.680 That's not only has anti-inflammatory
- NOTE Confidence: 0.794081502857143
- 00:46:15.680 --> 00:46:17.590 properties, but it also kind of
- NOTE Confidence: 0.794081502857143
- $00:46:17.590 \longrightarrow 00:46:19.630$ targets the scarring part of it,
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}19.630 \dashrightarrow 00{:}46{:}21.366$ which is kind of a novel mechanisms.
- NOTE Confidence: 0.794081502857143
- $00:46:21.370 \longrightarrow 00:46:24.430$ Here the overall rate was 73% in the CR.
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}24{.}430 \dashrightarrow 00{:}46{:}26{.}743$ CRA dispite being low the PR was
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}26.743 \dashrightarrow 00{:}46{:}28.941$ high but based on the fact that
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}28{.}941 \dashrightarrow 00{:}46{:}30{.}672$ it targets the scarring pathway,
- NOTE Confidence: 0.794081502857143
- $00{:}46{:}30.672 \dashrightarrow 00{:}46{:}32.084$ it's been approved recently.
- NOTE Confidence: 0.794081502857143

 $00:46:32.090 \rightarrow 00:46:34.600$ In addition to controlling gived.

NOTE Confidence: 0.794081502857143

00:46:34.600 --> 00:46:37.897 Uh, I spoke to you earlier on.

NOTE Confidence: 0.794081502857143

 $00{:}46{:}37{.}900 \dashrightarrow 00{:}46{:}40{.}210$ Fracture GBST in the last six months.

NOTE Confidence: 0.794081502857143

 $00:46:40.210 \rightarrow 00:46:42.919$ It's also been approved for chronic GVHD.

NOTE Confidence: 0.794081502857143

 $00:46:42.920 \longrightarrow 00:46:46.016$ Again, the rates of CR is close to about 50%.

NOTE Confidence: 0.794081502857143

00:46:46.016 --> 00:46:47.552 Most of these drugs are approved

NOTE Confidence: 0.794081502857143

 $00:46:47.552 \longrightarrow 00:46:49.076$ for people who fail at least

NOTE Confidence: 0.794081502857143

 $00:46:49.076 \rightarrow 00:46:50.486$ two or more lines of therapy,

NOTE Confidence: 0.794081502857143

00:46:50.490 --> 00:46:52.638 but these lines of response rate

NOTE Confidence: 0.794081502857143

 $00{:}46{:}52.638 \dashrightarrow 00{:}46{:}54.885$ suggests there is still more that's

NOTE Confidence: 0.794081502857143

 $00{:}46{:}54.885 \dashrightarrow 00{:}46{:}56.755$ needed to optimize the speed.

NOTE Confidence: 0.794081502857143

 $00:46:56.760 \longrightarrow 00:46:58.620$ One of the yes,

NOTE Confidence: 0.794081502857143

 $00:46:58.620 \rightarrow 00:47:01.620$ which is kind of not that commonly explored,

NOTE Confidence: 0.794081502857143

 $00{:}47{:}01.620 \dashrightarrow 00{:}47{:}02.760$ but it's kind of.

NOTE Confidence: 0.794081502857143

 $00:47:02.760 \longrightarrow 00:47:04.060$ It's a welcome change.

NOTE Confidence: 0.794081502857143

00:47:04.060 --> 00:47:04.710 It's commonly,

 $00:47:04.710 \longrightarrow 00:47:07.097$ we think about jobs as a T

NOTE Confidence: 0.794081502857143

00:47:07.097 --> 00:47:08.120 cell mediated pathway.

NOTE Confidence: 0.794081502857143

 $00:47:08.120 \longrightarrow 00:47:10.316$ This work that was presented by

NOTE Confidence: 0.794081502857143

 $00{:}47{:}10.316 \dashrightarrow 00{:}47{:}12.260$ Stephanie Lee's group from Fred

NOTE Confidence: 0.794081502857143

00:47:12.260 --> 00:47:14.756 Hutch is now looking into targeting

NOTE Confidence: 0.794081502857143

 $00{:}47{:}14.756 \dashrightarrow 00{:}47{:}16.546$ macrophage driven chronic drug

NOTE Confidence: 0.794081502857143

 $00{:}47{:}16.546 \dashrightarrow 00{:}47{:}19.171$ Physiology colony stimulating factor

NOTE Confidence: 0.794081502857143

00:47:19.171 -> 00:47:22.039 1 receptor mediated pathways.

NOTE Confidence: 0.794081502857143

00:47:22.040 --> 00:47:23.312 Once someone is circulating,

NOTE Confidence: 0.794081502857143

 $00:47:23.312 \longrightarrow 00:47:25.611$ they can get into the tissues and

NOTE Confidence: 0.794081502857143

 $00:47:25.611 \longrightarrow 00:47:27.585$ then they can differentiate in either.

NOTE Confidence: 0.794081502857143

00:47:27.590 --> 00:47:30.290 I'm wondering 2 phenotypes of macrophages,

NOTE Confidence: 0.794081502857143

 $00:47:30.290 \longrightarrow 00:47:32.606$ which them one being pro inflammatory,

NOTE Confidence: 0.794081502857143

 $00{:}47{:}32.610 \dashrightarrow 00{:}47{:}33.798$ this being anti inflammatory.

NOTE Confidence: 0.794081502857143

 $00{:}47{:}33.798 \dashrightarrow 00{:}47{:}35.580$ But now people are looking into

00:47:35.630 --> 00:47:37.146 developing drugs against tests

NOTE Confidence: 0.794081502857143

 $00{:}47{:}37{.}146 \dashrightarrow 00{:}47{:}38{.}662$ which promotes this differentiation

NOTE Confidence: 0.794081502857143

 $00{:}47{:}38.662 \dashrightarrow 00{:}47{:}40.236$ to decrease the inflammation and

NOTE Confidence: 0.794081502857143

 $00:47:40.236 \longrightarrow 00:47:42.007$ the drug that I'm going to talk

NOTE Confidence: 0.794081502857143

 $00{:}47{:}42.010 \dashrightarrow 00{:}47{:}44.712$ to you is a CC colony stimulating

NOTE Confidence: 0.794081502857143

 $00:47:44.712 \longrightarrow 00:47:46.630$ factor 1 receptor antibody.

NOTE Confidence: 0.794081502857143

 $00{:}47{:}46.630 \dashrightarrow 00{:}47{:}48.496$ Inhibition of that is start to

NOTE Confidence: 0.794081502857143

 $00:47:48.496 \rightarrow 00:47:50.857$ decrease 5 process and make bring about

NOTE Confidence: 0.794081502857143

00:47:50.857 --> 00:47:52.617 changes in collagen structure which

NOTE Confidence: 0.794081502857143

 $00{:}47{:}52.617 \dashrightarrow 00{:}47{:}55.084$ kind of then has impact and tissue

NOTE Confidence: 0.794081502857143

 $00:47:55.084 \rightarrow 00:47:58.830$ healing for people with chronic dry.

NOTE Confidence: 0.794081502857143

 $00{:}47{:}58.830 \dashrightarrow 00{:}48{:}02.370$ The drug is exactly exactly map.

NOTE Confidence: 0.794081502857143

 $00:48:02.370 \longrightarrow 00:48:03.966$ As I said, it's a humanized IgG.

NOTE Confidence: 0.794081502857143

 $00:48:03.970 \longrightarrow 00:48:06.595$ 4 monoclonal antibody binds to

NOTE Confidence: 0.794081502857143

00:48:06.595 --> 00:48:08.170 CSF 1 receptor.

NOTE Confidence: 0.794081502857143

 $00:48:08.170 \longrightarrow 00:48:10.346$ In addition, it also binds to oil 34,

 $00:48:10.350 \rightarrow 00:48:13.409$ which has informative properties in the skin.

NOTE Confidence: 0.794081502857143

00:48:13.410 --> 00:48:14.695 It's administered over 30 minutes

NOTE Confidence: 0.794081502857143

 $00:48:14.695 \longrightarrow 00:48:16.310$ for every two to four weeks.

NOTE Confidence: 0.794081502857143

 $00:48:16.310 \rightarrow 00:48:17.790$ It's highly effective in decreasing

NOTE Confidence: 0.794081502857143

 $00:48:17.790 \longrightarrow 00:48:19.270$ the fiber optic signals on

NOTE Confidence: 0.794081502857143

 $00:48:19.320 \longrightarrow 00:48:20.610$ the nonclassical monocytes.

NOTE Confidence: 0.794081502857143

00:48:20.610 --> 00:48:21.352 In addition,

NOTE Confidence: 0.794081502857143

 $00:48:21.352 \rightarrow 00:48:23.207$ using this intermittent dosing pathway,

NOTE Confidence: 0.794081502857143

 $00{:}48{:}23{.}210 \dashrightarrow 00{:}48{:}25{.}310$ they found that you know gives

NOTE Confidence: 0.794081502857143

 $00{:}48{:}25{.}310 \dashrightarrow 00{:}48{:}27{.}372$ opportunities to keep the drugs going

NOTE Confidence: 0.794081502857143

 $00{:}48{:}27{.}372 \dashrightarrow 00{:}48{:}29{.}027$ frequently because the cells do.

NOTE Confidence: 0.794081502857143

 $00{:}48{:}29{.}030 \dashrightarrow 00{:}48{:}30{.}810$ So in the mean time this was

NOTE Confidence: 0.794081502857143

 $00{:}48{:}30{.}810 \dashrightarrow 00{:}48{:}32{.}550$ a phase one two study design.

NOTE Confidence: 0.794081502857143

 $00{:}48{:}32{.}550 \dashrightarrow 00{:}48{:}34{.}446$ They wanted to test the phase

NOTE Confidence: 0.794081502857143

 $00{:}48{:}34{.}446 \dashrightarrow 00{:}48{:}35{.}710$ one about 17 patients,

- $00:48:35.710 \longrightarrow 00:48:36.120$ a point
- NOTE Confidence: 0.649108285555556
- 00:48:39.150 --> 00:48:41.886 15.5133 given over Q4 weeks at Q 2 weeks,
- NOTE Confidence: 0.649108285555556
- $00:48:41.890 \longrightarrow 00:48:43.591$ and then they went to the phase
- NOTE Confidence: 0.649108285555556
- $00:48:43.591 \rightarrow 00:48:45.589$ expansion at 1 milligram per kilogram.
- NOTE Confidence: 0.649108285555556
- $00:48:45.590 \longrightarrow 00:48:47.630$ That included a larger number
- NOTE Confidence: 0.649108285555556
- $00:48:47.630 \longrightarrow 00:48:48.854$ of patient population.
- NOTE Confidence: 0.64910828555556
- $00{:}48{:}48{.}860 \dashrightarrow 00{:}48{:}50{.}845$ Presented here is a baseline
- NOTE Confidence: 0.64910828555556
- 00:48:50.845 --> 00:48:52.036 characteristics for patients.
- NOTE Confidence: 0.649108285555556
- $00:48:52.040 \rightarrow 00:48:54.035$ A quick summary of this is that
- NOTE Confidence: 0.649108285555556
- 00:48:54.035 00:48:56.168 most of these people were heavily
- NOTE Confidence: 0.649108285555556
- $00{:}48{:}56{.}168 \dashrightarrow 00{:}48{:}58{.}625$ treated that more than half of the
- NOTE Confidence: 0.649108285555556
- $00:48:58.625 \rightarrow 00:49:00.919$ people in both phase one and two.
- NOTE Confidence: 0.64910828555556
- 00:49:00.920 --> 00:49:03.636 I had four or more organs involved
- NOTE Confidence: 0.649108285555556
- $00{:}49{:}03.640 \dashrightarrow 00{:}49{:}05.360$ consistent with modern tactics.
- NOTE Confidence: 0.649108285555556
- $00:49:05.360 \rightarrow 00:49:08.272$ People have been exposed to Brittany and
- NOTE Confidence: 0.649108285555556
- $00:49:08.272 \rightarrow 00:49:10.928$ which is the rock number that I showed.

- NOTE Confidence: 0.649108285555556
- $00:49:10.930 \longrightarrow 00:49:12.058$ I'm I'm there,
- NOTE Confidence: 0.64910828555556
- $00:49:12.058 \longrightarrow 00:49:14.314$ basically show that there's no differences
- NOTE Confidence: 0.649108285555556
- $00:49:14.314 \rightarrow 00:49:16.380$ between Android patient populations.
- NOTE Confidence: 0.64910828555556
- $00:49:16.380 \rightarrow 00:49:19.020$ Uh, and the drug seems to be pretty
- NOTE Confidence: 0.649108285555556
- $00:49:19.020 \rightarrow 00:49:21.279$ well tolerated across both groups.
- NOTE Confidence: 0.649108285555556
- $00:49:21.279 \longrightarrow 00:49:22.878$ The discontinuation rate,
- NOTE Confidence: 0.649108285555556
- 00:49:22.880 --> 00:49:23.960 although seems to be high,
- NOTE Confidence: 0.649108285555556
- $00:49:23.960 \rightarrow 00:49:26.298$ but in this context it's pretty challenging,
- NOTE Confidence: 0.64910828555556
- $00:49:26.300 \longrightarrow 00:49:28.295$ and about 30% in the phase one,
- NOTE Confidence: 0.649108285555556
- $00{:}49{:}28{.}300 \dashrightarrow 00{:}49{:}30{.}196$ and about 58% are still continuing.
- NOTE Confidence: 0.649108285555556
- $00:49:30.200 \longrightarrow 00:49:33.398$ This drug in the phase two.
- NOTE Confidence: 0.649108285555556
- $00:49:33.400 \longrightarrow 00:49:34.650$ More interestingly,
- NOTE Confidence: 0.649108285555556
- $00{:}49{:}34.650 \dashrightarrow 00{:}49{:}37.150$ is the response rate.
- NOTE Confidence: 0.649108285555556
- $00{:}49{:}37{.}150 \dashrightarrow 00{:}49{:}38{.}425$ Most of the responses we
- NOTE Confidence: 0.649108285555556
- $00:49:38.425 \longrightarrow 00:49:39.445$ do show that responsive,
- NOTE Confidence: 0.649108285555556

 $00:49:39.450 \rightarrow 00:49:41.305$ especially with this one milligram per KQ,

NOTE Confidence: 0.649108285555556

00:49:41.310 - 00:49:43.790 2 weeks our sponsor seems to be pretty

NOTE Confidence: 0.64910828555556

 $00{:}49{:}43.790 \dashrightarrow 00{:}49{:}46.094$ durable and same is the case with

NOTE Confidence: 0.649108285555556

 $00{:}49{:}46.094 \dashrightarrow 00{:}49{:}47.956$ three milligrams per kick and when

NOTE Confidence: 0.649108285555556

 $00{:}49{:}47{.}956 \dashrightarrow 00{:}49{:}49{.}654$ you look around their best overall

NOTE Confidence: 0.649108285555556

 $00{:}49{:}49{.}654 \dashrightarrow 00{:}49{:}51{.}448$ response rates and time from responses,

NOTE Confidence: 0.64910828555556

 $00:49:51.450 \longrightarrow 00:49:53.091$ that's reasonably impressive,

NOTE Confidence: 0.649108285555556

 $00:49:53.091 \rightarrow 00:49:55.279$ but time to responsive.

NOTE Confidence: 0.649108285555556

 $00:49:55.280 \longrightarrow 00:49:56.784$ One month it's something

NOTE Confidence: 0.649108285555556

 $00:49:56.784 \rightarrow 00:49:58.664$ that you don't often see,

NOTE Confidence: 0.649108285555556

 $00{:}49{:}58.670 \dashrightarrow 00{:}50{:}01.190$ and that's a welcome change.

NOTE Confidence: 0.64910828555556

 $00{:}50{:}01{.}190 \dashrightarrow 00{:}50{:}03{.}381$ The next question people come commonly ask

NOTE Confidence: 0.64910828555556

 $00:50:03.381 \rightarrow 00:50:05.809$ is how about organ specific responses?

NOTE Confidence: 0.64910828555556

 $00:50:05.810 \rightarrow 00:50:07.735$ Well, light light Gray or blue ish

NOTE Confidence: 0.649108285555556

 $00{:}50{:}07{.}735 \dashrightarrow 00{:}50{:}10.069$ is the CR rates in the dark ones.

NOTE Confidence: 0.649108285555556

 $00:50:10.070 \longrightarrow 00:50:11.646$ The PR lower GI?

 $00:50:11.646 \rightarrow 00:50:14.010$ Everybody seems to have good responses.

NOTE Confidence: 0.649108285555556

 $00:50:14.010 \longrightarrow 00:50:15.648$ What what's of interest to us

NOTE Confidence: 0.649108285555556

 $00:50:15.648 \longrightarrow 00:50:17.330$ is the Giants and the skin,

NOTE Confidence: 0.649108285555556

 $00{:}50{:}17.330 \dashrightarrow 00{:}50{:}20.025$ which seems to be PR based on

NOTE Confidence: 0.64910828555556

 $00{:}50{:}20.025 \dashrightarrow 00{:}50{:}21.180$ its antifibrotic mechanisms.

NOTE Confidence: 0.649108285555556

 $00{:}50{:}21.180 \dashrightarrow 00{:}50{:}22.684$ People ask me what happens to the lung,

NOTE Confidence: 0.649108285555556

 $00:50:22.690 \rightarrow 00:50:24.952$ which is more common and challenging

NOTE Confidence: 0.649108285555556

 $00:50:24.952 \longrightarrow 00:50:25.706$ to handle?

NOTE Confidence: 0.649108285555556

 $00{:}50{:}25{.}710 \dashrightarrow 00{:}50{:}27{.}897$ Seems like you know at least five out of

NOTE Confidence: 0.64910828555556

00:50:27.897 - 00:50:30.226 15 patients is a reasonable one for CR.

NOTE Confidence: 0.64910828555556

 $00:50:30.230 \longrightarrow 00:50:31.660$ When it types the lung.

NOTE Confidence: 0.649108285555556

 $00{:}50{:}31.660 \dashrightarrow 00{:}50{:}34.482$ And and and about 88% at serious

NOTE Confidence: 0.649108285555556

 $00{:}50{:}34.482 \dashrightarrow 00{:}50{:}36.512$ skin sclerosis are baseline close

NOTE Confidence: 0.649108285555556

 $00{:}50{:}36{.}512 \dashrightarrow 00{:}50{:}40{.}000$ to 16% on improvement in sclerosis.

NOTE Confidence: 0.64910828555556

 $00{:}50{:}40.000 \dashrightarrow 00{:}50{:}41.645$ Another aspect that we tend to ignore

 $00:50:41.645 \rightarrow 00:50:43.719$ is you might have clinical manifestation,

NOTE Confidence: 0.649108285555556

 $00:50:43.720 \longrightarrow 00:50:45.520$ but what about the quality of

NOTE Confidence: 0.649108285555556

 $00:50:45.520 \rightarrow 00:50:46.720$ lives and symptom burden?

NOTE Confidence: 0.64910828555556

00:50:46.720 --> 00:50:48.939 And here's just a graph in somebody

NOTE Confidence: 0.649108285555556

 $00{:}50{:}48{.}939 \dashrightarrow 00{:}50{.}502$ that's depicting that across the

NOTE Confidence: 0.64910828555556

 $00{:}50{:}50{.}502 \dashrightarrow 00{:}50{:}52{.}820$ dose people had good responses

NOTE Confidence: 0.64910828555556

 $00:50:52.820 \rightarrow 00:50:54.860$ in the symptom scale.

NOTE Confidence: 0.649108285555556

00:50:54.860 --> 00:50:55.500 In conclusion,

NOTE Confidence: 0.649108285555556

 $00{:}50{:}55{.}500 \dashrightarrow 00{:}50{:}57{.}100$ I think the investigators were

NOTE Confidence: 0.649108285555556

 $00:50:57.100 \longrightarrow 00:50:59.065$ able to show that targeting

NOTE Confidence: 0.649108285555556

00:50:59.065 --> 00:51:00.487 monocyte macrophage pathway,

NOTE Confidence: 0.649108285555556

 $00:51:00.490 \longrightarrow 00:51:04.434$ the CSF one receptor ligand seems to be

NOTE Confidence: 0.649108285555556

 $00:51:04.434 \rightarrow 00:51:07.422$ meaningful leads to decent response rates.

NOTE Confidence: 0.649108285555556

 $00:51:07.430 \longrightarrow 00:51:10.190$ Sclerosis seems to go down on it now.

NOTE Confidence: 0.649108285555556

00:51:10.190 - 00:51:12.206 There's a trial that they're going

NOTE Confidence: 0.649108285555556

 $00:51:12.206 \rightarrow 00:51:13.550$ to randomize different doses,

- NOTE Confidence: 0.649108285555556
- 00:51:13.550 --> 00:51:15.896 potentially as a group with contemplating
- NOTE Confidence: 0.649108285555556
- 00:51:15.900 --> 00:51:17.168 participating in this thing,
- NOTE Confidence: 0.64910828555556
- 00:51:17.168 --> 00:51:19.873 but it's kind of opened up the concept
- NOTE Confidence: 0.64910828555556
- $00{:}51{:}19.873 \dashrightarrow 00{:}51{:}21.718$ of targeting monocyte macrophages in
- NOTE Confidence: 0.649108285555556
- $00{:}51{:}21{.}718 \dashrightarrow 00{:}51{:}24{.}138$ addition to the T cell thing that
- NOTE Confidence: 0.649108285555556
- $00:51:24.138 \rightarrow 00:51:26.010$ we commonly pursued in chronic GVHD.
- NOTE Confidence: 0.649108285555556
- 00:51:26.010 00:51:27.340 On the last day that I'm going
- NOTE Confidence: 0.649108285555556
- $00:51:27.340 \longrightarrow 00:51:28.650$ to talk about is a better set,
- NOTE Confidence: 0.649108285555556
- $00{:}51{:}28.650 \dashrightarrow 00{:}51{:}31.495$ this was a study that was done at Boston.
- NOTE Confidence: 0.649108285555556
- $00:51:31.495 \rightarrow 00:51:34.165$ Abbott stepped as you all know,
- NOTE Confidence: 0.649108285555556
- $00{:}51{:}34{.}170 \dashrightarrow 00{:}51{:}37{.}668$ is a T cell costimulation modulator,
- NOTE Confidence: 0.61681749777778
- 00:51:37.670 --> 00:51:39.650 the T cell receptors.
- NOTE Confidence: 0.61681749777778
- $00{:}51{:}39{.}650 \dashrightarrow 00{:}51{:}42{.}125$ After recognizing the APKS would
- NOTE Confidence: 0.61681749777778
- $00{:}51{:}42{.}130 \dashrightarrow 00{:}51{:}44{.}754$ interact with them and the CD 20 would
- NOTE Confidence: 0.61681749777778
- $00:51:44.754 \rightarrow 00:51:47.640$ normally interact with the CD 86.
- NOTE Confidence: 0.61681749777778

 $00:51:47.640 \rightarrow 00:51:49.840$ For this is necessary for T cell activation,

NOTE Confidence: 0.61681749777778

 $00{:}51{:}49{.}840 \dashrightarrow 00{:}51{:}51{.}370$ proliferation and production

NOTE Confidence: 0.61681749777778

00:51:51.370 -> 00:51:52.900 of inflammatory mediators,

NOTE Confidence: 0.61681749777778

 $00:51:52.900 \longrightarrow 00:51:55.260$ whereas inhibits this pathway

NOTE Confidence: 0.61681749777778

 $00:51:55.260 \longrightarrow 00:51:57.234$ by targeting CD 1886,

NOTE Confidence: 0.61681749777778

 $00{:}51{:}57{.}234 \dashrightarrow 00{:}51{:}58{.}822$ and this costimulation doesn't

NOTE Confidence: 0.61681749777778

 $00{:}51{:}58{.}822 \dashrightarrow 00{:}52{:}00{.}455$ happen and the hypothesis here is

NOTE Confidence: 0.61681749777778

 $00{:}52{:}00{.}455 \dashrightarrow 00{:}52{:}02{.}076$ that if you somehow can prevent

NOTE Confidence: 0.61681749777778

 $00{:}52{:}02{.}076 \dashrightarrow 00{:}52{:}03{.}420$ this T cell costimulation,

NOTE Confidence: 0.61681749777778

 $00:52:03.420 \longrightarrow 00:52:04.359$ maybe the proliferation

NOTE Confidence: 0.61681749777778

00:52:04.359 --> 00:52:05.298 activation doesn't happen.

NOTE Confidence: 0.61681749777778

 $00:52:05.300 \rightarrow 00:52:08.408$ That leads to decrease chronic dry.

NOTE Confidence: 0.61681749777778

 $00{:}52{:}08{.}410 \dashrightarrow 00{:}52{:}10{.}670$ About six months ago I.

NOTE Confidence: 0.61681749777778

 $00{:}52{:}10.670 \dashrightarrow 00{:}52{:}12.329$ I know I'm using the six months

NOTE Confidence: 0.61681749777778

 $00:52:12.329 \rightarrow 00:52:13.678$ one year commonly because that's

NOTE Confidence: 0.61681749777778

 $00:52:13.678 \longrightarrow 00:52:14.850$ how frequently the drugs are

 $00:52:14.850 \longrightarrow 00:52:15.950$ getting approved in this space.

NOTE Confidence: 0.61681749777778

 $00:52:15.950 \rightarrow 00:52:16.416$ Recently,

NOTE Confidence: 0.61681749777778

 $00:52:16.416 \longrightarrow 00:52:18.746$ the drug was actually approved

NOTE Confidence: 0.61681749777778

 $00:52:18.746 \longrightarrow 00:52:21.050$ for prevention of acute GVHD.

NOTE Confidence: 0.61681749777778

00:52:21.050 --> 00:52:23.230 Yeah, mainly for unrelated donors,

NOTE Confidence: 0.61681749777778

 $00{:}52{:}23{.}230 \dashrightarrow 00{:}52{:}25{.}170$ so this is a study in the backdrop of that,

NOTE Confidence: 0.61681749777778

 $00:52:25.170 \longrightarrow 00:52:26.822$ but obviously the context

NOTE Confidence: 0.61681749777778

00:52:26.822 --> 00:52:28.887 is in a chronic dbcontext,

NOTE Confidence: 0.61681749777778

 $00{:}52{:}28.890 \dashrightarrow 00{:}52{:}30.444$ so people are wanting to say yes.

NOTE Confidence: 0.61681749777778

 $00:52:30.450 \longrightarrow 00:52:31.692$ This is a drug that's not

NOTE Confidence: 0.61681749777778

 $00:52:31.692 \longrightarrow 00:52:32.790$ going to be commonly used.

NOTE Confidence: 0.61681749777778

 $00:52:32.790 \rightarrow 00:52:35.184$ What happens in the chronic dry setting?

NOTE Confidence: 0.61681749777778

 $00{:}52{:}35{.}190 \dashrightarrow 00{:}52{:}37{.}142$ So the design was this close to 40

NOTE Confidence: 0.61681749777778

 $00:52:37.142 \longrightarrow 00:52:39.060$ patients who had both are bleeding

NOTE Confidence: 0.61681749777778

 $00{:}52{:}39{.}060 \dashrightarrow 00{:}52{:}40{.}432$ and reduced density transplants

 $00:52:40.432 \longrightarrow 00:52:41.913$ and declared themselves steroid

NOTE Confidence: 0.61681749777778

00:52:41.913 --> 00:52:43.389 refractory and the definition

NOTE Confidence: 0.61681749777778

 $00{:}52{:}43{.}389 \dashrightarrow 00{:}52{:}45{.}156$ of that was persistent science

NOTE Confidence: 0.61681749777778

00:52:45.156 --> 00:52:46.586 and symptoms of chronic GVHD.

NOTE Confidence: 0.61681749777778

 $00:52:46.590 \longrightarrow 00:52:47.842$ Despite use of steroids,

NOTE Confidence: 0.61681749777778

 $00{:}52{:}47.842 \dashrightarrow 00{:}52{:}49.720$.5 mix per chik per day for

NOTE Confidence: 0.61681749777778

 $00:52:49.789 \longrightarrow 00:52:51.017$ at least four weeks.

NOTE Confidence: 0.61681749777778

 $00:52:51.020 \rightarrow 00:52:51.955$ They were to be getting

NOTE Confidence: 0.61681749777778

 $00{:}52{:}51{.}955 \dashrightarrow 00{:}52{:}53{.}140$ this to stand mix for cake,

NOTE Confidence: 0.61681749777778

 $00:52:53.140 \longrightarrow 00:52:54.598$ which is what was acute GVHD.

NOTE Confidence: 0.61681749777778

 $00:52:54.600 \rightarrow 00:52:56.434$ Dose was every two weeks for three

NOTE Confidence: 0.61681749777778

 $00{:}52{:}56{.}434 \dashrightarrow 00{:}52{:}58{.}383$ doses and then they would go on to

NOTE Confidence: 0.61681749777778

 $00{:}52{:}58{.}383 \dashrightarrow 00{:}53{:}00{.}484$ get it for every four weeks for three

NOTE Confidence: 0.61681749777778

 $00{:}53{:}00{.}484 \dashrightarrow 00{:}53{:}02{.}380$ doses based on the clinical response,

NOTE Confidence: 0.61681749777778

 $00:53:02.380 \longrightarrow 00:53:03.814$ there was no response will come

NOTE Confidence: 0.61681749777778

 $00{:}53{:}03{.}814 \dashrightarrow 00{:}53{:}05{.}503$ off that a clinical response for

- NOTE Confidence: 0.61681749777778
- $00{:}53{:}05{.}503 \dashrightarrow 00{:}53{:}06{.}875$ their continuation was allowed.
- NOTE Confidence: 0.61681749777778
- $00{:}53{:}06{.}880 \dashrightarrow 00{:}53{:}09{.}504$ The aim was to look into the rates
- NOTE Confidence: 0.61681749777778
- $00:53:09.504 \rightarrow 00:53:11.260$ of overall response rates and
- NOTE Confidence: 0.61681749777778
- $00:53:11.260 \rightarrow 00:53:13.390$ see how things were playing out.
- NOTE Confidence: 0.61681749777778
- $00:53:13.390 \rightarrow 00:53:15.030$ And this is just a description of things.
- NOTE Confidence: 0.61681749777778
- $00:53:15.030 \longrightarrow 00:53:18.003$ Go on the oral response rate was 49%.
- NOTE Confidence: 0.61681749777778
- 00:53:18.003 --> 00:53:18.356 Unfortunately,
- NOTE Confidence: 0.61681749777778
- $00{:}53{:}18.356 \dashrightarrow 00{:}53{:}20.827$ CR was zero and most of them
- NOTE Confidence: 0.61681749777778
- 00:53:20.827 -> 00:53:22.119 were PR responses.
- NOTE Confidence: 0.61681749777778
- 00:53:22.120 --> 00:53:23.710 This is just a spread
- NOTE Confidence: 0.61681749777778
- $00:53:23.710 \longrightarrow 00:53:24.664$ across different organs.
- NOTE Confidence: 0.61681749777778
- $00:53:24.670 \longrightarrow 00:53:25.480$ In the interest of time,
- NOTE Confidence: 0.61681749777778
- 00:53:25.480 --> 00:53:27.230 I'm going to quit that and this
- NOTE Confidence: 0.61681749777778
- $00{:}53{:}27{.}230 \dashrightarrow 00{:}53{:}29{.}228$ is the slide that basically shows.
- NOTE Confidence: 0.61681749777778
- $00:53:29.230 \longrightarrow 00:53:30.650$ While look at response rates,
- NOTE Confidence: 0.61681749777778

 $00:53:30.650 \rightarrow 00:53:32.939$ its importance to Ryan has been the

NOTE Confidence: 0.61681749777778

00:53:32.939 --> 00:53:34.873 main drug that we've used quite

NOTE Confidence: 0.61681749777778

00:53:34.873 -> 00:53:36.434 a few other people were able to

NOTE Confidence: 0.61681749777778

 $00:53:36.434 \rightarrow 00:53:37.928$ decrease down their dose of steroids,

NOTE Confidence: 0.61681749777778

 $00:53:37.930 \longrightarrow 00:53:39.560$ which has long term implications

NOTE Confidence: 0.61681749777778

 $00:53:39.560 \longrightarrow 00:53:40.864$ on their metabolic health,

NOTE Confidence: 0.61681749777778

00:53:40.870 - 00:53:41.566 mental health,

NOTE Confidence: 0.61681749777778

 $00:53:41.566 \rightarrow 00:53:43.654$ cardiovascular risk and things like that.

NOTE Confidence: 0.61681749777778

 $00:53:43.660 \longrightarrow 00:53:46.848$ So with that the.

NOTE Confidence: 0.61681749777778

 $00:53:46.848 \rightarrow 00:53:49.288$ Investigators conclude now a 50%

NOTE Confidence: 0.61681749777778

 $00:53:49.290 \rightarrow 00:53:51.582$ objective response rate or are in

NOTE Confidence: 0.61681749777778

 $00{:}53{:}51{.}582 \dashrightarrow 00{:}53{:}54{.}298$ the cirrhotic factory is a welcome change.

NOTE Confidence: 0.61681749777778

 $00:53:54.300 \longrightarrow 00:53:54.704$ Importantly,

NOTE Confidence: 0.61681749777778

 $00{:}53{:}54{.}704 \dashrightarrow 00{:}53{:}57{.}128$ there was a durable reduction in

NOTE Confidence: 0.61681749777778

 $00:53:57.128 \rightarrow 00:53:58.789$ Prednisone dosing overtime infections

NOTE Confidence: 0.61681749777778

 $00{:}53{:}58{.}789 \dashrightarrow 00{:}54{:}00{.}709$ were uncommon in this context,

 $00:54:00.710 \longrightarrow 00:54:02.546$ and infusions were pretty well tolerated.

NOTE Confidence: 0.61681749777778

00:54:02.550 --> 00:54:04.128 Their ongoing studies,

NOTE Confidence: 0.61681749777778

00:54:04.128 --> 00:54:05.706 correlate's and biomarkers,

NOTE Confidence: 0.61681749777778

 $00{:}54{:}05{.}710 \dashrightarrow 00{:}54{:}06{.}654$ and things like that.

NOTE Confidence: 0.61681749777778

 $00{:}54{:}06{.}654 \dashrightarrow 00{:}54{:}07{.}126$ With that,

NOTE Confidence: 0.61681749777778

 $00{:}54{:}07{.}130 \dashrightarrow 00{:}54{:}08{.}775$ I'll end the top and thank every body

NOTE Confidence: 0.61681749777778

 $00:54:08.775 \longrightarrow 00:54:10.406$ for coming and I'll open it up

NOTE Confidence: 0.61681749777778

 $00:54:10.406 \longrightarrow 00:54:11.060$ for the audience.

NOTE Confidence: 0.9663661

 $00:54:15.530 \rightarrow 00:54:17.690$ So we're going to open this up to questions.

NOTE Confidence: 0.946120445

 $00:54:17.690 \longrightarrow 00:54:21.050$ Now you can feel free to ask them

NOTE Confidence: 0.946120445

 $00:54:21.050 \longrightarrow 00:54:24.794$ or or write them down in the chat.

NOTE Confidence: 0.946120445

 $00{:}54{:}24.800 \dashrightarrow 00{:}54{:}26.190$ For each of the talks.

NOTE Confidence: 0.822578278571429

00:54:29.780 - 00:54:31.796 And maybe in the. In the meantime,

NOTE Confidence: 0.822578278571429

00:54:31.800 --> 00:54:35.220 I'll just ask Lohith lohith.

NOTE Confidence: 0.822578278571429

 $00{:}54{:}35{.}220 \dashrightarrow 00{:}54{:}38{.}752$ Do you think that given the good

 $00:54:38.752 \rightarrow 00:54:41.407$ efficacy we've seen with ruxolitinib NOTE Confidence: 0.822578278571429 $00:54:41.410 \rightarrow 00:54:43.910$ in patients with steroid refractory? NOTE Confidence: 0.82662060625 $00:54:46.010 \rightarrow 00:54:48.314$ Jigged, do you think that there's NOTE Confidence: 0.82662060625 $00:54:48.314 \rightarrow 00:54:51.036$ and given the safe the what seems NOTE Confidence: 0.82662060625 $00:54:51.036 \rightarrow 00:54:53.619$ to be fairly good safety profile of NOTE Confidence: 0.82662060625 $00:54:53.700 \rightarrow 00:54:56.140$ the human chorionic gonadotropin? NOTE Confidence: 0.82662060625 $00{:}54{:}56{.}140 \dashrightarrow 00{:}54{:}58{.}748$ Do you see a role for the combination NOTE Confidence: 0.82662060625 $00{:}54{:}58{.}748 \dashrightarrow 00{:}55{:}03{.}196$ of that with ruxolitinib and in NOTE Confidence: 0.82662060625 $00:55:03.196 \rightarrow 00:55:06.088$ terms of steroid sparing effects NOTE Confidence: 0.82662060625 $00:55:06.088 \rightarrow 00:55:07.800$ in this patient population? NOTE Confidence: 0.82662060625 00:55:07.800 --> 00:55:09.627 I don't know if there is such NOTE Confidence: 0.82662060625 $00{:}55{:}09{.}627 \dashrightarrow 00{:}55{:}11{.}239$ a trial that's already been. NOTE Confidence: 0.82662060625 00:55:11.240 --> 00:55:13.496 That University of Minnesota is doing or not, NOTE Confidence: 0.82662060625 $00:55:13.500 \longrightarrow 00:55:15.474$ but that would seem like a NOTE Confidence: 0.82662060625 $00:55:15.474 \rightarrow 00:55:16.790$ reasonable trial to conduct. NOTE Confidence: 0.7046359992 00:55:17.560 --> 00:55:19.108 Yeah, I think I think that's

- NOTE Confidence: 0.7046359992
- $00:55:19.108 \rightarrow 00:55:21.530$ that's a great question, Alice.
- NOTE Confidence: 0.7046359992
- $00{:}55{:}21{.}530 \dashrightarrow 00{:}55{:}23{.}945$ Obviously, the CR rates around 60 to
- NOTE Confidence: 0.7046359992
- $00:55:23.945 \longrightarrow 00:55:25.808$ 70% based on which trial you look
- NOTE Confidence: 0.7046359992
- $00:55:25.808 \rightarrow 00:55:28.300$ around it or our response rate.
- NOTE Confidence: 0.7046359992
- $00:55:28.300 \longrightarrow 00:55:31.740$ Real question is the day 28 is the
- NOTE Confidence: 0.7046359992
- $00{:}55{:}31.740 \dashrightarrow 00{:}55{:}34.270$ magic bullet, at least in most trials.
- NOTE Confidence: 0.7046359992
- $00:55:34.270 \longrightarrow 00:55:37.528$ How much are we going to?
- NOTE Confidence: 0.7046359992
- $00:55:37.530 \rightarrow 00:55:38.122$ Miles suppressed?
- NOTE Confidence: 0.7046359992
- $00{:}55{:}38{.}122 \dashrightarrow 00{:}55{:}40{.}490$ The good thing about this drug is it's
- NOTE Confidence: 0.7046359992
- $00:55:40.543 \rightarrow 00:55:42.238$ not deeply Mila suppressive right?
- NOTE Confidence: 0.7046359992
- $00:55:42.238 \rightarrow 00:55:44.650$ I think that's that's a great part of this.
- NOTE Confidence: 0.7046359992
- $00{:}55{:}44.650 \dashrightarrow 00{:}55{:}46.528$ There's always been this concern in
- NOTE Confidence: 0.7046359992
- $00{:}55{:}46{.}528 \dashrightarrow 00{:}55{:}48{.}478$ the field that if the inflammation
- NOTE Confidence: 0.7046359992
- $00{:}55{:}48{.}478 \dashrightarrow 00{:}55{:}51{.}030$ kicks in and the tissue is wiped out.
- NOTE Confidence: 0.7046359992
- $00:55:51.030 \rightarrow 00:55:54.016$ You're in a losing cause that that
- NOTE Confidence: 0.7046359992

- $00:55:54.016 \rightarrow 00:55:56.388$ combination makes rational sense,
- NOTE Confidence: 0.7046359992
- 00:55:56.390 --> 00:55:58.280 but I'm not certain the group
- NOTE Confidence: 0.7046359992
- $00:55:58.280 \rightarrow 00:55:59.225$ is pursuing this.
- NOTE Confidence: 0.7046359992
- $00:55:59.230 \rightarrow 00:55:59.502$ Clearly,
- NOTE Confidence: 0.7046359992
- $00{:}55{:}59{.}502 \dashrightarrow 00{:}56{:}01{.}678$ I think what it's showing is we just
- NOTE Confidence: 0.7046359992
- $00{:}56{:}01.678 \dashrightarrow 00{:}56{:}04.064$ probably need to start thinking and
- NOTE Confidence: 0.7046359992
- $00:56:04.064 \rightarrow 00:56:05.228$ deescalating immunosuppression sooner
- NOTE Confidence: 0.7046359992
- $00:56:05.228 \rightarrow 00:56:07.256$ rather than keep harping on it,
- NOTE Confidence: 0.7046359992
- $00{:}56{:}07{.}260 \dashrightarrow 00{:}56{:}09{.}508$ which is what we've done for many decades.
- NOTE Confidence: 0.7046359992
- 00:56:09.510 --> 00:56:11.980 Hopefully we'll get a good
- NOTE Confidence: 0.7046359992
- 00:56:11.980 --> 00:56:13.796 antimotility drugs, good tissue,
- NOTE Confidence: 0.7046359992
- $00:56:13.796 \longrightarrow 00:56:15.448$ healing, drugs going forwards,
- NOTE Confidence: 0.7046359992
- $00{:}56{:}15{.}450 \dashrightarrow 00{:}56{:}18{.}170$ and this seems to be the right start.
- NOTE Confidence: 0.7046359992
- $00:56:18.170 \longrightarrow 00:56:18.800$ But there's
- NOTE Confidence: 0.857819911428572
- $00:56:18.810 \longrightarrow 00:56:21.358$ a question in the chat about the
- NOTE Confidence: 0.837721745
- $00:56:22.230 \longrightarrow 00:56:25.618$ the mechanism of rock

- NOTE Confidence: 0.730805488
- 00:56:23.830 --> 00:56:25.610 two and Rock 2 inhibition. Can you
- NOTE Confidence: 0.928397435714286
- $00:56:25.620 \longrightarrow 00:56:28.770$ tell us a little more about that? So.
- NOTE Confidence: 0.5270866466666667
- $00:56:31.510 \longrightarrow 00:56:33.285$ I think it's mass general
- NOTE Confidence: 0.5270866466666667
- $00:56:33.285 \longrightarrow 00:56:35.476$ identified a few years ago.
- NOTE Confidence: 0.5270866466666667
- $00{:}56{:}35{.}476 \dashrightarrow 00{:}56{:}38{.}860$ They came up with this idea that.
- NOTE Confidence: 0.527086646666667
- 00:56:38.860 --> 00:56:41.508 You know, just like most things you know,
- NOTE Confidence: 0.5270866466666667
- $00:56:41.510 \rightarrow 00:56:43.338$ we have anti-inflammatory drugs.
- NOTE Confidence: 0.5270866466666667
- $00:56:43.338 \longrightarrow 00:56:45.623$ But we don't really have
- NOTE Confidence: 0.5270866466666667
- $00:56:45.623 \longrightarrow 00:56:47.629$ good antifibrotic trucks.
- NOTE Confidence: 0.5270866466666667
- 00:56:47.630 --> 00:56:49.835 I think this rock pathway has been
- NOTE Confidence: 0.5270866466666667
- 00:56:49.835 --> 00:56:51.700 shown in systemic sclerosis and,
- NOTE Confidence: 0.5270866466666667
- 00:56:51.700 --> 00:56:53.758 at least in this clematis GBST,
- NOTE Confidence: 0.5270866466666667
- 00:56:53.760 --> 00:56:57.004 most models targeting rock
- NOTE Confidence: 0.5270866466666667
- 00:56:57.004 --> 00:57:01.059 Pathway Rock 2 results in.
- NOTE Confidence: 0.5270866466666667
- $00:57:01.060 \rightarrow 00:57:03.236$ Grease scarring, decreased fibrosis,
- NOTE Confidence: 0.5270866466666667

 $00{:}57{:}03.236 \dashrightarrow 00{:}57{:}06.990$ and that was the rationale for that.

NOTE Confidence: 0.5270866466666667

00:57:06.990 --> 00:57:08.550 Considering most of chronic GVHD,

NOTE Confidence: 0.5270866466666667

00:57:08.550 --> 00:57:10.914 people have facial involvement,

NOTE Confidence: 0.527086646666667

 $00:57:10.914 \rightarrow 00:57:13.278$ synovitis myositis and things.

NOTE Confidence: 0.527086646666667

 $00{:}57{:}13.280 \dashrightarrow 00{:}57{:}14.942$ There's a lot of interest that's

NOTE Confidence: 0.527086646666667

 $00:57:14.942 \rightarrow 00:57:16.765$ going on a couple of our dermatology

NOTE Confidence: 0.5270866466666667

00:57:16.765 --> 00:57:17.777 colleagues and our banking.

NOTE Confidence: 0.5270866466666667

 $00:57:17.780 \rightarrow 00:57:19.970$ These samples at least my patients.

NOTE Confidence: 0.5270866466666667

00:57:19.970 --> 00:57:22.959 Uh, trying to address what are the

NOTE Confidence: 0.5270866466666667

 $00:57:22.959 \rightarrow 00:57:25.278$ synergistic things that we could use?

NOTE Confidence: 0.5270866466666667

 $00:57:25.280 \rightarrow 00:57:27.947$ In addition to the rock pathway that

NOTE Confidence: 0.5270866466666667

00:57:27.950 --> 00:57:30.942 further subprocess fibrotic mechanisms,

NOTE Confidence: 0.5270866466666667

00:57:30.942 --> 00:57:31.908 because really,

NOTE Confidence: 0.5270866466666667

 $00{:}57{:}31{.}908 \dashrightarrow 00{:}57{:}34{.}196$ we do see that some of them come up with

NOTE Confidence: 0.5270866466666667

 $00{:}57{:}34.196 \dashrightarrow 00{:}57{:}35.840$ contracted arms and things like that

NOTE Confidence: 0.5270866466666667

 $00:57:35.840 \rightarrow 00:57:37.930$ and that has functional implications.

- NOTE Confidence: 0.5270866466666667
- $00:57:37.930 \longrightarrow 00:57:38.782$ More importantly,
- NOTE Confidence: 0.5270866466666667
- 00:57:38.782 --> 00:57:40.486 it's not deeply immunosuppressive,
- NOTE Confidence: 0.5270866466666667
- $00:57:40.490 \longrightarrow 00:57:42.090$ and that's a welcome change.
- NOTE Confidence: 0.5270866466666667
- $00{:}57{:}42.090 \dashrightarrow 00{:}57{:}44.682$ Rates of infections are low and and.
- NOTE Confidence: 0.5270866466666667
- $00:57:44.682 \rightarrow 00:57:46.062$ Stating that this is something
- NOTE Confidence: 0.5270866466666667
- $00:57:46.062 \longrightarrow 00:57:47.528$ that you had in the car,
- NOTE Confidence: 0.5270866466666667
- $00:57:47.530 \longrightarrow 00:57:49.462$ I say I've seen good responses
- NOTE Confidence: 0.5270866466666667
- $00:57:49.462 \longrightarrow 00:57:50.750$ even in lung GVHD,
- NOTE Confidence: 0.5270866466666667
- $00{:}57{:}50{.}750 \dashrightarrow 00{:}57{:}53{.}000$ but I think as a special code I would
- NOTE Confidence: 0.5270866466666667
- $00:57:53.000 \longrightarrow 00:57:55.311$ like to see a little more to see if
- NOTE Confidence: 0.5270866466666667
- $00:57:55.311 \rightarrow 00:57:57.043$ that brings up on field changing shift,
- NOTE Confidence: 0.5270866466666667
- $00{:}57{:}57{.}043 \dashrightarrow 00{:}57{:}59{.}080$ but that's still a work in progress.
- NOTE Confidence: 0.7297306075
- $00:58:01.090 \longrightarrow 00:58:02.398$ There's also a question
- NOTE Confidence: 0.457523812
- $00{:}58{:}02{.}410 \dashrightarrow 00{:}58{:}05{.}170$ for Aris about immune approaches.
- NOTE Confidence: 0.457523812
- $00{:}58{:}05{.}170 \dashrightarrow 00{:}58{:}07{.}920$ Postcard T to enhance attention
- NOTE Confidence: 0.457523812

 $00:58:07.920 \longrightarrow 00:58:10.670$ of cells for continued response.

NOTE Confidence: 0.457523812

 $00{:}58{:}10.670 \dashrightarrow 00{:}58{:}12.018$ Thank you. Touched on that a little

NOTE Confidence: 0.457523812

 $00{:}58{:}12.018 \dashrightarrow 00{:}58{:}14.510$ bit with that new Novartis platform.

NOTE Confidence: 0.457523812

 $00{:}58{:}14{.}510 \dashrightarrow 00{:}58{:}16{.}494$ But people doing other things try and

NOTE Confidence: 0.457523812

 $00{:}58{:}16{.}494 \dashrightarrow 00{:}58{:}18{.}286$ get car T cells to persist to work

NOTE Confidence: 0.457523812

 $00{:}58{:}18.286 \dashrightarrow 00{:}58{:}21.620$ better afterwards that you heard of.

NOTE Confidence: 0.457523812

 $00:58:21.620 \longrightarrow 00:58:24.470$ Yeah, well, I mean so.

NOTE Confidence: 0.457523812

 $00:58:24.470 \rightarrow 00:58:28.649$ So the humanizing party is 1 approach

NOTE Confidence: 0.457523812

 $00{:}58{:}28{.}649 \dashrightarrow 00{:}58{:}30{.}660$ to for them to persist better.

NOTE Confidence: 0.457523812

 $00:58:30.660 \rightarrow 00:58:32.148$ Again looking at the.

NOTE Confidence: 0.871919848

 $00:58:34.500 \rightarrow 00:58:37.640$ Central memory phenotypes are using

NOTE Confidence: 0.871919848

 $00:58:37.640 \longrightarrow 00:58:40.780$ enriching for that particular patient

NOTE Confidence: 0.871919848

 $00:58:40.875 \longrightarrow 00:58:43.715$ population is another is another

NOTE Confidence: 0.871919848

 $00{:}58{:}43.715 \dashrightarrow 00{:}58{:}46.555$ approach to to enhance retention.

NOTE Confidence: 0.871919848

 $00{:}58{:}46{.}560 \dashrightarrow 00{:}58{:}49{.}296$ You know, the other thing is that they do

NOTE Confidence: 0.871919848

 $00:58:49.296 \rightarrow 00:58:52.116$ have these Cortese that secrete cytokines,

- NOTE Confidence: 0.871919848
- $00:58:52.120 \longrightarrow 00:58:53.365$ so that's another.
- NOTE Confidence: 0.871919848
- 00:58:53.365 00:58:54.610 That's another approach.
- NOTE Confidence: 0.871919848
- $00:58:54.610 \longrightarrow 00:58:56.970$ And in fact there was actually an
- NOTE Confidence: 0.871919848
- 00:58:56.970 --> 00:58:59.630 abstract at ASH that I didn't show,
- NOTE Confidence: 0.871919848
- $00:58:59.630 \dashrightarrow 00:59:06.590$ but I have a slide of with the BC MA therapy.
- NOTE Confidence: 0.871919848
- $00:59:06.590 \rightarrow 00:59:10.598$ Releasing, you know with AB Mccourtie
- NOTE Confidence: 0.871919848
- $00:59:10.598 \rightarrow 00:59:13.147$ releasing cytokines that enhance
- NOTE Confidence: 0.871919848
- $00:59:13.147 \longrightarrow 00:59:15.832$ proliferation so so there are
- NOTE Confidence: 0.871919848
- $00{:}59{:}15.832 \dashrightarrow 00{:}59{:}19.709$ multiple approaches and actually.
- NOTE Confidence: 0.871919848
- $00{:}59{:}19{.}710 \dashrightarrow 00{:}59{:}21{.}792$ Come. You know, sometimes that can
- NOTE Confidence: 0.871919848
- $00:59:21.792 \rightarrow 00:59:24.479$ can be a double edged sword, right?
- NOTE Confidence: 0.871919848
- $00{:}59{:}24{.}479 \dashrightarrow 00{:}59{:}26{.}424$ Because these cells can proliferate
- NOTE Confidence: 0.871919848
- $00:59:26.424 \rightarrow 00:59:28.872$ very rapidly and then you have to
- NOTE Confidence: 0.871919848
- $00{:}59{:}28{.}872 \dashrightarrow 00{:}59{:}31{.}164$ think about a switch to turn them off NOTE Confidence: 0.871919848
- 00:59:31.164 --> 00:59:33.348 because they can become a very toxic,
- NOTE Confidence: 0.871919848

 $00:59:33.350 \longrightarrow 00:59:34.910$ but you can combine them.

NOTE Confidence: 0.871919848

 $00{:}59{:}34{.}910 \dashrightarrow 00{:}59{:}36{.}524$ You can do basically like City

NOTE Confidence: 0.871919848

 $00:59:36.524 \rightarrow 00:59:37.950$ Chen is doing at Yale,

NOTE Confidence: 0.871919848

00:59:37.950 - 00:59:42.350 a dual knock in knockout, where you can.

NOTE Confidence: 0.871919848

00:59:42.350 --> 00:59:43.886 Knockout pretty one, so I mean,

NOTE Confidence: 0.871919848

 $00:59:43.890 \rightarrow 00:59:45.750$ that's that's another approach, right?

NOTE Confidence: 0.871919848

 $00:59:45.750 \longrightarrow 00:59:48.207$ So so looking at the micro environment,

NOTE Confidence: 0.871919848

 $00:59:48.210 \longrightarrow 00:59:53.226$ can we actually can we actually.

NOTE Confidence: 0.871919848

 $00{:}59{:}53{.}230 \dashrightarrow 00{:}59{:}55{.}450$ Get cells that are less exhausted

NOTE Confidence: 0.871919848

 $00:59:55.450 \rightarrow 00:59:57.959$ by stimulating by by affecting

NOTE Confidence: 0.871919848

 $00:59:57.959 \longrightarrow 00:59:59.396$ the micro environment.

NOTE Confidence: 0.871919848

 $00:59:59.400 \rightarrow 01:00:00.000$ For example,

NOTE Confidence: 0.871919848

 $01:00:00.000 \rightarrow 01:00:02.100$ those efforts are going on in CLL

NOTE Confidence: 0.871919848

 $01:00:02.100 \longrightarrow 01:00:04.375$ where there is a real problem with

NOTE Confidence: 0.871919848

 $01:00:04.375 \rightarrow 01:00:06.169$ persistence of these court T cells,

NOTE Confidence: 0.871919848

 $01:00:06.170 \longrightarrow 01:00:08.872$ so those are all or or you

- NOTE Confidence: 0.871919848
- $01{:}00{:}08.872 \dashrightarrow 01{:}00{:}10.979$ know the other thing is.
- NOTE Confidence: 0.871919848
- 01:00:10.980 --> 01:00:13.148 At CAR T cells like one of the
- NOTE Confidence: 0.871919848
- 01:00:13.148 --> 01:00:15.619 labs is doing here with Sally Sue,
- NOTE Confidence: 0.871919848
- 01:00:15.620 --> 01:00:16.804 you know,
- NOTE Confidence: 0.871919848
- $01:00:16.804 \rightarrow 01:00:20.356$ with the targeting low antigen density,
- NOTE Confidence: 0.871919848
- $01{:}00{:}20{.}360 \dashrightarrow 01{:}00{:}22{.}364$ for example T cells.
- NOTE Confidence: 0.871919848
- $01{:}00{:}22.364 \dashrightarrow 01{:}00{:}24.869$ So that's that's another approach
- NOTE Confidence: 0.871919848
- $01:00:24.869 \longrightarrow 01:00:27.577$ so that once they may.
- NOTE Confidence: 0.871919848
- 01:00:27.580 --> 01:00:29.376 Progress after regular karty,
- NOTE Confidence: 0.871919848
- 01:00:29.376 --> 01:00:32.960 or if you see decreased antigen expression,
- NOTE Confidence: 0.871919848
- $01:00:32.960 \rightarrow 01:00:35.144$ is to actually target them with the
- NOTE Confidence: 0.871919848
- $01:00:35.144 \rightarrow 01:00:37.638$ with the party that has higher avidity,
- NOTE Confidence: 0.871919848
- $01{:}00{:}37.640 \dashrightarrow 01{:}00{:}39.976$ so those are those are some of the
- NOTE Confidence: 0.871919848
- 01:00:39.976 --> 01:00:42.131 approaches for to enhance the retention
- NOTE Confidence: 0.871919848
- $01:00:42.131 \dashrightarrow 01:00:44.387$ of these cells and continued response.
- NOTE Confidence: 0.6548898125

- 01:00:47.070 --> 01:00:48.478 So so I have
- NOTE Confidence: 0.689952899166667
- $01:00:48.490 \longrightarrow 01:00:51.610$ one question for you is that?
- NOTE Confidence: 0.689952899166667
- $01:00:51.610 \rightarrow 01:00:53.870$ Why it has come up in there has
- NOTE Confidence: 0.689952899166667
- $01:00:53.870 \rightarrow 01:00:55.680$ already been a trial, but given the
- NOTE Confidence: 0.840418978
- $01{:}00{:}55{.}710$ --> $01{:}00{:}56{.}898$ the favorable results,
- NOTE Confidence: 0.840418978
- $01{:}00{:}56.898 \dashrightarrow 01{:}00{:}59.293$ at least from the Zuma 7 trial.
- NOTE Confidence: 0.840418978
- 01:00:59.293 --> 01:01:02.258 Do you foresee a time
- NOTE Confidence: 0.840418978
- $01:01:02.258 \rightarrow 01:01:05.380$ when Carty are used even?
- NOTE Confidence: 0.840418978
- 01:01:05.380 --> 01:01:06.804 In high risk patients,
- NOTE Confidence: 0.840418978
- 01:01:06.804 --> 01:01:08.940 as part of their initial therapy,
- NOTE Confidence: 0.840418978
- $01{:}01{:}08{.}940 \dashrightarrow 01{:}01{:}11{.}718$ as opposed to waiting for disease,
- NOTE Confidence: 0.840418978
- $01:01:11.720 \longrightarrow 01:01:14.610$ refractoriness or relapse.
- NOTE Confidence: 0.720524061428572
- 01:01:17.400 --> 01:01:19.066 Well, I mean different from the Zuma.
- NOTE Confidence: 0.720524061428572
- 01:01:19.070 --> 01:01:21.110 12 so Zuma 12. For example, right?
- NOTE Confidence: 0.720524061428572
- 01:01:21.110 --> 01:01:23.270 They took really high risk patients
- NOTE Confidence: 0.720524061428572
- $01:01:23.270 \rightarrow 01:01:26.170$ and they stratified them by pet after

 $01:01:26.170 \longrightarrow 01:01:29.116$ two cycles and patients that were pet

NOTE Confidence: 0.720524061428572

01:01:29.116 --> 01:01:31.868 positive went on to get to get Carty

NOTE Confidence: 0.720524061428572

 $01:01:31.948 \rightarrow 01:01:34.546$ and the outcomes were pretty good.

NOTE Confidence: 0.720524061428572

 $01:01:34.550 \rightarrow 01:01:38.474$ You know the problem is I think we need to

NOTE Confidence: 0.720524061428572

 $01:01:38.474 \rightarrow 01:01:41.620$ get a little bit longer follow-up because.

NOTE Confidence: 0.911926897666666

01:01:43.700 --> 01:01:46.052 You know patients who have a positive

NOTE Confidence: 0.911926897666666

01:01:46.052 --> 01:01:48.614 PET scan after two cycles you know may

NOTE Confidence: 0.911926897666666

 $01:01:48.614 \rightarrow 01:01:50.855$ still go on to achieve complete remission

NOTE Confidence: 0.911926897666666

 $01:01:50.855 \longrightarrow 01:01:53.591$ at the end of 6 cycles of the rapy,

NOTE Confidence: 0.911926897666666

 $01{:}01{:}53.600 \dashrightarrow 01{:}01{:}57.443$ so I don't know if it's ever going to

NOTE Confidence: 0.911926897666666

 $01:01:57.443 \rightarrow 01:02:00.560$ make it to to frontline it. It may.

NOTE Confidence: 0.9119268976666666

 $01{:}02{:}00.560 \dashrightarrow 01{:}02{:}02{.}738$ It's not. We're not there yet.

NOTE Confidence: 0.911926897666666

 $01:02:02.740 \longrightarrow 01:02:05.436$ I think that what companies are doing now,

NOTE Confidence: 0.911926897666666

 $01{:}02{:}05{.}440 \dashrightarrow 01{:}02{:}07{.}954$ though they are sponsoring trials where

NOTE Confidence: 0.911926897666666

 $01:02:07.954 \rightarrow 01:02:11.121$ they pay for the collection of T cells

 $01:02:11.121 \rightarrow 01:02:13.492$ early on in somebody's presentation.

NOTE Confidence: 0.911926897666666

 $01:02:13.492 \longrightarrow 01:02:18.248$ And they saved them in the event that

NOTE Confidence: 0.911926897666666

 $01:02:18.248 \rightarrow 01:02:23.298$ patients do relapse and they will probably.

NOTE Confidence: 0.911926897666666

 $01:02:23.300 \longrightarrow 01:02:24.539$ Sell that information.

NOTE Confidence: 0.911926897666666

 $01{:}02{:}24.539 \dashrightarrow 01{:}02{:}27.017$ Sell those to pharmaceutical companies that

NOTE Confidence: 0.911926897666666

 $01{:}02{:}27.017 \dashrightarrow 01{:}02{:}31.108$ are designing that are designing trials.

NOTE Confidence: 0.911926897666666

 $01:02:31.110 \longrightarrow 01:02:32.250$ That's interesting, so so,

NOTE Confidence: 0.911926897666666

 $01{:}02{:}32{.}250 \dashrightarrow 01{:}02{:}34{.}315$ so that's going on because I think

NOTE Confidence: 0.911926897666666

 $01{:}02{:}34{.}315 \dashrightarrow 01{:}02{:}35{.}795$ it's really important to collect

NOTE Confidence: 0.911926897666666

 $01{:}02{:}35.795 \dashrightarrow 01{:}02{:}37.966$ the cells as early as possible when

NOTE Confidence: 0.911926897666666

 $01:02:37.966 \longrightarrow 01:02:39.521$ they're when they're fit before

NOTE Confidence: 0.911926897666666

 $01:02:39.521 \dashrightarrow 01:02:42.790$ people have a lot of chemotherapy.

NOTE Confidence: 0.9119268976666666

 $01:02:42.790 \longrightarrow 01:02:45.220$ So so you know there may.

NOTE Confidence: 0.911926897666666

01:02:45.220 --> 01:02:45.832 I mean,

NOTE Confidence: 0.911926897666666

 $01{:}02{:}45.832 \dashrightarrow 01{:}02{:}48.088$ the FDA hasn't even approved yet, right?

NOTE Confidence: 0.911926897666666

 $01{:}02{:}48.088 \dashrightarrow 01{:}02{:}50.596$ For they haven't even approved access

- NOTE Confidence: 0.911926897666666
- 01:02:50.596 --> 01:02:53.636 L or based on or Lisle based on
- NOTE Confidence: 0.911926897666666
- $01:02:53.636 \dashrightarrow 01:02:56.030$ the Zuma 7 and transform results.
- NOTE Confidence: 0.911926897666666
- $01{:}02{:}56{.}030 \dashrightarrow 01{:}02{:}58{.}316$ I think that's the next step.
- NOTE Confidence: 0.911926897666666
- 01:02:58.320 --> 01:02:59.930 Because I think it should be approved,
- NOTE Confidence: 0.911926897666666
- $01:02:59.930 \rightarrow 01:03:03.283$ 'cause clearly there's a PFS benefit in
- NOTE Confidence: 0.911926897666666
- $01{:}03{:}03{.}283 \dashrightarrow 01{:}03{:}06{.}020$ that patient population over transplant,
- NOTE Confidence: 0.911926897666666
- $01:03:06.020 \longrightarrow 01:03:07.763$ so I think that's going to be
- NOTE Confidence: 0.911926897666666
- $01:03:07.763 \longrightarrow 01:03:09.030$ probably the first approval,
- NOTE Confidence: 0.911926897666666
- $01:03:09.030 \longrightarrow 01:03:10.830$ and then after that you know
- NOTE Confidence: 0.911926897666666
- $01:03:10.830 \rightarrow 01:03:11.730$ we're looking at.
- NOTE Confidence: 0.911926897666666
- 01:03:11.730 --> 01:03:12.183 Yeah,
- NOTE Confidence: 0.911926897666666
- $01:03:12.183 \longrightarrow 01:03:13.995$ potentially incorporating it in
- NOTE Confidence: 0.911926897666666
- $01:03:13.995 \rightarrow 01:03:16.260$ people with double hit lymphomas
- NOTE Confidence: 0.911926897666666
- 01:03:16.327 --> 01:03:18.267 or primary refractory disease.
- NOTE Confidence: 0.911926897666666
- $01{:}03{:}18{.}270 \dashrightarrow 01{:}03{:}20{.}370$ Incorporating it early on.
- NOTE Confidence: 0.605640722

01:03:22.250 --> 01:03:23.522 Alright, well we're a we're a

NOTE Confidence: 0.605640722

 $01:03:23.522 \rightarrow 01:03:24.747$ few minutes after the hour,

NOTE Confidence: 0.605640722

 $01:03:24.747 \longrightarrow 01:03:26.118$ so, great presentations,

NOTE Confidence: 0.93276105

 $01{:}03{:}26{.}130 \dashrightarrow 01{:}03{:}29{.}082$ great questions and discussion.

NOTE Confidence: 0.93276105

 $01:03:29.082 \longrightarrow 01:03:30.558$ Thanks everybody.

NOTE Confidence: 0.93276105

 $01:03:30.560 \longrightarrow 01:03:32.430$ Have a good weekend.

NOTE Confidence: 0.93276105

01:03:32.430 --> 01:03:33.999 Thank you everyone.