## WEBVTT

NOTE duration: "01:12:55.4880000"

NOTE language:en-us

NOTE Confidence: 0.8253415

00:00:00.000 --> 00:00:03.232 OK, good afternoon everyone it's 12:00

NOTE Confidence: 0.8253415

 $00:00:03.232 \longrightarrow 00:00:06.914$  PM on this beautiful Friday and today

NOTE Confidence: 0.8253415

 $00:00:06.914 \longrightarrow 00:00:10.735$  is the next session and our yield.

NOTE Confidence: 0.8253415

00:00:10.740 --> 00:00:12.740 Hematology hash highlights from

NOTE Confidence: 0.8253415

 $00:00:12.740 \longrightarrow 00:00:15.240$  the 2020 American Society of

NOTE Confidence: 0.8253415

00:00:15.240 --> 00:00:17.160 Hematology Meeting highlights.

NOTE Confidence: 0.8253415

 $00{:}00{:}17.160 \dashrightarrow 00{:}00{:}21.072$  So as you can see on the agenda

NOTE Confidence: 0.8253415

 $00:00:21.072 \longrightarrow 00:00:24.119$  in the last few weeks,

NOTE Confidence: 0.8253415

 $00{:}00{:}24.120 \to 00{:}00{:}26.260$  we covered multiple myeloma,

NOTE Confidence: 0.8253415

00:00:26.260 --> 00:00:28.494 lymphoid malignancies, myeloid malignancies,

NOTE Confidence: 0.8253415

 $00:00:28.494 \longrightarrow 00:00:31.404$  and pediatric leukemia and hematology.

NOTE Confidence: 0.8253415

00:00:31.410 --> 00:00:35.022 And today we will be discussing

NOTE Confidence: 0.8253415

00:00:35.022 --> 00:00:36.828 classical or B9,

NOTE Confidence: 0.8253415

 $00{:}00{:}36.830 \dashrightarrow 00{:}00{:}39.840$  but not so benign hematology.

00:00:54.230 --> 00:00:56.450 So as usual, many abstracts are

NOTE Confidence: 0.83330727

 $00{:}00{:}56.450 {\:{\circ}{\circ}{\circ}}>00{:}00{:}58.410$  presented in about classical hematology

NOTE Confidence: 0.83330727

 $00:00:58.410 \longrightarrow 00:01:00.465$  in the ash mythology meeting.

NOTE Confidence: 0.83330727

 $00:01:00.470 \longrightarrow 00:01:02.906$  However, due to time limitations the focus

NOTE Confidence: 0.83330727

 $00{:}01{:}02.906 \dashrightarrow 00{:}01{:}05.930$  will be on the most prominent abstracts,

NOTE Confidence: 0.83330727

 $00:01:05.930 \longrightarrow 00:01:08.390$  and the ones that have the

NOTE Confidence: 0.83330727

 $00:01:08.390 \longrightarrow 00:01:10.030$  highest clinical relevance to

NOTE Confidence: 0.83330727

 $00{:}01{:}10.108 \dashrightarrow 00{:}01{:}12.598$  practice on on a day-to-day basis.

NOTE Confidence: 0.83330727

 $00{:}01{:}12.600 \dashrightarrow 00{:}01{:}15.765$  The abstracts will be grouped

NOTE Confidence: 0.83330727

00:01:15.765 --> 00:01:18.297 in areas of clinical.

NOTE Confidence: 0.83330727

 $00{:}01{:}18.300 \dashrightarrow 00{:}01{:}20.932$  Unmet need and there are many other

NOTE Confidence: 0.83330727

 $00:01:20.932 \longrightarrow 00:01:23.566$  abstracts of course that are very good that

NOTE Confidence: 0.83330727

 $00:01:23.566 \longrightarrow 00:01:26.440$  we do not have the time to cover today.

NOTE Confidence: 0.83330727

00:01:26.440 --> 00:01:28.112 Important to note that

NOTE Confidence: 0.83330727

 $00:01:28.112 \longrightarrow 00:01:29.366$  these abstracts represent.

 $00:01:29.370 \longrightarrow 00:01:30.806$  Often preliminary presentations and

NOTE Confidence: 0.83330727

 $00{:}01{:}30.806 \to 00{:}01{:}33.422$  data that has not been yet completely

NOTE Confidence: 0.83330727

 $00{:}01{:}33.422 \dashrightarrow 00{:}01{:}35.804$  vetted or peer reviewed or finalized.

NOTE Confidence: 0.83330727

 $00:01:35.810 \longrightarrow 00:01:38.850$  So we have to take that into consideration.

NOTE Confidence: 0.83330727

 $00{:}01{:}38.850 \dashrightarrow 00{:}01{:}41.272$  As we discussed the data we like

NOTE Confidence: 0.83330727

 $00:01:41.272 \longrightarrow 00:01:43.866$  to thank the authors who shared

NOTE Confidence: 0.83330727

 $00:01:43.866 \longrightarrow 00:01:46.818$  their presentations with us and the

NOTE Confidence: 0.83330727

 $00:01:46.818 \longrightarrow 00:01:49.583$  recording of this session and the

NOTE Confidence: 0.83330727

 $00:01:49.583 \longrightarrow 00:01:51.773$  other sessions will be available.

NOTE Confidence: 0.83330727

 $00:01:51.780 \longrightarrow 00:01:54.618$  Over the next week or so,

NOTE Confidence: 0.83330727

 $00{:}01{:}54.620 \dashrightarrow 00{:}01{:}57.805$  for those who cannot attend the live

NOTE Confidence: 0.83330727

 $00:01:57.805 \longrightarrow 00:02:01.396$  sessions and the CME credit will be

NOTE Confidence: 0.83330727

 $00:02:01.396 \longrightarrow 00:02:04.061$  available after filling up receive

NOTE Confidence: 0.83330727

00:02:04.061 --> 00:02:06.742 feedback on the seminars and how

NOTE Confidence: 0.83330727

 $00:02:06.742 \longrightarrow 00:02:09.210$  we can improve him going forward.

NOTE Confidence: 0.83330727

 $00:02:09.210 \longrightarrow 00:02:12.410$  So today it's a pleasure to be joined

00:02:12.410 --> 00:02:15.428 by my colleagues Sabrina Browning,

NOTE Confidence: 0.83330727

 $00{:}02{:}15.430 \dashrightarrow 00{:}02{:}18.316$  who's our instructor in medicine and

NOTE Confidence: 0.83330727

00:02:18.316 --> 00:02:21.379 section of Hematology who will be

NOTE Confidence: 0.83330727

 $00:02:21.379 \longrightarrow 00:02:23.499$  covering bleeding and hemostasis.

NOTE Confidence: 0.83330727

 $00:02:23.500 \longrightarrow 00:02:25.606$  Sam Alexander Pienaar,

NOTE Confidence: 0.83330727

 $00{:}02{:}25.606 \dashrightarrow 00{:}02{:}28.414$  associate professor of medicine.

NOTE Confidence: 0.83330727

 $00:02:28.420 \longrightarrow 00:02:31.180$  Who will be covering from bosses

NOTE Confidence: 0.83330727

 $00:02:31.180 \longrightarrow 00:02:32.560$  an antithrombotic therapy?

NOTE Confidence: 0.83330727

00:02:32.560 --> 00:02:35.020 Advances from ash and then our

NOTE Confidence: 0.83330727

 $00{:}02{:}35.020 \dashrightarrow 00{:}02{:}37.301$ bright fellow George Joshua will

NOTE Confidence: 0.83330727

 $00{:}02{:}37.301 \dashrightarrow 00{:}02{:}38.999$  finish their presentations,

NOTE Confidence: 0.83330727

 $00:02:39.000 \longrightarrow 00:02:40.840$  covering other important and

NOTE Confidence: 0.83330727

 $00{:}02{:}40.840 \dashrightarrow 00{:}02{:}42.680$  relevant classical hematology topics.

NOTE Confidence: 0.83330727

 $00:02:42.680 \longrightarrow 00:02:45.767$  At the end we will have Professor

NOTE Confidence: 0.83330727

00:02:45.767 --> 00:02:48.199 of Medicine Doctor Robert Bona,

00:02:48.200 --> 00:02:50.960 and our Associate Professor of Medicine,

NOTE Confidence: 0.83330727

 $00{:}02{:}50.960 --> 00{:}02{:}52.349$  Doctor Alfred Lee,

NOTE Confidence: 0.83330727

00:02:52.349 --> 00:02:54.664 who will moderate your questions

NOTE Confidence: 0.83330727

 $00:02:54.664 \longrightarrow 00:02:57.483$  and also be available to help

NOTE Confidence: 0.83330727

 $00:02:57.483 \longrightarrow 00:02:59.295$  the speakers in answering.

NOTE Confidence: 0.83330727

 $00:02:59.300 \longrightarrow 00:03:01.754$  Any of the questions that are

NOTE Confidence: 0.83330727

 $00:03:01.754 \longrightarrow 00:03:04.210$  relevant to the abstracts presented,

NOTE Confidence: 0.83330727

 $00:03:04.210 \longrightarrow 00:03:07.480$  or any other abstracts from the

NOTE Confidence: 0.83330727

 $00{:}03{:}07.480 \dashrightarrow 00{:}03{:}09.660$  meeting that are important.

NOTE Confidence: 0.83330727

 $00:03:09.660 \longrightarrow 00:03:12.635$  So it's my pleasure to present our

NOTE Confidence: 0.83330727

 $00{:}03{:}12.635 \to 00{:}03{:}14.804$  first speaker, doctor Sabrina Browning,

NOTE Confidence: 0.83330727

00:03:14.804 --> 00:03:16.994 who will discuss bleeding and

NOTE Confidence: 0.83330727

 $00{:}03{:}16.994 \dashrightarrow 00{:}03{:}18.590$  hemostasis without so Sabrina.

NOTE Confidence: 0.83330727

 $00:03:18.590 \longrightarrow 00:03:21.140$  Feel free to share your screen.

NOTE Confidence: 0.8116819

 $00:03:25.840 \longrightarrow 00:03:30.215$  Thank you Doctor Zayden and welcome everyone.

NOTE Confidence: 0.8116819

 $00:03:30.220 \longrightarrow 00:03:31.498$  For those interested,

 $00{:}03{:}31.498 \dashrightarrow 00{:}03{:}33.628$  we've included QR codes throughout

NOTE Confidence: 0.8116819

00:03:33.628 --> 00:03:35.491 our presentation that will link

NOTE Confidence: 0.8116819

 $00:03:35.491 \longrightarrow 00:03:37.393$  you directly to the ASH abstracts.

NOTE Confidence: 0.8116819

 $00:03:37.400 \longrightarrow 00:03:40.015$  You can access these by

NOTE Confidence: 0.8116819

 $00{:}03{:}40.015 \dashrightarrow 00{:}03{:}42.107$  using your smartphone camera.

NOTE Confidence: 0.8116819

 $00:03:42.110 \longrightarrow 00:03:45.140$  I have no disclosures to report.

NOTE Confidence: 0.8116819

 $00:03:45.140 \longrightarrow 00:03:46.874$  So this slide outlines the abstracts

NOTE Confidence: 0.8116819

 $00{:}03{:}46.874 \dashrightarrow 00{:}03{:}49.166$  that I will cover today which span

NOTE Confidence: 0.8116819

 $00{:}03{:}49.166 \dashrightarrow 00{:}03{:}50.961$  disorders of platelet number or

NOTE Confidence: 0.8116819

 $00:03:50.961 \longrightarrow 00:03:52.431$  function disorders of coagulation

NOTE Confidence: 0.8116819

 $00:03:52.431 \longrightarrow 00:03:54.171$  and fibrinolysis and von Willebrand

NOTE Confidence: 0.8116819

 $00{:}03{:}54.171 \dashrightarrow 00{:}03{:}56.492$  disease and at the end I will

NOTE Confidence: 0.8116819

 $00:03:56.492 \longrightarrow 00:03:58.082$  briefly touch upon abstracts that

NOTE Confidence: 0.8116819

 $00{:}03{:}58.082 \dashrightarrow 00{:}04{:}00.584$  were presented at ASH on the role

NOTE Confidence: 0.8116819

00:04:00.584 --> 00:04:02.000 of convalescent plasma therapy

 $00:04:02.060 \longrightarrow 00:04:04.004$  in the management of COVID-19 and

NOTE Confidence: 0.8116819

 $00:04:04.004 \longrightarrow 00:04:07.001$  provide an update on where we stand

NOTE Confidence: 0.8116819

 $00:04:07.001 \longrightarrow 00:04:09.269$  with this treatment currently.

NOTE Confidence: 0.8116819

 $00:04:09.270 \longrightarrow 00:04:10.347$  So to begin,

NOTE Confidence: 0.8116819

 $00:04:10.347 \longrightarrow 00:04:12.142$  doctor Charlotte Bradbury from the

NOTE Confidence: 0.8116819

 $00{:}04{:}12.142 \dashrightarrow 00{:}04{:}14.431$  University of Bristol in the United

NOTE Confidence: 0.8116819

 $00:04:14.431 \longrightarrow 00:04:16.316$  Kingdom presented a late breaking

NOTE Confidence: 0.8116819

00:04:16.316 --> 00:04:17.928 abstract on the flight trial,

NOTE Confidence: 0.8116819

 $00:04:17.930 \longrightarrow 00:04:19.354$  which is a multicenter,

NOTE Confidence: 0.8116819

00:04:19.354 --> 00:04:21.134 randomized trial evaluating the addition

NOTE Confidence: 0.8116819

 $00{:}04{:}21.134 \dashrightarrow 00{:}04{:}23.348$  of mycophenolate to standard of care.

NOTE Confidence: 0.8116819

 $00:04:23.350 \longrightarrow 00:04:24.622$  Corticosteroids in the management

NOTE Confidence: 0.8116819

 $00:04:24.622 \longrightarrow 00:04:26.212$  of patients with newly diagnosed

NOTE Confidence: 0.8116819

 $00:04:26.212 \longrightarrow 00:04:27.320$  immune thrombocytopenia.

NOTE Confidence: 0.8116819

 $00:04:27.320 \longrightarrow 00:04:30.071$  This study was developed due to the

NOTE Confidence: 0.8116819

 $00{:}04{:}30.071 \dashrightarrow 00{:}04{:}32.073$  heterogeneous responses in ITP to

 $00{:}04{:}32.073 \dashrightarrow 00{:}04{:}33.973$  first line steroids and concerns

NOTE Confidence: 0.8116819

 $00{:}04{:}33.973 \dashrightarrow 00{:}04{:}36.319$  regarding their long term side effects.

NOTE Confidence: 0.8116819

 $00:04:36.320 \longrightarrow 00:04:38.456$  Evidence for mycophenolate or MF and

NOTE Confidence: 0.8116819

00:04:38.456 --> 00:04:40.335 second line treatment and beyond

NOTE Confidence: 0.8116819

 $00:04:40.335 \longrightarrow 00:04:42.290$  really comes only from Russia's

NOTE Confidence: 0.8116819

 $00:04:42.290 \longrightarrow 00:04:44.200$  retrospective studies at this time.

NOTE Confidence: 0.8116819

00:04:44.200 --> 00:04:46.240 This study recruited adult patients

NOTE Confidence: 0.8116819

 $00:04:46.240 \longrightarrow 00:04:49.573$  with ITP and a platelet count of less

NOTE Confidence: 0.8116819

 $00:04:49.573 \longrightarrow 00:04:52.015$  than 30,000 who were requiring therapy.

NOTE Confidence: 0.8116819

00:04:52.020 --> 00:04:53.440 Subjects were then randomized

NOTE Confidence: 0.8116819

 $00{:}04{:}53.440 \dashrightarrow 00{:}04{:}54.505$  to standard corticosteroids,

NOTE Confidence: 0.8116819

 $00:04:54.510 \longrightarrow 00:04:57.358$  which could be in the form of dexamethasone,

NOTE Confidence: 0.8116819

00:04:57.360 --> 00:05:00.208 pulsed, at 40 milligrams daily for four days,

NOTE Confidence: 0.8116819

 $00:05:00.210 \longrightarrow 00:05:01.610$  up to three cycles,

NOTE Confidence: 0.8116819

00:05:01.610 --> 00:05:03.010 or Prednisolone 1 milligram

 $00:05:03.010 \longrightarrow 00:05:04.120$  per kilogram daily,

NOTE Confidence: 0.8116819

 $00:05:04.120 \longrightarrow 00:05:05.900$  followed by a taper or

NOTE Confidence: 0.8116819

00:05:05.900 --> 00:05:06.968 corticosteroids plus MMF,

NOTE Confidence: 0.8116819

 $00:05:06.970 \longrightarrow 00:05:09.502$  which was initially dosed at 500

NOTE Confidence: 0.8116819

 $00:05:09.502 \longrightarrow 00:05:11.586$  milligrams twice daily and then

NOTE Confidence: 0.8116819

 $00:05:11.586 \longrightarrow 00:05:14.106$  escalated to a Max dose of 1 gram

NOTE Confidence: 0.8116819

00:05:14.106 --> 00:05:16.701 daily with a plan to taper and then

NOTE Confidence: 0.8116819

00:05:16.701 --> 00:05:18.997 stop after six months of treatment.

NOTE Confidence: 0.8116819

 $00{:}05{:}18.997 \dashrightarrow 00{:}05{:}20.793$  The investigators from this

NOTE Confidence: 0.8116819

00:05:20.793 --> 00:05:22.400 trial hypothesize that MF,

NOTE Confidence: 0.8116819

 $00:05:22.400 \longrightarrow 00:05:23.525$  combined with steroids,

NOTE Confidence: 0.8116819

 $00:05:23.525 \longrightarrow 00:05:26.150$  would be more effective than steroids alone,

NOTE Confidence: 0.8116819

 $00:05:26.150 \longrightarrow 00:05:28.565$  and the primary outcome measured was time

NOTE Confidence: 0.8116819

 $00{:}05{:}28.565 \to 00{:}05{:}30.650$  from randomization to treatment failure,

NOTE Confidence: 0.8116819

 $00:05:30.650 \longrightarrow 00:05:32.235$  defined as a platelet count

NOTE Confidence: 0.8116819

 $00:05:32.235 \longrightarrow 00:05:34.809$  less than 30 and a clinical need

 $00{:}05{:}34.809 \dashrightarrow 00{:}05{:}36.645$  for second line treatment.

NOTE Confidence: 0.8116819

 $00:05:36.650 \longrightarrow 00:05:38.150$  Secondary outcomes are outlined

NOTE Confidence: 0.8116819

 $00:05:38.150 \longrightarrow 00:05:40.025$  here and included bleeding events,

NOTE Confidence: 0.8116819

 $00:05:40.030 \longrightarrow 00:05:40.758$  side effects,

NOTE Confidence: 0.8116819

 $00:05:40.758 \longrightarrow 00:05:42.942$  and patient reported outcomes both at

NOTE Confidence: 0.8116819

 $00:05:42.942 \longrightarrow 00:05:45.627$  baseline and AT246 and 12 months as

NOTE Confidence: 0.8116819

 $00:05:45.627 \longrightarrow 00:05:47.143$  measured by validated questionnaires.

NOTE Confidence: 0.8653912

00:05:49.220 --> 00:05:51.719 120 patients were included in this study,

NOTE Confidence: 0.8653912

 $00:05:51.720 \longrightarrow 00:05:54.272$  with 59 on the MF ARM and 61

NOTE Confidence: 0.8653912

 $00:05:54.272 \longrightarrow 00:05:55.999$  patients receiving steroids alone.

NOTE Confidence: 0.8653912

 $00{:}05{:}56.000 \dashrightarrow 00{:}05{:}58.148$  The median follow-up was 18 months.

NOTE Confidence: 0.8653912

00:05:58.150 --> 00:05:59.955 52.4% of patients were male

NOTE Confidence: 0.8653912

 $00:05:59.955 \longrightarrow 00:06:02.070$  with a median age of 54,

NOTE Confidence: 0.8653912

 $00:06:02.070 \longrightarrow 00:06:04.541$  so it was noted that more than

NOTE Confidence: 0.8653912

 $00:06:04.541 \longrightarrow 00:06:06.737 1/4$  of patients enrolled in the

 $00:06:06.737 \longrightarrow 00:06:09.208$  study were over the age of 70.

NOTE Confidence: 0.8653912

 $00{:}06{:}09.210 \dashrightarrow 00{:}06{:}11.496$  The primary outcome of proportion of

NOTE Confidence: 0.8653912

 $00{:}06{:}11.496 \dashrightarrow 00{:}06{:}13.392$  patients without treatment failure is

NOTE Confidence: 0.8653912

 $00{:}06{:}13.392 \dashrightarrow 00{:}06{:}15.276$  illustrated in the Kaplan Meier curve.

NOTE Confidence: 0.8653912

 $00:06:15.280 \longrightarrow 00:06:17.842$  Here on the left of the slide

NOTE Confidence: 0.8653912

 $00:06:17.842 \longrightarrow 00:06:20.654$  and favored the MF arm with an

NOTE Confidence: 0.8653912

 $00:06:20.654 \longrightarrow 00:06:22.689$  adjusted hazard ratio of 0.41.

NOTE Confidence: 0.8653912

 $00:06:22.690 \longrightarrow 00:06:23.414$  Interesting Lee.

NOTE Confidence: 0.8653912

 $00{:}06{:}23.414 \dashrightarrow 00{:}06{:}24.862$  Similar responses were observed

NOTE Confidence: 0.8653912

 $00:06:24.862 \longrightarrow 00:06:26.969$  in the two groups at 2 weeks,

NOTE Confidence: 0.8653912

 $00{:}06{:}26.970 \dashrightarrow 00{:}06{:}28.460$  despite the less refractoriness that

NOTE Confidence: 0.8653912

 $00{:}06{:}28.460 \dashrightarrow 00{:}06{:}31.111$  was seen in the MF cohort and a

NOTE Confidence: 0.8653912

 $00:06:31.111 \longrightarrow 00:06:32.215$  statistically significant increase

NOTE Confidence: 0.8653912

 $00{:}06{:}32.215 \dashrightarrow 00{:}06{:}34.676$  in plate in patients who reached a

NOTE Confidence: 0.8653912

 $00:06:34.676 \longrightarrow 00:06:36.530$  platelet count greater than 100 before

NOTE Confidence: 0.8653912

 $00:06:36.530 \longrightarrow 00:06:39.510$  they required in second line treatment.

 $00:06:39.510 \longrightarrow 00:06:41.496$  There were no differences observed in

NOTE Confidence: 0.8653912

 $00{:}06{:}41.496 \dashrightarrow 00{:}06{:}42.820$  bleeding events or hospitalizations,

NOTE Confidence: 0.8653912

 $00:06:42.820 \longrightarrow 00:06:44.776$  and there were comperable rates of

NOTE Confidence: 0.8653912

 $00:06:44.776 \longrightarrow 00:06:46.789$  treatment side effects in both groups.

NOTE Confidence: 0.8653912

00:06:46.790 --> 00:06:47.180 However,

NOTE Confidence: 0.8653912

 $00:06:47.180 \longrightarrow 00:06:49.520$  there were some aspects on quality

NOTE Confidence: 0.8653912

 $00:06:49.520 \longrightarrow 00:06:51.282$  of life questionnaires that were

NOTE Confidence: 0.8653912

 $00:06:51.282 \longrightarrow 00:06:53.410$  observed to be worse in the MF arm,

NOTE Confidence: 0.8653912

00:06:53.410 --> 00:06:54.724 including both physical

NOTE Confidence: 0.8653912

00:06:54.724 --> 00:06:56.476 function and fatigue scores.

NOTE Confidence: 0.8653912

 $00:06:56.480 \longrightarrow 00:06:58.380$  So to summarize this abstract,

NOTE Confidence: 0.8653912

 $00{:}06{:}58.380 \dashrightarrow 00{:}07{:}00.642$  this is the first randomized control

NOTE Confidence: 0.8653912

00:07:00.642 --> 00:07:02.920 trial using MF to treat ITP,

NOTE Confidence: 0.8653912

 $00:07:02.920 \longrightarrow 00:07:04.740$  and it illustrated good overall

NOTE Confidence: 0.8653912

 $00:07:04.740 \longrightarrow 00:07:06.560$  efficacy and tolerability when added

 $00:07:06.621 \longrightarrow 00:07:08.229$  to first line corticosteroids,

NOTE Confidence: 0.8653912

 $00{:}07{:}08.230 \dashrightarrow 00{:}07{:}10.366$  including in a cohort of patients

NOTE Confidence: 0.8653912

 $00:07:10.366 \longrightarrow 00:07:12.400$  that had included elderly patients.

NOTE Confidence: 0.8653912

00:07:12.400 --> 00:07:12.770 However,

NOTE Confidence: 0.8653912

 $00:07:12.770 \longrightarrow 00:07:14.990$  there were some negative affects on

NOTE Confidence: 0.8653912

 $00{:}07{:}14.990 \dashrightarrow 00{:}07{:}17.276$  quality of life that were observed

NOTE Confidence: 0.8653912

 $00:07:17.276 \longrightarrow 00:07:19.496$  in the treatment arm and the

NOTE Confidence: 0.8653912

 $00:07:19.496 \longrightarrow 00:07:21.084$  investigator suggested that this

NOTE Confidence: 0.8653912

 $00{:}07{:}21.084 \to 00{:}07{:}23.388$  regimen could be considered in some,

NOTE Confidence: 0.8653912

 $00:07:23.390 \longrightarrow 00:07:25.594$  but not necessarily all,

NOTE Confidence: 0.8653912

 $00{:}07{:}25.594 \dashrightarrow 00{:}07{:}28.349$  patients with newly diagnosed ITP.

NOTE Confidence: 0.8653912

 $00:07:28.350 \longrightarrow 00:07:30.102$  The nest next abstract I'd like

NOTE Confidence: 0.8653912

 $00{:}07{:}30.102 \dashrightarrow 00{:}07{:}32.114$  to share was presented by Doctor

NOTE Confidence: 0.8653912

 $00:07:32.114 \longrightarrow 00:07:33.674$  David Kuter from Massachusetts

NOTE Confidence: 0.8653912

 $00:07:33.674 \longrightarrow 00:07:35.646$  General Hospital and highlights the

NOTE Confidence: 0.8653912

 $00{:}07{:}35.646 {\:{\mbox{--}}\!\!>}\ 00{:}07{:}37.406$  clinically active and the durable

 $00:07:37.406 \longrightarrow 00:07:39.144$  platelet response that were observed

NOTE Confidence: 0.8653912

 $00:07:39.144 \longrightarrow 00:07:41.412$  with the oral BTK inhibitor reels of

NOTE Confidence: 0.8653912

00:07:41.412 --> 00:07:43.568 Bruton IB in patients with heavily

NOTE Confidence: 0.8653912

 $00:07:43.568 \longrightarrow 00:07:45.368$  pretreated ITP as illustrated in

NOTE Confidence: 0.8653912

 $00:07:45.368 \longrightarrow 00:07:46.499$  the figure here.

NOTE Confidence: 0.8653912

 $00:07:46.500 \longrightarrow 00:07:48.803$  On the left rules ibrutinib is a

NOTE Confidence: 0.8653912

 $00:07:48.803 \longrightarrow 00:07:50.191$  reversible and selective inhibitor

NOTE Confidence: 0.8653912

 $00{:}07{:}50.191 \dashrightarrow 00{:}07{:}52.571$  of BTK that aims to target the

NOTE Confidence: 0.8653912

 $00:07:52.571 \longrightarrow 00:07:54.067$  disease mechanisms leading to

NOTE Confidence: 0.8653912

00:07:54.067 --> 00:07:55.567 platelet destruction in ITP,

NOTE Confidence: 0.8653912

 $00{:}07{:}55.570 \dashrightarrow 00{:}07{:}57.766$  though it's without the effects on

NOTE Confidence: 0.8653912

 $00:07:57.766 \longrightarrow 00:07:59.880$  platelet aggregation that we often see.

NOTE Confidence: 0.8653912

 $00:07:59.880 \longrightarrow 00:08:02.760$  In the drug ibrutinib the trial,

NOTE Confidence: 0.8653912

00:08:02.760 --> 00:08:04.840 this trial of Phase 1 two open label

NOTE Confidence: 0.8653912

 $00:08:04.840 \longrightarrow 00:08:07.063$  trial was a dose finding study and

00:08:07.063 --> 00:08:08.703 that enrolled adult patients with

NOTE Confidence: 0.8653912

 $00{:}08{:}08.767 \dashrightarrow 00{:}08{:}10.669$  relapsed or refractory ITP who had

NOTE Confidence: 0.8653912

 $00{:}08{:}10.669 \dashrightarrow 00{:}08{:}12.546$  responded to at least one prior

NOTE Confidence: 0.8653912

 $00:08:12.546 \longrightarrow 00:08:14.970$  line of ITP therapy and had two or

NOTE Confidence: 0.8653912

 $00:08:15.043 \longrightarrow 00:08:17.107$  more platelet counts that were less

NOTE Confidence: 0.8653912

00:08:17.107 --> 00:08:19.937 than 30 at the time of study entry.

NOTE Confidence: 0.8653912

 $00{:}08{:}19.940 \dashrightarrow 00{:}08{:}22.514$  Subjects could be on stable doses

NOTE Confidence: 0.8653912

 $00{:}08{:}22.514 \dashrightarrow 00{:}08{:}23.801$  of concomitant corticosteroids

NOTE Confidence: 0.8653912

 $00{:}08{:}23.801 \dashrightarrow 00{:}08{:}25.726$  and or thrombopoiet in receptor

NOTE Confidence: 0.8653912

 $00:08:25.726 \longrightarrow 00:08:27.634$  agonist during this trial.

NOTE Confidence: 0.8653912

 $00{:}08{:}27.640 \dashrightarrow 00{:}08{:}30.166$  The dose escalation phase of this

NOTE Confidence: 0.8653912

 $00{:}08{:}30.166 \dashrightarrow 00{:}08{:}32.281$  study was previously reported at

NOTE Confidence: 0.8653912

 $00{:}08{:}32.281 \dashrightarrow 00{:}08{:}34.447$  ASH with a minimum effective dose

NOTE Confidence: 0.8653912

 $00:08:34.447 \longrightarrow 00:08:36.400$  of 400 milligrams twice daily.

NOTE Confidence: 0.8653912

00:08:36.400 --> 00:08:38.640 The primary endpoint of this part of

NOTE Confidence: 0.8653912

 $00{:}08{:}38.640 \dashrightarrow 00{:}08{:}41.393$  the study was achieving two or more

00:08:41.393 --> 00:08:43.113 consecutive platelet counts that

NOTE Confidence: 0.8653912

 $00{:}08{:}43.113 --> 00{:}08{:}45.398$  were greater than  $50{,}000$  with an

NOTE Confidence: 0.8653912

 $00:08:45.398 \longrightarrow 00:08:47.869$  increase of more than 20,000 from the

NOTE Confidence: 0.8653912

00:08:47.869 --> 00:08:49.585 patients baseline without requiring

NOTE Confidence: 0.8653912

 $00:08:49.585 \longrightarrow 00:08:51.730$  any rescue or additional medications.

NOTE Confidence: 0.8653912

 $00:08:51.730 \longrightarrow 00:08:54.050$  The investigators also performed subgroup

NOTE Confidence: 0.8653912

 $00:08:54.050 \longrightarrow 00:08:56.370$  analysis to determine the impact

NOTE Confidence: 0.875766

 $00{:}08{:}56.435 \dashrightarrow 00{:}08{:}58.095$  of certain prior treatments

NOTE Confidence: 0.875766

00:08:58.095 --> 00:08:59.755 on this primary endpoint.

NOTE Confidence: 0.875766

 $00:08:59.760 \longrightarrow 00:09:01.972$  A long term extension study was also

NOTE Confidence: 0.875766

 $00:09:01.972 \longrightarrow 00:09:03.737$  conducted to further assess safety

NOTE Confidence: 0.875766

 $00:09:03.737 \longrightarrow 00:09:05.637$  and durability of this medication,

NOTE Confidence: 0.875766

 $00{:}09{:}05.640 \dashrightarrow 00{:}09{:}07.390$  and so this specific abstract

NOTE Confidence: 0.875766

 $00:09:07.390 \longrightarrow 00:09:09.140$  presented on 38 patients who

NOTE Confidence: 0.875766

 $00:09:09.201 \longrightarrow 00:09:11.187$  had received the dose of 400

00:09:11.187 --> 00:09:13.268 milligrams twice daily and the 13

NOTE Confidence: 0.875766

 $00{:}09{:}13.268 \to 00{:}09{:}15.332$  patients who entered the long term

NOTE Confidence: 0.875766

 $00{:}09{:}15.332 \dashrightarrow 00{:}09{:}17.408$  extension study at this same dose.

NOTE Confidence: 0.85495913

 $00:09:19.880 \longrightarrow 00:09:22.174$  So patients in the 400 milligram twice

NOTE Confidence: 0.85495913

 $00:09:22.174 \longrightarrow 00:09:24.503$  daily cohort had a median duration of

NOTE Confidence: 0.85495913

 $00{:}09{:}24.503 \dashrightarrow 00{:}09{:}27.080$  ITP of six years and had received a

NOTE Confidence: 0.85495913

 $00:09:27.080 \longrightarrow 00:09:29.159$  median of six prior lines of therapy.

NOTE Confidence: 0.85495913

 $00:09:29.160 \longrightarrow 00:09:31.915$  Their median age was 50, with a little

NOTE Confidence: 0.85495913

 $00:09:31.915 \dashrightarrow 00:09:34.610$  more than half of patients being female.

NOTE Confidence: 0.85495913

00:09:34.610 --> 00:09:36.506 At the time of data cutoff,

NOTE Confidence: 0.85495913

00:09:36.510 --> 00:09:39.275 which was July of 2020, forty 2% of

NOTE Confidence: 0.85495913

 $00:09:39.275 \longrightarrow 00:09:41.645$  patients had achieved the primary endpoint.

NOTE Confidence: 0.85495913

 $00:09:41.650 \longrightarrow 00:09:43.318$  Furthermore, responses were relatively

NOTE Confidence: 0.85495913

 $00:09:43.318 \longrightarrow 00:09:45.820$  similar whether or not these patients

NOTE Confidence: 0.85495913

00:09:45.878 --> 00:09:47.578 had responded to prior therapy,

NOTE Confidence: 0.85495913

 $00:09:47.580 \longrightarrow 00:09:48.762$  as outlined here,

 $00{:}09{:}48.762 \dashrightarrow 00{:}09{:}50.338$  including thrombopoiet in receptor agonist,

NOTE Confidence: 0.85495913

 $00:09:50.340 \longrightarrow 00:09:51.525$  rituximab, or fostamatinib,

NOTE Confidence: 0.85495913

 $00:09:51.525 \longrightarrow 00:09:53.895$  and notably responses were quite rapid,

NOTE Confidence: 0.85495913

 $00:09:53.900 \longrightarrow 00:09:56.702$  with 53% of patients achieving a

NOTE Confidence: 0.85495913

00:09:56.702 --> 00:10:00.109 platelet count of more than 30 by day 8.

NOTE Confidence: 0.85495913

 $00:10:00.110 \longrightarrow 00:10:02.145$  And and responses were also

NOTE Confidence: 0.85495913

 $00:10:02.145 \longrightarrow 00:10:03.366$  durable in nature.

NOTE Confidence: 0.85495913

 $00{:}10{:}03.370 \dashrightarrow 00{:}10{:}05.730$  A real rose alot nib was generally well

NOTE Confidence: 0.85495913

 $00:10:05.730 \longrightarrow 00:10:08.109$  tolerated in all portions of the trial

NOTE Confidence: 0.85495913

 $00:10:08.109 \longrightarrow 00:10:09.839$  with approximately half of patients

NOTE Confidence: 0.85495913

 $00{:}10{:}09.900 \dashrightarrow 00{:}10{:}12.364$  experiencing grade one or two side effects

NOTE Confidence: 0.85495913

 $00:10:12.364 \dashrightarrow 00:10:14.428$  that were transient and mostly GI.

NOTE Confidence: 0.85495913

 $00{:}10{:}14.428 \to 00{:}10{:}15.100$  In nature,

NOTE Confidence: 0.85495913

 $00{:}10{:}15.100 \dashrightarrow 00{:}10{:}17.158$  though there were no serious adverse

NOTE Confidence: 0.85495913

 $00:10:17.158 \longrightarrow 00:10:19.430$  events or treatment related bleeding or

00:10:19.430 --> 00:10:21.535 thrombotic complications during this study.

NOTE Confidence: 0.85495913

00:10:21.540 --> 00:10:22.521 So, in conclusion,

NOTE Confidence: 0.85495913

00:10:22.521 --> 00:10:24.810 reels reels of Bruton AB therapy at

NOTE Confidence: 0.85495913

 $00:10:24.877 \longrightarrow 00:10:27.551$  a dose of 400 milligrams twice daily

NOTE Confidence: 0.85495913

 $00:10:27.551 \longrightarrow 00:10:29.499$  achieved significant rapid and long

NOTE Confidence: 0.85495913

 $00{:}10{:}29.499 \dashrightarrow 00{:}10{:}31.349$  lasting platelet responses in about

NOTE Confidence: 0.85495913

 $00:10:31.349 \longrightarrow 00:10:33.495$  a slightly under half a percent

NOTE Confidence: 0.85495913

 $00:10:33.495 \longrightarrow 00:10:35.220$  percentage of this patient population

NOTE Confidence: 0.85495913

00:10:35.220 --> 00:10:37.189 with heavily treated pretreated ITP,

NOTE Confidence: 0.85495913

 $00:10:37.190 \longrightarrow 00:10:39.668$  and this was observed irrespective of the

NOTE Confidence: 0.85495913

 $00{:}10{:}39.668 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}10{:}42.290$  response to prior lines of treatment rules.

NOTE Confidence: 0.85495913

 $00:10:42.290 \longrightarrow 00:10:44.105$  Ibrutinib was granted fast track

NOTE Confidence: 0.85495913

 $00:10:44.105 \longrightarrow 00:10:46.345$  designation by the FDA in October

NOTE Confidence: 0.85495913

 $00{:}10{:}46.345 \to 00{:}10{:}48.523$  of this past year and further

NOTE Confidence: 0.85495913

00:10:48.523 --> 00:10:50.300 clinical trials with this drug.

NOTE Confidence: 0.85495913

 $00:10:50.300 \longrightarrow 00:10:51.820$  That drug is current.

 $00:10:51.820 \longrightarrow 00:10:52.960$  Currently on going.

NOTE Confidence: 0.8092774

 $00:10:55.840 \longrightarrow 00:10:57.264$  In the plenary session,

NOTE Confidence: 0.8092774

00:10:57.264 --> 00:10:59.896 Doctor Terry Gurne Shime are from the

NOTE Confidence: 0.8092774

00:10:59.896 --> 00:11:02.464 University of Washington School of Medicine,

NOTE Confidence: 0.8092774

 $00{:}11{:}02.470 \dashrightarrow 00{:}11{:}04.864$  presented the results of the American

NOTE Confidence: 0.8092774

 $00{:}11{:}04.864 \dashrightarrow 00{:}11{:}06.890$  trial using tranexamic acid and

NOTE Confidence: 0.8092774

 $00:11:06.890 \longrightarrow 00:11:09.098$  thrombocytopenia or the a treat trial.

NOTE Confidence: 0.8092774

 $00:11:09.100 \longrightarrow 00:11:10.536$  This study specifically examined

NOTE Confidence: 0.8092774

00:11:10.536 --> 00:11:12.690 the effects of tranexamic acid or

NOTE Confidence: 0.8092774

 $00:11:12.747 \longrightarrow 00:11:14.897$  txa prophylaxis on bleeding outcomes

NOTE Confidence: 0.8092774

 $00:11:14.897 \longrightarrow 00:11:16.617$  in individuals with hematologic

NOTE Confidence: 0.8092774

 $00:11:16.617 \longrightarrow 00:11:18.679$  malignancy undergoing treatment therapy.

NOTE Confidence: 0.8092774

00:11:18.680 --> 00:11:20.936 And it was supported by understanding

NOTE Confidence: 0.8092774

 $00:11:20.936 \longrightarrow 00:11:23.340$  of the high incidence of bleeding

NOTE Confidence: 0.8092774

00:11:23.340 --> 00:11:25.000 in this patient population,

 $00:11:25.000 \longrightarrow 00:11:27.828$  even despite our evidence based use of

NOTE Confidence: 0.8092774

 $00{:}11{:}27.828 \dashrightarrow 00{:}11{:}29.040$  platelet transfusions prophylactically

NOTE Confidence: 0.8092774

 $00:11:29.100 \longrightarrow 00:11:30.780$  and while anti fibrinolytic therapy

NOTE Confidence: 0.8092774

 $00:11:30.780 \longrightarrow 00:11:33.393$  has certainly been used with pain in

NOTE Confidence: 0.8092774

00:11:33.393 --> 00:11:35.145 patients with hematologic malignancy

NOTE Confidence: 0.8092774

00:11:35.145 --> 00:11:36.459 undergoing treatment evidence,

NOTE Confidence: 0.8092774

00:11:36.460 --> 00:11:38.830 evidence of its benefit has really

NOTE Confidence: 0.8092774

 $00:11:38.830 \longrightarrow 00:11:39.620$  been lacking.

NOTE Confidence: 0.8092774

 $00{:}11{:}39.620 \longrightarrow 00{:}11{:}42.780$  So the Atria trial was a multi center,

NOTE Confidence: 0.8092774

00:11:42.780 --> 00:11:43.548 double blinded,

NOTE Confidence: 0.8092774

 $00{:}11{:}43.548 \mathrel{--}{>} 00{:}11{:}45.468$  place be controlled trial aimed to

NOTE Confidence: 0.8092774

00:11:45.468 --> 00:11:47.988 assess the safety and efficacy of

NOTE Confidence: 0.8092774

 $00:11:47.988 \longrightarrow 00:11:49.724$  prophylactic transit tranexamic acid.

NOTE Confidence: 0.8092774

00:11:49.730 --> 00:11:52.070 Which is seen in this schematic,

NOTE Confidence: 0.8092774

 $00:11:52.070 \longrightarrow 00:11:54.478$  here included on the left of the

NOTE Confidence: 0.8092774

 $00{:}11{:}54.478 \dashrightarrow 00{:}11{:}56.876$  slide block slicing binding site on

00:11:56.876 --> 00:11:59.474 plasmingen an inhibits and its activation,

NOTE Confidence: 0.8092774

 $00:11:59.480 \longrightarrow 00:12:00.533$  thus halting fibrinolysis.

NOTE Confidence: 0.8092774

 $00:12:00.533 \longrightarrow 00:12:03.862$  And the train exam IC acid was used as

NOTE Confidence: 0.8092774

 $00:12:03.862 \longrightarrow 00:12:06.268$  an adjunct to routine platelet transfusions.

NOTE Confidence: 0.8092774

 $00:12:06.270 \longrightarrow 00:12:08.130$  As was previously studied.

NOTE Confidence: 0.8092774

00:12:08.130 --> 00:12:09.990 Patients undergoing therapy for

NOTE Confidence: 0.8092774

 $00:12:09.990 \longrightarrow 00:12:11.663$  hematologic malignancy whom were

NOTE Confidence: 0.8092774

00:12:11.663 --> 00:12:13.358 expected to have platelet counts

NOTE Confidence: 0.8092774

 $00:12:13.358 \longrightarrow 00:12:15.583$  less than 10,000 for five or more

NOTE Confidence: 0.8092774

 $00:12:15.583 \longrightarrow 00:12:17.305$  days were eligible to be enrolled

NOTE Confidence: 0.8092774

 $00:12:17.310 \longrightarrow 00:12:20.173$  in the study and were randomized to

NOTE Confidence: 0.8092774

 $00{:}12{:}20.173 \dashrightarrow 00{:}12{:}22.173$  receive either tranexamic acid at a

NOTE Confidence: 0.8092774

00:12:22.173 --> 00:12:24.610 dose of 1 gram Ivy or 1.3 grams opeo

NOTE Confidence: 0.8092774

00:12:24.610 --> 00:12:26.782 every eight hours or placebo with

NOTE Confidence: 0.8092774

 $00:12:26.782 \longrightarrow 00:12:29.880$  the start of the study drug after a

 $00:12:29.880 \longrightarrow 00:12:32.229$  platelet count had dropped below 30.

NOTE Confidence: 0.8092774

 $00{:}12{:}32.230 \dashrightarrow 00{:}12{:}33.990$  Tranexamic acid or placebo was

NOTE Confidence: 0.8092774

 $00:12:33.990 \longrightarrow 00:12:36.157$  discontinued after 30 days or when

NOTE Confidence: 0.8092774

 $00:12:36.157 \longrightarrow 00:12:38.233$  platelet counts had re platelet count

NOTE Confidence: 0.8092774

 $00:12:38.233 \longrightarrow 00:12:40.477$  had recovered to more than 30,000

NOTE Confidence: 0.8092774

 $00:12:40.477 \longrightarrow 00:12:42.382$  and the transfusion thresholds

NOTE Confidence: 0.8092774

 $00:12:42.382 \longrightarrow 00:12:44.614$  used during the study where per

NOTE Confidence: 0.8092774

 $00:12:44.614 \longrightarrow 00:12:46.810$  standard of care the primary endpoint

NOTE Confidence: 0.8092774

00:12:46.876 --> 00:12:48.880 was the proportion of patients with

NOTE Confidence: 0.8092774

 $00:12:48.880 \longrightarrow 00:12:51.417$  WHO grade two or above bleeding with

NOTE Confidence: 0.8092774

 $00{:}12{:}51.417 \dashrightarrow 00{:}12{:}53.691$  Grade 2 being moderate bleeding Grade

NOTE Confidence: 0.8092774

00:12:53.691 --> 00:12:55.538 3 being severe bleeding requiring

NOTE Confidence: 0.8092774

 $00{:}12{:}55.538 \operatorname{--}{>} 00{:}12{:}57.740$  transfusion of red blood cells or

NOTE Confidence: 0.8092774

 $00:12:57.806 \longrightarrow 00:13:00.212$  other intervention and grade for being

NOTE Confidence: 0.8092774

00:13:00.212 --> 00:13:02.559 life threatening or debilitating bleed bleed.

NOTE Confidence: 0.8092774

 $00:13:02.560 \longrightarrow 00:13:04.144$  Additional secondary and safety

 $00:13:04.144 \longrightarrow 00:13:06.520$  endpoints are outlined on the slide

NOTE Confidence: 0.8092774

00:13:06.588 --> 00:13:08.718 here and include rate of thrombosis,

NOTE Confidence: 0.8092774

 $00:13:08.720 \longrightarrow 00:13:10.650$  vino occlusive disease and mortality.

NOTE Confidence: 0.85934526

 $00:13:14.810 \longrightarrow 00:13:16.210$  There were 330 patients,

NOTE Confidence: 0.85934526

00:13:16.210 --> 00:13:19.438 a valuable in the study with 165 on each arm,

NOTE Confidence: 0.85934526

 $00:13:19.440 \longrightarrow 00:13:22.419$  and the two groups were well balanced by age,

NOTE Confidence: 0.85934526

 $00:13:22.420 \longrightarrow 00:13:24.080$  gender, and type of therapy.

NOTE Confidence: 0.85934526

00:13:24.080 --> 00:13:26.042 Only 9% of the patients actually

NOTE Confidence: 0.85934526

 $00:13:26.042 \longrightarrow 00:13:27.720$  completed 30 days on drug,

NOTE Confidence: 0.85934526

 $00:13:27.720 \longrightarrow 00:13:30.699$  with an average of 12 days on train exam.

NOTE Confidence: 0.85934526

 $00:13:30.700 \longrightarrow 00:13:31.956$  IC acid or placebo.

NOTE Confidence: 0.85934526

 $00:13:31.956 \longrightarrow 00:13:34.265$  And as you can see in the

NOTE Confidence: 0.85934526

00:13:34.265 --> 00:13:35.990 table here on the left,

NOTE Confidence: 0.85934526

00:13:35.990 --> 00:13:37.730 the primary outcome of proportion of

NOTE Confidence: 0.85934526

 $00:13:37.730 \longrightarrow 00:13:39.999$  WHL grade two or higher bleeding was

 $00:13:39.999 \longrightarrow 00:13:41.749$  no different between the transamic

NOTE Confidence: 0.85934526

00:13:41.749 --> 00:13:43.678 acid and placebo, placebo arms,

NOTE Confidence: 0.85934526

 $00{:}13{:}43.678 \dashrightarrow 00{:}13{:}46.226$  and this was also true irrespective of.

NOTE Confidence: 0.85934526

 $00:13:46.230 \longrightarrow 00:13:48.066$  The pre specified treatment

NOTE Confidence: 0.85934526

 $00:13:48.066 \longrightarrow 00:13:49.902$  subgroups that included allogeneic

NOTE Confidence: 0.85934526

00:13:49.902 --> 00:13:51.869 stencel stem cell transplant,

NOTE Confidence: 0.85934526

00:13:51.870 --> 00:13:53.090 autologous transplant,

NOTE Confidence: 0.85934526

 $00:13:53.090 \longrightarrow 00:13:54.920$  and chemotherapy alone.

NOTE Confidence: 0.85934526

00:13:54.920 --> 00:13:56.824 The time to 1st WH O2 or more

NOTE Confidence: 0.85934526

 $00:13:56.824 \longrightarrow 00:13:59.122$  two or higher bleeding or death

NOTE Confidence: 0.85934526

 $00{:}13{:}59.122 \dashrightarrow 00{:}14{:}00.874$  was also remarkably similar,

NOTE Confidence: 0.85934526

 $00:14:00.880 \longrightarrow 00:14:02.866$  with the lines overlying each other

NOTE Confidence: 0.85934526

 $00:14:02.866 \longrightarrow 00:14:06.480$  in the graph, seen here on the right.

NOTE Confidence: 0.85934526

 $00{:}14{:}06.480 \dashrightarrow 00{:}14{:}07.816$  Mean platelet transfusion mean

NOTE Confidence: 0.85934526

00:14:07.816 --> 00:14:10.288 days alive with WHO two or more

NOTE Confidence: 0.85934526

 $00{:}14{:}10.288 \dashrightarrow 00{:}14{:}12.748$  bleeding an mean red blood cell

 $00:14:12.748 \longrightarrow 00:14:13.978$  transfusion per thrombocytopenia.

NOTE Confidence: 0.85934526

 $00{:}14{:}13.980 \dashrightarrow 00{:}14{:}16.530$  Cdai were also not impacted by

NOTE Confidence: 0.85934526

 $00:14:16.530 \longrightarrow 00:14:18.730$  the use of transamic acid.

NOTE Confidence: 0.85934526

 $00:14:18.730 \longrightarrow 00:14:19.442$  There was,

NOTE Confidence: 0.85934526

00:14:19.442 --> 00:14:19.798 however,

NOTE Confidence: 0.85934526

00:14:19.798 --> 00:14:20.866 a statistically significant

NOTE Confidence: 0.85934526

 $00:14:20.866 \longrightarrow 00:14:22.664$  increase in the overall thrombotic

NOTE Confidence: 0.85934526

 $00:14:22.664 \longrightarrow 00:14:24.596$  events on the tranexamic acid arm,

NOTE Confidence: 0.85934526

00:14:24.600 --> 00:14:27.176 though this primarily was made up of

NOTE Confidence: 0.85934526

 $00{:}14{:}27.176 \dashrightarrow 00{:}14{:}29.638$  line occlusions with a trend that was

NOTE Confidence: 0.85934526

00:14:29.638 --> 00:14:31.576 actually fewer in of non catheter

NOTE Confidence: 0.85934526

 $00:14:31.641 \longrightarrow 00:14:34.155$  thrombotic events in the treatment arm.

NOTE Confidence: 0.85934526

 $00{:}14{:}34.160 \dashrightarrow 00{:}14{:}36.379$  There was no increase in Vino occlusive,

NOTE Confidence: 0.85934526

00:14:36.380 --> 00:14:36.705 disease,

NOTE Confidence: 0.85934526

00:14:36.705 --> 00:14:38.330 or alcors all cause mortality

00:14:38.330 --> 00:14:40.179 at either 30 or 20 days,

NOTE Confidence: 0.85934526

 $00:14:40.180 \longrightarrow 00:14:42.065$  and no deaths were observed

NOTE Confidence: 0.85934526

00:14:42.065 --> 00:14:43.950 as the result of thrombosis.

NOTE Confidence: 0.85934526

 $00:14:43.950 \longrightarrow 00:14:46.038$  So based on all of this,

NOTE Confidence: 0.85934526

 $00{:}14{:}46.040 \dashrightarrow 00{:}14{:}47.780$ train exam IC acid administered

NOTE Confidence: 0.85934526

00:14:47.780 --> 00:14:48.128 prophylactically,

NOTE Confidence: 0.85934526

00:14:48.130 --> 00:14:49.760 in addition to routine platelet

NOTE Confidence: 0.85934526

00:14:49.760 --> 00:14:51.950 transfusion did not seem to increase,

NOTE Confidence: 0.85934526

 $00{:}14{:}51.950 \dashrightarrow 00{:}14{:}53.924$  decrease the rate of WHL grade 2

NOTE Confidence: 0.85934526

 $00:14:53.924 \longrightarrow 00:14:55.867$  plus or bleeding in patients who

NOTE Confidence: 0.85934526

 $00{:}14{:}55.867 {\: --> \:} 00{:}14{:}56.902$  are severely thrombocy topenia

NOTE Confidence: 0.85934526

 $00:14:56.902 \longrightarrow 00:14:59.674$  IK as a result of treatment for

NOTE Confidence: 0.85934526

 $00:14:59.674 \longrightarrow 00:15:01.000$  their hematologic malignancy.

NOTE Confidence: 0.85934526

 $00:15:01.000 \longrightarrow 00:15:03.303$  It also did not seem to alter

NOTE Confidence: 0.85934526

 $00:15:03.303 \longrightarrow 00:15:04.677$  transfusion requirements and and

NOTE Confidence: 0.85934526

 $00{:}15{:}04.677 \dashrightarrow 00{:}15{:}06.651$  actually resulted in an increased rate

00:15:06.651 --> 00:15:08.659 of central line occlusion events,

NOTE Confidence: 0.85934526

 $00{:}15{:}08.660 \mathrel{--}{>} 00{:}15{:}10.400$  and so the authors emphasize,

NOTE Confidence: 0.85934526

 $00:15:10.400 \longrightarrow 00:15:11.372$  despite these findings,

NOTE Confidence: 0.85934526

 $00:15:11.372 \longrightarrow 00:15:12.992$  that the utility of transxamic

NOTE Confidence: 0.85934526

 $00:15:12.992 \longrightarrow 00:15:14.947$  acid in other settings with

NOTE Confidence: 0.85934526

 $00:15:14.947 \longrightarrow 00:15:16.619$  thrombocytopenia cannot be excluded.

NOTE Confidence: 0.85934526

 $00:15:16.620 \longrightarrow 00:15:18.068$  By this study alone.

NOTE Confidence: 0.8342403

 $00:15:20.300 \longrightarrow 00:15:23.023$  So moving on to an abstract presented

NOTE Confidence: 0.8342403

00:15:23.023 --> 00:15:25.433 by Doctor Steven Pipe from the

NOTE Confidence: 0.8342403

00:15:25.433 --> 00:15:28.156 University of Michigan on the long term,

NOTE Confidence: 0.8342403

00:15:28.160 --> 00:15:28.944 durability, safety,

NOTE Confidence: 0.8342403

00:15:28.944 --> 00:15:31.296 and efficacy of fat userin prophylaxis,

NOTE Confidence: 0.8342403

 $00{:}15{:}31.300 \dashrightarrow 00{:}15{:}32.828$  prophylaxis in patients with

NOTE Confidence: 0.8342403

 $00{:}15{:}32.828 \dashrightarrow 00{:}15{:}35.592$ hemophilia A or B with or without

NOTE Confidence: 0.8342403

00:15:35.592 --> 00:15:38.378 inhibitors as seen on the slide here.

 $00:15:38.380 \longrightarrow 00:15:41.521$  So for two are in is a small interfering

NOTE Confidence: 0.8342403

00:15:41.521 --> 00:15:44.670 RNA that as described in the schematic,

NOTE Confidence: 0.8342403

 $00:15:44.670 \longrightarrow 00:15:46.380$  blocks the production of anti

NOTE Confidence: 0.8342403

 $00:15:46.380 \longrightarrow 00:15:48.647$  thrombin and as a result increases

NOTE Confidence: 0.8342403

 $00:15:48.647 \longrightarrow 00:15:51.077$  or improves thrombin generation and.

NOTE Confidence: 0.8342403

00:15:51.080 --> 00:15:53.324 Remote team of stasis and individuals

NOTE Confidence: 0.8342403

00:15:53.324 --> 00:15:55.130 with hemophilia of phase one.

NOTE Confidence: 0.8342403

00:15:55.130 --> 00:15:57.260 Study of monthly subcutaneous photographer

NOTE Confidence: 0.8342403

00:15:57.260 --> 00:15:59.390 to Sarandos ING was previously

NOTE Confidence: 0.8342403

 $00:15:59.453 \longrightarrow 00:16:01.379$  reported in the New England Journal

NOTE Confidence: 0.8342403

 $00{:}16{:}01.379 \dashrightarrow 00{:}16{:}03.412$  of Medicine in 2017 and demonstrated

NOTE Confidence: 0.8342403

 $00:16:03.412 \longrightarrow 00:16:05.820$  that this drug was well tolerated and

NOTE Confidence: 0.8342403

 $00:16:05.820 \longrightarrow 00:16:07.169$  also reliably lowered antithrombin

NOTE Confidence: 0.8342403

 $00:16:07.169 \longrightarrow 00:16:09.167$  in a dose dependent manner resulting

NOTE Confidence: 0.8342403

00:16:09.167 --> 00:16:10.948 in decreased bleeding frequency.

NOTE Confidence: 0.8342403

 $00:16:10.950 \longrightarrow 00:16:13.582$  So in this trial adult male patients

 $00:16:13.582 \longrightarrow 00:16:15.154$  with moderate severe haemophilia

NOTE Confidence: 0.8342403

00:16:15.154 --> 00:16:17.374 moderate or severe hemophilia A or

NOTE Confidence: 0.8342403

 $00:16:17.374 \longrightarrow 00:16:19.924$  B who had tolerated for chooser in

NOTE Confidence: 0.8342403

 $00:16:19.924 \longrightarrow 00:16:22.368$  in the Phase one study were eligible

NOTE Confidence: 0.8342403

 $00:16:22.368 \longrightarrow 00:16:24.258$  to continue into this phase.

NOTE Confidence: 0.8342403

00:16:24.260 --> 00:16:24.966 A2 cohort,

NOTE Confidence: 0.8342403

 $00:16:24.966 \longrightarrow 00:16:27.084$  which was an open label extension

NOTE Confidence: 0.8342403

00:16:27.084 --> 00:16:29.118 portion and they receive photos,

NOTE Confidence: 0.8342403

 $00:16:29.120 \longrightarrow 00:16:31.703$  are in at a dose of 50 or 80

NOTE Confidence: 0.8342403

 $00:16:31.703 \longrightarrow 00:16:33.610$  milligrams subcutaneous monthly.

NOTE Confidence: 0.8342403

 $00{:}16{:}33.610 \dashrightarrow 00{:}16{:}35.102$  The primary endpoints were

NOTE Confidence: 0.8342403

00:16:35.102 --> 00:16:36.594 safety and adverse events,

NOTE Confidence: 0.8342403

 $00{:}16{:}36.600 \dashrightarrow 00{:}16{:}38.796$  and there were key secondary endpoints

NOTE Confidence: 0.8342403

 $00{:}16{:}38.796 \dashrightarrow 00{:}16{:}40.720$  that included a calculated median.

NOTE Confidence: 0.8342403

 $00{:}16{:}40.720 \dashrightarrow 00{:}16{:}42.800$  Analyze the annualized bleed rate

00:16:42.800 --> 00:16:44.464 pharmacokinetics in quality of

NOTE Confidence: 0.8342403

 $00:16:44.464 \longrightarrow 00:16:46.700$  life in the in the patient cohort.

NOTE Confidence: 0.9159124

00:16:49.070 --> 00:16:52.214 34 patients were included in this portion of

NOTE Confidence: 0.9159124

 $00:16:52.214 \longrightarrow 00:16:55.409$  the study with a median age of 35.4 years.

NOTE Confidence: 0.9159124

 $00:16:55.410 \longrightarrow 00:16:57.726$  And this included 27 individuals with

NOTE Confidence: 0.9159124

00:16:57.726 --> 00:16:59.505 hemophilia A, A7 individuals with

NOTE Confidence: 0.9159124

00:16:59.505 --> 00:17:02.378 hemophilia B and 15 out of the group

NOTE Confidence: 0.9159124

 $00:17:02.378 \longrightarrow 00:17:04.668$  had inhibitors with 19 individuals.

NOTE Confidence: 0.9159124

 $00{:}17{:}04.670 \dashrightarrow 00{:}17{:}06.350$  Not having an inhibitor.

NOTE Confidence: 0.9159124

00:17:06.350 --> 00:17:09.578 Patients received a median of 3.1 years of

NOTE Confidence: 0.9159124

 $00{:}17{:}09.578 \dashrightarrow 00{:}17{:}12.490$  a tutor inducing as of the data cut off,

NOTE Confidence: 0.9159124

 $00:17:12.490 \longrightarrow 00:17:14.758$  which was September of 2020 and 12

NOTE Confidence: 0.9159124

 $00:17:14.758 \longrightarrow 00:17:17.117$  individuals were on the 50 milligram dose,

NOTE Confidence: 0.9159124

 $00:17:17.120 \longrightarrow 00:17:20.376$  with 22 being on the 80 milligram dose.

NOTE Confidence: 0.9159124

00:17:20.380 --> 00:17:22.612 But user and was noted in this study

NOTE Confidence: 0.9159124

 $00:17:22.612 \longrightarrow 00:17:24.442$  to decrease antithrombin levels quickly

 $00:17:24.442 \longrightarrow 00:17:26.854$  with sustained levels that remained at

NOTE Confidence: 0.9159124

 $00:17:26.854 \longrightarrow 00:17:29.096$  or below 20% in individuals who remained

NOTE Confidence: 0.9159124

 $00:17:29.096 \longrightarrow 00:17:31.909$  on the drug and so this was confirmed.

NOTE Confidence: 0.9159124

00:17:31.910 --> 00:17:34.724 The findings of the Phase one portion

NOTE Confidence: 0.9159124

 $00:17:34.724 \longrightarrow 00:17:35.930$  of the study.

NOTE Confidence: 0.9159124

 $00:17:35.930 \longrightarrow 00:17:37.910$  Immediate analyzed bleed rate was

NOTE Confidence: 0.9159124

 $00:17:37.910 \longrightarrow 00:17:39.890$  calculated for this cohort after

NOTE Confidence: 0.9159124

 $00:17:39.954 \longrightarrow 00:17:41.634$  achieving antithrombin knockdown an

NOTE Confidence: 0.9159124

 $00:17:41.634 \longrightarrow 00:17:44.154$  was zero for treated bleeds during

NOTE Confidence: 0.9159124

 $00:17:44.219 \longrightarrow 00:17:45.479$  the follow up period.

NOTE Confidence: 0.9159124

 $00{:}17{:}45.480 \dashrightarrow 00{:}17{:}48.091$  The figure included here on this slide

NOTE Confidence: 0.9159124

 $00:17:48.091 \longrightarrow 00:17:51.124$  is a result from a post hoc analysis

NOTE Confidence: 0.9159124

00:17:51.124 --> 00:17:53.929 of 258 treated bleeds in 15 subjects,

NOTE Confidence: 0.9159124

 $00:17:53.930 \longrightarrow 00:17:56.228$  with each separate graph showing data

NOTE Confidence: 0.9159124

00:17:56.228 --> 00:17:58.090 on bleed causality, bleed location,

00:17:58.090 --> 00:18:00.575 an bleeds severity and from left to

NOTE Confidence: 0.9159124

 $00{:}18{:}00.575 \dashrightarrow 00{:}18{:}02.635$  right in patients with hemophilia

NOTE Confidence: 0.9159124

00:18:02.635 --> 00:18:04.680 A with no inhibitor hemophilia.

NOTE Confidence: 0.9159124

 $00:18:04.680 \longrightarrow 00:18:07.110$  A patients with an inhibitor hemophilia

NOTE Confidence: 0.9159124

 $00{:}18{:}07.110 \dashrightarrow 00{:}18{:}09.697$  B patients without an inhibitor and

NOTE Confidence: 0.9159124

00:18:09.697 --> 00:18:12.385 hemophilia B patients with an inhibitor.

NOTE Confidence: 0.9159124

00:18:12.390 --> 00:18:15.400 So while this is a bit of a busy figure,

NOTE Confidence: 0.9159124

 $00:18:15.400 \longrightarrow 00:18:17.512$  the takeaway is really that breakaway

NOTE Confidence: 0.9159124

 $00:18:17.512 \longrightarrow 00:18:18.920$  breakthrough bleeds occurred mostly

NOTE Confidence: 0.9159124

 $00:18:18.974 \longrightarrow 00:18:20.514$  in the joints or mild in nature,

NOTE Confidence: 0.9159124

 $00{:}18{:}20.520 \dashrightarrow 00{:}18{:}22.774$  and tended to be more spontaneous in

NOTE Confidence: 0.9159124

 $00:18:22.774 \longrightarrow 00:18:24.400$  those individuals with inhibitors.

NOTE Confidence: 0.9159124

 $00:18:24.400 \longrightarrow 00:18:26.770$  These breakthrough bleeds were managed

NOTE Confidence: 0.9159124

00:18:26.770 --> 00:18:29.140 with factor replacement or bypassing

NOTE Confidence: 0.9159124

00:18:29.206 --> 00:18:31.366 agent per the study management guidelines

NOTE Confidence: 0.9159124

 $00:18:31.366 \longrightarrow 00:18:34.489$  with a focus on reduced doses to try

 $00:18:34.489 \longrightarrow 00:18:36.913$  and minimize the potential thrombotic risk.

NOTE Confidence: 0.9159124

00:18:36.920 --> 00:18:37.316 However,

NOTE Confidence: 0.9159124

00:18:37.316 --> 00:18:40.088 in the safety analysis of this study,

NOTE Confidence: 0.9159124

 $00:18:40.090 \longrightarrow 00:18:42.532$  97% of patients experienced at least

NOTE Confidence: 0.9159124

00:18:42.532 --> 00:18:45.334 one adverse event with 38% having a

NOTE Confidence: 0.9159124

 $00:18:45.334 \longrightarrow 00:18:47.569$  serious adverse event which included

NOTE Confidence: 0.9159124

 $00:18:47.569 \longrightarrow 00:18:50.130$  the events such as an arterial

NOTE Confidence: 0.9159124

 $00{:}18{:}50.130 \dashrightarrow 00{:}18{:}52.797$  thrombosis in one patient and a death

NOTE Confidence: 0.9159124

 $00{:}18{:}52.873 \dashrightarrow 00{:}18{:}55.281$  that actually occurred in 2017 as a

NOTE Confidence: 0.9159124

 $00{:}18{:}55.281 \dashrightarrow 00{:}18{:}57.730$  result of a cerebral vein thrombosis.

NOTE Confidence: 0.9159124

 $00:18:57.730 \longrightarrow 00:19:00.080$  So in October of 2020,

NOTE Confidence: 0.9159124

 $00:19:00.080 \longrightarrow 00:19:01.616$  Sanofi voluntarily paused enrollment,

NOTE Confidence: 0.9159124

00:19:01.616 --> 00:19:02.768 inducing with Catoosa,

NOTE Confidence: 0.9159124

 $00:19:02.770 \longrightarrow 00:19:05.014$  ran to further investigate these adverse

NOTE Confidence: 0.9159124

 $00{:}19{:}05.014 \dashrightarrow 00{:}19{:}07.359$  events and the rate of thrombotic

 $00:19:07.359 \longrightarrow 00:19:09.319$  events in the clinical trials,

NOTE Confidence: 0.9159124

 $00:19:09.320 \longrightarrow 00:19:11.582$  these trials have now resumed with

NOTE Confidence: 0.9159124

00:19:11.582 --> 00:19:13.550 reduced dosing of Fatou Suran,

NOTE Confidence: 0.9159124

 $00:19:13.550 \longrightarrow 00:19:15.490$  initially at 50 milligrams every

NOTE Confidence: 0.9159124

 $00:19:15.490 \longrightarrow 00:19:18.244$  other month in order to target and

NOTE Confidence: 0.9159124

 $00:19:18.244 \longrightarrow 00:19:20.476$  antithrombin level of 15 to 35%,

NOTE Confidence: 0.9159124

 $00:19:20.480 \longrightarrow 00:19:23.483$  which was found to be less associated

NOTE Confidence: 0.9159124

 $00{:}19{:}23.483 \dashrightarrow 00{:}19{:}25.380$  with the thrombotic events.

NOTE Confidence: 0.9159124

00:19:25.380 --> 00:19:26.463 So in summary,

NOTE Confidence: 0.9159124

00:19:26.463 --> 00:19:28.629 for chooser and is an investigational

NOTE Confidence: 0.9159124

 $00{:}19{:}28.629 \dashrightarrow 00{:}19{:}30.160$  small interfering RNA the rapeutic

NOTE Confidence: 0.9159124

 $00{:}19{:}30.160 \dashrightarrow 00{:}19{:}33.168$  and it has the potential use as a

NOTE Confidence: 0.9159124

 $00:19:33.168 \longrightarrow 00:19:34.636$  prophylactic treatment in patients

NOTE Confidence: 0.9159124

 $00:19:34.636 \longrightarrow 00:19:37.140$  with hemophilia A or B with or

NOTE Confidence: 0.9159124

 $00:19:37.140 \longrightarrow 00:19:39.120$  without inhibitors in order to try

NOTE Confidence: 0.9159124

 $00:19:39.120 \longrightarrow 00:19:40.920$  and reestablish hemostatic balance.

 $00:19:40.920 \longrightarrow 00:19:41.290$  However,

NOTE Confidence: 0.9159124

 $00:19:41.290 \longrightarrow 00:19:43.140$  further evaluation of its safety

NOTE Confidence: 0.9159124

 $00:19:43.140 \longrightarrow 00:19:43.880$  is imperative,

NOTE Confidence: 0.9159124

 $00:19:43.880 \longrightarrow 00:19:45.926$  and phase three trials of this

NOTE Confidence: 0.9159124

 $00:19:45.926 \longrightarrow 00:19:47.950$  drug are are now ongoing.

NOTE Confidence: 0.85483044

 $00:19:50.040 \longrightarrow 00:19:52.152$  And so I'll switch gears a bit with

NOTE Confidence: 0.85483044

 $00:19:52.152 \longrightarrow 00:19:54.228$  this abstract that was presented by

NOTE Confidence: 0.85483044

 $00:19:54.228 \longrightarrow 00:19:56.088$  Doctor Brooks Sadler from Washington

NOTE Confidence: 0.85483044

 $00:19:56.088 \longrightarrow 00:19:58.140$  University School of Medicine on Geno

NOTE Confidence: 0.85483044

 $00:19:58.140 \longrightarrow 00:20:00.232$  type analysis of adolescents with low.

NOTE Confidence: 0.85483044

00:20:00.232 --> 00:20:01.648 One willibrand factor,

NOTE Confidence: 0.85483044

00:20:01.648 --> 00:20:03.536 an heavy menstrual bleeding.

NOTE Confidence: 0.85483044

 $00{:}20{:}03.540 \dashrightarrow 00{:}20{:}05.592$  She noted that heavy menstrual bleeding

NOTE Confidence: 0.85483044

 $00:20:05.592 \longrightarrow 00:20:07.673$  occurs in about 1/3 of adolescent

NOTE Confidence: 0.85483044

 $00:20:07.673 \longrightarrow 00:20:09.948$  women and accounts for 2/3 of patients

00:20:09.948 --> 00:20:12.127 who require hysterectomy and the

NOTE Confidence: 0.85483044

00:20:12.127 --> 00:20:13.923 prevalence of bleeding disorders,

NOTE Confidence: 0.85483044

 $00:20:13.930 \longrightarrow 00:20:16.012$  including von Willebrand disease in this

NOTE Confidence: 0.85483044

 $00{:}20{:}16.012 \dashrightarrow 00{:}20{:}18.748$  cohort is higher than the general population.

NOTE Confidence: 0.85483044

00:20:18.750 --> 00:20:19.444 However, no,

NOTE Confidence: 0.85483044

 $00:20:19.444 \longrightarrow 00:20:21.526$  no one has looked or evaluated

NOTE Confidence: 0.85483044

 $00:20:21.526 \longrightarrow 00:20:23.454$  at other genetic hemostatic risk

NOTE Confidence: 0.85483044

 $00:20:23.454 \longrightarrow 00:20:26.163$  factors that may play a role here.

NOTE Confidence: 0.85483044

00:20:26.170 --> 00:20:27.642 So in this study,

NOTE Confidence: 0.85483044

00:20:27.642 --> 00:20:29.850 86 adolescent patients who met criteria

NOTE Confidence: 0.85483044

 $00{:}20{:}29.919 \dashrightarrow 00{:}20{:}32.992$  for heavy menstrual bleeding and had von

NOTE Confidence: 0.85483044

 $00:20:32.992 \longrightarrow 00:20:35.090$  Willebrand activity between 30 and 50%.

NOTE Confidence: 0.85483044

 $00:20:35.090 \longrightarrow 00:20:37.575$  Were enrolled in the study and underwent

NOTE Confidence: 0.85483044

 $00:20:37.575 \longrightarrow 00:20:39.828$  whole exome sequencing that was compared

NOTE Confidence: 0.85483044

 $00:20:39.828 \longrightarrow 00:20:41.698$  to 600 unrelated in-house controls.

NOTE Confidence: 0.85483044

 $00:20:41.700 \longrightarrow 00:20:43.625$  The sequencing interesting Lee revealed

00:20:43.625 --> 00:20:46.767 in excess of rare stop gain and stop

NOTE Confidence: 0.85483044

 $00{:}20{:}46.767 \dashrightarrow 00{:}20{:}48.692$  loss mutations in genes associated

NOTE Confidence: 0.85483044

 $00:20:48.692 \longrightarrow 00:20:50.662$  with bleeding or haematologic diseases

NOTE Confidence: 0.85483044

 $00:20:50.662 \longrightarrow 00:20:52.936$  as outlined in the slide here.

NOTE Confidence: 0.85483044

 $00{:}20{:}52.940 \dashrightarrow 00{:}20{:}55.677$  There was also an excess of rare

NOTE Confidence: 0.85483044

00:20:55.677 --> 00:20:57.317 pathogenic variants that were

NOTE Confidence: 0.85483044

00:20:57.317 --> 00:20:59.663 observed in jeans that cause anemia

NOTE Confidence: 0.85483044

 $00{:}20{:}59.663 \dashrightarrow 00{:}21{:}02.408$  or cause disease with an emia as a

NOTE Confidence: 0.85483044

 $00{:}21{:}02.408 \dashrightarrow 00{:}21{:}04.278$  major symptoms of major symptom.

NOTE Confidence: 0.85483044

00:21:04.280 --> 00:21:07.017 This included variance in Adams TS 13,

NOTE Confidence: 0.85483044 00:21:07.020 --> 00:21:07.435 Fink,

NOTE Confidence: 0.85483044

 $00:21:07.435 \longrightarrow 00:21:10.340$  CA and G6PD and the other jeans

NOTE Confidence: 0.85483044

 $00:21:10.340 \longrightarrow 00:21:12.350$  that are listed here.

NOTE Confidence: 0.85483044

 $00:21:12.350 \longrightarrow 00:21:14.360$  There was analysis Additionally for

NOTE Confidence: 0.85483044

 $00:21:14.360 \longrightarrow 00:21:15.968$  common single nucleotide polymorphism's

00:21:15.968 --> 00:21:18.078 or snips that were that identified,

NOTE Confidence: 0.85483044

00:21:18.080 --> 00:21:19.990 3 common snips in firm too,

NOTE Confidence: 0.85483044

 $00{:}21{:}19.990 \dashrightarrow 00{:}21{:}22.755$  and this past genome wide significance as

NOTE Confidence: 0.85483044

00:21:22.755 --> 00:21:26.475 seen in the figure here on the right firm T2,

NOTE Confidence: 0.85483044

 $00:21:26.480 \longrightarrow 00:21:28.008$  encodes a cytoskeletal protein

NOTE Confidence: 0.85483044

00:21:28.008 --> 00:21:29.918 that is important in hemostasis,

NOTE Confidence: 0.85483044

00:21:29.920 --> 00:21:31.444 angiogenesis and blood vessel,

NOTE Confidence: 0.85483044

 $00:21:31.444 \longrightarrow 00:21:32.936$  home homeostasis, and so.

NOTE Confidence: 0.85483044

 $00:21:32.936 \longrightarrow 00:21:35.114$  This was the first whole exome

NOTE Confidence: 0.85483044

00:21:35.114 --> 00:21:37.572 sequencing study in patients with heavy

NOTE Confidence: 0.85483044

 $00:21:37.572 \longrightarrow 00:21:39.652$  menstrual bleeding and suggest there

NOTE Confidence: 0.85483044

00:21:39.652 --> 00:21:42.379 may be some Association in this group.

NOTE Confidence: 0.85483044

 $00:21:42.380 \longrightarrow 00:21:44.240$  With both rare and common

NOTE Confidence: 0.85483044

00:21:44.240 --> 00:21:46.100 variants in hemostasis and anemia,

NOTE Confidence: 0.85483044

 $00:21:46.100 \longrightarrow 00:21:47.588$  genes that warrant further

NOTE Confidence: 0.85483044

 $00{:}21{:}47.588 \dashrightarrow 00{:}21{:}49.076$  validation in larger studies.

 $00:21:52.370 \longrightarrow 00:21:54.750$  And Lastly, I wanted to touch upon

NOTE Confidence: 0.8524265

 $00{:}21{:}54.750 \dashrightarrow 00{:}21{:}56.565$  the abstracts that presented data

NOTE Confidence: 0.8524265

00:21:56.565 --> 00:21:59.120 on the use of kobid 19 convalescent

NOTE Confidence: 0.8524265

00:21:59.120 --> 00:22:00.839 plasma convalescent plasma,

NOTE Confidence: 0.8524265

 $00{:}22{:}00.840 \dashrightarrow 00{:}22{:}02.765$  which is collected from individuals

NOTE Confidence: 0.8524265

00:22:02.765 --> 00:22:04.690 who have recovered from infection,

NOTE Confidence: 0.8524265

 $00:22:04.690 \longrightarrow 00:22:06.520$  is a therapeutic modality that's

NOTE Confidence: 0.8524265

 $00:22:06.520 \longrightarrow 00:22:08.803$  actually been used for over a

NOTE Confidence: 0.8524265

 $00:22:08.803 \longrightarrow 00:22:11.143$  century with the aim to transfer

NOTE Confidence: 0.8524265

 $00{:}22{:}11.143 \dashrightarrow 00{:}22{:}12.767$  virus neutralizing antibodies to

NOTE Confidence: 0.8524265

00:22:12.767 --> 00:22:14.697 patients who have active infection.

NOTE Confidence: 0.8524265

 $00:22:14.700 \longrightarrow 00:22:17.689$  However, data on its use in COVID-19

NOTE Confidence: 0.8524265

 $00:22:17.689 \longrightarrow 00:22:20.349$  has been limited and quite mixed.

NOTE Confidence: 0.8524265

 $00:22:20.350 \longrightarrow 00:22:22.678$  And so I'll highlight here again,

NOTE Confidence: 0.8524265

 $00:22:22.680 \longrightarrow 00:22:24.630$  the five abstracts that presented

 $00:22:24.630 \longrightarrow 00:22:25.800$  some additional data.

NOTE Confidence: 0.8524265

 $00{:}22{:}25.800 \dashrightarrow 00{:}22{:}27.630$  So in our institutional experience

NOTE Confidence: 0.8524265

 $00:22:27.630 \longrightarrow 00:22:30.202$  with 105 patients with severe or life

NOTE Confidence: 0.8524265

 $00:22:30.202 \longrightarrow 00:22:31.892$  threatening COVID-19 who were transfuse

NOTE Confidence: 0.8524265

 $00:22:31.892 \longrightarrow 00:22:34.359$  one unit of convalescent plasma through

NOTE Confidence: 0.8524265

00:22:34.359 --> 00:22:36.684 the national Expanded Access program,

NOTE Confidence: 0.8524265

 $00:22:36.690 \longrightarrow 00:22:39.308$  we saw that 42.9% of patients had

NOTE Confidence: 0.8524265

00:22:39.308 --> 00:22:41.750 improvement in their WHO ordinal scale,

NOTE Confidence: 0.8524265

 $00{:}22{:}41.750 \dashrightarrow 00{:}22{:}44.078$  which is a score comprised of

NOTE Confidence: 0.8524265

00:22:44.078 --> 00:22:46.024 functional status, level of care,

NOTE Confidence: 0.8524265

 $00{:}22{:}46.024 \dashrightarrow 00{:}22{:}47.576$  and oxygen supplement Tatian.

NOTE Confidence: 0.8524265

 $00:22:47.580 \longrightarrow 00:22:48.019$  Interestingly,

NOTE Confidence: 0.8524265

 $00{:}22{:}48.019 \dashrightarrow 00{:}22{:}50.653$  we observed a correlation between D

NOTE Confidence: 0.8524265

 $00:22:50.653 \longrightarrow 00:22:53.472$  dimer level more than five at 2448

NOTE Confidence: 0.8524265

 $00{:}22{:}53.472 \dashrightarrow 00{:}22{:}55.257$  and 72 hours after transfusion.

NOTE Confidence: 0.8524265

00:22:55.260 --> 00:22:57.380 Convalescent, plasma, and mortality.

00:22:57.380 --> 00:22:59.500 Ibrahim and colleagues shared

NOTE Confidence: 0.8524265

00:22:59.500 --> 00:23:01.499 data on 17 patients,

NOTE Confidence: 0.8524265

 $00{:}23{:}01.500 \longrightarrow 00{:}23{:}04.050$  six of whom were being treated

NOTE Confidence: 0.8524265

00:23:04.050 --> 00:23:05.750 for a hematologic malignancy,

NOTE Confidence: 0.8524265

 $00:23:05.750 \longrightarrow 00:23:07.505$  and these individuals were transfused

NOTE Confidence: 0.8524265

 $00:23:07.505 \longrightarrow 00:23:09.814$  one to two units of COVID-19

NOTE Confidence: 0.8524265

 $00:23:09.814 \longrightarrow 00:23:12.274$  convalescent plasma that had concert

NOTE Confidence: 0.8524265

 $00:23:12.274 \longrightarrow 00:23:14.242$  confirmed positive antibody titer,

NOTE Confidence: 0.8524265

 $00{:}23{:}14.250 \dashrightarrow 00{:}23{:}16.632$  and they also observed a decrease

NOTE Confidence: 0.8524265

00:23:16.632 --> 00:23:19.577 in the mean WHO ordinal score by

NOTE Confidence: 0.8524265

 $00{:}23{:}19.577 \dashrightarrow 00{:}23{:}22.531$  two points at the time of discharge

NOTE Confidence: 0.8524265

 $00{:}23{:}22.615 \dashrightarrow 00{:}23{:}25.243$  of multi center phase two trial

NOTE Confidence: 0.8524265

 $00{:}23{:}25.243 \dashrightarrow 00{:}23{:}27.483$  presented by Doctor Al Hashmi

NOTE Confidence: 0.8524265

 $00{:}23{:}27.483 \dashrightarrow 00{:}23{:}29.898$  compared 178 covid convalescent plasma

NOTE Confidence: 0.8524265

 $00:23:29.898 \longrightarrow 00:23:32.520$  recipients to 391 matched controls.

 $00:23:32.520 \longrightarrow 00:23:34.176$  Is a significant reduction in 30

NOTE Confidence: 0.8524265

 $00:23:34.176 \longrightarrow 00:23:36.069$  day mortality in the treatment arm.

NOTE Confidence: 0.8524265

00:23:36.070 --> 00:23:37.111 In this study,

NOTE Confidence: 0.8524265

 $00:23:37.111 \longrightarrow 00:23:38.846$  though Interestingly they observed that

NOTE Confidence: 0.8524265

00:23:38.846 --> 00:23:40.766 the hospital and ICU length of stay

NOTE Confidence: 0.8524265

00:23:40.766 --> 00:23:42.582 as well as duration of intubation was

NOTE Confidence: 0.8524265

 $00{:}23{:}42.582 \dashrightarrow 00{:}23{:}44.358$  longer and that was actually longer

NOTE Confidence: 0.8524265

 $00{:}23{:}44.358 \dashrightarrow 00{:}23{:}46.264$  in the convalescent Plasma Group.

NOTE Confidence: 0.8524265

 $00:23:46.264 \longrightarrow 00:23:47.140$  Another phase,

NOTE Confidence: 0.8524265

 $00:23:47.140 \longrightarrow 00:23:49.084$  two matched case control study looked

NOTE Confidence: 0.8524265

 $00{:}23{:}49.084 \dashrightarrow 00{:}23{:}51.232$  at a smaller number of hospitalized

NOTE Confidence: 0.8524265

 $00:23:51.232 \longrightarrow 00:23:53.590$  COVID-19 patients who received 2 units

NOTE Confidence: 0.8524265

 $00{:}23{:}53.590 \dashrightarrow 00{:}23{:}55.916$  of transfusion and there was a trend

NOTE Confidence: 0.8524265

00:23:55.916 --> 00:23:57.742 in this group towards improved survival,

NOTE Confidence: 0.8524265

 $00:23:57.742 \longrightarrow 00:23:59.110$  though this was not

NOTE Confidence: 0.8524265

00:23:59.110 --> 00:23:59.794 statistically significant,

 $00:23:59.800 \longrightarrow 00:24:02.128$  it was noted in this study that the

NOTE Confidence: 0.8524265

 $00{:}24{:}02.128 {\: -->\:} 00{:}24{:}04.238$ donor plasma was quite heterogeneous,

NOTE Confidence: 0.8524265

 $00:24:04.240 \longrightarrow 00:24:05.950$  with an increase in antibody

NOTE Confidence: 0.8524265

 $00:24:05.950 \longrightarrow 00:24:07.318$  activity observed in some,

NOTE Confidence: 0.8524265

 $00:24:07.320 \longrightarrow 00:24:08.346$  but not all,

NOTE Confidence: 0.8524265

00:24:08.346 --> 00:24:10.740 of the patients included in the study,

NOTE Confidence: 0.8524265

 $00:24:10.740 \longrightarrow 00:24:11.721$  and interesting Lee,

NOTE Confidence: 0.8524265

 $00:24:11.721 \longrightarrow 00:24:14.010$  those who had undergone anti CD 20

NOTE Confidence: 0.8524265

 $00:24:14.069 \longrightarrow 00:24:16.589$  treatment in the last year had a demo

NOTE Confidence: 0.8524265

 $00:24:16.589 \longrightarrow 00:24:18.350$  demonstrated an impaired response.

NOTE Confidence: 0.8524265

 $00:24:18.350 \longrightarrow 00:24:20.200$  In regards to antibody activity

NOTE Confidence: 0.8524265

 $00{:}24{:}20.200 \dashrightarrow 00{:}24{:}22.754$  and Lastly a multi center Phase 1

NOTE Confidence: 0.8524265

 $00{:}24{:}22.754 \dashrightarrow 00{:}24{:}24.980$  two trial of 70 patients who had

NOTE Confidence: 0.8524265

 $00:24:24.980 \longrightarrow 00:24:26.237$  received COVID-19 convalescent

NOTE Confidence: 0.8524265

 $00:24:26.237 \longrightarrow 00:24:28.847$  plasma found that 30 day overall

00:24:28.847 --> 00:24:30.917 survival was improved in those

NOTE Confidence: 0.8524265

 $00{:}24{:}30.917 \dashrightarrow 00{:}24{:}32.912$  patients who had severe acute

NOTE Confidence: 0.8524265

 $00{:}24{:}32.912 \dashrightarrow 00{:}24{:}34.812$  respiratory distress syndrome as a

NOTE Confidence: 0.8524265

00:24:34.812 --> 00:24:36.537 part of their COVID-19 infection,

NOTE Confidence: 0.8524265

 $00:24:36.540 \longrightarrow 00:24:39.186$  though there was an adverse event rate

NOTE Confidence: 0.8524265

 $00:24:39.186 \longrightarrow 00:24:41.605$  of 3.65% and there was one patient

NOTE Confidence: 0.8524265

00:24:41.605 --> 00:24:44.120 who was observed to have transfusion,

NOTE Confidence: 0.8524265

00:24:44.120 --> 00:24:45.772 associated circulatory overload and

NOTE Confidence: 0.8524265

 $00:24:45.772 \longrightarrow 00:24:48.759$  a second that was observed to have a.

NOTE Confidence: 0.8524265

 $00{:}24{:}48.760 \dashrightarrow 00{:}24{:}51.140$  A venous thromboembolic event.

NOTE Confidence: 0.8445773

 $00{:}24{:}53.740 \dashrightarrow 00{:}24{:}56.064$  So the QR code included here on

NOTE Confidence: 0.8445773

 $00:24:56.064 \longrightarrow 00:24:58.429$  this slide links to a section of

NOTE Confidence: 0.8445773

 $00:24:58.429 \longrightarrow 00:25:00.379$  the ash website that discuss is

NOTE Confidence: 0.8445773

 $00:25:00.449 \longrightarrow 00:25:02.869$  our available evidence on COVID-19.

NOTE Confidence: 0.8445773

00:25:02.870 --> 00:25:04.690 Convalescent Plasma provides a summary.

NOTE Confidence: 0.8445773

 $00:25:04.690 \longrightarrow 00:25:06.880$  As you can see, just from

 $00:25:06.880 \longrightarrow 00:25:08.340$  the data presented today,

NOTE Confidence: 0.8445773

 $00:25:08.340 \longrightarrow 00:25:09.716$  information on its effectiveness

NOTE Confidence: 0.8445773

00:25:09.716 --> 00:25:11.436 has been somewhat mixed and

NOTE Confidence: 0.8445773

00:25:11.436 --> 00:25:13.370 we're really awaiting data from

NOTE Confidence: 0.8445773

 $00:25:13.370 \longrightarrow 00:25:14.906$  larger randomized control trials.

NOTE Confidence: 0.8445773

 $00:25:14.910 \longrightarrow 00:25:17.465$  There are some themes that have emerged,

NOTE Confidence: 0.8445773

 $00:25:17.470 \longrightarrow 00:25:19.290$  and they include the importance

NOTE Confidence: 0.8445773

 $00:25:19.290 \longrightarrow 00:25:20.746$  of both antibody titer,

NOTE Confidence: 0.8445773

 $00:25:20.750 \longrightarrow 00:25:23.126$  but more notably neutralizing function in

NOTE Confidence: 0.8445773

 $00{:}25{:}23.126 \dashrightarrow 00{:}25{:}25.150$  the donor COVID-19 convalescent plasma.

NOTE Confidence: 0.8445773

00:25:25.150 --> 00:25:28.166 As well as the benefit of providing this

NOTE Confidence: 0.8445773

 $00:25:28.166 \longrightarrow 00:25:30.159$  treatment earlier in disease course,

NOTE Confidence: 0.8445773

 $00{:}25{:}30.160 \dashrightarrow 00{:}25{:}32.162$  there has been concern raised by our

NOTE Confidence: 0.8445773

 $00:25:32.162 \longrightarrow 00:25:33.968$  group and others regarding whether

NOTE Confidence: 0.8445773

 $00:25:33.968 \longrightarrow 00:25:35.756$  COVID-19 convalescent plasma may

 $00:25:35.756 \longrightarrow 00:25:37.544$  actually potentiates the already

NOTE Confidence: 0.8445773

 $00{:}25{:}37.607 \dashrightarrow 00{:}25{:}39.008$  increased thrombotic risk.

NOTE Confidence: 0.8445773

00:25:39.010 --> 00:25:41.514 An end to Ophelia Opathy that we now

NOTE Confidence: 0.8445773

 $00:25:41.514 \longrightarrow 00:25:44.041$  know occurs with COVID-19 and further

NOTE Confidence: 0.8445773

 $00:25:44.041 \longrightarrow 00:25:46.326$  investigation into this is warranted.

NOTE Confidence: 0.8445773

 $00:25:46.330 \longrightarrow 00:25:48.610$  So taking this all into account

NOTE Confidence: 0.8445773

 $00:25:48.610 \longrightarrow 00:25:50.949$  as of just actually last week,

NOTE Confidence: 0.8445773

00:25:50.950 --> 00:25:53.194 the FDA has updated their emergency

NOTE Confidence: 0.8445773

00:25:53.194 --> 00:25:54.690 use authorization for COVID-19

NOTE Confidence: 0.8445773

00:25:54.747 --> 00:25:55.879 convalescent plasma.

NOTE Confidence: 0.8445773

00:25:55.880 --> 00:25:57.819 Really limiting it to use of high

NOTE Confidence: 0.8445773

 $00:25:57.819 \longrightarrow 00:25:59.067$  titer plasma for hospitalized

NOTE Confidence: 0.8445773

00:25:59.067 --> 00:26:01.197 patients that are early in their

NOTE Confidence: 0.8445773

00:26:01.197 --> 00:26:03.392 disease course and those who may

NOTE Confidence: 0.8445773

00:26:03.392 --> 00:26:04.820 have impaired humoral immunity.

NOTE Confidence: 0.8751028

 $00:26:07.060 \longrightarrow 00:26:10.000$  Thank you and I'll turn it over to Alex now.

 $00:26:14.400 \longrightarrow 00:26:18.680$  Thank you Sabrina. I'm just.

NOTE Confidence: 0.86815625

 $00:26:33.060 \longrightarrow 00:26:36.686$  OK, hopefully everybody can see the screen.

NOTE Confidence: 0.6899577

00:26:39.910 --> 00:26:44.214 Alright, wanted to say thank you to decide

NOTE Confidence: 0.6899577

00:26:44.214 --> 00:26:48.893 and Megadeth for putting all this together

NOTE Confidence: 0.6899577

 $00:26:48.893 \longrightarrow 00:26:52.613$  and everybody who's contributed else.

NOTE Confidence: 0.6899577

00:26:52.620 --> 00:26:55.434 Um, exciting, serious, and learning a lot.

NOTE Confidence: 0.6899577

 $00:26:55.440 \longrightarrow 00:26:58.296$  So I am going to see if I

NOTE Confidence: 0.6899577

 $00:26:58.296 \longrightarrow 00:27:00.683$  can move the slides. Yes,

NOTE Confidence: 0.6899577

 $00:27:00.683 \longrightarrow 00:27:06.360$  I'm just going to touch upon a few guests. 3.

NOTE Confidence: 0.6899577

00:27:06.360 --> 00:27:09.727 The abstracts that that and identified,

NOTE Confidence: 0.6899577

00:27:09.730 --> 00:27:11.714 and specifically about cancer,

NOTE Confidence: 0.6899577

 $00{:}27{:}11.714 \dashrightarrow 00{:}27{:}13.202$  associated venous thromboembolism

NOTE Confidence: 0.6899577

 $00:27:13.202 \longrightarrow 00:27:16.586$  and one of the new exciting agent

NOTE Confidence: 0.6899577

 $00{:}27{:}16.586 \dashrightarrow 00{:}27{:}18.406$  for reversal of anticoagulation.

NOTE Confidence: 0.6899577

 $00:27:18.410 \longrightarrow 00:27:21.980$  And then I'm going to touch

 $00:27:21.980 \longrightarrow 00:27:25.180$  base and our own work.

NOTE Confidence: 0.6899577

 $00:27:25.180 \longrightarrow 00:27:27.250$  Thrombosis and COVID-19.

NOTE Confidence: 0.6899577

 $00{:}27{:}27.250 \dashrightarrow 00{:}27{:}31.780$  How it actually. Informed us about

NOTE Confidence: 0.6899577

 $00:27:31.780 \longrightarrow 00:27:35.060$  in conditions beyond COVID-19.

NOTE Confidence: 0.6899577

 $00:27:35.060 \longrightarrow 00:27:37.830$  No disclosures on my end.

NOTE Confidence: 0.6899577

 $00:27:37.830 \longrightarrow 00:27:39.267$  Um, so the.

NOTE Confidence: 0.6899577

00:27:39.267 --> 00:27:42.141 One of the first highlight the

NOTE Confidence: 0.6899577

00:27:42.141 --> 00:27:44.912 this abstract about machine

NOTE Confidence: 0.6899577

00:27:44.912 --> 00:27:48.547 learning for prediction of cancer.

NOTE Confidence: 0.6899577

 $00:27:48.550 \longrightarrow 00:27:49.578$  Social verbalism,

NOTE Confidence: 0.6899577

 $00{:}27{:}49.578 \dashrightarrow 00{:}27{:}52.662$  especially in the setting of new

NOTE Confidence: 0.6899577

 $00:27:52.662 \longrightarrow 00:27:54.805$  guidelines that ash guidelines

NOTE Confidence: 0.6899577

 $00:27:54.805 \longrightarrow 00:27:57.375$  that have been just released

NOTE Confidence: 0.6899577

 $00{:}27{:}57.375 \longrightarrow 00{:}27{:}59.550$  about cancer regarding cancer.

NOTE Confidence: 0.6899577

 $00{:}27{:}59.550 \dashrightarrow 00{:}28{:}01.236$  Associated venous thromboembolism

NOTE Confidence: 0.6899577

 $00:28:01.236 \longrightarrow 00:28:05.777$  just the other day and as you all

 $00{:}28{:}05.777 \dashrightarrow 00{:}28{:}08.879$  know we there are several clinical

NOTE Confidence: 0.6899577

 $00{:}28{:}08.879 \dashrightarrow 00{:}28{:}12.129$  prediction rules of which comma score.

NOTE Confidence: 0.6899577

 $00:28:12.130 \longrightarrow 00:28:15.406$  Is most validated and had been.

NOTE Confidence: 0.6899577

00:28:15.410 --> 00:28:21.218 Used to stratify the risk in multiple trials,

NOTE Confidence: 0.6899577

 $00{:}28{:}21.220 \dashrightarrow 00{:}28{:}25.000$  including most recently a PERT and

NOTE Confidence: 0.6899577

 $00{:}28{:}25.000 \dashrightarrow 00{:}28{:}28.499$  Cassini RCT S42 Deluxe prophylactic

NOTE Confidence: 0.6899577

00:28:28.499 --> 00:28:32.829 regimen versus placebo and recall.

NOTE Confidence: 0.6899577

00:28:32.830 --> 00:28:37.345 It's pretty simple score to

NOTE Confidence: 0.6899577

 $00:28:37.345 \longrightarrow 00:28:40.957$  to use the questions.

NOTE Confidence: 0.6899577

 $00{:}28{:}40.960 \dashrightarrow 00{:}28{:}43.634$  We have been raised over the over

NOTE Confidence: 0.6899577

 $00:28:43.634 \longrightarrow 00:28:45.960$  over the years is exactly where

NOTE Confidence: 0.6899577

 $00:28:45.960 \longrightarrow 00:28:48.522$  the draw the line in terms of

NOTE Confidence: 0.6899577

00:28:48.606 --> 00:28:52.044 prophylaxis versus which group to sort

NOTE Confidence: 0.6899577

00:28:52.044 --> 00:28:54.336 of start prophylactic production,

NOTE Confidence: 0.6899577

 $00:28:54.340 \longrightarrow 00:28:55.678$  if at all.

00:28:55.678 --> 00:28:56.570 And Furthermore,

NOTE Confidence: 0.6899577

00:28:56.570 --> 00:28:59.246 since Corona score as anybody know,

NOTE Confidence: 0.6899577

 $00:28:59.250 \longrightarrow 00:29:01.255$  several other scores have been

NOTE Confidence: 0.6899577

 $00:29:01.255 \longrightarrow 00:29:03.260$  released that had also been

NOTE Confidence: 0.6899577

 $00:29:03.330 \longrightarrow 00:29:05.750$  addressing certain features that had

NOTE Confidence: 0.6899577

00:29:05.750 --> 00:29:08.170 not been including current score.

NOTE Confidence: 0.6899577

 $00:29:08.170 \longrightarrow 00:29:11.334$  But unfortunately all of them have been.

NOTE Confidence: 0.6899577

 $00:29:11.340 \longrightarrow 00:29:15.834$  Not so useful in terms of prediction

NOTE Confidence: 0.6899577

 $00{:}29{:}15.834 \rightarrow 00{:}29{:}18.421$  because their predicted power

NOTE Confidence: 0.6899577

00:29:18.421 --> 00:29:22.243 was not was in moderate mild to

NOTE Confidence: 0.6899577

 $00{:}29{:}22.243 \dashrightarrow 00{:}29{:}25.332$  moderate sort of territory with

NOTE Confidence: 0.6899577

 $00:29:25.332 \longrightarrow 00:29:28.477$  statistics between .6 and .7.

NOTE Confidence: 0.6899577

 $00:29:28.480 \longrightarrow 00:29:31.540$  So for Corona score itself,

NOTE Confidence: 0.6899577

 $00{:}29{:}31.540 \dashrightarrow 00{:}29{:}36.428$  there's a three categories so long to medium,

NOTE Confidence: 0.6899577

 $00:29:36.430 \longrightarrow 00:29:38.958$  high and specifically in

NOTE Confidence: 0.6899577

 $00:29:38.958 \longrightarrow 00:29:41.486$  high in the original.

00:29:41.490 --> 00:29:44.778 An original paper by Doctor Corona.

NOTE Confidence: 0.6899577

 $00:29:44.780 \longrightarrow 00:29:49.172$  We know that the rate of DTE was

NOTE Confidence: 0.6899577

00:29:49.172 --> 00:29:52.306 about 7% in high risk cohort,

NOTE Confidence: 0.6899577

 $00:29:52.306 \longrightarrow 00:29:56.713$  so the authors of this app start from

NOTE Confidence: 0.6899577

 $00:29:56.713 \longrightarrow 00:29:59.864$  Libor Sloan, Kettering, US Sameta and.

NOTE Confidence: 0.6899577

 $00:29:59.864 \longrightarrow 00:30:02.720$  Microsoft Group they sought to use

NOTE Confidence: 0.6899577

 $00:30:02.807 \longrightarrow 00:30:05.711$  to to utilize the machine learning

NOTE Confidence: 0.6899577

 $00:30:05.711 \longrightarrow 00:30:08.701$  algorithms to inform about the which

NOTE Confidence: 0.6899577

 $00{:}30{:}08.701 \dashrightarrow 00{:}30{:}11.121$  features actually would be more

NOTE Confidence: 0.6899577

 $00:30:11.121 \dashrightarrow 00:30:13.765$  productive in there for create a

NOTE Confidence: 0.6899577

 $00{:}30{:}13.765 \dashrightarrow 00{:}30{:}16.135$  score or update the current score

NOTE Confidence: 0.6899577

 $00{:}30{:}16.135 \dashrightarrow 00{:}30{:}18.335$  that potentially could increase

NOTE Confidence: 0.6899577

 $00{:}30{:}18.335 \dashrightarrow 00{:}30{:}20.635$  the its predictive power.

NOTE Confidence: 0.6899577

 $00:30:20.640 \longrightarrow 00:30:23.995$  So they positive that they

NOTE Confidence: 0.6899577

 $00:30:23.995 \longrightarrow 00:30:26.679$  would use known predictors.

 $00:30:26.680 \longrightarrow 00:30:28.364$  It from Corona score.

NOTE Confidence: 0.6899577

 $00:30:28.364 \longrightarrow 00:30:30.469$  They would utilize too much

NOTE Confidence: 0.6899577

00:30:30.469 --> 00:30:32.809 genomic information that they they

NOTE Confidence: 0.6899577

 $00:30:32.809 \longrightarrow 00:30:35.563$  collect it in their preferred their

NOTE Confidence: 0.6899577

00:30:35.637 --> 00:30:38.433 profiling assay with 341 uncle gene

NOTE Confidence: 0.6899577

 $00{:}30{:}38.433 \dashrightarrow 00{:}30{:}40.297$  and tumor suppressor genes.

NOTE Confidence: 0.6899577

00:30:40.300 --> 00:30:40.897 Overall,

NOTE Confidence: 0.6899577

00:30:40.897 --> 00:30:45.076 they had a significant number of patients

NOTE Confidence: 0.6899577

 $00:30:45.076 \longrightarrow 00:30:49.559$  at 12,000 out of those they had about 850.

NOTE Confidence: 0.6899577

 $00:30:49.560 \longrightarrow 00:30:52.152$  It's something about like events in

NOTE Confidence: 0.6899577

 $00{:}30{:}52.152 \dashrightarrow 00{:}30{:}55.679$  the span of six months from from

NOTE Confidence: 0.6899577

00:30:55.679 --> 00:30:57.955 the diagnosis from enrollment,

NOTE Confidence: 0.6899577

 $00:30:57.960 \longrightarrow 00:31:00.430$  and most frequent cancer along

NOTE Confidence: 0.6899577

 $00:31:00.430 \longrightarrow 00:31:01.418$  Bryson colorectal.

NOTE Confidence: 0.6899577

00:31:01.420 --> 00:31:04.384 They did not include upper extremity

NOTE Confidence: 0.6899577

 $00{:}31{:}04.384 \dashrightarrow 00{:}31{:}06.360$  DVT's and their collected.

 $00:31:06.360 \longrightarrow 00:31:09.204$  This is amazing that they collected

NOTE Confidence: 0.6899577

 $00{:}31{:}09.204 \dashrightarrow 00{:}31{:}11.695$  all these events from clinic

NOTE Confidence: 0.6899577

00:31:11.695 --> 00:31:14.255 from review of clinical notes,

NOTE Confidence: 0.802935

00:31:14.260 --> 00:31:16.730 radiology reports and text search,

NOTE Confidence: 0.802935

 $00:31:16.730 \longrightarrow 00:31:20.286$  which itself is very valiant effort knowing.

NOTE Confidence: 0.802935

00:31:20.290 --> 00:31:25.270 Anne. From now, from my from my

NOTE Confidence: 0.802935

00:31:25.270 --> 00:31:27.550 own experience doing similar work.

NOTE Confidence: 0.802935

 $00:31:27.550 \longrightarrow 00:31:31.230$  So as far as the predictors that they

NOTE Confidence: 0.802935

 $00:31:31.230 \longrightarrow 00:31:35.148$  put that they use in the in the model,

NOTE Confidence: 0.802935

 $00:31:35.150 \longrightarrow 00:31:38.272$  which was not really clear how they

NOTE Confidence: 0.802935

00:31:38.272 --> 00:31:41.145 selected it, but it seemed like it

NOTE Confidence: 0.802935

 $00{:}31{:}41.145 \dashrightarrow 00{:}31{:}44.090$  was some sort of manual selection.

NOTE Confidence: 0.802935

 $00{:}31{:}44.090 \dashrightarrow 00{:}31{:}45.766$  Not unbiased informed selection,

NOTE Confidence: 0.802935

 $00:31:45.766 \longrightarrow 00:31:48.280$  at least based on their abstract

NOTE Confidence: 0.802935

 $00:31:48.352 \longrightarrow 00:31:49.450$  and presentation.

 $00:31:49.450 \longrightarrow 00:31:52.579$  So the tumor type status of metastases,

NOTE Confidence: 0.802935

 $00:31:52.580 \longrightarrow 00:31:54.815$  age, cytotoxic chemotherapy time since

NOTE Confidence: 0.802935

00:31:54.815 --> 00:31:56.656 cancer diagnosis, tumor sampling,

NOTE Confidence: 0.802935

 $00:31:56.656 \longrightarrow 00:31:58.548$  and they included interesting

NOTE Confidence: 0.802935

 $00:31:58.548 \longrightarrow 00:32:00.440$  without the blood counts.

NOTE Confidence: 0.802935

 $00:32:00.440 \longrightarrow 00:32:01.730$  In the prior three months.

NOTE Confidence: 0.750427

 $00:32:04.110 \dashrightarrow 00:32:08.432$  Indices of calculation be my end. Of course.

NOTE Confidence: 0.750427

 $00:32:08.432 \longrightarrow 00:32:10.962$  Those somatic genetic alterations on

NOTE Confidence: 0.750427

 $00:32:10.962 \dashrightarrow 00:32:14.598$  the jeans in tumor suppression genes,

NOTE Confidence: 0.750427

 $00:32:14.600 \longrightarrow 00:32:18.410$  of which they include 56.

NOTE Confidence: 0.750427

 $00{:}32{:}18.410 \dashrightarrow 00{:}32{:}20.834$  And so when they put it all together

NOTE Confidence: 0.750427

 $00:32:20.834 \longrightarrow 00:32:22.929$  and they used this fancy math,

NOTE Confidence: 0.750427

 $00{:}32{:}22.930 \dashrightarrow 00{:}32{:}24.666$  the random survival forest

NOTE Confidence: 0.750427

 $00:32:24.666 \longrightarrow 00:32:27.270$  basically to create a model to

NOTE Confidence: 0.750427

 $00:32:27.353 \longrightarrow 00:32:29.866$  fit the model using all of these.

NOTE Confidence: 0.750427

 $00:32:29.870 \longrightarrow 00:32:32.789$  Various sets of permutations of the features,

00:32:32.790 --> 00:32:36.126 the predictors and what they come up with.

NOTE Confidence: 0.750427

 $00:32:36.130 \longrightarrow 00:32:38.315$  It came up with basically

NOTE Confidence: 0.750427

 $00:32:38.315 \longrightarrow 00:32:41.130$  that if you include all of it,

NOTE Confidence: 0.750427

 $00:32:41.130 \longrightarrow 00:32:44.007$  that gives usage statistics of .7 is

NOTE Confidence: 0.750427

00:32:44.007 --> 00:32:47.379 just the kind of worry and people here.

NOTE Confidence: 0.750427

 $00:32:47.380 \longrightarrow 00:32:50.716$  If it's insisted 6.5 is a coin toss,

NOTE Confidence: 0.750427

00:32:50.720 --> 00:32:52.840 so basically it doesn't predict

NOTE Confidence: 0.750427

 $00{:}32{:}52.840 \to 00{:}32{:}55.310$  anything and see statistics of one.

NOTE Confidence: 0.750427

 $00:32:55.310 \longrightarrow 00:32:56.978$  It's the perfect sensitivity,

NOTE Confidence: 0.750427

 $00:32:56.978 \longrightarrow 00:33:00.070$  specificity of 5%, of course is unreachable.

NOTE Confidence: 0.750427

 $00:33:00.070 \longrightarrow 00:33:02.370$  So somewhere in between that,

NOTE Confidence: 0.750427

 $00:33:02.370 \longrightarrow 00:33:04.882$  the higher the better.

NOTE Confidence: 0.750427

 $00{:}33{:}04.882 \dashrightarrow 00{:}33{:}08.022$  But .7 ISM is it.

NOTE Confidence: 0.750427

 $00:33:08.030 \longrightarrow 00:33:08.934$  Legitimate number,

NOTE Confidence: 0.750427

 $00:33:08.934 \longrightarrow 00:33:12.550$  and as I would like to remind everybody,

 $00:33:12.550 \longrightarrow 00:33:15.230$  the original credit score

NOTE Confidence: 0.750427

 $00{:}33{:}15.230 --> 00{:}33{:}18.580$  system tistic was also .7.

NOTE Confidence: 0.750427

 $00{:}33{:}18.580 \dashrightarrow 00{:}33{:}21.115$  They also then separated their

NOTE Confidence: 0.750427

00:33:21.115 --> 00:33:23.143 population into five groups,

NOTE Confidence: 0.750427

 $00:33:23.150 \longrightarrow 00:33:26.156$  although how they get it not

NOTE Confidence: 0.750427

 $00:33:26.156 \longrightarrow 00:33:28.740$  clearly was outlined as well,

NOTE Confidence: 0.750427

 $00:33:28.740 \longrightarrow 00:33:32.796$  and it's five risk groups based on the.

NOTE Confidence: 0.78821117

00:33:36.460 --> 00:33:38.810 Incidence of VTE I presume,

NOTE Confidence: 0.78821117

 $00{:}33{:}38.810 \dashrightarrow 00{:}33{:}42.982$  and so then they validated this with

NOTE Confidence: 0.78821117

 $00:33:42.982 \longrightarrow 00:33:47.580$  the model in the said that that is.

NOTE Confidence: 0.78821117

 $00{:}33{:}47.580 \dashrightarrow 00{:}33{:}50.670$  Per their validation metric that was

NOTE Confidence: 0.78821117

 $00:33:50.670 \longrightarrow 00:33:55.110$  validated, model was performed well.

NOTE Confidence: 0.78821117

00:33:55.110 --> 00:33:56.865 With, Interestingly enough,

NOTE Confidence: 0.78821117

 $00:33:56.865 \longrightarrow 00:33:59.790$  when they looked at which

NOTE Confidence: 0.78821117

 $00:33:59.790 \longrightarrow 00:34:02.937$  predictors had been most predictive

NOTE Confidence: 0.78821117

 $00:34:02.937 \longrightarrow 00:34:05.445$  of the venous thromboembolism,

 $00:34:05.450 \longrightarrow 00:34:10.306$  they found that it's a cancer type came,

NOTE Confidence: 0.78821117

 $00:34:10.310 \longrightarrow 00:34:13.830$  whether patient received chemotherapy,

NOTE Confidence: 0.78821117

 $00:34:13.830 \longrightarrow 00:34:15.590$  platelet count.

NOTE Confidence: 0.78821117

00:34:15.590 --> 00:34:19.790 PT White count and so on was interesting.

NOTE Confidence: 0.78821117

 $00:34:19.790 \longrightarrow 00:34:24.806$  This is out of these features.

NOTE Confidence: 0.78821117

 $00:34:24.810 \longrightarrow 00:34:27.450$  Where this is not a selection,

NOTE Confidence: 0.78821117

 $00:34:27.450 \longrightarrow 00:34:29.650$  so these features were determined.

NOTE Confidence: 0.78821117

 $00:34:29.650 \longrightarrow 00:34:32.452$  The importance of these features was

NOTE Confidence: 0.78821117

 $00{:}34{:}32.452 \dashrightarrow 00{:}34{:}35.369$  determined in in sort of post hoc.

NOTE Confidence: 0.78821117

 $00{:}34{:}35.370 \dashrightarrow 00{:}34{:}38.676$  These are not the features that

NOTE Confidence: 0.78821117

 $00{:}34{:}38.676 \dashrightarrow 00{:}34{:}42.620$  were selected to go into the model.

NOTE Confidence: 0.78821117

00:34:42.620 --> 00:34:45.056 That's it, that's a key issue,

NOTE Confidence: 0.78821117

00:34:45.060 --> 00:34:48.870 because in my opinion, because.

NOTE Confidence: 0.78821117

 $00:34:48.870 \longrightarrow 00:34:52.398$  If the if you if you if the features

NOTE Confidence: 0.78821117

 $00:34:52.398 \longrightarrow 00:34:55.339$  are included in a biased way,

 $00:34:55.340 \longrightarrow 00:34:58.020$  the prediction of course would

NOTE Confidence: 0.78821117

 $00:34:58.020 \longrightarrow 00:35:00.164$  potentially suffer as well.

NOTE Confidence: 0.78821117

 $00:35:00.170 \longrightarrow 00:35:04.850$  And so out of all the genes that they pulled.

NOTE Confidence: 0.78821117

 $00:35:04.850 \longrightarrow 00:35:08.270$  As you can see this STK 11 was found

NOTE Confidence: 0.78821117

 $00:35:08.270 \longrightarrow 00:35:12.172$  to be significant and only one of them

NOTE Confidence: 0.78821117

 $00:35:12.172 \longrightarrow 00:35:16.080$  based on value of false detection rate.

NOTE Confidence: 0.78821117

 $00:35:16.080 \longrightarrow 00:35:18.888$  So every every other one gene

NOTE Confidence: 0.78821117

 $00:35:18.888 \longrightarrow 00:35:20.760$  was not considered significant.

NOTE Confidence: 0.78821117

 $00{:}35{:}20.760 \dashrightarrow 00{:}35{:}23.100$  And as people probably know,

NOTE Confidence: 0.78821117

 $00:35:23.100 \longrightarrow 00:35:26.190$  STK 11 is actually tumor suppressor

NOTE Confidence: 0.78821117

 $00{:}35{:}26.190 \dashrightarrow 00{:}35{:}29.870$  gene out of all possible jeans.

NOTE Confidence: 0.78821117

 $00:35:29.870 \longrightarrow 00:35:32.470$  So question on my end that I sort

NOTE Confidence: 0.78821117

 $00:35:32.470 \longrightarrow 00:35:35.428$  of would like to one of wanted to

NOTE Confidence: 0.78821117

00:35:35.428 --> 00:35:37.598 clarify was unclear how initial

NOTE Confidence: 0.78821117

 $00:35:37.598 \longrightarrow 00:35:39.398$  features were selected,

NOTE Confidence: 0.78821117

 $00:35:39.400 \longrightarrow 00:35:41.722$  and again that's important because the

 $00:35:41.722 \longrightarrow 00:35:45.172$  biased it will be by a set of features

NOTE Confidence: 0.78821117

 $00{:}35{:}45.172 \dashrightarrow 00{:}35{:}47.511$  if it manually manually selected and

NOTE Confidence: 0.78821117

 $00:35:47.511 \longrightarrow 00:35:50.115$  similar to other clinical scoring tools.

NOTE Confidence: 0.78821117

 $00:35:50.120 \longrightarrow 00:35:52.538$  So there are some robust methods

NOTE Confidence: 0.78821117

 $00{:}35{:}52.538 \dashrightarrow 00{:}35{:}54.630$  exist that feature feature selection

NOTE Confidence: 0.78821117

 $00{:}35{:}54.630 \to 00{:}35{:}57.048$  algorithm that you know existed prior

NOTE Confidence: 0.78821117

 $00:35:57.048 \longrightarrow 00:36:00.179$  that can be used to to select features

NOTE Confidence: 0.78821117

 $00{:}36{:}00.179 \dashrightarrow 00{:}36{:}02.420$  prior to including into the model.

NOTE Confidence: 0.78821117

 $00:36:02.420 \longrightarrow 00:36:03.980$  That would be very,

NOTE Confidence: 0.78821117

 $00{:}36{:}03.980 \dashrightarrow 00{:}36{:}05.420$  very helpful in China.

NOTE Confidence: 0.79679555

 $00{:}36{:}09.630 \dashrightarrow 00{:}36{:}11.534$  Something something like this.

NOTE Confidence: 0.79679555

 $00:36:11.534 \longrightarrow 00:36:14.889$  We were actually thinking of doing the

NOTE Confidence: 0.79679555

 $00{:}36{:}14.889 \dashrightarrow 00{:}36{:}16.979$  VA and another interesting component

NOTE Confidence: 0.79679555

 $00:36:16.979 \longrightarrow 00:36:20.001$  was prior vtu is not included although

NOTE Confidence: 0.79679555

 $00:36:20.001 \longrightarrow 00:36:22.976$  has it has a racial quoted somewhere

 $00:36:22.980 \longrightarrow 00:36:27.444$  in between two to three which is not

NOTE Confidence: 0.79679555

 $00:36:27.444 \longrightarrow 00:36:30.799$  insignificant risk factor and of course.

NOTE Confidence: 0.79679555

 $00{:}36{:}30.800 \dashrightarrow 00{:}36{:}32.990$  Current score is not the dynamic

NOTE Confidence: 0.79679555

 $00:36:32.990 \longrightarrow 00:36:35.894$  score and would be interested to know

NOTE Confidence: 0.79679555

 $00:36:35.894 \longrightarrow 00:36:38.174$  how variability of the features,

NOTE Confidence: 0.79679555

00:36:38.180 --> 00:36:40.230 specifically of CBC features assessed.

NOTE Confidence: 0.79679555

 $00:36:40.230 \longrightarrow 00:36:42.911$  So overall it's I think it's important

NOTE Confidence: 0.79679555

00:36:42.911 --> 00:36:45.800 work and I think it's a interesting

NOTE Confidence: 0.79679555

 $00:36:45.800 \longrightarrow 00:36:48.840$  how the field of all because again,

NOTE Confidence: 0.79679555

 $00:36:48.840 \longrightarrow 00:36:51.300$  even the guidelines have been released,

NOTE Confidence: 0.79679555

00:36:51.300 --> 00:36:52.368 their sort of,

NOTE Confidence: 0.79679555

00:36:52.368 --> 00:36:54.860 they still leave a lot of uncertainty

NOTE Confidence: 0.79679555

 $00:36:54.933 \longrightarrow 00:36:57.908$  into who which group needs to be

NOTE Confidence: 0.79679555

 $00:36:57.908 \longrightarrow 00:36:59.730$  anticoagulated versus whether it's

NOTE Confidence: 0.79679555

 $00:36:59.730 \longrightarrow 00:37:02.125$  intermediate group versus high Group.

NOTE Confidence: 0.79679555

 $00:37:02.130 \longrightarrow 00:37:05.066$  Um patients for should be inside quite late.

 $00:37:05.070 \longrightarrow 00:37:06.542$  It's still not clear.

NOTE Confidence: 0.79679555

00:37:06.542 --> 00:37:08.382 I think uncertainties still exist,

NOTE Confidence: 0.79679555

 $00:37:08.390 \longrightarrow 00:37:10.959$  and so the the better we have,

NOTE Confidence: 0.79679555

 $00:37:10.960 \longrightarrow 00:37:13.624$  the better method we have in terms of

NOTE Confidence: 0.79679555

 $00:37:13.624 \longrightarrow 00:37:15.750$  determining which features are important,

NOTE Confidence: 0.79679555

 $00:37:15.750 \longrightarrow 00:37:19.534$  I think that's going to be very helpful.

NOTE Confidence: 0.79679555

00:37:19.540 --> 00:37:20.098 Alright,

NOTE Confidence: 0.79679555

 $00:37:20.098 \dashrightarrow 00:37:24.004$  so moving on are also an interesting

NOTE Confidence: 0.79679555

 $00:37:24.004 \longrightarrow 00:37:26.049$  abstract about than you.

NOTE Confidence: 0.79679555

 $00:37:26.050 \dashrightarrow 00:37:31.030$  A reversal agent for anticoagulation.

NOTE Confidence: 0.79679555

 $00{:}37{:}31.030 \dashrightarrow 00{:}37{:}34.338$  This is really interesting.

NOTE Confidence: 0.79679555

 $00:37:34.340 \longrightarrow 00:37:37.130$  Abstract the work has been going

NOTE Confidence: 0.79679555

00:37:37.130 --> 00:37:40.659 on for quite awhile and I found

NOTE Confidence: 0.79679555

00:37:40.659 --> 00:37:42.755 references going quite badly.

NOTE Confidence: 0.79679555

 $00:37:42.760 \longrightarrow 00:37:45.286$  Even just doesn't 14 but essentially

 $00:37:45.286 \longrightarrow 00:37:48.093$  pseudoprime tag is a small molecule

NOTE Confidence: 0.79679555

 $00:37:48.093 \longrightarrow 00:37:50.713$  that was initially designed through

NOTE Confidence: 0.79679555

 $00:37:50.713 \longrightarrow 00:37:53.412$  very rational design to reversibly

NOTE Confidence: 0.79679555

00:37:53.412 --> 00:37:56.032 bind to fractionated heparin low

NOTE Confidence: 0.79679555

 $00:37:56.032 \longrightarrow 00:37:58.107$  molecular weight heparin through

NOTE Confidence: 0.79679555

 $00:37:58.107 \longrightarrow 00:38:00.095$  noncovalent charge charge interaction

NOTE Confidence: 0.79679555

 $00:38:00.095 \longrightarrow 00:38:02.580$  with it was interesting that

NOTE Confidence: 0.79679555

 $00:38:02.651 \longrightarrow 00:38:04.599$  they unexpectedly they found.

NOTE Confidence: 0.79679555

 $00:38:04.600 \longrightarrow 00:38:07.168$  That it also binds the DOAX,

NOTE Confidence: 0.79679555

00:38:07.170 --> 00:38:08.882 which prevents their Association

NOTE Confidence: 0.79679555

 $00{:}38{:}08.882 \dashrightarrow 00{:}38{:}11.450$  with factor 10 factor to rain,

NOTE Confidence: 0.79679555

 $00:38:11.450 \longrightarrow 00:38:14.460$  but it doesn't bind to a lot

NOTE Confidence: 0.79679555

 $00:38:14.460 \longrightarrow 00:38:17.440$  of things at a lot of drugs.

NOTE Confidence: 0.79679555

 $00:38:17.440 \longrightarrow 00:38:19.852$  It doesn't bind to albumin and

NOTE Confidence: 0.79679555

 $00:38:19.852 \longrightarrow 00:38:22.150$  doesn't bind to actual factors,

NOTE Confidence: 0.79679555

 $00:38:22.150 \longrightarrow 00:38:24.290$  and so they say uh-huh.

 $00:38:24.290 \longrightarrow 00:38:26.090$  Let's try to reverse.

NOTE Confidence: 0.79679555

00:38:26.090 --> 00:38:29.380 Let's try to use their parents like

NOTE Confidence: 0.79679555

 $00:38:29.380 \longrightarrow 00:38:32.894$  to reverse do act like apixaban oral

NOTE Confidence: 0.79679555

 $00:38:32.894 \longrightarrow 00:38:35.368$  molecular weight heparin so they.

NOTE Confidence: 0.79679555

 $00:38:35.370 \longrightarrow 00:38:39.938$  They've done that in animals and in humans.

NOTE Confidence: 0.79679555

 $00:38:39.940 \longrightarrow 00:38:42.964$  So here you can see that for

NOTE Confidence: 0.79679555

 $00:38:42.964 \longrightarrow 00:38:44.850$  instance on the left.

NOTE Confidence: 0.79679555

 $00:38:44.850 \longrightarrow 00:38:49.618$  A pain where you can see that several

NOTE Confidence: 0.79679555

 $00:38:49.618 \longrightarrow 00:38:54.219$  hours after administration of edoxaban.

NOTE Confidence: 0.79679555

 $00:38:54.220 \longrightarrow 00:38:58.620$  Sorry for typo the.

NOTE Confidence: 0.79679555

 $00:38:58.620 \longrightarrow 00:39:00.666$  After the silicone flag was administered,

NOTE Confidence: 0.79679555

 $00:39:00.670 \longrightarrow 00:39:03.680$  there was a very rapid.

NOTE Confidence: 0.79679555

 $00{:}39{:}03.680 \dashrightarrow 00{:}39{:}07.646$  Reversal a curd that actually stayed.

NOTE Confidence: 0.79679555

 $00:39:07.650 \longrightarrow 00:39:09.906$  Plateaued for a number of hours

NOTE Confidence: 0.79679555

 $00:39:09.906 \longrightarrow 00:39:13.226$  and then on the right side the same

00:39:13.226 --> 00:39:15.386 idea with low molecular weights

NOTE Confidence: 0.79679555

00:39:15.386 --> 00:39:17.746 in same sort of data that,

NOTE Confidence: 0.79679555

 $00:39:17.750 \longrightarrow 00:39:22.118$  with different doses of Sopron tags.

NOTE Confidence: 0.79679555

 $00:39:22.120 \longrightarrow 00:39:24.640$  The universal was fairly complete.

NOTE Confidence: 0.79679555

 $00:39:24.640 \longrightarrow 00:39:26.644$  Below 10% of baseline.

NOTE Confidence: 0.79679555

 $00{:}39{:}26.644 \dashrightarrow 00{:}39{:}29.650$  Now the metric that's being used

NOTE Confidence: 0.79679555

 $00:39:29.749 \longrightarrow 00:39:32.725$  to determine this is a whole

NOTE Confidence: 0.79679555

 $00:39:32.725 \longrightarrow 00:39:34.213$  blood clotting time,

NOTE Confidence: 0.79679555

00:39:34.220 --> 00:39:37.238 and that's and that's actually important,

NOTE Confidence: 0.79679555

00:39:37.240 --> 00:39:39.760 because apparently I cannot activity

NOTE Confidence: 0.79679555

 $00{:}39{:}39.760 \dashrightarrow 00{:}39{:}42.280$  of Sharon Cycle rather reversal.

NOTE Confidence: 0.76944727

00:39:44.600 --> 00:39:46.900 Enter calculation cannot be determined

NOTE Confidence: 0.76944727

 $00:39:46.900 \longrightarrow 00:39:48.740$  using regular typical methods.

NOTE Confidence: 0.76944727

 $00:39:48.740 \longrightarrow 00:39:51.470$  For instance using PT PTT

NOTE Confidence: 0.76944727

00:39:51.470 --> 00:39:54.655 because your parent act would be

NOTE Confidence: 0.76944727

 $00:39:54.655 \longrightarrow 00:39:57.479$  in in the in the in the tube,

 $00:39:57.480 \longrightarrow 00:40:00.480$  in the inner tube of blood.

NOTE Confidence: 0.76944727

 $00:40:00.480 \longrightarrow 00:40:02.900$  It would be pulled competitively

NOTE Confidence: 0.76944727

 $00:40:02.900 \longrightarrow 00:40:04.836$  inhibited by like say,

NOTE Confidence: 0.76944727

00:40:04.840 --> 00:40:07.255 citrate or ETA that already

NOTE Confidence: 0.76944727

 $00:40:07.255 \longrightarrow 00:40:09.187$  present in the tube,

NOTE Confidence: 0.76944727

 $00:40:09.190 \longrightarrow 00:40:11.605$  so therefore they used whole

NOTE Confidence: 0.76944727

 $00:40:11.605 \longrightarrow 00:40:13.054$  blood clotting time.

NOTE Confidence: 0.76944727

 $00:40:13.060 \longrightarrow 00:40:16.276$  So now the abstract itself actually

NOTE Confidence: 0.76944727

 $00{:}40{:}16.276 \dashrightarrow 00{:}40{:}19.391$  presents the two studies to phase

NOTE Confidence: 0.76944727

 $00{:}40{:}19.391 \dashrightarrow 00{:}40{:}21.581$  two will see what controlled

NOTE Confidence: 0.76944727

00:40:21.581 --> 00:40:24.357 RCT one for Apixaban and the

NOTE Confidence: 0.76944727

 $00:40:24.357 \longrightarrow 00:40:27.099$  other one for rear axle band,

NOTE Confidence: 0.76944727

 $00:40:27.100 \longrightarrow 00:40:30.289$  where they actually.

NOTE Confidence: 0.76944727

 $00:40:30.290 \longrightarrow 00:40:33.465$  Looked at reversal Cedar parents

NOTE Confidence: 0.76944727

 $00:40:33.465 \longrightarrow 00:40:36.640$  like versus placebo and it's

 $00:40:36.747 \longrightarrow 00:40:40.077$  very simple design in both arms.

NOTE Confidence: 0.76944727

 $00:40:40.080 \longrightarrow 00:40:41.444$  Both studies.

NOTE Confidence: 0.76944727

 $00:40:41.444 \longrightarrow 00:40:45.536$  Essentially they used doac to reach

NOTE Confidence: 0.76944727

 $00:40:45.536 \longrightarrow 00:40:50.085$  a steady state and then they gave

NOTE Confidence: 0.76944727

 $00:40:50.085 \longrightarrow 00:40:54.019$  patients Sera parent tag on different

NOTE Confidence: 0.76944727

00:40:54.019 --> 00:40:58.555 doses and contract the whole blood.

NOTE Confidence: 0.76944727

 $00:40:58.560 \longrightarrow 00:40:59.910$  A cloud.

NOTE Confidence: 0.76944727

00:40:59.910 --> 00:41:03.960 Including time and again because the

NOTE Confidence: 0.76944727

 $00{:}41{:}03.960 \dashrightarrow 00{:}41{:}07.060$  other parameters cannot be used.

NOTE Confidence: 0.76944727

00:41:07.060 --> 00:41:10.120 And in point was that WBC

NOTE Confidence: 0.76944727

 $00:41:10.120 \longrightarrow 00:41:12.760$  T should be below 10%,

NOTE Confidence: 0.76944727

 $00:41:12.760 \longrightarrow 00:41:16.379$  and so how fast that actually happens.

NOTE Confidence: 0.76944727

00:41:16.380 --> 00:41:19.488 And So what they showed again,

NOTE Confidence: 0.76944727

 $00:41:19.490 \longrightarrow 00:41:23.178$  that in both cases for the Pixel banner

NOTE Confidence: 0.76944727

00:41:23.178 --> 00:41:26.323 over oxygen that indeed within hours

NOTE Confidence: 0.76944727

 $00:41:26.323 \longrightarrow 00:41:29.521$  within actually minutes the for in

00:41:29.615 --> 00:41:32.957 different doses of shared parent tag,

NOTE Confidence: 0.76944727

 $00:41:32.960 \longrightarrow 00:41:36.640$  the reversal was rather.

NOTE Confidence: 0.76944727

 $00:41:36.640 \longrightarrow 00:41:38.071$  Especially in this,

NOTE Confidence: 0.76944727

00:41:38.071 --> 00:41:41.410 in higher doses like syntax 60 milligrams,

NOTE Confidence: 0.76944727

 $00:41:41.410 \longrightarrow 00:41:45.674$  220 milligrams in takes a band and higher

NOTE Confidence: 0.76944727

 $00:41:45.674 \longrightarrow 00:41:49.630$  doses in rivaroxaban group as well.

NOTE Confidence: 0.76944727

00:41:49.630 --> 00:41:54.265 Then they also looked at how fast in again,

NOTE Confidence: 0.76944727

 $00{:}41{:}54.270 \dashrightarrow 00{:}41{:}56.840$  how long the reversal remained.

NOTE Confidence: 0.76944727

00:41:56.840 --> 00:41:57.870 And again,

NOTE Confidence: 0.76944727

 $00:41:57.870 \longrightarrow 00:42:00.445$  in both groups fix again,

NOTE Confidence: 0.76944727

 $00:42:00.450 \longrightarrow 00:42:03.540$  but were actually in the high

NOTE Confidence: 0.76944727

 $00:42:03.540 \longrightarrow 00:42:05.600$  dose single parent tag.

NOTE Confidence: 0.76944727

 $00{:}42{:}05.600 \dashrightarrow 00{:}42{:}09.720$  The highest dose children tag in each group.

NOTE Confidence: 0.76944727

 $00:42:09.720 \longrightarrow 00:42:12.225$  River traversal was rather fast

NOTE Confidence: 0.76944727

 $00:42:12.225 \longrightarrow 00:42:14.730$  within within 660 minutes in

 $00:42:14.814 \longrightarrow 00:42:16.954$  apixaban 100% patients have

NOTE Confidence: 0.76944727

 $00:42:16.954 \longrightarrow 00:42:19.589$  been reversed to the target.

NOTE Confidence: 0.76944727

 $00:42:19.590 \longrightarrow 00:42:22.075$  Of less than 10% of baseline for

NOTE Confidence: 0.76944727

 $00:42:22.075 \longrightarrow 00:42:24.375$  a whole bottle of whole blood

NOTE Confidence: 0.76944727

00:42:24.375 --> 00:42:26.685 clotting time and in Russia ban

NOTE Confidence: 0.76944727

 $00:42:26.685 \longrightarrow 00:42:29.118$  even even faster in 30 minutes.

NOTE Confidence: 0.76944727

 $00:42:29.120 \longrightarrow 00:42:31.922$  So it's an interesting concept is

NOTE Confidence: 0.76944727

00:42:31.922 --> 00:42:34.328 interesting new molecule which product

NOTE Confidence: 0.76944727

 $00{:}42{:}34.328 \dashrightarrow 00{:}42{:}36.628$  which is undergoing studies like

NOTE Confidence: 0.76944727

 $00:42:36.628 \longrightarrow 00:42:39.199$  phase two and probably would be.

NOTE Confidence: 0.76944727

 $00:42:39.200 \longrightarrow 00:42:41.984$  Can soon enter phase three with

NOTE Confidence: 0.76944727

 $00:42:41.984 \longrightarrow 00:42:43.840$  a very exciting profile.

NOTE Confidence: 0.76944727

00:42:43.840 --> 00:42:46.368 There's no prothrombotic signal,

NOTE Confidence: 0.76944727

 $00{:}42{:}46.368 \to 00{:}42{:}50.734$  no evidence to promote it signaled they

NOTE Confidence: 0.76944727

 $00:42:50.734 \longrightarrow 00:42:54.038$  actually looked at the D dimer and.

NOTE Confidence: 0.76944727

 $00:42:54.040 \longrightarrow 00:42:57.340$  Uh, and that was not affected.

 $00:42:57.340 \longrightarrow 00:42:58.526$  There's potential.

NOTE Confidence: 0.76944727

 $00{:}42{:}58.526 \dashrightarrow 00{:}43{:}01.491$  The interesting question that could

NOTE Confidence: 0.76944727

00:43:01.491 --> 00:43:04.603 be raised that whether magnesium

NOTE Confidence: 0.76944727

 $00{:}43{:}04.603 \dashrightarrow 00{:}43{:}07.522$  and calcium in Vivo could could

NOTE Confidence: 0.76944727

 $00{:}43{:}07.522 \longrightarrow 00{:}43{:}10.613$  have any effect on sort of pulling

NOTE Confidence: 0.76944727

00:43:10.613 --> 00:43:13.038 setup Ramtek out of the.

NOTE Confidence: 0.76944727

 $00:43:13.040 \longrightarrow 00:43:16.365$  Interaction with the aid with the agents.

NOTE Confidence: 0.76944727

 $00{:}43{:}16.370 \dashrightarrow 00{:}43{:}18.218$  Anticoagulation agents but it

NOTE Confidence: 0.76944727

00:43:18.218 --> 00:43:20.066 probably in molar concentration

NOTE Confidence: 0.76944727

 $00:43:20.066 \longrightarrow 00:43:22.498$  such that probably not really

NOTE Confidence: 0.76944727

00:43:22.498 --> 00:43:24.422 likely an interesting concept

NOTE Confidence: 0.76944727

 $00:43:24.422 \longrightarrow 00:43:25.865$  that an anticoagulation,

NOTE Confidence: 0.76944727

 $00{:}43{:}25.870 \dashrightarrow 00{:}43{:}29.342$  if necessary can be re stored and re

NOTE Confidence: 0.76944727

 $00:43:29.342 \longrightarrow 00:43:32.519$  established 24 hour reversal without any.

NOTE Confidence: 0.8165076

 $00:43:35.300 \longrightarrow 00:43:37.715$  In effect cost, of course the issue,

00:43:37.720 --> 00:43:39.604 and I'm sure George some point

NOTE Confidence: 0.8165076

00:43:39.604 --> 00:43:41.530 will do the cost analysis.

NOTE Confidence: 0.8165076

00:43:41.530 --> 00:43:45.122 I hope if that comes to that and

NOTE Confidence: 0.8165076

 $00:43:45.122 \longrightarrow 00:43:48.057$  then with that I'll move to.

NOTE Confidence: 0.8165076

00:43:48.060 --> 00:43:52.556 To our to my final discussion of the

NOTE Confidence: 0.8165076

 $00:43:52.556 \longrightarrow 00:43:57.589$  work that we sort of we presented at ASH.

NOTE Confidence: 0.8165076

 $00:43:57.590 \longrightarrow 00:44:00.360$  That in form has been

NOTE Confidence: 0.8165076

 $00:44:00.360 \longrightarrow 00:44:02.576$  informing us beyond COVID-19,

NOTE Confidence: 0.8165076

 $00{:}44{:}02.580 \dashrightarrow 00{:}44{:}05.350$  which is quite interesting discussion.

NOTE Confidence: 0.8165076

 $00:44:05.350 \longrightarrow 00:44:09.110$  So what we wanted to.

NOTE Confidence: 0.8165076

 $00:44:09.110 \longrightarrow 00:44:12.870$  Look at is a weather items test 13.

NOTE Confidence: 0.8165076

 $00:44:12.870 \longrightarrow 00:44:15.985$  Another imbalance of atoms TS 13 an

NOTE Confidence: 0.8165076

00:44:15.985 --> 00:44:18.275 Fonville burn factor could potentially

NOTE Confidence: 0.8165076

 $00:44:18.275 \longrightarrow 00:44:20.897$  serve as a marker of uniform

NOTE Confidence: 0.8165076

 $00:44:20.897 \longrightarrow 00:44:23.679$  doses in patients with COVID-19,

NOTE Confidence: 0.8165076

00:44:23.680 --> 00:44:26.030 that was our initial goal,

 $00:44:26.030 \longrightarrow 00:44:30.118$  so we last year we right in the

NOTE Confidence: 0.8165076

 $00{:}44{:}30.118 \dashrightarrow 00{:}44{:}33.636$  beginning of pandemic we sort of

NOTE Confidence: 0.8165076

 $00:44:33.636 \longrightarrow 00:44:37.660$  have this lack of having number of.

NOTE Confidence: 0.8165076

00:44:37.660 --> 00:44:39.922 Great researchers working,

NOTE Confidence: 0.8165076

 $00:44:39.922 \longrightarrow 00:44:43.692$  collaborating with George Washago shoe

NOTE Confidence: 0.8165076

 $00:44:43.692 \longrightarrow 00:44:48.236$  and Enchong after deadly and math mileage.

NOTE Confidence: 0.8165076

 $00:44:48.240 \longrightarrow 00:44:49.650$  And we.

NOTE Confidence: 0.77607673

 $00:44:51.860 \longrightarrow 00:44:53.432$  Show that one from

NOTE Confidence: 0.77607673

 $00:44:53.432 \longrightarrow 00:44:55.004$  building factor, of course.

NOTE Confidence: 0.77607673

 $00:44:55.004 \longrightarrow 00:44:57.356$  It's been shown since then many,

NOTE Confidence: 0.77607673

 $00{:}44{:}57.360 \dashrightarrow 00{:}44{:}59.325$  many times is quite elevated

NOTE Confidence: 0.77607673

 $00:44:59.325 \longrightarrow 00:45:01.290$  in patients with coded 19,

NOTE Confidence: 0.77607673

 $00:45:01.290 \longrightarrow 00:45:03.576$  and this specifically much more elevated

NOTE Confidence: 0.77607673

 $00{:}45{:}03.576 \dashrightarrow 00{:}45{:}05.620$  in patients with critical disease.

NOTE Confidence: 0.77607673

 $00:45:05.620 \longrightarrow 00:45:07.828$  We also know from other studies

00:45:07.828 --> 00:45:10.216 from studies so far not related

NOTE Confidence: 0.77607673

00:45:10.216 --> 00:45:11.900 to coordinating at all,

NOTE Confidence: 0.77607673

00:45:11.900 --> 00:45:13.480 that Adams TS13 deficiency.

NOTE Confidence: 0.68871737

 $00{:}45{:}16.470 \dashrightarrow 00{:}45{:}18.924$  13 is reduced in inflammatory states

NOTE Confidence: 0.68871737

 $00:45:18.924 \longrightarrow 00:45:21.120$  like cancer stroke and sepsis.

NOTE Confidence: 0.68871737

00:45:21.120 --> 00:45:21.968 Interestingly enough,

NOTE Confidence: 0.68871737

00:45:21.968 --> 00:45:23.662 in animal models, Adams,

NOTE Confidence: 0.68871737

 $00:45:23.662 \longrightarrow 00:45:25.350$  tutti and efficiency increases.

NOTE Confidence: 0.68871737

00:45:25.350 --> 00:45:27.658 Release of from building

NOTE Confidence: 0.68871737

00:45:27.658 --> 00:45:29.966 factor from from platelets.

NOTE Confidence: 0.68871737

 $00{:}45{:}29.970 \dashrightarrow 00{:}45{:}34.518$  It increases increases adhesion to white.

NOTE Confidence: 0.68871737

00:45:34.520 --> 00:45:34.864 Neutrophils,

NOTE Confidence: 0.68871737

 $00:45:34.864 \longrightarrow 00:45:37.272$  white count white cells to the civilian

NOTE Confidence: 0.68871737

 $00:45:37.272 \longrightarrow 00:45:39.340$  and enhances neutrophil extravasation.

NOTE Confidence: 0.68871737

 $00:45:39.340 \longrightarrow 00:45:42.220$  So what we then looked we going back

NOTE Confidence: 0.68871737

 $00:45:42.220 \longrightarrow 00:45:45.131$  to the to the cohort to our data

 $00:45:45.131 \longrightarrow 00:45:48.534$  and we will look at what kind of

NOTE Confidence: 0.68871737

 $00{:}45{:}48.534 \dashrightarrow 00{:}45{:}50.919$  relationship exists between Adams test

NOTE Confidence: 0.68871737

00:45:50.919 --> 00:45:53.818 13 an from villain factor antigen activity.

NOTE Confidence: 0.68871737

 $00:45:53.820 \longrightarrow 00:45:56.988$  We found that indeed.

NOTE Confidence: 0.68871737

00:45:56.990 --> 00:45:59.200 In critical disease in patients

NOTE Confidence: 0.68871737

 $00:45:59.200 \longrightarrow 00:46:00.526$  with critical disease,

NOTE Confidence: 0.68871737

 $00:46:00.530 \longrightarrow 00:46:02.249$  it's indeed lower.

NOTE Confidence: 0.68871737

 $00:46:02.249 \longrightarrow 00:46:07.330$  The balance is such that this ratio is lower.

NOTE Confidence: 0.68871737

 $00:46:07.330 \longrightarrow 00:46:09.832$  We also showed earlier this year

NOTE Confidence: 0.68871737

00:46:09.832 --> 00:46:11.500 that there's several markers

NOTE Confidence: 0.68871737

 $00{:}46{:}11.575 \dashrightarrow 00{:}46{:}13.459$  of neutrophil activation that

NOTE Confidence: 0.68871737

 $00:46:13.459 \longrightarrow 00:46:15.814$  been associated with ICU status,

NOTE Confidence: 0.68871737

 $00:46:15.820 \longrightarrow 00:46:18.502$  and we collaborate with this with

NOTE Confidence: 0.68871737

 $00:46:18.502 \longrightarrow 00:46:20.290$  adjacency Cheyenne David Friend.

NOTE Confidence: 0.65678453

 $00:46:22.400 \longrightarrow 00:46:24.717$  \*\*\*\* and what we can infer that

 $00:46:24.717 \longrightarrow 00:46:27.257$  we show that at the absolute

NOTE Confidence: 0.65678453

00:46:27.257 --> 00:46:29.702 neutrophil count and image resized

NOTE Confidence: 0.65678453

 $00{:}46{:}29.702 \dashrightarrow 00{:}46{:}32.230$  to neutrophils have been associated

NOTE Confidence: 0.65678453

 $00:46:32.230 \longrightarrow 00:46:34.675$  and could discriminate mortality and

NOTE Confidence: 0.65678453

 $00{:}46{:}34.675 \dashrightarrow 00{:}46{:}38.988$  we used our Dom Kodiaks database.

NOTE Confidence: 0.65678453

 $00:46:38.990 \longrightarrow 00:46:42.482$  For that so then when we went to Adams

NOTE Confidence: 0.65678453

00:46:42.482 --> 00:46:45.670 just watching from Wilburton ratio,

NOTE Confidence: 0.65678453

 $00:46:45.670 \longrightarrow 00:46:48.806$  we also showed that that he had

NOTE Confidence: 0.65678453

 $00{:}46{:}48.806 \dashrightarrow 00{:}46{:}51.241$  actually inversely related to neutrophil

NOTE Confidence: 0.65678453

00:46:51.241 --> 00:46:53.776 and initial to lymphocyte ratio,

NOTE Confidence: 0.65678453

 $00{:}46{:}53.780 \dashrightarrow 00{:}46{:}56.874$  and Furthermore we when we looked at

NOTE Confidence: 0.65678453

 $00:46:56.874 \longrightarrow 00:46:59.296$  whether this disbalance also associated

NOTE Confidence: 0.65678453

00:46:59.296 --> 00:47:01.836 with the neutrophil markers

NOTE Confidence: 0.65678453

00:47:01.836 --> 00:47:03.907 markers of neutrophil activation

NOTE Confidence: 0.65678453

 $00:47:03.907 \longrightarrow 00:47:06.691$  is GF resistant Lipo Callanan I'll

NOTE Confidence: 0.65678453

 $00:47:06.691 \longrightarrow 00:47:10.235$  eight that indeed we found that.

00:47:10.235 --> 00:47:13.810 All those markers were associated

NOTE Confidence: 0.65678453

 $00:47:13.810 \longrightarrow 00:47:15.240$  with worsening.

NOTE Confidence: 0.65678453

00:47:15.240 --> 00:47:18.166 Reducing the rate reduce the ratio for

NOTE Confidence: 0.65678453

00:47:18.166 --> 00:47:21.289 Adams Tester team to fund building factor,

NOTE Confidence: 0.65678453

 $00:47:21.290 \longrightarrow 00:47:23.445$  which again could indicate the

NOTE Confidence: 0.65678453

 $00:47:23.445 \longrightarrow 00:47:24.738$  potential prothrombotic process.

NOTE Confidence: 0.65678453

 $00:47:24.740 \longrightarrow 00:47:25.320$  Furthermore,

NOTE Confidence: 0.65678453

 $00{:}47{:}25.320 \dashrightarrow 00{:}47{:}30.540$  we also looked at the same exact idea about.

NOTE Confidence: 0.65678453

 $00:47:30.540 \longrightarrow 00:47:33.220$  L Association with the ratio

NOTE Confidence: 0.65678453

 $00:47:33.220 \longrightarrow 00:47:34.828$  with Taiwan with.

NOTE Confidence: 0.65678453

 $00{:}47{:}34.830 \dashrightarrow 00{:}47{:}37.890$  Fabulous inhibitor and again the

NOTE Confidence: 0.65678453

 $00:47:37.890 \longrightarrow 00:47:41.545$  same situation with where Adams just

NOTE Confidence: 0.65678453

 $00{:}47{:}41.545 \dashrightarrow 00{:}47{:}44.497$  looking for the ratio is lower.

NOTE Confidence: 0.65678453

 $00:47:44.500 \longrightarrow 00:47:46.831$  So overall we show that lower so

NOTE Confidence: 0.65678453

 $00:47:46.831 \longrightarrow 00:47:49.327$  Adam Sistine Info Bill from building

 $00:47:49.327 \longrightarrow 00:47:50.758$  factor Disbalance exist.

NOTE Confidence: 0.65678453

 $00:47:50.760 \longrightarrow 00:47:53.100$  So shaded with inhibitor for lysis,

NOTE Confidence: 0.65678453

 $00{:}47{:}53.100 \dashrightarrow 00{:}47{:}54.552$  markers of neutrophil activation

NOTE Confidence: 0.65678453

 $00:47:54.552 \longrightarrow 00:47:56.730$  and there are four its potential

NOTE Confidence: 0.65678453

 $00:47:56.787 \longrightarrow 00:47:58.862$  email somebody in uniform biotic

NOTE Confidence: 0.65678453

 $00:47:58.862 \longrightarrow 00:48:00.522$  market foreign botic complication.

NOTE Confidence: 0.65678453

 $00:48:00.530 \longrightarrow 00:48:02.140$  What's really interesting now is

NOTE Confidence: 0.65678453

 $00:48:02.140 \longrightarrow 00:48:05.020$  that what we do now is actually we're

NOTE Confidence: 0.65678453

 $00{:}48{:}05.020 \dashrightarrow 00{:}48{:}07.030$  looking specifically at people at

NOTE Confidence: 0.65678453

00:48:07.030 --> 00:48:09.224 patients with COVID-19 and without

NOTE Confidence: 0.65678453

 $00:48:09.224 \longrightarrow 00:48:11.864$  coordinating but who had actual thrombosis.

NOTE Confidence: 0.65678453

 $00:48:11.870 \longrightarrow 00:48:15.198$  So now we actually will be able to.

NOTE Confidence: 0.65678453

 $00:48:15.200 \longrightarrow 00:48:17.230$  Tying this with this ratio

NOTE Confidence: 0.65678453

 $00:48:17.230 \longrightarrow 00:48:18.448$  with thrombosis itself,

NOTE Confidence: 0.65678453

00:48:18.450 --> 00:48:20.880 and of course going beyond COVID-19,

NOTE Confidence: 0.65678453

 $00:48:20.880 \longrightarrow 00:48:22.504$  all of it applies.

 $00:48:22.504 \longrightarrow 00:48:24.940$  This platform can be scaled up.

NOTE Confidence: 0.65678453

 $00:48:24.940 \longrightarrow 00:48:27.579$  This idea can be scaled up to

NOTE Confidence: 0.65678453

00:48:27.579 --> 00:48:29.819 basically any uniform body disorder,

NOTE Confidence: 0.65678453

00:48:29.820 --> 00:48:31.624 an also synthetic malignancies,

NOTE Confidence: 0.65678453

 $00:48:31.624 \longrightarrow 00:48:35.096$  which we would like to explore as well

NOTE Confidence: 0.65678453

 $00:48:35.096 \longrightarrow 00:48:37.525$  and with that will yield the floor.

NOTE Confidence: 0.89763653

 $00:48:42.980 \longrightarrow 00:48:46.286$  Thank you so much, Alex and.

NOTE Confidence: 0.89763653

 $00:48:46.290 \longrightarrow 00:48:48.929$  For the last part of the talk.

NOTE Confidence: 0.89763653

 $00{:}48{:}48.930 \dashrightarrow 00{:}48{:}51.072$  I am going to talk about other

NOTE Confidence: 0.89763653

 $00:48:51.072 \longrightarrow 00:48:52.670$  topics in classical mythology.

NOTE Confidence: 0.89763653

 $00{:}48{:}52.670 \dashrightarrow 00{:}48{:}53.702$  Good afternoon everybody.

NOTE Confidence: 0.89763653

00:48:53.702 --> 00:48:56.110 My name is George Joshua and one

NOTE Confidence: 0.89763653

 $00{:}48{:}56.174 \dashrightarrow 00{:}48{:}58.834$  of the senior fellows in the Yale

NOTE Confidence: 0.89763653

 $00{:}48{:}58.834 \dashrightarrow 00{:}49{:}00.510$  Hematology Oncology Fellowship program.

NOTE Confidence: 0.89763653

 $00:49:00.510 \longrightarrow 00:49:02.472$  And it is a pleasure to

 $00:49:02.472 \longrightarrow 00:49:04.340$  be talking to you today.

NOTE Confidence: 0.89763653

 $00:49:04.340 \longrightarrow 00:49:05.730$  I have no disclosures.

NOTE Confidence: 0.89763653

 $00:49:05.730 \longrightarrow 00:49:08.035$  There are four apps we're going to

NOTE Confidence: 0.89763653

 $00:49:08.035 \longrightarrow 00:49:10.599$  cover and I will speak through this,

NOTE Confidence: 0.89763653

 $00:49:10.600 \longrightarrow 00:49:12.777$  so we finish on time and we're

NOTE Confidence: 0.89763653

 $00{:}49{:}12.777 \dashrightarrow 00{:}49{:}15.129$  going to talk about gene editing.

NOTE Confidence: 0.89763653

00:49:15.130 --> 00:49:17.212 And we're going to talk about

NOTE Confidence: 0.89763653

00:49:17.212 --> 00:49:18.253 complement system performance,

NOTE Confidence: 0.89763653

00:49:18.260 --> 00:49:19.541 health outcomes, research.

NOTE Confidence: 0.89763653

 $00:49:19.541 \longrightarrow 00:49:22.103$  And a little bit of coping.

NOTE Confidence: 0.89763653

 $00:49:22.110 \longrightarrow 00:49:23.720$  19 So to start off.

NOTE Confidence: 0.89763653

00:49:23.720 --> 00:49:25.514 First abstract #4 entitled CRISPR CAS

NOTE Confidence: 0.89763653

 $00:49:25.514 \longrightarrow 00:49:27.804$  9 gene editing for sickle cell disease

NOTE Confidence: 0.89763653

 $00:49:27.804 \longrightarrow 00:49:29.539$  and beta thalassemia by doctors.

NOTE Confidence: 0.89763653

 $00:49:29.540 \longrightarrow 00:49:30.344$  Frangou and colleagues.

NOTE Confidence: 0.89763653

 $00:49:30.344 \longrightarrow 00:49:31.952$  Miss was a plenary talk and

 $00:49:31.952 \longrightarrow 00:49:33.081$  also simultaneously published

NOTE Confidence: 0.89763653

00:49:33.081 --> 00:49:34.705 in human Journal Medicine.

NOTE Confidence: 0.89763653

 $00:49:34.710 \longrightarrow 00:49:36.325$  For context to the reason

NOTE Confidence: 0.89763653

 $00:49:36.325 \longrightarrow 00:49:37.940$  why the study is important.

NOTE Confidence: 0.095846444

 $00:49:40.090 \longrightarrow 00:49:41.450$  Football.

NOTE Confidence: 0.409799

 $00:49:44.520 \longrightarrow 00:49:44.910$  Emma.

NOTE Confidence: 0.15843415

 $00:49:46.940 \longrightarrow 00:49:50.830$  Bo team. Both.

NOTE Confidence: 0.51197803

 $00:49:53.540 \longrightarrow 00:49:57.290$  Valve should have.

NOTE Confidence: 0.51197803

 $00:49:57.290 \longrightarrow 00:50:03.299$  What is speed? Your line is.

NOTE Confidence: 0.51197803

 $00:50:03.300 \longrightarrow 00:50:09.050$  Is script more than one?

NOTE Confidence: 0.51197803

 $00:50:09.050 \longrightarrow 00:50:10.349$  For the intervention,

NOTE Confidence: 0.51197803

 $00:50:10.349 \longrightarrow 00:50:12.514$  here is analogous selling 001,

NOTE Confidence: 0.51197803

 $00:50:12.520 \longrightarrow 00:50:14.260$  and it is edited.

NOTE Confidence: 0.6017649

 $00:50:19.190 \longrightarrow 00:50:19.570$  Speak.

NOTE Confidence: 0.81746113

 $00:50:31.180 \longrightarrow 00:50:34.936$  OK, I suppose we disconnected there.

00:50:34.940 --> 00:50:37.543 Alright. Alright,

NOTE Confidence: 0.81746113

 $00:50:37.543 \longrightarrow 00:50:40.810$  so back to the figure as it was saying.

NOTE Confidence: 0.81746113

 $00:50:40.810 \longrightarrow 00:50:42.922$  So this is crisper cast 9

NOTE Confidence: 0.81746113

 $00:50:42.922 \longrightarrow 00:50:44.800$  technology on the X axis.

NOTE Confidence: 0.81746113

 $00:50:44.800 \longrightarrow 00:50:46.642$  You see months before birth and

NOTE Confidence: 0.81746113

00:50:46.642 --> 00:50:49.503 after birth and on the Y axis globin

NOTE Confidence: 0.81746113

 $00{:}50{:}49.503 \dashrightarrow 00{:}50{:}51.075$  synthesis and percentage fetal

NOTE Confidence: 0.81746113

 $00:50:51.075 \longrightarrow 00:50:53.149$  hemoglobin goes to adult hemoglobin.

NOTE Confidence: 0.81746113

 $00{:}50{:}53.150 --> 00{:}50{:}55.530$  BCL 11 is an important

NOTE Confidence: 0.81746113

 $00{:}50{:}55.530 \dashrightarrow 00{:}50{:}56.958$  transcription factor so.

NOTE Confidence: 0.81746113

00:50:56.960 --> 00:50:59.996 If you take a look at.

NOTE Confidence: 0.81746113

 $00:51:00.000 \longrightarrow 00:51:01.878$  The nucleus and the guide RNA.

NOTE Confidence: 0.81746113

 $00:51:01.880 \longrightarrow 00:51:03.902$  The target is in the Erythroid

NOTE Confidence: 0.81746113

 $00:51:03.902 \longrightarrow 00:51:05.704$  Enhancer region and by disrupting

NOTE Confidence: 0.81746113

 $00:51:05.704 \longrightarrow 00:51:08.032$  that with gene editing we can

NOTE Confidence: 0.81746113

 $00:51:08.032 \longrightarrow 00:51:09.959$  alter the expression of BCL 11A.

 $00{:}51{:}09.960 \dashrightarrow 00{:}51{:}13.749$  Effectively shutting down.

NOTE Confidence: 0.81746113

 $00{:}51{:}13.750 \dashrightarrow 00{:}51{:}16.015$  The production of globin and

NOTE Confidence: 0.81746113

00:51:16.015 --> 00:51:17.374 increasing fetal hemoglobin.

NOTE Confidence: 0.81746113

 $00{:}51{:}17.380 \dashrightarrow 00{:}51{:}19.364$  So you will see the results here in

NOTE Confidence: 0.81746113

 $00:51:19.364 \longrightarrow 00:51:21.272$  the first 2 patients presented by

NOTE Confidence: 0.81746113

 $00:51:21.272 \longrightarrow 00:51:22.957$  Doctor Strangle and colleagues on

NOTE Confidence: 0.81746113

 $00:51:22.957 \longrightarrow 00:51:25.088$  the left you have a patient with data

NOTE Confidence: 0.81746113

 $00{:}51{:}25.088 \dashrightarrow 00{:}51{:}27.250$  file on the X axis you have months.

NOTE Confidence: 0.81746113

00:51:27.250 --> 00:51:28.096 After CTX user,

NOTE Confidence: 0.81746113

00:51:28.096 --> 00:51:29.788 one infusion on the Y axis,

NOTE Confidence: 0.81746113

 $00:51:29.790 \longrightarrow 00:51:31.332$  hemoglobin in grams per deciliter and

NOTE Confidence: 0.81746113

 $00:51:31.332 \longrightarrow 00:51:33.631$  on the and on the right panel you

NOTE Confidence: 0.81746113

 $00{:}51{:}33.631 \dashrightarrow 00{:}51{:}35.146$  have patients sickle cell disease.

NOTE Confidence: 0.81746113

 $00{:}51{:}35.150 \dashrightarrow 00{:}51{:}36.949$  Pay attention to the areas in the

NOTE Confidence: 0.81746113

 $00:51:36.949 \longrightarrow 00:51:38.689$  blue as they expand that's fetal

00:51:38.689 --> 00:51:40.501 hemoglobin and you see that in

NOTE Confidence: 0.81746113

00:51:40.501 --> 00:51:42.509 the case of beta Thal the last

NOTE Confidence: 0.81746113

 $00:51:42.509 \longrightarrow 00:51:43.870$  transfusion was at one month.

NOTE Confidence: 0.81746113

 $00:51:43.870 \longrightarrow 00:51:45.950$  Prior Post 2 CTX 01 infusion and in

NOTE Confidence: 0.81746113

00:51:45.950 --> 00:51:48.135 the case of sickle cell disease the

NOTE Confidence: 0.81746113

 $00:51:48.135 \longrightarrow 00:51:49.889$  last transfusion was at 19 days.

NOTE Confidence: 0.81746113

 $00:51:49.890 \longrightarrow 00:51:53.208$  Status Post ETF 001 infusion the

NOTE Confidence: 0.81746113

 $00{:}51{:}53.208 \dashrightarrow 00{:}51{:}55.987$  adverse events are listed here

NOTE Confidence: 0.81746113

 $00:51:55.987 \longrightarrow 00:51:58.765$  and all of them were treated.

NOTE Confidence: 0.81746113

00:51:58.770 --> 00:52:00.450 Abstract number 445 is entitled very

NOTE Confidence: 0.81746113

 $00:52:00.450 \longrightarrow 00:52:01.983$  inherited defects of the complement

NOTE Confidence: 0.81746113

 $00:52:01.983 \longrightarrow 00:52:03.419$  system and poor performance.

NOTE Confidence: 0.81746113

 $00:52:03.420 \longrightarrow 00:52:05.232$  This was presented by Doctor Bendapudi

NOTE Confidence: 0.81746113

 $00:52:05.232 \longrightarrow 00:52:07.450$  and colleagues out of the Harvard system.

NOTE Confidence: 0.81746113

 $00:52:07.450 \longrightarrow 00:52:09.925$  The context here is that PF is on the

NOTE Confidence: 0.81746113

00:52:09.925 --> 00:52:12.409 extreme thrombotic end of the GIC spectrum,

00:52:12.410 --> 00:52:14.100 and elucidating PF quite gladly

NOTE Confidence: 0.81746113

 $00{:}52{:}14.100 \longrightarrow 00{:}52{:}16.724$  may pave the way for a better

NOTE Confidence: 0.81746113

00:52:16.724 --> 00:52:18.456 understanding of DIC including.

NOTE Confidence: 0.81746113

 $00:52:18.460 \longrightarrow 00:52:22.258$  Are you asking in this subset?

NOTE Confidence: 0.81746113

 $00:52:22.260 \dashrightarrow 00:52:29.340$  Peach boss Richmond Cody, their competitor.

NOTE Confidence: 0.81746113

 $00:52:29.340 \longrightarrow 00:52:32.679$  This with this from the NHL VR.

NOTE Confidence: 0.70531815

 $00:52:34.980 \longrightarrow 00:52:37.038$  And you will see violin plots

NOTE Confidence: 0.70531815

 $00:52:37.038 \longrightarrow 00:52:39.640$  on the left and the right on

NOTE Confidence: 0.70531815

 $00:52:39.640 \longrightarrow 00:52:41.550$  the left is the compliment.

NOTE Confidence: 0.70531815

00:52:41.550 --> 00:52:43.888 You can set the enrichment in PFS

NOTE Confidence: 0.70531815

 $00{:}52{:}43.888 \dashrightarrow 00{:}52{:}45.765$  compared to an slips patients

NOTE Confidence: 0.70531815

 $00:52:45.765 \longrightarrow 00:52:47.755$  and on the right quality.

NOTE Confidence: 0.774716963478261

 $00:52:50.430 \longrightarrow 00:52:52.010$  At the doctor \*\*\*\*\*.

NOTE Confidence: 0.774716963478261

 $00{:}52{:}52.010 \dashrightarrow 00{:}52{:}54.380$  Global in the slides looking at

NOTE Confidence: 0.774716963478261

 $00:52:54.461 \longrightarrow 00:52:57.053$  all the unique variants that the

 $00:52:57.053 \longrightarrow 00:52:59.758$  researchers have found so far to date,

NOTE Confidence: 0.774716963478261

00:52:59.760 --> 00:53:01.788 but let me summarize it here.

NOTE Confidence: 0.774716963478261

 $00:53:01.790 \longrightarrow 00:53:04.149$  26 out of have one or more

NOTE Confidence: 0.774716963478261

 $00:53:04.149 \longrightarrow 00:53:05.160$  rare putatively delete,

NOTE Confidence: 0.774716963478261

 $00:53:05.160 \longrightarrow 00:53:06.168$  delete serious mutations.

NOTE Confidence: 0.8488677

 $00{:}53{:}18.990 \dashrightarrow 00{:}53{:}20.974$  Sorry for the audio difficulties.

NOTE Confidence: 0.8488677

00:53:20.974 --> 00:53:22.558 I think George you

NOTE Confidence: 0.8488677

 $00:53:22.560 \longrightarrow 00:53:24.945$  might wanna like hide your camera.

NOTE Confidence: 0.8488677

 $00:53:24.945 \longrightarrow 00:53:27.716$  Maybe that will help the audio connection.

NOTE Confidence: 0.8488677

 $00:53:27.720 \longrightarrow 00:53:30.108$  It might be a connectivity issue.

NOTE Confidence: 0.72921765

00:53:30.940 --> 00:53:32.505 Um, I wouldn't having connectivity

NOTE Confidence: 0.72921765

 $00{:}53{:}32.505 \longrightarrow 00{:}53{:}34.799$  issues at all and all prior talks.

NOTE Confidence: 0.72921765

00:53:34.800 --> 00:53:37.054 Can you see this summer right now?

NOTE Confidence: 0.8479782

 $00{:}53{:}39.080 \dashrightarrow 00{:}53{:}41.050$  Or no, we can. We see you,

NOTE Confidence: 0.8479782

00:53:41.050 --> 00:53:43.010 but it keeps freezing, yet it keeps

NOTE Confidence: 0.8568507

 $00{:}53{:}43.010 \dashrightarrow 00{:}53{:}46.598$  freezing. Not quite. Sorry bout that.

 $00:53:46.600 \longrightarrow 00:53:49.410$  Um? Let me try this again.

NOTE Confidence: 0.9230279

 $00:53:54.520 \longrightarrow 00:53:55.700$  Can you see this here?

NOTE Confidence: 0.845912

 $00:53:58.080 \longrightarrow 00:54:00.798$  Yeah, we can see, but probably better if you

NOTE Confidence: 0.845912

 $00:54:00.798 \longrightarrow 00:54:03.380$  hide your camera so that it flows nicely.

NOTE Confidence: 0.85032344

 $00:54:06.730 \longrightarrow 00:54:08.627$  Sorry, I'm not sure what you mean

NOTE Confidence: 0.85032344

 $00:54:08.627 \longrightarrow 00:54:10.688$  by hide the camera 'cause all I'm

NOTE Confidence: 0.85032344

 $00:54:10.688 \longrightarrow 00:54:12.950$  seeing is the screen on the screen.

NOTE Confidence: 0.85032344

 $00:54:12.950 \longrightarrow 00:54:14.670$  Let's see here OK.

NOTE Confidence: 0.8047364

00:54:18.500 --> 00:54:21.076 Alright, just let me know if we get

NOTE Confidence: 0.8047364

 $00{:}54{:}21.080 \dashrightarrow 00{:}54{:}23.330$  disconnected again. You can go ahead. I

NOTE Confidence: 0.8047364

 $00:54:23.330 \longrightarrow 00:54:24.618$  think we're good now.

NOTE Confidence: 0.8047364

00:54:24.618 --> 00:54:26.280 OK, sounds good. Thank you.

NOTE Confidence: 0.8047364

 $00:54:26.280 \longrightarrow 00:54:27.955$  So with regards to the

NOTE Confidence: 0.8047364

 $00:54:27.955 \longrightarrow 00:54:29.129$  bendapudi at all study,

NOTE Confidence: 0.8047364

 $00:54:29.130 \longrightarrow 00:54:31.130$  they found that six of the 8 CR

 $00:54:31.130 \longrightarrow 00:54:33.305$  3 variants were loss of function

NOTE Confidence: 0.8047364

 $00:54:33.305 \longrightarrow 00:54:34.913$  and these are anti-inflammatory,

NOTE Confidence: 0.8047364

 $00:54:34.920 \longrightarrow 00:54:36.750$  while three of seven CR 4

NOTE Confidence: 0.8047364

00:54:36.750 --> 00:54:37.970 variants are gaining function

NOTE Confidence: 0.8047364

 $00:54:38.029 \longrightarrow 00:54:39.749$  and these are pro inflammatory.

NOTE Confidence: 0.8047364

00:54:39.750 --> 00:54:41.742 So overall supporting very

NOTE Confidence: 0.8047364

 $00:54:41.742 \longrightarrow 00:54:44.232$  inflammatory milieu in these patients.

NOTE Confidence: 0.8047364

 $00:54:44.240 \longrightarrow 00:54:45.548$  Abstract 47 cost effectiveness

NOTE Confidence: 0.8047364

 $00{:}54{:}45.548 \dashrightarrow 00{:}54{:}47.183$  of capitalism had been acquired.

NOTE Confidence: 0.8047364

 $00:54:47.190 \longrightarrow 00:54:48.498$  Thrombotic thrombocytopenia purpura was

NOTE Confidence: 0.8047364

 $00:54:48.498 \longrightarrow 00:54:50.133$  presented by Joshua and colleagues.

NOTE Confidence: 0.8047364

 $00:54:50.140 \longrightarrow 00:54:51.886$  The context for this study is

NOTE Confidence: 0.8047364

 $00:54:51.886 \longrightarrow 00:54:53.893$  that complexes map is the first

NOTE Confidence: 0.8047364

 $00:54:53.893 \longrightarrow 00:54:55.716$  FDA approved medication. In TTP.

NOTE Confidence: 0.8047364

00:54:55.716 --> 00:54:57.356 It's endorsed in ITP guidelines,

NOTE Confidence: 0.8047364

 $00:54:57.360 \longrightarrow 00:54:59.496$  recently approved in the context of

 $00:54:59.496 \longrightarrow 00:55:00.920$  confidential patient access schemes

NOTE Confidence: 0.8047364

00:55:00.979 --> 00:55:02.939 for use in the National Health Service,

NOTE Confidence: 0.8047364

 $00:55:02.940 \longrightarrow 00:55:04.705$  both discomfort in England has

NOTE Confidence: 0.8047364

00:55:04.705 --> 00:55:06.948 a high list price of 270,000

NOTE Confidence: 0.8047364

00:55:06.948 --> 00:55:08.968 US dollars per TCP episode.

NOTE Confidence: 0.8047364

 $00:55:08.970 \longrightarrow 00:55:10.692$  Here is a cartoon schematic on

NOTE Confidence: 0.8047364

00.55:10.692 -> 00.55:12.394 the bottom you see the summary

NOTE Confidence: 0.8047364

 $00:55:12.394 \longrightarrow 00:55:14.362$  of the two of the phase two in

NOTE Confidence: 0.8047364

 $00:55:14.424 \longrightarrow 00:55:16.299$  the Phase three clinical trials.

NOTE Confidence: 0.8047364

 $00:55:16.300 \longrightarrow 00:55:18.636$  You have a patient with the disease state,

NOTE Confidence: 0.8047364

 $00:55:18.640 \longrightarrow 00:55:19.928$  the hospitalization for TCP,

NOTE Confidence: 0.8047364

 $00:55:19.928 \longrightarrow 00:55:21.538$  who then receive treatment with

NOTE Confidence: 0.8047364

 $00:55:21.538 \longrightarrow 00:55:22.746$  their capitalism admin standard

NOTE Confidence: 0.8047364

 $00{:}55{:}22.746 \to 00{:}55{:}24.692$  of care labeled as a or place bo

NOTE Confidence: 0.8047364

 $00:55:24.744 \longrightarrow 00:55:26.352$  standard care labeled as B and

00:55:26.352 --> 00:55:28.014 they can either progress to death

NOTE Confidence: 0.8047364

00:55:28.014 --> 00:55:29.766 or they can go into remission.

NOTE Confidence: 0.8047364

 $00:55:29.770 \longrightarrow 00:55:31.814$  Once in remission they can again relapse.

NOTE Confidence: 0.8047364

 $00:55:31.820 \longrightarrow 00:55:33.843$  The total cost for each arm are

NOTE Confidence: 0.8047364

 $00:55:33.843 \longrightarrow 00:55:35.634$  in front of you, 324 thousand.

NOTE Confidence: 0.8047364

 $00:55:35.634 \longrightarrow 00:55:37.386$  For the campuses in my bar,

NOTE Confidence: 0.8047364

 $00:55:37.390 \longrightarrow 00:55:41.030$  84,000 for the standard of care arm.

NOTE Confidence: 0.8047364

 $00:55:41.030 \longrightarrow 00:55:43.406$  The five year time Horizon incremental

NOTE Confidence: 0.8047364

 $00:55:43.406 \dashrightarrow 00:55:45.638$  cost effectiveness ratio here was \$1.5

NOTE Confidence: 0.8047364

00:55:45.638 --> 00:55:47.384 million for the use of capitalism

NOTE Confidence: 0.8047364

 $00{:}55{:}47.384 \dashrightarrow 00{:}55{:}49.143$  have in addition to the standard

NOTE Confidence: 0.8047364

 $00:55:49.143 \longrightarrow 00:55:50.868$  of care with a 95% confidence

NOTE Confidence: 0.8047364

 $00:55:50.868 \longrightarrow 00:55:53.125$  interval of 1.3 to \$1.7 million.

NOTE Confidence: 0.8047364

 $00:55:53.125 \longrightarrow 00:55:54.085$  Of note,

NOTE Confidence: 0.8047364

 $00:55:54.085 \longrightarrow 00:55:56.500$  this is the sensitivity analysis and I'll

NOTE Confidence: 0.8047364

 $00:55:56.500 \longrightarrow 00:55:58.529$  just highlight one specific area here.

 $00:55:58.530 \longrightarrow 00:55:59.898$  Researchers looked at parameters

NOTE Confidence: 0.8047364

 $00{:}55{:}59.898 \dashrightarrow 00{:}56{:}01.950$  that affect the icier for capitalism,

NOTE Confidence: 0.8047364

 $00:56:01.950 \longrightarrow 00:56:04.742$  AB and the one that affected the most

NOTE Confidence: 0.8047364

 $00:56:04.742 \longrightarrow 00:56:07.986$  by far is capitalism that cost itself.

NOTE Confidence: 0.8047364

00:56:07.990 --> 00:56:08.451 Finally,

NOTE Confidence: 0.8047364

 $00:56:08.451 \longrightarrow 00:56:10.756$  abstract 529 entitled intermediate dose

NOTE Confidence: 0.8047364

00:56:10.756 --> 00:56:12.600 anticoagulation and aspirin COVID-19

NOTE Confidence: 0.8047364

 $00:56:12.655 \longrightarrow 00:56:14.280$  and Propensity Score match analysis

NOTE Confidence: 0.8047364

 $00{:}56{:}14.280 \dashrightarrow 00{:}56{:}16.560$  by not this mindless and colleagues.

NOTE Confidence: 0.8047364

 $00:56:16.560 \longrightarrow 00:56:19.241$  The context here is the current active

NOTE Confidence: 0.8047364

 $00:56:19.241 \longrightarrow 00:56:20.894$  for preliminary an unadjudicated

NOTE Confidence: 0.8047364

 $00{:}56{:}20.894 \dashrightarrow 00{:}56{:}23.486$  data which shows 2 main things.

NOTE Confidence: 0.8047364

 $00{:}56{:}23.490 {\:{\circ}{\circ}{\circ}}>00{:}56{:}25.530$  One that the rapeutic versus prophylactic

NOTE Confidence: 0.8047364

 $00:56:25.530 \longrightarrow 00:56:27.570$  dose anticoagulation in severely ill,

NOTE Confidence: 0.8047364 00:56:27.570 --> 00:56:27.940 i.e. NOTE Confidence: 0.8047364  $00:56:27.940 \longrightarrow 00:56:29.790$  Critically ill patients was halted

NOTE Confidence: 0.8047364

 $00:56:29.790 \longrightarrow 00:56:32.170$  utility in December and then January

NOTE Confidence: 0.8047364

00:56:32.170 --> 00:56:33.838 pre specified security boundary

NOTE Confidence: 0.8047364

 $00:56:33.838 \longrightarrow 00:56:36.419$  was achieved in moderately elii non

NOTE Confidence: 0.8047364

 $00:56:36.419 \longrightarrow 00:56:38.534$  critically ill patients on the apeutic

NOTE Confidence: 0.8047364

00:56:38.534 --> 00:56:40.134 versus prophylactic dose anticoagulation.

NOTE Confidence: 0.8047364

 $00{:}56{:}40.134 \dashrightarrow 00{:}56{:}42.402$  So it is in this background that

NOTE Confidence: 0.8047364

 $00:56:42.402 \longrightarrow 00:56:43.688$  optimization colleagues published their

NOTE Confidence: 0.8047364

 $00:56:43.688 \longrightarrow 00:56:45.760$  study in the American Journal of Hematology.

NOTE Confidence: 0.8047364

00:56:45.760 --> 00:56:47.404 This is an observation ULL study

NOTE Confidence: 0.8047364

00:56:47.404 --> 00:56:48.860 looking at about 2800 patients

NOTE Confidence: 0.8047364

 $00:56:48.860 \longrightarrow 00:56:50.660$  with the primary outcome being time

NOTE Confidence: 0.8047364

 $00:56:50.660 \longrightarrow 00:56:51.920$  to in hospital death.

NOTE Confidence: 0.8047364

 $00{:}56{:}51.920 \dashrightarrow 00{:}56{:}53.380$  The competing risk of discharge.

NOTE Confidence: 0.8047364

 $00:56:53.380 \longrightarrow 00:56:55.092$  I'm showing only a portion of the Yale

NOTE Confidence: 0.8047364

 $00:56:55.092 \longrightarrow 00:56:56.109$  guidelines for thromboprophylaxis

 $00:56:56.109 \longrightarrow 00:56:57.189$  for hospitalizations.

NOTE Confidence: 0.8047364

 $00{:}56{:}57.190 \dashrightarrow 00{:}56{:}58.660$  COVID-19 on the top right,

NOTE Confidence: 0.8047364

 $00{:}56{:}58.660 \dashrightarrow 00{:}57{:}01.228$  and you see that there was a D

NOTE Confidence: 0.8047364

 $00:57:01.228 \longrightarrow 00:57:03.728$  dimer cut off that was utilized.

NOTE Confidence: 0.8047364

 $00:57:03.730 \longrightarrow 00:57:05.879$  This is the overall study design in

NOTE Confidence: 0.8047364

 $00{:}57{:}05.879 \dashrightarrow 00{:}57{:}07.960$  overall cohort of some 2800 patients.

NOTE Confidence: 0.8047364

 $00:57:07.960 \longrightarrow 00:57:09.328$  Researchers identified risk factors

NOTE Confidence: 0.8047364

 $00:57:09.328 \longrightarrow 00:57:11.380$  for in hospital death and then

NOTE Confidence: 0.8047364

 $00:57:11.435 \longrightarrow 00:57:13.457$  created two nested cohorts on the

NOTE Confidence: 0.8047364

 $00:57:13.457 \longrightarrow 00:57:14.805$  left anticoagulation court that

NOTE Confidence: 0.7165097

00:57:14.858 --> 00:57:16.568 were Ben City scored matched for

NOTE Confidence: 0.7165097

 $00:57:16.568 \longrightarrow 00:57:18.685$  those risk factors and on the right.

NOTE Confidence: 0.7165097

00:57:18.685 --> 00:57:19.660 Aspirin versus NASCAR,

NOTE Confidence: 0.7165097

00:57:19.660 --> 00:57:21.610 notably on patients who were not

NOTE Confidence: 0.7165097

 $00:57:21.610 \longrightarrow 00:57:22.910$  on home antiplatelet therapy.

 $00:57:22.910 \longrightarrow 00:57:25.016$  And finally the results of the

NOTE Confidence: 0.7165097

 $00{:}57{:}25.016 \to 00{:}57{:}26.069$  multiple analysis following

NOTE Confidence: 0.7165097

 $00:57:26.069 \longrightarrow 00:57:27.958$  the propensity score matching.

NOTE Confidence: 0.7165097

 $00:57:27.960 \longrightarrow 00:57:30.540$  You will see the hazard ratio for

NOTE Confidence: 0.7165097

00:57:30.540 --> 00:57:32.988 death for the use of intermediate

NOTE Confidence: 0.7165097

 $00{:}57{:}32.988 \dashrightarrow 00{:}57{:}34.620$  dose anticoagulation as compared

NOTE Confidence: 0.7165097

00:57:34.684 --> 00:57:36.610 to prophylactic is .5 two and

NOTE Confidence: 0.7165097

 $00:57:36.610 \longrightarrow 00:57:37.894$  again for in hospital.

NOTE Confidence: 0.7165097

 $00{:}57{:}37.900 \dashrightarrow 00{:}57{:}39.368$  Aspirin compared to and

NOTE Confidence: 0.7165097

 $00:57:39.368 \longrightarrow 00:57:41.203$  no aspirin again .5 two.

NOTE Confidence: 0.7165097

00:57:41.210 --> 00:57:43.779 So take homes gene editing in Dallas,

NOTE Confidence: 0.7165097

 $00:57:43.780 \longrightarrow 00:57:45.620$  EMEA and sickle cell disease

NOTE Confidence: 0.7165097

 $00{:}57{:}45.620 \dashrightarrow 00{:}57{:}49.270$  can alter the disease scorers.

NOTE Confidence: 0.7165097

 $00:57:49.270 \longrightarrow 00:57:50.694$  Target gene discoveries facility

NOTE Confidence: 0.7165097

 $00:57:50.694 \longrightarrow 00:57:52.118$  genomic studies of breakfast

NOTE Confidence: 0.7165097

 $00:57:52.118 \longrightarrow 00:57:53.769$  acquisition by bending colleagues,

 $00:57:53.770 \longrightarrow 00:57:54.895$  capitalism, app costs,

NOTE Confidence: 0.7165097

00:57:54.895 --> 00:57:56.770 and ATP is quite expensive.

NOTE Confidence: 0.7165097

 $00:57:56.770 \longrightarrow 00:57:58.924$  And finally we randomized trial data

NOTE Confidence: 0.7165097

 $00:57:58.924 \longrightarrow 00:58:00.360$  on intermediate dose anticoagulation

NOTE Confidence: 0.7165097

00:58:00.418 --> 00:58:01.648 and antiplatelet therapy.

NOTE Confidence: 0.7165097

 $00:58:01.650 \longrightarrow 00:58:02.786$  Thank you.

NOTE Confidence: 0.7165097

00:58:02.786 --> 00:58:06.194 Look forward to taking your questions.

NOTE Confidence: 0.7165097

 $00:58:06.200 \longrightarrow 00:58:06.660 \text{ Yeah},$ 

NOTE Confidence: 0.8676868

00:58:06.660 --> 00:58:08.970 thank you so much George,

NOTE Confidence: 0.8676868

 $00:58:08.970 \longrightarrow 00:58:11.730$  and apologies about the

NOTE Confidence: 0.8676868

 $00:58:11.730 \longrightarrow 00:58:13.110$  technical difficulties.

NOTE Confidence: 0.8676868

 $00:58:13.110 \longrightarrow 00:58:15.130$  For the next 10 minutes,

NOTE Confidence: 0.8676868

 $00:58:15.130 \longrightarrow 00:58:17.728$  doctor Bone and hopefully will moderate

NOTE Confidence: 0.8676868

 $00:58:17.728 \longrightarrow 00:58:20.788$  questions for those of you have to leave.

NOTE Confidence: 0.8676868

00:58:20.790 --> 00:58:23.226 As mentioned, this will be recorded

 $00:58:23.226 \longrightarrow 00:58:25.303$  and should be available for

NOTE Confidence: 0.8676868

 $00:58:25.303 \longrightarrow 00:58:27.250$  you for subsequent full option.

NOTE Confidence: 0.8676868

 $00:58:27.250 \longrightarrow 00:58:28.870$  Doctor Bone and Alfred.

NOTE Confidence: 0.8386467

 $00:58:30.500 \longrightarrow 00:58:32.200$  Great, thank you everybody.

NOTE Confidence: 0.91464174

00:58:37.690 --> 00:58:39.410 So maybe I can start with a

NOTE Confidence: 0.91464174

 $00:58:39.410 \longrightarrow 00:58:41.996$  question that came in through the.

NOTE Confidence: 0.91464174

 $00{:}58{:}42.000 \dashrightarrow 00{:}58{:}45.590$  Through the chat room so you Sabrina.

NOTE Confidence: 0.91464174

00:58:45.590 --> 00:58:48.605 How robust or how good do you feel

NOTE Confidence: 0.91464174

 $00:58:48.605 \longrightarrow 00:58:50.900$  about the mycophenolate? In addition to

NOTE Confidence: 0.876151

 $00:58:50.900 \longrightarrow 00:58:51.908$  corticosteroids that it

NOTE Confidence: 0.876151

 $00{:}58{:}51.910 --> 00{:}58{:}52.930$  might begin to

NOTE Confidence: 0.876151

00:58:52.930 --> 00:58:55.640 alter practice at this point. Yeah,

NOTE Confidence: 0.7826892

00:58:55.640 --> 00:58:58.377 you know, I I I have pause.

NOTE Confidence: 0.7826892

00:58:58.380 --> 00:59:00.335 I don't think it's practice

NOTE Confidence: 0.7826892

 $00:59:00.335 \longrightarrow 00:59:01.899$  changing at this point.

NOTE Confidence: 0.7826892

00:59:01.900 --> 00:59:04.270 You know, I think it's interesting

 $00:59:04.270 \longrightarrow 00:59:06.677$  that there were some decrease in

NOTE Confidence: 0.7826892

00:59:06.677 --> 00:59:08.939 quality of life in the mpharm.

NOTE Confidence: 0.7826892

00:59:08.940 --> 00:59:11.836 I think it's important to kind of recognize

NOTE Confidence: 0.7826892

00:59:11.836 --> 00:59:14.692 that clinical response and kind of patient

NOTE Confidence: 0.7826892

 $00:59:14.692 \longrightarrow 00:59:16.757$  experience may not always correlate.

NOTE Confidence: 0.7826892

 $00:59:16.760 \longrightarrow 00:59:18.715$  You know, the this steroid

NOTE Confidence: 0.7826892

 $00:59:18.715 \longrightarrow 00:59:20.670$  alone arm more than 50%?

NOTE Confidence: 0.7826892

00:59:20.670 --> 00:59:22.795 About 56% of patients actually

NOTE Confidence: 0.7826892

 $00:59:22.795 \longrightarrow 00:59:25.260$  at the end of follow up.

NOTE Confidence: 0.7826892

 $00:59:25.260 \longrightarrow 00:59:26.700$  Which was about two years,

NOTE Confidence: 0.7826892

 $00:59:26.700 \longrightarrow 00:59:28.416$  had not required second line treatment,

NOTE Confidence: 0.7826892

 $00:59:28.420 \longrightarrow 00:59:30.240$  so they did well as in addition

NOTE Confidence: 0.7826892

 $00:59:30.240 \longrightarrow 00:59:31.859$  and better than prior studies.

NOTE Confidence: 0.7826892

00:59:31.860 --> 00:59:33.869 So you know, I think it's interesting,

NOTE Confidence: 0.7826892

00:59:33.870 --> 00:59:36.078 but I I think we need more data

00:59:36.078 --> 00:59:38.457 before we move it to the first line.

NOTE Confidence: 0.7826892

 $00:59:39.400 \longrightarrow 00:59:39.870$  Thank you.

NOTE Confidence: 0.78495073

 $00:59:42.110 \longrightarrow 00:59:44.005$  To be a payment, go ahead.

NOTE Confidence: 0.78495073

00:59:44.005 --> 00:59:46.210 At the Harford, I figured we could.

NOTE Confidence: 0.78495073

00:59:46.210 --> 00:59:47.470 We could like pick,

NOTE Confidence: 0.78495073

 $00{:}59{:}47.470 \dashrightarrow 00{:}59{:}49.042$  introduce some of the questions

NOTE Confidence: 0.78495073

 $00:59:49.042 \longrightarrow 00:59:50.926$  that are are added in there.

NOTE Confidence: 0.78495073

00:59:50.930 --> 00:59:52.825 Sabrina. Can you also talk a

NOTE Confidence: 0.78495073

00:59:52.825 --> 00:59:54.712 bit about tranexamic acid in he

NOTE Confidence: 0.78495073

00:59:54.712 --> 00:59:55.660 malignancy's and thrombocytopenia?

NOTE Confidence: 0.78495073

 $00:59:55.660 \longrightarrow 00:59:58.486$  You know there is positive data for its use.

NOTE Confidence: 0.78495073

 $00:59:58.490 \longrightarrow 01:00:00.433$  It's been completely lifesaving in trauma.

NOTE Confidence: 0.78495073

01:00:00.433 --> 01:00:01.426 In postpartum hemorrhage,

NOTE Confidence: 0.78495073

01:00:01.430 --> 01:00:02.686 particularly in Third World

NOTE Confidence: 0.78495073

01:00:02.686 --> 01:00:04.256 countries and under resourced areas,

NOTE Confidence: 0.78495073

 $01:00:04.260 \longrightarrow 01:00:07.095$  do any comments on why you think it didn't

 $01:00:07.095 \longrightarrow 01:00:08.985$  work in the setting of hematologic,

NOTE Confidence: 0.78495073

 $01{:}00{:}08.990 \dashrightarrow 01{:}00{:}09.932$  malignancy, and thrombocytopenia?

NOTE Confidence: 0.78495073

 $01:00:09.932 \longrightarrow 01:00:11.190$  Yeah things, but I

NOTE Confidence: 0.82867736

01:00:11.190 --> 01:00:13.694 think that's a great great question and a

NOTE Confidence: 0.82867736

 $01:00:13.694 \longrightarrow 01:00:15.916$  question that came up for the presenters.

NOTE Confidence: 0.82867736

 $01:00:15.920 \longrightarrow 01:00:17.180$  The authors as well.

NOTE Confidence: 0.82867736

01:00:17.180 --> 01:00:20.008 You know, I think what they they spoke to,

NOTE Confidence: 0.82867736

 $01:00:20.010 \longrightarrow 01:00:21.590$  which makes sense to me,

NOTE Confidence: 0.82867736

01:00:21.590 --> 01:00:23.414 is kind of the complexity of

NOTE Confidence: 0.82867736

 $01:00:23.414 \dashrightarrow 01:00:25.050$  microvascular and India theal damage.

NOTE Confidence: 0.82867736

 $01:00:25.050 \longrightarrow 01:00:27.255$  That happens as a rolls result of

NOTE Confidence: 0.82867736

 $01:00:27.255 \longrightarrow 01:00:29.142$  chemotherapy, 'cause all of these

NOTE Confidence: 0.82867736

 $01{:}00{:}29.142 \dashrightarrow 01{:}00{:}30.714$  patients were getting treatment.

NOTE Confidence: 0.82867736

 $01:00:30.720 \longrightarrow 01:00:33.380$  You know, we know that while prophylactic

NOTE Confidence: 0.82867736

 $01:00:33.380 \longrightarrow 01:00:34.914$  platelet transfusions has helped

 $01:00:34.914 \longrightarrow 01:00:36.906$  in terms of of bleeding incidents,

NOTE Confidence: 0.82867736

 $01{:}00{:}36.910 \dashrightarrow 01{:}00{:}38.950$  there are still a good proportion

NOTE Confidence: 0.82867736

 $01:00:38.950 \longrightarrow 01:00:41.280$  of patients that do have bleeding.

NOTE Confidence: 0.82867736

 $01:00:41.280 \longrightarrow 01:00:42.153$  So you know,

NOTE Confidence: 0.82867736

 $01:00:42.153 \longrightarrow 01:00:44.719$  I think there may just be more complex

NOTE Confidence: 0.82867736

01:00:44.719 --> 01:00:47.443 pathophysiology in terms of why these

NOTE Confidence: 0.82867736

 $01:00:47.443 \longrightarrow 01:00:50.330$  patients believe that is beyond low

NOTE Confidence: 0.82867736

 $01:00:50.330 \longrightarrow 01:00:52.266$  platelets and impaired fibrinolysis.

NOTE Confidence: 0.82867736

 $01{:}00{:}52.270 \dashrightarrow 01{:}00{:}54.654$  But I agree that I think there are

NOTE Confidence: 0.82867736

01:00:54.654 --> 01:00:56.080 definitely rules and you know,

NOTE Confidence: 0.82867736

 $01{:}00{:}56.080 \dashrightarrow 01{:}00{:}57.838$  I think even within this population,

NOTE Confidence: 0.82867736

 $01:00:57.840 \longrightarrow 01:00:59.840$  there may be a role for this in

NOTE Confidence: 0.82867736

 $01:00:59.840 \longrightarrow 01:01:01.883$  patients who are bleeding or who need

NOTE Confidence: 0.82867736

 $01:01:01.883 \longrightarrow 01:01:03.990$  procedures or other kind of subgroups.

NOTE Confidence: 0.77241987

01:01:05.400 --> 01:01:06.856 Great Bob, do you want to just sort of

NOTE Confidence: 0.77241987

 $01:01:06.856 \longrightarrow 01:01:09.210$  tag team back and forth? Uh, sure, in

01:01:09.210 --> 01:01:10.500 less anyone in the audience

NOTE Confidence: 0.83646846

 $01{:}01{:}10.500 \longrightarrow 01{:}01{:}12.051$  has a question, you could raise

NOTE Confidence: 0.83646846

 $01:01:12.051 \longrightarrow 01:01:13.600$  your hand and will unmute you.

NOTE Confidence: 0.8548884

 $01:01:15.760 \longrightarrow 01:01:17.520$  But still waiting for

NOTE Confidence: 0.8548884

 $01:01:17.520 \longrightarrow 01:01:21.040$  that. I I had a question for Alex.

NOTE Confidence: 0.8548884

01:01:21.040 --> 01:01:24.120 So Alex, the data on Adams 13

NOTE Confidence: 0.8548884

 $01:01:24.120 \longrightarrow 01:01:26.760$  and BWF levels. Do you think

NOTE Confidence: 0.8548884

 $01:01:26.760 \longrightarrow 01:01:29.400$  that could be the basis for

NOTE Confidence: 0.8548884

 $01{:}01{:}29.400 \dashrightarrow 01{:}01{:}31.600$ identifying high risk patients who

NOTE Confidence: 0.8548884

 $01:01:31.600 \longrightarrow 01:01:34.922$  then might be part of a randomized

NOTE Confidence: 0.8548884

01:01:34.922 --> 01:01:39.014 control trial of anticoagulation or not?

NOTE Confidence: 0.8548884

 $01:01:39.020 \longrightarrow 01:01:41.660$  In in COVID-19 and perhaps other

NOTE Confidence: 0.8548884

 $01{:}01{:}41.660 \dashrightarrow 01{:}01{:}43.860$  people who are severely infected.

NOTE Confidence: 0.77955836

 $01:01:45.670 \longrightarrow 01:01:47.462$  Yes, but thank you.

NOTE Confidence: 0.77955836

 $01:01:47.462 \longrightarrow 01:01:49.259$  Thanks for question. Indeed.

01:01:49.259 --> 01:01:51.504 I actually have great hopes

NOTE Confidence: 0.77955836

 $01:01:51.504 \longrightarrow 01:01:53.300$  until data shows otherwise,

NOTE Confidence: 0.77955836

01:01:53.300 --> 01:01:56.191 but I have great hopes that this

NOTE Confidence: 0.77955836

01:01:56.191 --> 01:01:58.490 imbalance Adams just routine for

NOTE Confidence: 0.77955836

 $01:01:58.490 \longrightarrow 01:02:00.940$  Willebrand factor in balance is,

NOTE Confidence: 0.77955836

 $01:02:00.940 \longrightarrow 01:02:04.076$  you know for the lack of a better

NOTE Confidence: 0.77955836

 $01{:}02{:}04.076 \dashrightarrow 01{:}02{:}07.669$  word may be fundamental to Infosys it.

NOTE Confidence: 0.77955836

 $01:02:07.670 \longrightarrow 01:02:11.254$  Whether it is a marker or A cause,

NOTE Confidence: 0.77955836

 $01:02:11.260 \longrightarrow 01:02:15.124$  that's I think it remains to be.

NOTE Confidence: 0.77955836

 $01:02:15.130 \longrightarrow 01:02:17.470$  Is to be seen.

NOTE Confidence: 0.77955836

 $01{:}02{:}17.470 \dashrightarrow 01{:}02{:}19.290$  But from from Pathophysiologic

NOTE Confidence: 0.77955836

01:02:19.290 --> 01:02:21.565 understanding of how Infosys happens,

NOTE Confidence: 0.77955836

 $01{:}02{:}21.570 \dashrightarrow 01{:}02{:}25.371$  I think this two markers would be

NOTE Confidence: 0.77955836

01:02:25.371 --> 01:02:28.095 potentially could have that that

NOTE Confidence: 0.77955836

 $01:02:28.095 \longrightarrow 01:02:31.077$  could have that fill that role.

NOTE Confidence: 0.77955836

 $01:02:31.080 \longrightarrow 01:02:31.550$  Thank you.

01:02:34.200 --> 01:02:36.016 Another question for you Alex again,

NOTE Confidence: 0.8076803

 $01{:}02{:}36.016 \to 01{:}02{:}37.204$  great session, great summaries.

NOTE Confidence: 0.8076803

 $01:02:37.204 \longrightarrow 01:02:38.956$  All of you guys you know

NOTE Confidence: 0.8076803

 $01:02:38.956 \longrightarrow 01:02:39.960$  for predicting cancer,

NOTE Confidence: 0.8076803

 $01:02:39.960 \longrightarrow 01:02:40.562$  associated thrombosis.

NOTE Confidence: 0.8076803

01:02:40.562 --> 01:02:42.985 You kind of mentioned this that you know

NOTE Confidence: 0.8076803

01:02:42.985 --> 01:02:45.108 the Corona score has been around awhile.

NOTE Confidence: 0.8076803

 $01:02:45.108 \longrightarrow 01:02:46.316$  There been other scores.

NOTE Confidence: 0.8076803

01:02:46.320 --> 01:02:48.136 There's been positive data to support

NOTE Confidence: 0.8076803

 $01:02:48.136 \longrightarrow 01:02:49.652$  the use of prophylactic integration

NOTE Confidence: 0.8076803

 $01:02:49.652 \longrightarrow 01:02:51.470$  for years and years and years,

NOTE Confidence: 0.8076803

 $01:02:51.470 \longrightarrow 01:02:53.591$  but an even most recently with doacs

NOTE Confidence: 0.8076803

 $01{:}02{:}53.591 \dashrightarrow 01{:}02{:}55.714$  and yet no major consensus group has

NOTE Confidence: 0.8076803

 $01:02:55.714 \longrightarrow 01:02:57.526$  come down to support that practice.

NOTE Confidence: 0.8076803

 $01:02:57.530 \longrightarrow 01:02:59.954$  So so do you feel that this machine

01:02:59.954 --> 01:03:01.169 learning algorithm will change

NOTE Confidence: 0.8076803

 $01:03:01.170 \longrightarrow 01:03:02.680$  clinical practice in that regard?

NOTE Confidence: 0.8076803

 $01:03:02.680 \longrightarrow 01:03:05.176$  Or do you still feel that we need?

NOTE Confidence: 0.8076803

 $01:03:05.180 \longrightarrow 01:03:08.042$  Better tools to predict who will

NOTE Confidence: 0.8076803

 $01:03:08.042 \longrightarrow 01:03:09.950$  actually get cancer thrombosis.

NOTE Confidence: 0.8076803

 $01:03:09.950 \longrightarrow 01:03:12.918$  So I'm a big believer in machine

NOTE Confidence: 0.8076803

01:03:12.918 --> 01:03:15.175 learning just because it make it

NOTE Confidence: 0.8076803

01:03:15.175 --> 01:03:17.740 can crunch a lot of data in that.

NOTE Confidence: 0.8076803

01:03:17.740 --> 01:03:18.607 From that perspective,

NOTE Confidence: 0.8076803

01:03:18.607 --> 01:03:20.630 I think as a data generator and

NOTE Confidence: 0.8076803

 $01{:}03{:}20.688 \to 01{:}03{:}22.940$  hypothesis generator generating technique,

NOTE Confidence: 0.8076803

01:03:22.940 --> 01:03:25.280 I think it's very important tool

NOTE Confidence: 0.8076803

 $01:03:25.280 \longrightarrow 01:03:27.958$  in we should not shy from it

NOTE Confidence: 0.8076803

 $01:03:27.958 \longrightarrow 01:03:30.359$  and utilized as much as we can.

NOTE Confidence: 0.8076803

 $01:03:30.360 \longrightarrow 01:03:32.520$  The question becomes sort of whether

NOTE Confidence: 0.8076803

 $01:03:32.520 \longrightarrow 01:03:34.776$  it's become sort of garbage in

 $01{:}03{:}34.776 \dashrightarrow 01{:}03{:}36.656$  garbage out kind of situation.

NOTE Confidence: 0.8076803

 $01:03:36.660 \longrightarrow 01:03:40.164$  If we feed something that biased to this.

NOTE Confidence: 0.8076803

 $01:03:40.170 \longrightarrow 01:03:41.750$  So the machine learning algorithms

NOTE Confidence: 0.8076803

 $01:03:41.750 \longrightarrow 01:03:43.330$  algorithms we're going to get

NOTE Confidence: 0.8076803

 $01:03:43.384 \longrightarrow 01:03:44.668$  something totally useless,

NOTE Confidence: 0.8076803

 $01:03:44.670 \longrightarrow 01:03:46.934$  so we have to be very careful about

NOTE Confidence: 0.8076803

 $01:03:46.934 \longrightarrow 01:03:49.178$  what we really feed these algorithms

NOTE Confidence: 0.8076803

 $01{:}03{:}49.178 \dashrightarrow 01{:}03{:}51.590$  and how we use these algorithms.

NOTE Confidence: 0.8076803

01:03:51.590 --> 01:03:53.529 And I think we need to collaborate

NOTE Confidence: 0.8076803

 $01:03:53.529 \longrightarrow 01:03:56.088$  with a lot of artificial intelligence,

NOTE Confidence: 0.8076803

 $01:03:56.090 \longrightarrow 01:03:57.845$  machine learning people to to

NOTE Confidence: 0.8076803

 $01:03:57.845 \longrightarrow 01:03:59.890$  get the best out of it.

NOTE Confidence: 0.8076803

01:03:59.890 --> 01:04:01.286 But yes, I agree,

NOTE Confidence: 0.8076803

 $01:04:01.286 \longrightarrow 01:04:02.682$  that's actually could be

NOTE Confidence: 0.8076803

 $01:04:02.682 \longrightarrow 01:04:03.700$  absolutely indispensable tool.

01:04:06.730 --> 01:04:10.730 So George question for you if I may.

NOTE Confidence: 0.8678143

 $01:04:12.380 \longrightarrow 01:04:16.240$  Do you think that the data for complement

NOTE Confidence: 0.8678143

01:04:16.240 --> 01:04:18.660 abnormalities in purpura fulminans has,

NOTE Confidence: 0.8678143

 $01:04:18.660 \longrightarrow 01:04:21.560$  or will have any therapeutic implications?

NOTE Confidence: 0.8234763

 $01:04:25.040 \longrightarrow 01:04:28.604$  Thank you Bob, really fascinating question.

NOTE Confidence: 0.8234763

01:04:28.604 --> 01:04:30.980 Really hard question too,

NOTE Confidence: 0.8234763

 $01:04:30.980 \longrightarrow 01:04:34.140$  especially because we worry about

NOTE Confidence: 0.8234763

01:04:34.140 --> 01:04:38.130 performance often in the infectious setting.

NOTE Confidence: 0.8234763

 $01{:}04{:}38.130 \dashrightarrow 01{:}04{:}40.517$  One of the first patients that this

NOTE Confidence: 0.8234763

01:04:40.517 --> 01:04:43.790 study was based off of was a patient

NOTE Confidence: 0.8234763

 $01{:}04{:}43.790 \dashrightarrow 01{:}04{:}45.095$  with Capnocytophaga bacteremia,

NOTE Confidence: 0.8234763

 $01:04:45.100 \longrightarrow 01:04:48.188$  who ended up having purple foam and ends.

NOTE Confidence: 0.8234763

 $01:04:48.190 \longrightarrow 01:04:50.125$  So I think that that's

NOTE Confidence: 0.8234763

 $01:04:50.125 \longrightarrow 01:04:51.673$  that's that's that stuff.

NOTE Confidence: 0.8234763

 $01:04:51.680 \longrightarrow 01:04:54.464$  At the same time we have utilized compliment

NOTE Confidence: 0.8234763

 $01:04:54.464 \longrightarrow 01:04:57.479$  in vision therapy when necessary in patients,

01:04:57.480 --> 01:04:59.420 for example, with catastrophic APS.

NOTE Confidence: 0.8234763

 $01:04:59.420 \longrightarrow 01:05:00.968$  The difficulty, of course,

NOTE Confidence: 0.8234763

 $01:05:00.968 \longrightarrow 01:05:03.290$  because when there's a common infection,

NOTE Confidence: 0.8234763

 $01:05:03.290 \longrightarrow 01:05:05.408$  so I think that becomes a

NOTE Confidence: 0.8234763

01:05:05.408 --> 01:05:07.540 discussion of risks and benefits,

NOTE Confidence: 0.8234763

 $01:05:07.540 \longrightarrow 01:05:09.220$  including with our infectious

NOTE Confidence: 0.8234763

 $01:05:09.220 \longrightarrow 01:05:10.060$  disease specialists.

NOTE Confidence: 0.8234763

01:05:10.060 --> 01:05:10.837 Beyond of course,

NOTE Confidence: 0.8234763

 $01:05:10.837 \longrightarrow 01:05:12.132$  the vaccination and the use

NOTE Confidence: 0.8234763

 $01:05:12.132 \longrightarrow 01:05:13.299$  of amoxicillin or penicillin,

NOTE Confidence: 0.8234763

 $01:05:13.300 \longrightarrow 01:05:15.190$  or something like that to be able

NOTE Confidence: 0.8234763

 $01:05:15.190 \longrightarrow 01:05:17.860$  to cover the next serial organisms.

NOTE Confidence: 0.8234763

01:05:17.860 --> 01:05:20.280 Thank you.

NOTE Confidence: 0.83295316

 $01{:}05{:}20.280 \dashrightarrow 01{:}05{:}22.248$  Question for Sabrina the convalescent plasma.

NOTE Confidence: 0.83295316

 $01:05:22.250 \longrightarrow 01:05:24.266$  The most recent recovery is a

01:05:24.266 --> 01:05:25.870 recovery truck from the UK.

NOTE Confidence: 0.83295316

 $01:05:25.870 \longrightarrow 01:05:27.182$  Was a negative study,

NOTE Confidence: 0.83295316

 $01:05:27.182 \longrightarrow 01:05:28.822$  but there's many positive ones,

NOTE Confidence: 0.83295316

 $01:05:28.830 \longrightarrow 01:05:30.480$  including our own data that

NOTE Confidence: 0.83295316

 $01:05:30.480 \longrightarrow 01:05:31.470$  you brilliantly presented.

NOTE Confidence: 0.83295316

 $01{:}05{:}31.470 \dashrightarrow 01{:}05{:}33.438$  Can you reconcile all of this

NOTE Confidence: 0.83295316

 $01:05:33.438 \longrightarrow 01:05:35.740$  for us and how we should think

NOTE Confidence: 0.83295316

01:05:35.740 --> 01:05:37.060 about using convalescent plasma

NOTE Confidence: 0.83295316

01:05:37.060 --> 01:05:38.050 and COVID-19 patients?

NOTE Confidence: 0.83295316

 $01:05:38.050 \longrightarrow 01:05:39.030$  Yeah, it thank

NOTE Confidence: 0.83295316

 $01:05:39.030 \longrightarrow 01:05:40.346$  you all for that.

NOTE Confidence: 0.83295316

01:05:40.346 --> 01:05:42.320 I think it's been challenging 'cause,

NOTE Confidence: 0.83295316

 $01:05:42.320 \longrightarrow 01:05:44.665$  as you mentioned that the data has

NOTE Confidence: 0.83295316

 $01{:}05{:}44.665 \dashrightarrow 01{:}05{:}46.599$  been quite mixed and you know,

NOTE Confidence: 0.83295316

01:05:46.600 --> 01:05:48.826 I think just recently we're getting

NOTE Confidence: 0.83295316

 $01:05:48.826 \longrightarrow 01:05:50.310$  additional information from from

 $01:05:50.372 \longrightarrow 01:05:52.227$  larger and more randomized trials.

NOTE Confidence: 0.83295316

 $01{:}05{:}52.230 \dashrightarrow 01{:}05{:}54.799$  The early trials that were randomized had

NOTE Confidence: 0.83295316

01:05:54.799 --> 01:05:57.209 stopped early for a number of reasons,

NOTE Confidence: 0.83295316

 $01:05:57.210 \longrightarrow 01:05:59.695$  one being that there were patients that

NOTE Confidence: 0.83295316

 $01:05:59.695 \longrightarrow 01:06:01.874$  actually actually were SERO positive at

NOTE Confidence: 0.83295316

01:06:01.874 --> 01:06:03.974 the time they got convalescent plasma,

NOTE Confidence: 0.83295316

 $01:06:03.980 \longrightarrow 01:06:06.974$  and then there were issues with

NOTE Confidence: 0.83295316

 $01{:}06{:}06.974 \dashrightarrow 01{:}06{:}08.970$  recruitment in other studies.

NOTE Confidence: 0.83295316

 $01:06:08.970 \longrightarrow 01:06:11.018$  I, I think we're going to have to

NOTE Confidence: 0.83295316

 $01{:}06{:}11.018 \dashrightarrow 01{:}06{:}12.826$  really kind of look through the

NOTE Confidence: 0.83295316

01:06:12.826 --> 01:06:14.366 details of what antibody titer

NOTE Confidence: 0.83295316

 $01:06:14.366 \longrightarrow 01:06:16.372$  was an neutralizing function in

NOTE Confidence: 0.83295316

 $01{:}06{:}16.372 \dashrightarrow 01{:}06{:}18.422$  the convalescent plasma with each

NOTE Confidence: 0.83295316

 $01:06:18.422 \longrightarrow 01:06:20.405$  randomized trial as well as timing

NOTE Confidence: 0.83295316

 $01:06:20.405 \longrightarrow 01:06:22.376$  and timing of receiving the plasma

 $01:06:22.376 \longrightarrow 01:06:24.428$  and the severity of the disease,

NOTE Confidence: 0.83295316

 $01:06:24.430 \longrightarrow 01:06:26.320$  because I think there has been

NOTE Confidence: 0.83295316

 $01:06:26.320 \longrightarrow 01:06:28.320$  signal for patients who get high

NOTE Confidence: 0.83295316

 $01:06:28.320 \longrightarrow 01:06:30.025$  titer plasma earlier in disease,

NOTE Confidence: 0.83295316

 $01:06:30.030 \longrightarrow 01:06:31.998$  that there is benefit there,

NOTE Confidence: 0.83295316

01:06:32.000 --> 01:06:32.582 you know,

NOTE Confidence: 0.83295316

 $01:06:32.582 \longrightarrow 01:06:34.910$  and I I don't know that there the

NOTE Confidence: 0.83295316

01:06:34.987 --> 01:06:37.225 details of the recovery trial have

NOTE Confidence: 0.83295316

 $01{:}06{:}37.225 \dashrightarrow 01{:}06{:}39.399$  been released yet in terms of.

NOTE Confidence: 0.83295316

01:06:39.400 --> 01:06:42.478 The timing of convalescent plasma and

NOTE Confidence: 0.83295316

 $01{:}06{:}42.478 \dashrightarrow 01{:}06{:}44.530$  how heterogeneous the convalescent

NOTE Confidence: 0.83295316

 $01{:}06{:}44.602 \dashrightarrow 01{:}06{:}46.738$  donor plasma was at that time.

NOTE Confidence: 0.8631877

 $01:06:48.480 \longrightarrow 01:06:49.158$  Great, thank you.

NOTE Confidence: 0.796499

01:06:52.590 --> 01:06:54.226 Sabrina question about it

NOTE Confidence: 0.796499

 $01:06:54.226 \longrightarrow 01:06:56.680$  for two zaran if I could.

NOTE Confidence: 0.796499

 $01:06:56.680 \longrightarrow 01:06:59.144$  So you mentioned that there

 $01:06:59.144 \longrightarrow 01:07:01.115$  were some adverse events,

NOTE Confidence: 0.796499

01:07:01.115 --> 01:07:02.103 notably thrombosis,

NOTE Confidence: 0.796499

01:07:02.103 --> 01:07:04.568 presumably due to the sustained

NOTE Confidence: 0.796499

 $01:07:04.570 \longrightarrow 01:07:07.196$  reduction in anti thrombin levels.

NOTE Confidence: 0.796499

01:07:07.196 --> 01:07:09.856 Do you know if those individuals

NOTE Confidence: 0.796499

 $01:07:09.856 \longrightarrow 01:07:11.206$  were treated with antithrombin

NOTE Confidence: 0.796499

 $01:07:11.206 \longrightarrow 01:07:12.558$  concentrates as a as

NOTE Confidence: 0.81299037

 $01:07:12.560 \longrightarrow 01:07:13.580$  a in in

NOTE Confidence: 0.81299037

01:07:13.580 --> 01:07:14.591 along with anticoagulation?

NOTE Confidence: 0.81299037

01:07:14.591 --> 01:07:16.613 That's a great question but I

NOTE Confidence: 0.81299037

01:07:16.620 --> 01:07:17.968 I don't, I don't.

NOTE Confidence: 0.81299037

 $01:07:17.970 \longrightarrow 01:07:20.458$  I didn't find any evidence that or any

NOTE Confidence: 0.81299037

 $01{:}07{:}20.458 \to 01{:}07{:}23.380$  data on whether or not they were treated,

NOTE Confidence: 0.81299037

 $01:07:23.380 \longrightarrow 01:07:26.076$  so I don't know the answer to that.

NOTE Confidence: 0.81299037

01:07:26.080 --> 01:07:28.446 I do know when dosing was paused,

 $01:07:28.450 \longrightarrow 01:07:30.613$  you know they looked at the group

NOTE Confidence: 0.81299037

01:07:30.613 --> 01:07:32.714 and found that patients who had

NOTE Confidence: 0.81299037

 $01:07:32.714 \longrightarrow 01:07:34.549$  an antithrombin level that was

NOTE Confidence: 0.81299037

 $01:07:34.549 \longrightarrow 01:07:37.006$  less than 20% and had the higher

NOTE Confidence: 0.81299037

 $01:07:37.006 \longrightarrow 01:07:38.826$  risk highest risk of thrombosis.

NOTE Confidence: 0.81299037

 $01:07:38.830 \longrightarrow 01:07:40.804$  And those patients that were greater than

NOTE Confidence: 0.81299037

 $01:07:40.804 \longrightarrow 01:07:42.510$  20% actually had no thrombotic events,

NOTE Confidence: 0.81299037

 $01:07:42.510 \longrightarrow 01:07:44.372$  and so that's why the trials

NOTE Confidence: 0.81299037

 $01{:}07{:}44.372 \dashrightarrow 01{:}07{:}45.910$  have preceded with the redosing,

NOTE Confidence: 0.81299037

01:07:45.910 --> 01:07:47.772 which is initially going to start at

NOTE Confidence: 0.81299037

 $01{:}07{:}47.772 \dashrightarrow 01{:}07{:}49.589$  every other month and then kind of

NOTE Confidence: 0.81299037

 $01:07:49.589 \longrightarrow 01:07:51.423$  increased back to where they had been

NOTE Confidence: 0.81299037

 $01:07:51.423 \longrightarrow 01:07:53.403$  previously with the goal of monitoring

NOTE Confidence: 0.81299037

 $01:07:53.403 \longrightarrow 01:07:54.974$  and antithrombin levels closely so

NOTE Confidence: 0.81299037

 $01:07:54.974 \longrightarrow 01:07:56.983$  that they stay kind of between 15

NOTE Confidence: 0.81299037

 $01:07:56.983 \longrightarrow 01:07:59.208$  and 35% is what what it's report is,

 $01:07:59.210 \longrightarrow 01:08:00.620$  but I don't know about

NOTE Confidence: 0.8318267

 $01{:}08{:}00.620 \dashrightarrow 01{:}08{:}02.040$  the concentrates. OK, great thank

NOTE Confidence: 0.8318267

01:08:02.040 --> 01:08:03.450 you, that's interesting, thank you.

NOTE Confidence: 0.79507476

01:08:05.350 --> 01:08:07.456 Question for George. So you know,

NOTE Confidence: 0.79507476

 $01{:}08{:}07.460 \dashrightarrow 01{:}08{:}09.916$  in the abstract that you presented on

NOTE Confidence: 0.79507476

01:08:09.916 --> 01:08:12.720 using CRISPR CAS to target BCL 11 A.

NOTE Confidence: 0.79507476

01:08:12.720 --> 01:08:14.480 I was literally just Googling

NOTE Confidence: 0.79507476

 $01:08:14.480 \longrightarrow 01:08:16.230$  what else detail 11/8 does.

NOTE Confidence: 0.79507476

01:08:16.230 --> 01:08:18.340 And you know there are interesting

NOTE Confidence: 0.79507476

 $01:08:18.340 \longrightarrow 01:08:20.091$  reports about it being involved

NOTE Confidence: 0.79507476

01:08:20.091 --> 01:08:22.197 in metal pieces in B cell,

NOTE Confidence: 0.79507476

01:08:22.200 --> 01:08:23.950 lymph, Genesis and so forth.

NOTE Confidence: 0.79507476

 $01:08:23.950 \longrightarrow 01:08:26.410$  And so I'm just wondering if the

NOTE Confidence: 0.79507476

01:08:26.410 --> 01:08:27.810 investigators talked about potential,

NOTE Confidence: 0.79507476

 $01:08:27.810 \longrightarrow 01:08:28.863$  you know, humans,

 $01:08:28.863 \longrightarrow 01:08:30.267$  allergic effects or immunological

NOTE Confidence: 0.79507476

 $01:08:30.267 \longrightarrow 01:08:32.730$  effects and and the reason being that

NOTE Confidence: 0.79507476

 $01:08:32.730 \longrightarrow 01:08:35.830$  you know there there is another set of.

NOTE Confidence: 0.79507476

 $01:08:35.830 \longrightarrow 01:08:36.095$  Essentially,

NOTE Confidence: 0.79507476

 $01:08:36.095 \longrightarrow 01:08:37.152$  gene editing treatments that

NOTE Confidence: 0.79507476

 $01:08:37.152 \longrightarrow 01:08:38.724$  we can use in these disorders,

NOTE Confidence: 0.79507476

 $01{:}08{:}38.730 \dashrightarrow 01{:}08{:}40.055$  which is stem cell transplant.

NOTE Confidence: 0.79507476

01:08:40.055 --> 01:08:41.834 So it just makes you wonder that

NOTE Confidence: 0.79507476

 $01:08:41.834 \longrightarrow 01:08:43.310$  if there are these unknown effects

NOTE Confidence: 0.79507476

 $01:08:43.354 \longrightarrow 01:08:44.538$  with these newer therapies,

NOTE Confidence: 0.79507476 $01:08:44.540 \longrightarrow 01:08:44.810$  then

NOTE Confidence: 0.80985254

 $01:08:44.810 \longrightarrow 01:08:46.388$  why not just go for stem

NOTE Confidence: 0.80985254

 $01:08:46.390 \longrightarrow 01:08:48.388$  cell transplant instead?

NOTE Confidence: 0.80985254

 $01:08:48.390 \longrightarrow 01:08:49.620$  Yeah, thank you.

NOTE Confidence: 0.80985254

 $01:08:49.620 \longrightarrow 01:08:51.670$  Yeah that's a great question.

NOTE Confidence: 0.80985254

 $01:08:51.670 \longrightarrow 01:08:53.495$  Of course, stem cell transplant

 $01:08:53.495 \longrightarrow 01:08:54.955$  also has adverse effects.

NOTE Confidence: 0.80985254

 $01:08:54.960 \longrightarrow 01:08:56.994$  An events just like gene editing

NOTE Confidence: 0.80985254

01:08:56.994 --> 01:08:59.718 does in the in the initial study,

NOTE Confidence: 0.80985254

 $01:08:59.720 \longrightarrow 01:09:02.011$  so they've completed follow up in

NOTE Confidence: 0.80985254

01:09:02.011 --> 01:09:04.790 at least two patients and they have

NOTE Confidence: 0.80985254

 $01:09:04.876 \longrightarrow 01:09:07.652$  another I think 6 to 9 patients in

NOTE Confidence: 0.80985254

 $01:09:07.652 \longrightarrow 01:09:10.338$  in each of the 111 and STD 121.

NOTE Confidence: 0.80985254

 $01:09:10.340 \longrightarrow 01:09:13.730$  There is nothing that I saw.

NOTE Confidence: 0.80985254

01:09:13.730 --> 01:09:14.998 Talking about specifically human,

NOTE Confidence: 0.80985254

 $01:09:14.998 \longrightarrow 01:09:16.266$  logical and immunological effects,

NOTE Confidence: 0.80985254

 $01:09:16.270 \longrightarrow 01:09:17.510$  notable things were infectious

NOTE Confidence: 0.80985254

 $01:09:17.510 \longrightarrow 01:09:19.770$  from both of the first 2 pages,

NOTE Confidence: 0.80985254

 $01:09:19.770 \longrightarrow 01:09:21.047$  but The thing is,

NOTE Confidence: 0.80985254

 $01:09:21.047 \dashrightarrow 01:09:22.990$  those other patients still need at

NOTE Confidence: 0.80985254

 $01:09:22.990 \longrightarrow 01:09:25.300$  least another year of follow up before

 $01:09:25.368 \longrightarrow 01:09:27.398$  we can start talking about this right.

NOTE Confidence: 0.80985254

 $01:09:27.400 \longrightarrow 01:09:29.630$  And then beyond that long term too,

NOTE Confidence: 0.80985254

 $01:09:29.630 \longrightarrow 01:09:31.744$  'cause it's not just a year or

NOTE Confidence: 0.80985254

 $01:09:31.744 \longrightarrow 01:09:33.760$  two that people will live right.

NOTE Confidence: 0.80985254

 $01:09:33.760 \longrightarrow 01:09:37.069$  Hopefully in that good state so.

NOTE Confidence: 0.80985254

 $01:09:37.070 \longrightarrow 01:09:38.390$  Yeah, I I don't know more.

NOTE Confidence: 0.8540588

 $01:09:42.670 \longrightarrow 01:09:44.740$  So I have a question.

NOTE Confidence: 0.8540588

01:09:44.740 --> 01:09:46.803 Maybe for George about the

NOTE Confidence: 0.8540588

01:09:46.803 --> 01:09:48.454 the anticoagulant. I'm sorry.

NOTE Confidence: 0.8540588

01:09:48.454 --> 01:09:50.514 Not George Alex about the

NOTE Confidence: 0.8540588

 $01:09:50.514 \longrightarrow 01:09:51.338$  anticoagulant inhibitor.

NOTE Confidence: 0.8661554

 $01:09:52.290 \longrightarrow 01:09:54.010$  Where, where are we

NOTE Confidence: 0.8661554

 $01:09:54.010 \longrightarrow 01:09:56.590$  in 2021 in terms of first

NOTE Confidence: 0.8661554

 $01:09:56.590 \longrightarrow 01:09:58.310$  line therapy for reversal,

NOTE Confidence: 0.8661554

01:09:58.310 --> 01:10:00.425 bleeding for, let's say, induce?

NOTE Confidence: 0.8661554

 $01:10:00.425 \longrightarrow 01:10:01.968$  Buy a doac you think?

 $01:10:04.180 \longrightarrow 01:10:08.468$  Well, so we do have access to both.

NOTE Confidence: 0.7811392

01:10:11.320 --> 01:10:13.216 And extra an assistant

NOTE Confidence: 0.7811392

 $01:10:13.216 \longrightarrow 01:10:15.586$  either season map I believe.

NOTE Confidence: 0.7811392

01:10:15.590 --> 01:10:18.428 I personally have not used them,

NOTE Confidence: 0.7811392

 $01:10:18.430 \longrightarrow 01:10:23.926$  but I know several people have used them.

NOTE Confidence: 0.7811392

01:10:23.930 --> 01:10:29.400 And, um. I believe it's costly and

NOTE Confidence: 0.7811392

 $01:10:29.400 \longrightarrow 01:10:33.080$  what's interesting is that the decision,

NOTE Confidence: 0.7811392

 $01:10:33.080 \longrightarrow 01:10:35.990$  as far as I know,

NOTE Confidence: 0.7811392

 $01:10:35.990 \longrightarrow 01:10:39.511$  decision is made still on the timing

NOTE Confidence: 0.7811392

 $01{:}10{:}39.511 \dashrightarrow 01{:}10{:}43.540$  of the last those event equivalent.

NOTE Confidence: 0.7811392

 $01{:}10{:}43.540 \dashrightarrow 01{:}10{:}46.548$  Furthermore, the both trial

NOTE Confidence: 0.7811392

 $01:10:46.548 \longrightarrow 01:10:50.308$  trial so far both for.

NOTE Confidence: 0.7811392

 $01{:}10{:}50.310 \dashrightarrow 01{:}10{:}54.930$  Typical Tran and Doac and the factor

NOTE Confidence: 0.7811392

 $01:10:54.930 \longrightarrow 01:10:58.310$  of 10 anticoagulants inhibitors.

NOTE Confidence: 0.7811392

 $01:10:58.310 \longrightarrow 01:11:01.134$  Both those trials for the rest of the

01:11:01.134 --> 01:11:03.640 reversal agents were without control arms,

NOTE Confidence: 0.7811392

 $01{:}11{:}03.640 \dashrightarrow 01{:}11{:}05.926$  so with efficacy is not really

NOTE Confidence: 0.7811392

01:11:05.926 --> 01:11:07.069 well established still,

NOTE Confidence: 0.7811392

 $01:11:07.070 \longrightarrow 01:11:09.408$  so I think there's there's one trial

NOTE Confidence: 0.7811392

01:11:09.408 --> 01:11:11.984 right now is going on next I next

NOTE Confidence: 0.7811392

 $01:11:11.984 \longrightarrow 01:11:14.222$  one is for the internal hemorrhage

NOTE Confidence: 0.7811392

 $01:11:14.222 \longrightarrow 01:11:16.217$  reversal of anticoagulation.

NOTE Confidence: 0.7811392

01:11:16.220 --> 01:11:18.120 People patient with intracranial hemorrhage,

NOTE Confidence: 0.7811392

 $01:11:18.120 \longrightarrow 01:11:20.406$  which is which is randomized trial.

NOTE Confidence: 0.7811392

01:11:20.410 --> 01:11:24.099 I think that's going to be informative.

NOTE Confidence: 0.7811392

01:11:24.100 --> 01:11:30.382 But I I think it's data is not super.

NOTE Confidence: 0.7811392

 $01:11:30.390 \longrightarrow 01:11:33.252$  Super strong about how to reverse

NOTE Confidence: 0.7811392

 $01:11:33.252 \longrightarrow 01:11:35.160$  and whether to wait.

NOTE Confidence: 0.7811392

01:11:35.160 --> 01:11:36.990 Just kind of, you know,

NOTE Confidence: 0.7811392

 $01:11:36.990 \longrightarrow 01:11:38.820$  hours since the last administration.

NOTE Confidence: 0.7811392

 $01:11:38.820 \longrightarrow 01:11:40.292$  So secret parent tag,

01:11:40.292 --> 01:11:42.943 as far as I understand it's a

NOTE Confidence: 0.7811392

01:11:42.943 --> 01:11:45.109 small market which is very easy

NOTE Confidence: 0.7811392

01:11:45.109 --> 01:11:46.870 to fairly easy to make,

NOTE Confidence: 0.7811392

01:11:46.870 --> 01:11:49.396 which probably will reduce the cost

NOTE Confidence: 0.7811392

 $01:11:49.396 \longrightarrow 01:11:52.882$  an it's rapid and you don't need to

NOTE Confidence: 0.7811392

 $01:11:52.882 \longrightarrow 01:11:55.940$  necessarily think about when was the last.

NOTE Confidence: 0.7811392

01:11:55.940 --> 01:11:59.012 Dose I think that I would think that

NOTE Confidence: 0.7811392

 $01:11:59.012 \longrightarrow 01:12:02.148$  that might be an advantage of using it.

NOTE Confidence: 0.7811392

01:12:02.150 --> 01:12:04.460 Um?

NOTE Confidence: 0.7811392

 $01{:}12{:}04.460 \dashrightarrow 01{:}12{:}07.022$  But I think the world of antic

NOTE Confidence: 0.7811392

 $01:12:07.022 \longrightarrow 01:12:09.238$  of reversal agents is an infancy.

NOTE Confidence: 0.7811392

01:12:09.240 --> 01:12:09.608 Yeah,

NOTE Confidence: 0.7811392

01:12:09.608 --> 01:12:10.344 I agree.

NOTE Confidence: 0.7811392

01:12:10.344 --> 01:12:11.448 I think we're

NOTE Confidence: 0.8041131

 $01:12:11.450 \longrightarrow 01:12:13.290$  waiting for some head to

 $01:12:13.290 \longrightarrow 01:12:15.130$  head trials with some of

NOTE Confidence: 0.8041131

 $01:12:15.130 \longrightarrow 01:12:17.340$  these drugs in the prothrombin complex

NOTE Confidence: 0.8041131

 $01:12:17.340 \longrightarrow 01:12:19.178$  concentrates as well. Thank you.

NOTE Confidence: 0.85915107

01:12:19.900 --> 01:12:21.736 Well, thank you so much everybody.

NOTE Confidence: 0.85915107

01:12:21.740 --> 01:12:23.270 Thank you Doctor Pine, Victor,

NOTE Confidence: 0.85915107

01:12:23.270 --> 01:12:24.538 Joshua and Doctor Browning,

NOTE Confidence: 0.85915107

 $01:12:24.538 \longrightarrow 01:12:26.123$  and the excellent moderation by

NOTE Confidence: 0.85915107

 $01:12:26.123 \longrightarrow 01:12:27.548$  Doctor Lee and Doctor Bonner.

NOTE Confidence: 0.85915107

 $01{:}12{:}27.550 \dashrightarrow 01{:}12{:}29.200$  We probably could go another hour

NOTE Confidence: 0.85915107

 $01:12:29.200 \longrightarrow 01:12:31.220$  with all of these great questions.

NOTE Confidence: 0.85915107

 $01:12:31.220 \longrightarrow 01:12:33.412$  Please remember you can reach out to all

NOTE Confidence: 0.85915107

 $01:12:33.412 \longrightarrow 01:12:35.722$  of the speakers and the moderators by

NOTE Confidence: 0.85915107

 $01:12:35.722 \longrightarrow 01:12:38.060$  email for any questions and there will

NOTE Confidence: 0.85915107

 $01:12:38.060 \longrightarrow 01:12:40.396$  be a recording of this session for your

NOTE Confidence: 0.85915107

 $01:12:40.400 \longrightarrow 01:12:42.236$  convenience will be posted next week.

NOTE Confidence: 0.85915107

 $01:12:42.240 \longrightarrow 01:12:43.464$  Thank you so much.

 $01:12:43.464 \longrightarrow 01:12:44.688$  Please remember next week.

NOTE Confidence: 0.85915107

 $01{:}12{:}44.690 \dashrightarrow 01{:}12{:}47.306$  next Friday is the last session which will

NOTE Confidence: 0.85915107

 $01:12:47.306 \longrightarrow 01:12:50.010$  be focused on cell therapy and bone marrow.

NOTE Confidence: 0.85915107

 $01{:}12{:}50.010 \dashrightarrow 01{:}12{:}51.950$  A transplantation and that will

NOTE Confidence: 0.85915107

 $01{:}12{:}51.950 \dashrightarrow 01{:}12{:}53.908$  conclude our post. Ash highlights.

NOTE Confidence: 0.85915107

 $01:12:53.908 \longrightarrow 01:12:55.484$  Thank you so much.