WEBVTT

- NOTE duration:"00:56:13"
- NOTE recognizability:0.815
- NOTE language:en-us
- NOTE Confidence: 0.9023378835
- 00:00:03.200 --> 00:00:05.590 All right. Good afternoon, everybody,
- NOTE Confidence: 0.9023378835
- $00{:}00{:}05{.}590 \dashrightarrow 00{:}00{:}07{.}980$  and we lcome to the classical
- NOTE Confidence: 0.9023378835
- $00:00:08.056 \dashrightarrow 00:00:10.446$  hematology review of the American
- NOTE Confidence: 0.9023378835
- 00:00:10.446 --> 00:00:13.296 Society of Hematology meeting in 2022.
- NOTE Confidence: 0.9023378835
- $00:00:13.296 \longrightarrow 00:00:15.576$  Thank you for joining us.
- NOTE Confidence: 0.9023378835
- $00{:}00{:}15{.}580 \dashrightarrow 00{:}00{:}16{.}860$  My name is Robert Bona.
- NOTE Confidence: 0.9023378835
- $00{:}00{:}16.860 \dashrightarrow 00{:}00{:}19.668$  I work here at Yale in the section of
- NOTE Confidence: 0.9023378835
- $00:00:19.668 \dashrightarrow 00:00:22.119$  hematology and I'm very excited and happy
- NOTE Confidence: 0.9023378835
- $00:00:22.119 \rightarrow 00:00:24.540$  to introduce our three speakers today.
- NOTE Confidence: 0.9023378835
- $00{:}00{:}24.540 \dashrightarrow 00{:}00{:}26.521$  I will be brief with their introductions
- NOTE Confidence: 0.9023378835
- 00:00:26.521 --> 00:00:28.531 since I don't want to take away
- NOTE Confidence: 0.9023378835
- $00{:}00{:}28.531 \dashrightarrow 00{:}00{:}30.193$  time from the important things that
- NOTE Confidence: 0.9023378835
- $00:00:30.253 \rightarrow 00:00:32.136$  they're going to talk with us about.
- NOTE Confidence: 0.9023378835

- $00{:}00{:}32{.}140 \dashrightarrow 00{:}00{:}34{.}366$ Lila van Doren. We'll begin our discussion.
- NOTE Confidence: 0.9023378835
- 00:00:34.370 --> 00:00:35.030 Lila joined.
- NOTE Confidence: 0.9023378835
- 00:00:35.030 --> 00:00:37.010 All three of our faculty actually
- NOTE Confidence: 0.9023378835
- $00:00:37.010 \rightarrow 00:00:38.869$  have joined the classical hematology
- NOTE Confidence: 0.9023378835
- $00{:}00{:}38.869 \dashrightarrow 00{:}00{:}41.143$  program at Yale this academic year.
- NOTE Confidence: 0.9023378835
- $00{:}00{:}41.150 \dashrightarrow 00{:}00{:}43.187$  And Lila joined us from Columbia and
- NOTE Confidence: 0.9023378835
- $00{:}00{:}43.187 \dashrightarrow 00{:}00{:}45.251$  she brings a wealth of experience
- NOTE Confidence: 0.9023378835
- $00:00:45.251 \longrightarrow 00:00:46.747$  and knowledge with her.
- NOTE Confidence: 0.9023378835
- $00{:}00{:}46.750 \dashrightarrow 00{:}00{:}49.262$  And at Yale she is going to be
- NOTE Confidence: 0.9023378835
- $00:00:49.262 \rightarrow 00:00:51.791$  focusing on sickle cell diseases and
- NOTE Confidence: 0.9023378835
- $00{:}00{:}51.791 \dashrightarrow 00{:}00{:}54.071$  iron disorders of iron hemostasis
- NOTE Confidence: 0.9023378835
- $00{:}00{:}54.071 \dashrightarrow 00{:}00{:}56.370$  in particular iron homeostasis in
- NOTE Confidence: 0.9023378835
- $00:00:56.370 \rightarrow 00:01:00.442$  particular in the area of Women's Health.
- NOTE Confidence: 0.9023378835
- $00:01:00.442 \longrightarrow 00:01:01.864$  Doctor Gashua,
- NOTE Confidence: 0.9023378835
- $00:01:01.864 \rightarrow 00:01:03.286$  Yale fellow.
- NOTE Confidence: 0.9023378835
- $00:01:03.290 \rightarrow 00:01:05.240$  And graduate of the Harvard Public

 $00:01:05.240 \dashrightarrow 00:01:07.664$  School of Health is focusing his work

NOTE Confidence: 0.9023378835

 $00{:}01{:}07.664 \dashrightarrow 00{:}01{:}10.530$  research work here at Yale on decision

NOTE Confidence: 0.9023378835

00:01:10.530 --> 00:01:13.660 science analysis and hematologic disorders.

NOTE Confidence: 0.9023378835

00:01:13.660 --> 00:01:15.704 And Annie Sharda joined us from the

NOTE Confidence: 0.9023378835

00:01:15.704 --> 00:01:17.400 Beth Israel Deaconess Medical Center.

NOTE Confidence: 0.9023378835

00:01:17.400 --> 00:01:20.376 He has a active laboratory program

NOTE Confidence: 0.9023378835

 $00{:}01{:}20{.}376 \dashrightarrow 00{:}01{:}22{.}923$  looking at endothelial function and

NOTE Confidence: 0.9023378835

 $00:01:22.923 \rightarrow 00:01:25.328$  in particular the expression and

NOTE Confidence: 0.9023378835

 $00:01:25.328 \dashrightarrow 00:01:27.860$  secretion of von Willebrand factor.

NOTE Confidence: 0.9023378835

00:01:27.860 --> 00:01:28.444 So again,

NOTE Confidence: 0.9023378835

 $00{:}01{:}28.444 \dashrightarrow 00{:}01{:}28.736$  we're,

NOTE Confidence: 0.9023378835

00:01:28.736 --> 00:01:31.153 I'm very excited to to to have them

NOTE Confidence: 0.9023378835

 $00{:}01{:}31{.}153 \dashrightarrow 00{:}01{:}33{.}633$  present their work to us today or their.

NOTE Confidence: 0.9023378835

 $00:01:33.640 \longrightarrow 00:01:37.245$  Their review of some of the ash.

NOTE Confidence: 0.9023378835

 $00{:}01{:}37.250 \dashrightarrow 00{:}01{:}40.256$  Up hot abstracts and please put

00:01:40.256 --> 00:01:43.093 your questions in the chat room

NOTE Confidence: 0.9023378835

 $00:01:43.093 \dashrightarrow 00:01:45.550$  or in the Q&A and we'll get to

NOTE Confidence: 0.9023378835

 $00{:}01{:}45{.}550 \dashrightarrow 00{:}01{:}47{.}020$  those at the end of the session.

NOTE Confidence: 0.9023378835

00:01:47.020 --> 00:01:49.324 Each of our presenters will present

NOTE Confidence: 0.9023378835

 $00:01:49.324 \longrightarrow 00:01:51.631$  for about 15 minutes and then

NOTE Confidence: 0.9023378835

 $00:01:51.631 \longrightarrow 00:01:53.737$  we'll take questions at the end.

NOTE Confidence: 0.9023378835

 $00:01:53.740 \longrightarrow 00:01:55.452$  So without further ado,

NOTE Confidence: 0.9023378835

00:01:55.452 --> 00:01:56.736 Doctor Van Dorn,

NOTE Confidence: 0.9023378835

 $00{:}01{:}56.740 \dashrightarrow 00{:}01{:}58.364$  would you like to get us started?

NOTE Confidence: 0.8177328866666667

00:01:59.840 - 00:02:05.906 Share my screen. And. There we go.

NOTE Confidence: 0.8177328866666667

 $00:02:05.906 \dashrightarrow 00:02:09.178$  OK, these are my disclosures. All right.

NOTE Confidence: 0.8177328866666667

 $00{:}02{:}09{.}180 \dashrightarrow 00{:}02{:}10{.}530$  These are the two abstracts that

NOTE Confidence: 0.8177328866666667

00:02:10.530 --> 00:02:12.280 I'm going to be discussing today,

NOTE Confidence: 0.8177328866666667

 $00:02:12.280 \longrightarrow 00:02:13.936$  so we'll just jump into it.

NOTE Confidence: 0.8177328866666667

00:02:13.940 --> 00:02:16.412 The first abstract is focused on

NOTE Confidence: 0.8177328866666667

 $00:02:16.412 \rightarrow 00:02:18.060$  inherited thrombophilia and pregnancy,

 $00:02:18.060 \rightarrow 00:02:21.640$  anticoagulation and thrombophilia testing.

NOTE Confidence: 0.8177328866666667

 $00:02:21.640 \dashrightarrow 00:02:24.080$  So I wanted to start out with the case first.

NOTE Confidence: 0.8177328866666667

00:02:24.080 --> 00:02:26.952 It's a 38 year old patient who presents

NOTE Confidence: 0.8177328866666667

 $00:02:26.952 \rightarrow 00:02:29.138$  for evaluation at 8 weeks gestation.

NOTE Confidence: 0.8177328866666667

 $00:02:29.140 \dashrightarrow 00:02:31.384$  She's the history of three miscarriages

NOTE Confidence: 0.8177328866666667

 $00:02:31.384 \longrightarrow 00:02:33.787$  in the first trimester anti phospholipid

NOTE Confidence: 0.8177328866666667

 $00:02:33.787 \rightarrow 00:02:36.319$  antibody testing was previously negative but

NOTE Confidence: 0.8177328866666667

 $00:02:36.319 \rightarrow 00:02:39.279$  she was found to be positive for Factor 5,

NOTE Confidence: 0.8177328866666667

 $00{:}02{:}39{.}280 \dashrightarrow 00{:}02{:}40{.}558$  Leiden heterozygous mutation.

NOTE Confidence: 0.8177328866666667

 $00:02:40.558 \rightarrow 00:02:43.540$  And the question is would you recommend

NOTE Confidence: 0.8177328866666667

 $00:02:43.605 \rightarrow 00:02:45.825$  anticoagulation during pregnancy for this

NOTE Confidence: 0.8177328866666667

 $00:02:45.825 \rightarrow 00:02:48.979$  patient to increase her chance of live birth?

NOTE Confidence: 0.8177328866666667

 $00{:}02{:}48.980 \dashrightarrow 00{:}02{:}51.122$  So the background is that studies

NOTE Confidence: 0.8177328866666667

 $00{:}02{:}51{.}122 \dashrightarrow 00{:}02{:}52{.}550$  have shown an association.

NOTE Confidence: 0.8177328866666667

00:02:52.550 --> 00:02:54.920 Between recurrent miscarriage and inherited

 $00:02:54.920 \rightarrow 00:02:57.620$  thrombophilia for women with a PLS,

NOTE Confidence: 0.8177328866666667

 $00{:}02{:}57{.}620 \dashrightarrow 00{:}02{:}59{.}879$  we know that the use of heparin or low

NOTE Confidence: 0.8177328866666667

 $00:02:59.879 \dashrightarrow 00:03:01.332$  molecular weight heparin and combined NOTE Confidence: 0.8177328866666667

 $00:03:01.332 \rightarrow 00:03:03.594$  with low dose aspirin is an effective

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}03{.}594 \dashrightarrow 00{:}03{:}05{.}518$  treatment for recurrent miscarriage.

NOTE Confidence: 0.8177328866666667

 $00:03:05.520 \rightarrow 00:03:08.411$  And the thought about the role of NOTE Confidence: 0.8177328866666667

 $00:03:08.411 \rightarrow 00:03:09.650$  thrombophilia recurrent miscarriage

NOTE Confidence: 0.8177328866666667

 $00:03:09.712 \rightarrow 00:03:11.889$  is that it can be explained partially

NOTE Confidence: 0.8177328866666667

00:03:11.889 --> 00:03:14.502 by the concept of throm<br/>bosis of the

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}14.502 \dashrightarrow 00{:}03{:}16.118$  microvasculature of the placenta.

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}16{.}120 \dashrightarrow 00{:}03{:}18{.}486$  And so it is thought that anticoagulant

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}18.486 \dashrightarrow 00{:}03{:}20.504$  therapy might reduce miscarriages and

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}20{.}504 \dashrightarrow 00{:}03{:}22{.}869$  adverse pregnancy outcomes in patients

NOTE Confidence: 0.8177328866666667

 $00:03:22.869 \dashrightarrow 00:03:24.799$  with inherited thrombophilia as well.

NOTE Confidence: 0.8177328866666667

00:03:24.800 --> 00:03:25.208 However,

NOTE Confidence: 0.8177328866666667

 $00{:}03{:}25{.}208 \dashrightarrow 00{:}03{:}27{.}248$  there's a lack of solid

- NOTE Confidence: 0.8177328866666667
- $00:03:27.248 \longrightarrow 00:03:28.880$  evidence for this practice.
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}28.880 \dashrightarrow 00{:}03{:}32.536$  And so in 2010 a study was published,
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}32{.}540 \dashrightarrow 00{:}03{:}35{.}676$  a life study that was a randomized
- NOTE Confidence: 0.8177328866666667
- 00:03:35.680 --> 00:03:37.393 placebo-controlled study investigating
- NOTE Confidence: 0.8177328866666667
- $00:03:37.393 \rightarrow 00:03:40.248$  whether aspirin plus low molecular
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}40{.}248 \dashrightarrow 00{:}03{:}42{.}672$  weight heparin or a spirin alone
- NOTE Confidence: 0.8177328866666667
- $00:03:42.672 \dashrightarrow 00:03:44.400$  combined on compared to place bo
- NOTE Confidence: 0.8177328866666667
- $00:03:44.400 \longrightarrow 00:03:46.050$  would improve the live birth.
- NOTE Confidence: 0.8177328866666667
- 00:03:46.050 --> 00:03:47.019 Among 364 women,
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}47.019 \dashrightarrow 00{:}03{:}48.957$  so there were three different arms
- NOTE Confidence: 0.8177328866666667
- $00:03:48.957 \rightarrow 00:03:50.962$  and what this study showed was
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}50.962 \dashrightarrow 00{:}03{:}52.958$  that there was no difference in
- NOTE Confidence: 0.8177328866666667
- $00{:}03{:}52{.}958 \dashrightarrow 00{:}03{:}54{.}842$  the live birth rates between the
- NOTE Confidence: 0.8177328866666667
- $00:03:54.842 \rightarrow 00:03:56.926$  study groups with the relative risk
- NOTE Confidence: 0.8177328866666667
- $00:03:56.926 \longrightarrow 00:04:00.070$  of 1.03 and in patient specific.
- NOTE Confidence: 0.8177328866666667

- 00:04:00.070 --> 00:04:00.438 Thrombophilia,
- NOTE Confidence: 0.8177328866666667
- 00:04:00.438 --> 00:04:02.278 there was also no difference,
- NOTE Confidence: 0.8177328866666667
- 00:04:02.280 --> 00:04:04.155 although the number of patients
- NOTE Confidence: 0.8177328866666667
- 00:04:04.155 --> 00:04:06.552 in the study with an inherited
- NOTE Confidence: 0.8177328866666667
- $00{:}04{:}06{.}552 \dashrightarrow 00{:}04{:}09{.}646$  thrombophilia were was very low and so.
- NOTE Confidence: 0.8177328866666667
- $00:04:09.650 \rightarrow 00:04:12.305$  Which brings us to the a life two study,
- NOTE Confidence: 0.8177328866666667
- $00:04:12.310 \longrightarrow 00:04:13.678$  the first abstract,
- NOTE Confidence: 0.8177328866666667
- $00:04:13.678 \rightarrow 00:04:16.110$  which was a late breaking abstract
- NOTE Confidence: 0.8177328866666667
- $00{:}04{:}16.110 \dashrightarrow 00{:}04{:}17.905$  at ASH in December 2022,
- NOTE Confidence: 0.8177328866666667
- $00:04:17.905 \rightarrow 00:04:20.105$  and it was ten years in the making.
- NOTE Confidence: 0.8177328866666667
- $00{:}04{:}20{.}110 \dashrightarrow 00{:}04{:}22{.}758$  So the objective of the A life two
- NOTE Confidence: 0.8177328866666667
- $00:04:22.758 \rightarrow 00:04:25.064$  study was specifically to evaluate
- NOTE Confidence: 0.8177328866666667
- $00:04:25.064 \rightarrow 00:04:27.026$  the efficacy of low molecular weight
- NOTE Confidence: 0.8177328866666667
- $00{:}04{:}27.026 \dashrightarrow 00{:}04{:}29.508$  heparin and women with an inherited
- NOTE Confidence: 0.8177328866666667
- $00:04:29.508 \rightarrow 00:04:31.280$  thrombophilia with recurrent miscarriage.
- NOTE Confidence: 0.8177328866666667
- $00:04:31.280 \longrightarrow 00:04:33.268$  And so the way this study was

- NOTE Confidence: 0.8177328866666667
- $00:04:33.268 \rightarrow 00:04:35.516$  designed is that patients who had a

 $00:04:35.516 \rightarrow 00:04:37.514$  history of two or more miscarriages

NOTE Confidence: 0.8177328866666667

 $00:04:37.583 \rightarrow 00:04:39.559$  with an inherited thrombophilia,

NOTE Confidence: 0.8177328866666667

 $00:04:39.560 \longrightarrow 00:04:41.576$  no more than seven weeks gestational

NOTE Confidence: 0.8177328866666667

 $00{:}04{:}41.576 \dashrightarrow 00{:}04{:}42.920$  age could be enrolled.

NOTE Confidence: 0.8177328866666667

 $00:04:42.920 \longrightarrow 00:04:44.838$  They were randomized 1 to one to

NOTE Confidence: 0.8177328866666667

 $00{:}04{:}44.838 \dashrightarrow 00{:}04{:}46.752$  receive either a low molecular weight

NOTE Confidence: 0.8177328866666667

 $00{:}04{:}46.752 \dashrightarrow 00{:}04{:}48.804$  heparin and those are the different

NOTE Confidence: 0.8177328866666667

 $00{:}04{:}48.804 \dashrightarrow 00{:}04{:}51.164$  ones that that were used in the study

NOTE Confidence: 0.8177328866666667

 $00:04:51.164 \rightarrow 00:04:53.147$  plus the standard of pregnancy care

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 $00:04:53.147 \rightarrow 00:04:55.800$  or a standard of pregnancy care alone.

NOTE Confidence: 0.8177328866666667

 $00{:}04{:}55{.}800 \dashrightarrow 00{:}04{:}57{.}966$  The outcomes was the primary efficacy

NOTE Confidence: 0.8177328866666667

00:04:57.966 --> 00:05:00.159 outcome was the live birth rate,

NOTE Confidence: 0.8177328866666667

 $00:05:00.160 \longrightarrow 00:05:00.988$  secondary efficacy.

NOTE Confidence: 0.8177328866666667

 $00{:}05{:}00{.}988 \dashrightarrow 00{:}05{:}02{.}644$  This miscarriage or adverse

 $00:05:02.644 \rightarrow 00:05:04.625$  obstetric outcomes and then safety

NOTE Confidence: 0.8177328866666667

 $00:05:04.625 \longrightarrow 00:05:05.960$  was looked at as well.

NOTE Confidence: 0.8177328866666667

 $00{:}05{:}05{.}960 \dashrightarrow 00{:}05{:}07{.}490$  And so these are the

NOTE Confidence: 0.8177328866666667

 $00:05:07.490 \rightarrow 00:05:08.714$  characteristics of the patients.

NOTE Confidence: 0.8177328866666667

 $00{:}05{:}08{.}720 \dashrightarrow 00{:}05{:}11{.}000$  The mean age was 33 and

NOTE Confidence: 0.8177328866666667

00:05:11.000 --> 00:05:12.520 the majority of patients

NOTE Confidence: 0.885496186875

 $00:05:12.607 \rightarrow 00:05:15.775$  actually had three or more miscarriages.

NOTE Confidence: 0.885496186875

 $00{:}05{:}15.780 \dashrightarrow 00{:}05{:}17.575$  The most common inherited thrombophilia

NOTE Confidence: 0.885496186875

00:05:17.575 --> 00:05:19.915 was the factor 5 Leiden heterozygous

NOTE Confidence: 0.885496186875

 $00:05:19.915 \rightarrow 00:05:22.335$  followed by prothrombin gene mutation,

NOTE Confidence: 0.885496186875

00:05:22.340 --> 00:05:24.420 heterozygous protein ESTA efficiency

NOTE Confidence: 0.885496186875

 $00{:}05{:}24{.}420 \dashrightarrow 00{:}05{:}28{.}216$  and then a mix of antithrom bin combined

NOTE Confidence: 0.885496186875

 $00{:}05{:}28.216 \dashrightarrow 00{:}05{:}31.804$  throm bophilias and then protein C deficiency.

NOTE Confidence: 0.885496186875

00:05:31.810 --> 00:05:34.258 And the outcome of the study was that there NOTE Confidence: 0.885496186875

 $00{:}05{:}34.258 \dashrightarrow 00{:}05{:}36.675$  was no difference between the standard of

NOTE Confidence: 0.885496186875

 $00:05:36.675 \rightarrow 00:05:39.068$  care and low molecular weight heparin plus

- NOTE Confidence: 0.885496186875
- $00:05:39.068 \rightarrow 00:05:41.576$  standard of care in the live birth rate.
- NOTE Confidence: 0.885496186875
- $00:05:41.576 \longrightarrow 00:05:43.934$  So the odds ratio was 1.04 when
- NOTE Confidence: 0.885496186875
- $00:05:43.934 \rightarrow 00:05:45.869$  this was adjusted for age.
- NOTE Confidence: 0.885496186875
- $00:05:45.870 \longrightarrow 00:05:47.616$  So less than or greater than
- NOTE Confidence: 0.885496186875
- $00:05:47.616 \rightarrow 00:05:49.530$  or equal to 36 years old,
- NOTE Confidence: 0.885496186875
- $00{:}05{:}49{.}530 \dashrightarrow 00{:}05{:}51{.}945$  the number of miscarriages or the center.
- NOTE Confidence: 0.885496186875
- $00{:}05{:}51{.}950 \dashrightarrow 00{:}05{:}54{.}134$  So if the patient was treated at a
- NOTE Confidence: 0.885496186875
- $00:05:54.134 \rightarrow 00:05:56.107$  tertiary center or a non tertiary center,
- NOTE Confidence: 0.885496186875
- $00:05:56.110 \rightarrow 00:05:59.064$  or by country UK versus the Netherlands,
- NOTE Confidence: 0.885496186875
- $00{:}05{:}59{.}070 \dashrightarrow 00{:}06{:}00{.}555$  there was still no difference
- NOTE Confidence: 0.885496186875
- 00:06:00.555 --> 00:06:02.040 between the live birth rate.
- NOTE Confidence: 0.885496186875
- $00{:}06{:}02{.}040 \dashrightarrow 00{:}06{:}04{.}768$  In the different arms.
- NOTE Confidence: 0.885496186875
- 00:06:04.770 --> 00:06:06.595 In terms of the differences
- NOTE Confidence: 0.885496186875
- $00{:}06{:}06{.}595 \dashrightarrow 00{:}06{:}07{.}690$  in adverse effects,
- NOTE Confidence: 0.885496186875
- $00{:}06{:}07.690 \dashrightarrow 00{:}06{:}10.266$  there were more adverse effects in patients
- NOTE Confidence: 0.885496186875

 $00:06:10.266 \rightarrow 00:06:12.250$  receiving low molecular weight heparin,

NOTE Confidence: 0.885496186875

 $00{:}06{:}12.250 \dashrightarrow 00{:}06{:}13.782$  such as easy bruising,

NOTE Confidence: 0.885496186875

00:06:13.782 --> 00:06:14.548 skin reactions,

NOTE Confidence: 0.885496186875

 $00:06:14.550 \rightarrow 00:06:17.886$  that injection site and minor bleeding.

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 $00:06:17.890 \dashrightarrow 00:06:19.997$  And so the conclusions of this study

NOTE Confidence: 0.885496186875

 $00{:}06{:}19{.}997 \dashrightarrow 00{:}06{:}22{.}005$  was that low molecular weight heparin NOTE Confidence: 0.885496186875

 $00:06:22.005 \dashrightarrow 00:06:24.709$  did not result in a higher life birth

NOTE Confidence: 0.885496186875

 $00{:}06{:}24.709 \dashrightarrow 00{:}06{:}26.732$  rate in women who had greater than

NOTE Confidence: 0.885496186875

00:06:26.732 --> 00:06:29.665 or equal to two pregnancy losses and NOTE Confidence: 0.885496186875

 $00:06:29.665 \longrightarrow 00:06:31.039$  confirmed inherited thrombophilia.

NOTE Confidence: 0.885496186875

 $00:06:31.040 \dashrightarrow 00:06:33.280$  And the recommendation is to not use NOTE Confidence: 0.885496186875

 $00{:}06{:}33{.}280 \dashrightarrow 00{:}06{:}35{.}487$  low molecular weight heparin in women

NOTE Confidence: 0.885496186875

 $00:06:35.487 \rightarrow 00:06:37.457$  with recurrent pregnancy loss and

NOTE Confidence: 0.885496186875

 $00:06:37.457 \rightarrow 00:06:38.763$  confirmed inherited thrombophilias

NOTE Confidence: 0.885496186875

 $00:06:38.763 \rightarrow 00:06:40.607$  to prevent pregnancy loss.

NOTE Confidence: 0.885496186875

 $00:06:40.610 \rightarrow 00:06:44.348$  And so this also speaks to,

- NOTE Confidence: 0.885496186875
- 00:06:44.350 --> 00:06:45.408 not against,
- NOTE Confidence: 0.885496186875
- $00{:}06{:}45{.}408 \dashrightarrow 00{:}06{:}48{.}053$  the routine testing for inherited
- NOTE Confidence: 0.885496186875
- $00{:}06{:}48.053 \dashrightarrow 00{:}06{:}50.302$  thrombophilia in women with
- NOTE Confidence: 0.885496186875
- $00:06:50.302 \rightarrow 00:06:52.030$  recurrent pregnancy loss.
- NOTE Confidence: 0.885496186875
- $00{:}06{:}52.030 \dashrightarrow 00{:}06{:}54.226$  So that is the first abstract.
- NOTE Confidence: 0.885496186875
- $00{:}06{:}54.230 \dashrightarrow 00{:}06{:}56.360$  The second abstract will focus on
- NOTE Confidence: 0.885496186875
- 00:06:56.360 --> 00:06:58.114 sickle cell disease, diarrhea,
- NOTE Confidence: 0.885496186875
- $00:06:58.114 \dashrightarrow 00:07:00.850$  and diminished ovarian reserve.
- NOTE Confidence: 0.885496186875
- 00:07:00.850 --> 00:07:02.029 So second case,
- NOTE Confidence: 0.885496186875
- 00:07:02.029 --> 00:07:05.200 a patient comes to you 12 years old.
- NOTE Confidence: 0.885496186875
- $00:07:05.200 \rightarrow 00:07:07.671$  She has a history of avascular necrosis
- NOTE Confidence: 0.885496186875
- $00:07:07.671 \longrightarrow 00:07:10.101$  and very rare vasal clusive crises
- NOTE Confidence: 0.885496186875
- $00{:}07{:}10.101 \dashrightarrow 00{:}07{:}12.266$  she presents for initial visit.
- NOTE Confidence: 0.885496186875
- 00:07:12.270 --> 00:07:14.225 During the visit you discussed
- NOTE Confidence: 0.885496186875
- 00:07:14.225 --> 00:07:16.180 the importance of hydroxyurea as
- NOTE Confidence: 0.885496186875

00:07:16.242 --> 00:07:17.978 a disease modifying therapy.

NOTE Confidence: 0.885496186875

 $00{:}07{:}17{.}980 \dashrightarrow 00{:}07{:}19{.}768$  She notes that her previous provider

NOTE Confidence: 0.885496186875

 $00:07:19.768 \dashrightarrow 00:07:22.175$  told her she does not require hydroxy urea

NOTE Confidence: 0.885496186875

00:07:22.175 - 00:07:24.105 therapy due to infrequent basal,

NOTE Confidence: 0.885496186875

 $00{:}07{:}24.110 \dashrightarrow 00{:}07{:}24.916$  occlusive crises.

NOTE Confidence: 0.885496186875

00:07:24.916 --> 00:07:25.722 But furthermore,

NOTE Confidence: 0.885496186875

 $00:07:25.722 \rightarrow 00:07:28.820$  most concern for her is a Facebook,

NOTE Confidence: 0.885496186875

 $00{:}07{:}28.820 \dashrightarrow 00{:}07{:}30.955$  Facebook group that she's a part of

NOTE Confidence: 0.885496186875

00:07:30.955 --> 00:07:32.680 recommends not taking it for those

NOTE Confidence: 0.885496186875

 $00{:}07{:}32.680 \dashrightarrow 00{:}07{:}34.437$  who desire to have children in the

NOTE Confidence: 0.885496186875

 $00:07:34.499 \longrightarrow 00:07:36.317$  future as it leads to infertility.

NOTE Confidence: 0.885496186875

 $00{:}07{:}36{.}320 \dashrightarrow 00{:}07{:}39{.}731$  So there is quite a bit of evidence for

NOTE Confidence: 0.885496186875

 $00:07:39.731 \dashrightarrow 00:07:41.897$  hydroxyurea and fertility in males.

NOTE Confidence: 0.885496186875

 $00:07:41.900 \rightarrow 00:07:45.356$  We know that it leads to lower sperm counts.

NOTE Confidence: 0.885496186875

00:07:45.360 --> 00:07:47.898 Which improves with cessation of hydroxyurea.

NOTE Confidence: 0.885496186875

 $00:07:47.900 \longrightarrow 00:07:50.020$  But we don't have a lot of data

- NOTE Confidence: 0.885496186875
- $00:07:50.020 \rightarrow 00:07:52.005$  available for the use of hydroxyurea
- NOTE Confidence: 0.885496186875
- $00{:}07{:}52.005 \dashrightarrow 00{:}07{:}54.093$  and diminished ovarian reserve in in
- NOTE Confidence: 0.885496186875
- $00:07:54.152 \longrightarrow 00:07:56.570$  female patients with sickle cell disease.
- NOTE Confidence: 0.885496186875
- $00:07:56.570 \rightarrow 00:07:59.180$  And so from the evidence that we do have,
- NOTE Confidence: 0.885496186875
- $00{:}07{:}59{.}180 \dashrightarrow 00{:}08{:}01{.}343$  we do know that patients with sickle
- NOTE Confidence: 0.885496186875
- $00:08:01.343 \longrightarrow 00:08:03.723$  cell disease have a higher rate of
- NOTE Confidence: 0.885496186875
- $00{:}08{:}03.723 \dashrightarrow 00{:}08{:}05.119$  diminished ovarian reserve compared
- NOTE Confidence: 0.885496186875
- $00:08:05.119 \longrightarrow 00:08:07.020$  to those who are age and age,
- NOTE Confidence: 0.885496186875
- $00{:}08{:}07{.}020 \dashrightarrow 00{:}08{:}10{.}149$  race and sex match to to patients
- NOTE Confidence: 0.885496186875
- $00:08:10.149 \longrightarrow 00:08:12.300$  with sickle cell disease,
- NOTE Confidence: 0.885496186875
- $00:08:12.300 \longrightarrow 00:08:14.372$  there is much more of a sharper
- NOTE Confidence: 0.885496186875
- $00:08:14.372 \longrightarrow 00:08:15.260$  trajectory of decline.
- NOTE Confidence: 0.885496186875
- $00{:}08{:}15{.}260 \dashrightarrow 00{:}08{:}16{.}744$  Of diminished ovarian reserve.
- NOTE Confidence: 0.885496186875
- $00{:}08{:}16.744 \dashrightarrow 00{:}08{:}19.526$  And the thought is that this is and
- NOTE Confidence: 0.885496186875
- $00:08:19.526 \longrightarrow 00:08:21.486$  it was a theory again it had not
- NOTE Confidence: 0.786146952608696

00:08:21.553 --> 00:08:22.999 previously been proven.

NOTE Confidence: 0.786146952608696

 $00{:}08{:}23.000 \dashrightarrow 00{:}08{:}25.544$  The thought is that this is related to

NOTE Confidence: 0.786146952608696

 $00:08:25.544 \rightarrow 00:08:27.660$  hemolysis and anemia based occlusion.

NOTE Confidence: 0.786146952608696

 $00:08:27.660 \longrightarrow 00:08:30.000$  Basically any organ that can be

NOTE Confidence: 0.786146952608696

00:08:30.000 --> 00:08:32.200 affected by sickle cell disease,

NOTE Confidence: 0.786146952608696

 $00:08:32.200 \rightarrow 00:08:33.460$  which is every organ in the body,

NOTE Confidence: 0.786146952608696

 $00:08:33.460 \longrightarrow 00:08:35.204$  the ovaries included, can.

NOTE Confidence: 0.786146952608696

 $00{:}08{:}35{.}204 \dashrightarrow 00{:}08{:}37{.}384$  This can all lead to

NOTE Confidence: 0.786146952608696

 $00{:}08{:}37{.}384 \dashrightarrow 00{:}08{:}39{.}099$  diminished ovarian reserve.

NOTE Confidence: 0.786146952608696

 $00:08:39.100 \rightarrow 00:08:41.116$  And one thing that we don't know

NOTE Confidence: 0.786146952608696

00:08:41.116 --> 00:08:43.400 is that is hydroxy hydroxy urea,

NOTE Confidence: 0.786146952608696

 $00:08:43.400 \longrightarrow 00:08:45.276$  is it a friend or a foe?

NOTE Confidence: 0.786146952608696

 $00:08:45.280 \longrightarrow 00:08:48.220$  So we know that hydroxyurea causes.

NOTE Confidence: 0.786146952608696

00:08:48.220 --> 00:08:49.800 Reduction and disease severity.

NOTE Confidence: 0.786146952608696

 $00:08:49.800 \rightarrow 00:08:53.299$  So in theory it should be preventing this

NOTE Confidence: 0.786146952608696

 $00:08:53.299 \rightarrow 00:08:55.924$  accelerated age-related loss of eggs,

- NOTE Confidence: 0.786146952608696
- $00:08:55.930 \rightarrow 00:08:59.129$  but does it actually also contribute to
- NOTE Confidence: 0.786146952608696
- $00:08:59.129 \rightarrow 00:09:01.578$  the accelerated age-related loss of eggs?
- NOTE Confidence: 0.786146952608696
- $00{:}09{:}01{.}578 \dashrightarrow 00{:}09{:}03{.}870$  And that is the question that
- NOTE Confidence: 0.786146952608696
- $00{:}09{:}03{.}943 \dashrightarrow 00{:}09{:}05{.}887$  we don't know the answer to.
- NOTE Confidence: 0.786146952608696
- 00:09:05.890 00:09:08.260 And so this study was actually
- NOTE Confidence: 0.786146952608696
- $00:09:08.260 \rightarrow 00:09:10.390$  this is a background study.
- NOTE Confidence: 0.786146952608696
- $00:09:10.390 \rightarrow 00:09:13.407$  So this was done from the MULTICENTRIC
- NOTE Confidence: 0.786146952608696
- 00:09:13.407 -> 00:09:15.935 study of hydroxyurea and it was
- NOTE Confidence: 0.786146952608696
- $00{:}09{:}15{.}935 \dashrightarrow 00{:}09{:}18{.}257$  the pivotal trial that showed the
- NOTE Confidence: 0.786146952608696
- $00:09:18.257 \rightarrow 00:09:20.532$  benefits of hydroxyurea in patients
- NOTE Confidence: 0.786146952608696
- $00:09:20.532 \dashrightarrow 00:09:23.250$  to present to prevent organ damage.
- NOTE Confidence: 0.786146952608696
- $00{:}09{:}23.250 \dashrightarrow 00{:}09{:}25.490$  And what this shows here is that
- NOTE Confidence: 0.786146952608696
- $00:09:25.490 \longrightarrow 00:09:27.889$  you can see at every age level
- NOTE Confidence: 0.786146952608696
- $00:09:27.889 \longrightarrow 00:09:29.589$  starting from 20 to 25,
- NOTE Confidence: 0.786146952608696
- $00:09:29.590 \rightarrow 00:09:32.550$  we see that there's an age associated decline
- NOTE Confidence: 0.786146952608696

 $00:09:32.550 \longrightarrow 00:09:35.634$  in the AM H level which is a marker of.

NOTE Confidence: 0.786146952608696

 $00:09:35.640 \rightarrow 00:09:37.896$  Administration ovarian reserve when the MH

NOTE Confidence: 0.786146952608696

00:09:37.896 --> 00:09:40.716 level is less than 1.1 nanograms per ML.

NOTE Confidence: 0.786146952608696

 $00:09:40.716 \longrightarrow 00:09:42.361$  This contributes to the definition

NOTE Confidence: 0.786146952608696

 $00:09:42.361 \dashrightarrow 00:09:44.258$  of diminished ovarian reserve.

NOTE Confidence: 0.786146952608696

 $00{:}09{:}44.260 \dashrightarrow 00{:}09{:}46.444$  The dark lines here are the median

NOTE Confidence: 0.786146952608696

 $00:09:46.444 \dashrightarrow 00:09:48.312$  age control match ADH levels and

NOTE Confidence: 0.786146952608696

 $00:09:48.312 \rightarrow 00:09:50.328$  the the Gray boxes here these

NOTE Confidence: 0.786146952608696

 $00:09:50.395 \longrightarrow 00:09:52.200$  are patients with sickle cell.

NOTE Confidence: 0.786146952608696

 $00:09:52.200 \rightarrow 00:09:55.780$  So we see even at age 20 to 25 years old,

NOTE Confidence: 0.786146952608696

 $00:09:55.780 \dashrightarrow 00:09:58.727$  there is lower a MH levels compared

NOTE Confidence: 0.786146952608696

 $00:09:58.727 \longrightarrow 00:10:01.394$  to the controls and it's not until

NOTE Confidence: 0.786146952608696

 $00:10:01.394 \longrightarrow 00:10:04.119$  age 40 to 46 where we see that

NOTE Confidence: 0.786146952608696

 $00:10:04.120 \longrightarrow 00:10:06.238$  the controls as well as patients.

NOTE Confidence: 0.786146952608696

 $00:10:06.240 \longrightarrow 00:10:08.550$  Sickle cell disease both have

NOTE Confidence: 0.786146952608696

 $00:10:08.550 \longrightarrow 00:10:13.030$  AMH levels of less than 1.1.

 $00:10:13.030 \longrightarrow 00:10:15.186$  And so we what do we know?

NOTE Confidence: 0.786146952608696

 $00{:}10{:}15{.}190 \dashrightarrow 00{:}10{:}17{.}549$  We know that patients with sickle cell

NOTE Confidence: 0.786146952608696

 $00:10:17.549 \rightarrow 00:10:19.639$  have higher rates of diminished ovarian

NOTE Confidence: 0.786146952608696

 $00:10:19.639 \rightarrow 00:10:22.669$  reserve at least starting 25 to 30 years old.

NOTE Confidence: 0.786146952608696

 $00{:}10{:}22.670 \dashrightarrow 00{:}10{:}24.118$  The relationship between diminished

NOTE Confidence: 0.786146952608696

00:10:24.118 --> 00:10:25.566 ovarian reserve and pregnancy

NOTE Confidence: 0.786146952608696

 $00{:}10{:}25{.}566$  -->  $00{:}10{:}27{.}475$  outcomes and live births in sickle

NOTE Confidence: 0.786146952608696

00:10:27.475 --> 00:10:28.890 cell does require further study

NOTE Confidence: 0.786146952608696

 $00{:}10{:}28.890 \dashrightarrow 00{:}10{:}30.266$  because that doesn't answer the

NOTE Confidence: 0.786146952608696

 $00{:}10{:}30{.}266 \dashrightarrow 00{:}10{:}32{.}195$  question we don't have an answer to.

NOTE Confidence: 0.786146952608696

 $00:10:32.195 \rightarrow 00:10:34.385$  But the data regarding venata toxicity

NOTE Confidence: 0.786146952608696

 $00{:}10{:}34{.}385 \dashrightarrow 00{:}10{:}37{.}227$  in women with sickle cell disease who

NOTE Confidence: 0.786146952608696

 $00{:}10{:}37{.}227 \dashrightarrow 00{:}10{:}39{.}327$  are taking hydroxy urea is limited,

NOTE Confidence: 0.786146952608696

 $00{:}10{:}39{.}330 \dashrightarrow 00{:}10{:}41{.}225$  and it's thought that hydroxy urea

NOTE Confidence: 0.786146952608696

 $00{:}10{:}41.225 \dashrightarrow 00{:}10{:}43.120$  use might be a surrogate.

 $00:10:43.120 \longrightarrow 00:10:45.325$  The disease severity rather than

NOTE Confidence: 0.786146952608696

00:10:45.325 --> 00:10:47.089 the hydroxyurea itself causing

NOTE Confidence: 0.786146952608696

 $00:10:47.089 \longrightarrow 00:10:48.549$  diminished ovarian reserve.

NOTE Confidence: 0.786146952608696

 $00:10:48.550 \rightarrow 00:10:52.134$  And so this is an next abstract and

NOTE Confidence: 0.786146952608696

 $00{:}10{:}52{.}134 \dashrightarrow 00{:}10{:}55{.}492$  their study aimed to assess this

NOTE Confidence: 0.786146952608696

 $00:10:55.492 \longrightarrow 00:10:58.447$  does hydroxyurea and does basal

NOTE Confidence: 0.786146952608696

 $00{:}10{:}58{.}447 \dashrightarrow 00{:}11{:}01{.}062$  occlusive crises cause diminished

NOTE Confidence: 0.786146952608696

00:11:01.062 --> 00:11:03.090 ovarian follicle density?

NOTE Confidence: 0.786146952608696

 $00{:}11{:}03.090 \dashrightarrow 00{:}11{:}05.556$  And in girls and young females

NOTE Confidence: 0.786146952608696

 $00:11:05.556 \longrightarrow 00:11:07.200$  with sickle cell disease?

NOTE Confidence: 0.786146952608696

00:11:07.200 --> 00:11:08.608 And so this study,

NOTE Confidence: 0.786146952608696

 $00:11:08.608 \rightarrow 00:11:10.720$  it was designed 88 patients with

NOTE Confidence: 0.786146952608696

00:11:10.794 --> 00:11:13.349 hemoglobin s s genotype underwent

NOTE Confidence: 0.786146952608696

 $00:11:13.349 \rightarrow 00:11:14.882$  ovarian tissue cryopreservation

NOTE Confidence: 0.786146952608696

 $00:11:14.882 \longrightarrow 00:11:17.430$  prior to stem cell transplant.

NOTE Confidence: 0.786146952608696

 $00{:}11{:}17{.}430 \dashrightarrow 00{:}11{:}19{.}466$  Ovarian tissue was evaluated

- NOTE Confidence: 0.786146952608696
- $00:11:19.466 \rightarrow 00:11:21.502$  histologically by two independent
- NOTE Confidence: 0.786146952608696
- $00:11:21.502 \rightarrow 00:11:23.465$  investigators and the primary
- NOTE Confidence: 0.786146952608696
- $00:11:23.465 \rightarrow 00:11:25.650$  outcome was ovarian follicle density
- NOTE Confidence: 0.786146952608696
- $00:11:25.650 \rightarrow 00:11:28.200$  and here are the characteristics.
- NOTE Confidence: 0.786146952608696
- $00:11:28.200 \longrightarrow 00:11:29.760$  So most of the patients had
- NOTE Confidence: 0.786146952608696
- $00:11:29.760 \longrightarrow 00:11:30.540$  not reached puberty.
- NOTE Confidence: 0.786146952608696
- $00:11:30.540 \rightarrow 00:11:33.991$  Puberty of 45% were treated with hydroxyurea
- NOTE Confidence: 0.786146952608696
- 00:11:33.991 00:11:37.427 with a median dose of 23 milligrams.
- NOTE Confidence: 0.786146952608696
- $00:11:37.430 \longrightarrow 00:11:39.295$  It's per kilogram and the
- NOTE Confidence: 0.786146952608696
- 00:11:39.295 --> 00:11:41.160 vast majority of patients did
- NOTE Confidence: 0.692494187142857
- $00:11:41.230 \longrightarrow 00:11:43.130$  report vasal clusive crisis.
- NOTE Confidence: 0.692494187142857
- 00:11:43.130 --> 00:11:45.986 Of those patients who had vasoactive crisis,
- NOTE Confidence: 0.692494187142857
- $00:11:45.990 \longrightarrow 00:11:48.454 49\%$  were on hydroxyurea.
- NOTE Confidence: 0.692494187142857
- 00:11:48.454 --> 00:11:50.940 94% of patients receive pack red
- NOTE Confidence: 0.692494187142857
- 00:11:50.940 --> 00:11:53.209 blood cell transfusion at some point
- NOTE Confidence: 0.692494187142857

 $00:11:53.209 \longrightarrow 00:11:55.540$  with the median applied units of 22.

NOTE Confidence: 0.692494187142857

 $00{:}11{:}55{.}540 \dashrightarrow 00{:}11{:}57{.}668$  And so the outcome of the study showed

NOTE Confidence: 0.692494187142857

 $00:11:57.668 \rightarrow 00:11:59.731$  that the follicle density was similar

NOTE Confidence: 0.692494187142857

 $00:11:59.731 \rightarrow 00:12:01.939$  in the hydroxyurea group compared to

NOTE Confidence: 0.692494187142857

 $00:12:01.997 \rightarrow 00:12:03.977$  those without hydroxyurea exposure.

NOTE Confidence: 0.692494187142857

 $00{:}12{:}03{.}980 \dashrightarrow 00{:}12{:}05{.}640$  But for the first time,

NOTE Confidence: 0.692494187142857

 $00:12:05.640 \longrightarrow 00:12:08.184$  a study did show that the follicle density

NOTE Confidence: 0.692494187142857

 $00:12:08.184 \rightarrow 00:12:09.809$  was significantly higher in patients

NOTE Confidence: 0.692494187142857

 $00{:}12{:}09{.}809 \dashrightarrow 00{:}12{:}11{.}993$  who did not have vasal occlusive crisis.

NOTE Confidence: 0.692494187142857

 $00:12:12.000 \longrightarrow 00:12:14.532$  And so this suggests that it's

NOTE Confidence: 0.692494187142857

 $00{:}12{:}14.532 \dashrightarrow 00{:}12{:}16.809$  actually the disease itself rather

NOTE Confidence: 0.692494187142857

 $00:12:16.809 \rightarrow 00:12:19.359$  than hydroxyurea that is leading

NOTE Confidence: 0.692494187142857

 $00{:}12{:}19{.}359 \dashrightarrow 00{:}12{:}21{.}399$  to diminished ovarian reserve.

NOTE Confidence: 0.692494187142857

 $00:12:21.400 \longrightarrow 00:12:23.248$  And so the conclusions of this

NOTE Confidence: 0.692494187142857

00:12:23.248 --> 00:12:24.900 study as as I said,

NOTE Confidence: 0.692494187142857

 $00:12:24.900 \rightarrow 00:12:27.294$  were the hydroxyurea exposure did not

- NOTE Confidence: 0.692494187142857
- 00:12:27.294 --> 00:12:29.799 appear to reduce cortical follicle density
- NOTE Confidence: 0.692494187142857
- $00{:}12{:}29.799 \dashrightarrow 00{:}12{:}32.319$  in females with sickle cell disease.
- NOTE Confidence: 0.692494187142857
- $00:12:32.320 \longrightarrow 00:12:33.420$  And for the first time,
- NOTE Confidence: 0.692494187142857
- $00:12:33.420 \rightarrow 00:12:35.226$  the study could show an influence
- NOTE Confidence: 0.692494187142857
- 00:12:35.226 --> 00:12:37.499 of VOC on ovarian follicle density,
- NOTE Confidence: 0.692494187142857
- $00:12:37.500 \rightarrow 00:12:39.803$  possibly related to reduced blood flow and
- NOTE Confidence: 0.692494187142857
- $00:12:39.803 \rightarrow 00:12:42.157$  all the effects of sickle cell disease.
- NOTE Confidence: 0.692494187142857
- $00:12:42.160 \longrightarrow 00:12:45.946$  What we don't know is what.
- NOTE Confidence: 0.692494187142857
- $00:12:45.950 \longrightarrow 00:12:46.822$  What the?
- NOTE Confidence: 0.692494187142857
- 00:12:46.822 --> 00:12:49.002 Ovarian follicle density would look
- NOTE Confidence: 0.692494187142857
- $00:12:49.002 \longrightarrow 00:12:52.492$  like in a patient who has been on
- NOTE Confidence: 0.692494187142857
- $00:12:52.492 \rightarrow 00:12:55.390$  hydroxyurea for a much longer duration,
- NOTE Confidence: 0.692494187142857
- $00{:}12{:}55{.}390 \dashrightarrow 00{:}12{:}57{.}987$  because the median age of the patients
- NOTE Confidence: 0.692494187142857
- $00{:}12{:}57{.}987 \dashrightarrow 00{:}13{:}00{.}530$  in this study was nine years old.
- NOTE Confidence: 0.692494187142857
- $00{:}13{:}00{.}530 \dashrightarrow 00{:}13{:}03{.}008$  And the evidence that we have for
- NOTE Confidence: 0.692494187142857

 $00:13:03.008 \rightarrow 00:13:04.481$  diminished ovarian reserve and

NOTE Confidence: 0.692494187142857

 $00{:}13{:}04{.}481 \dashrightarrow 00{:}13{:}06{.}196$  patients with sickle cell really

NOTE Confidence: 0.692494187142857

00:13:06.196 --> 00:13:08.219 starts at age between 20 and 25,

NOTE Confidence: 0.692494187142857

 $00:13:08.220 \longrightarrow 00:13:09.990$  that multicenter study of hydroxyurea

NOTE Confidence: 0.692494187142857

 $00{:}13{:}09{.}990 \dashrightarrow 00{:}13{:}11{.}760$  that I showed you previously.

NOTE Confidence: 0.863884502777778

 $00{:}13{:}13{.}860 \dashrightarrow 00{:}13{:}15{.}920$  And lastly, longitudinal data are

NOTE Confidence: 0.86388450277778

 $00:13:15.920 \longrightarrow 00:13:18.546$  needed to evaluate if genotype and

NOTE Confidence: 0.863884502777778

 $00{:}13{:}18{.}546 \dashrightarrow 00{:}13{:}20{.}542$  severity of disease accelerate

NOTE Confidence: 0.863884502777778

 $00:13:20.542 \longrightarrow 00:13:22.039$  diminished ovarian reserve.

NOTE Confidence: 0.863884502777778

 $00:13:22.040 \longrightarrow 00:13:23.510$  Thank you and that's it.

NOTE Confidence: 0.8675334875

 $00{:}13{:}30{.}250 \dashrightarrow 00{:}13{:}32{.}770$  It is a pleasure to follow Doctor Vandoren,

NOTE Confidence: 0.8675334875

 $00:13:32.770 \rightarrow 00:13:35.857$  and so I will take over the screen sharing.

NOTE Confidence: 0.91067636

 $00{:}13{:}39{.}360 \dashrightarrow 00{:}13{:}41{.}960$ Beautiful. Good afternoon, everyone.

NOTE Confidence: 0.91067636

00:13:41.960 --> 00:13:43.080 Thank you for joining.

NOTE Confidence: 0.91067636

00:13:43.080 --> 00:13:44.460 My name is George Joshua.

NOTE Confidence: 0.91067636

 $00:13:44.460 \longrightarrow 00:13:46.542$  I am an assistant professor of

- NOTE Confidence: 0.91067636
- $00:13:46.542 \rightarrow 00:13:48.459$  medicine and hematology here at Yale,
- NOTE Confidence: 0.91067636
- $00{:}13{:}48{.}460 \dashrightarrow 00{:}13{:}52{.}107$  and I'm the Pi for a quantitative
- NOTE Confidence: 0.91067636
- $00:13:52.107 \longrightarrow 00:13:54.699$  decision sign and some lab.
- NOTE Confidence: 0.91067636
- $00:13:54.700 \longrightarrow 00:13:56.100$  So without further ado,
- NOTE Confidence: 0.91067636
- $00:13:56.100 \longrightarrow 00:13:58.900$  let's talk about 3 hard hitting abstracts.
- NOTE Confidence: 0.91067636
- $00{:}13{:}58{.}900 \dashrightarrow 00{:}14{:}00{.}540$  I have no disclosures.
- NOTE Confidence: 0.91067636
- $00:14:00.540 \rightarrow 00:14:03.170$  The first, we're gonna go and talk
- NOTE Confidence: 0.91067636
- 00:14:03.170 --> 00:14:04.980 through cold gluten and disease
- NOTE Confidence: 0.91067636
- $00{:}14{:}05{.}047 \dashrightarrow 00{:}14{:}06{.}889$  and immune thrombocytopenia.
- NOTE Confidence: 0.91067636
- $00:14:06.890 \rightarrow 00:14:09.450$  We're going to start with all of these,
- NOTE Confidence: 0.91067636
- $00:14:09.450 \longrightarrow 00:14:10.790$  by the way, our orals,
- NOTE Confidence: 0.91067636
- $00{:}14{:}10.790 \dashrightarrow 00{:}14{:}11.870$  one of them is a plenary,
- NOTE Confidence: 0.91067636
- $00:14:11.870 \longrightarrow 00:14:14.206$  as I'll point out in the next talk.
- NOTE Confidence: 0.91067636
- $00{:}14{:}14{.}210 \dashrightarrow 00{:}14{:}16{.}858$  And the last talk will be focused on
- NOTE Confidence: 0.91067636
- $00{:}14{:}16.858 \dashrightarrow 00{:}14{:}19.183$  a phenomenal study actually done by
- NOTE Confidence: 0.91067636

 $00{:}14{:}19{.}183 \dashrightarrow 00{:}14{:}21{.}571$  a trainee from the Cleveland Clinic.

NOTE Confidence: 0.91067636

00:14:21.580 --> 00:14:23.505 So talking about patient reported

NOTE Confidence: 0.91067636

 $00{:}14{:}23.505 \dashrightarrow 00{:}14{:}26.282$  outcomes 1st and septima abuse and our NOTE Confidence: 0.91067636

 $00:14:26.282 \rightarrow 00:14:28.257$  patients with cold agglutinin disease.

NOTE Confidence: 0.91067636

 $00{:}14{:}28{.}260 \dashrightarrow 00{:}14{:}31{.}277$  And so this is the schematic for

NOTE Confidence: 0.91067636

 $00{:}14{:}31{.}277 \dashrightarrow 00{:}14{:}35{.}014$  cadenza and this is a trial that

NOTE Confidence: 0.91067636

 $00{:}14{:}35{.}014 \dashrightarrow 00{:}14{:}37{.}370$  focused on transfusion independent

NOTE Confidence: 0.91067636

 $00:14:37.370 \longrightarrow 00:14:40.748$  individuals with cold agglutinin disease.

NOTE Confidence: 0.91067636

00:14:40.750 --> 00:14:42.414 You can see part A and Part B.

NOTE Confidence: 0.91067636

 $00{:}14{:}42{.}420 \dashrightarrow 00{:}14{:}44{.}772$  Part A has been reported on

NOTE Confidence: 0.91067636

 $00:14:44.772 \rightarrow 00:14:46.720$  previously at this year's Ash,

NOTE Confidence: 0.91067636

 $00{:}14{:}46.720 \dashrightarrow 00{:}14{:}47.840$  Alexander Roth and colleagues

NOTE Confidence: 0.91067636

00:14:47.840 --> 00:14:48.960 reported on Part B,

NOTE Confidence: 0.91067636

 $00{:}14{:}48{.}960 \dashrightarrow 00{:}14{:}51{.}813$  and so that that is what I'll focus on.

NOTE Confidence: 0.91067636

 $00:14:51.820 \longrightarrow 00:14:54.716$  But for anchoring,

NOTE Confidence: 0.91067636

 $00{:}14{:}54{.}716 \dashrightarrow 00{:}14{:}58{.}412$  part A was a double-blind period of

 $00:14:58.412 \rightarrow 00:15:01.179$  randomization to sitemap versus placebo.

NOTE Confidence: 0.91067636

00:15:01.180 --> 00:15:02.890 You see that there's a screening

NOTE Confidence: 0.91067636

 $00:15:02.890 \longrightarrow 00:15:04.351$  observation period there of six

NOTE Confidence: 0.91067636

 $00:15:04.351 \longrightarrow 00:15:05.696$  weeks leading into that study.

NOTE Confidence: 0.91067636

00:15:05.700 --> 00:15:08.394 And Part B was then the continuation

NOTE Confidence: 0.91067636

 $00{:}15{:}08{.}394 \dashrightarrow 00{:}15{:}10{.}716$  of the open label phase component

NOTE Confidence: 0.91067636

 $00{:}15{:}10.716 \dashrightarrow 00{:}15{:}13.120$  of patients who are on similar map

NOTE Confidence: 0.91067636

 $00{:}15{:}13{.}120 \dashrightarrow 00{:}15{:}15{.}373$  on similar mab and patients who are

NOTE Confidence: 0.91067636

 $00{:}15{:}15{.}373 \dashrightarrow 00{:}15{:}17{.}245$  on placebo going to similar map.

NOTE Confidence: 0.91067636

 $00:15:17.250 \longrightarrow 00:15:18.948$  So in the open label extension,

NOTE Confidence: 0.91067636

00:15:18.950 --> 00:15:19.482 Part B,

NOTE Confidence: 0.91067636

 $00{:}15{:}19{.}482 \dashrightarrow 00{:}15{:}21{.}078$  all of those patients who completed

NOTE Confidence: 0.91067636

 $00{:}15{:}21.078 \dashrightarrow 00{:}15{:}23.178$  part A were eligible then to receive NOTE Confidence: 0.91067636

 $00{:}15{:}23{.}178$  -->  $00{:}15{:}24{.}983$  biweekly doses and this was weight

NOTE Confidence: 0.91067636

00:15:24.983 --> 00:15:27.089 based as you can see in front of you.

00:15:27.090 --> 00:15:28.546 What we'll focus on in the next slide

NOTE Confidence: 0.91067636

 $00{:}15{:}28{.}546{\:}-{:}>{\:}00{:}15{:}30{.}087$  will be the patient reported outcome NOTE Confidence: 0.91067636

 $00{:}15{:}30.090$  -->  $00{:}15{:}34.216$  endpoints and there are five of them. NOTE Confidence: 0.91067636

 $00{:}15{:}34{.}220 \dashrightarrow 00{:}15{:}36{.}092$  And so the objective here again is to

NOTE Confidence: 0.91067636

 $00{:}15{:}36.092 \dashrightarrow 00{:}15{:}38.329$  look at transfusion independent patients.

NOTE Confidence: 0.91067636

 $00{:}15{:}38{.}330 \dashrightarrow 00{:}15{:}40{.}689$  This is cadenza trial as opposed to

NOTE Confidence: 0.91067636

00:15:40.689 --> 00:15:42.114 transfusion dependent called gluten

NOTE Confidence: 0.91067636

 $00{:}15{:}42{.}114 \dashrightarrow 00{:}15{:}44{.}238$  disease patients that would be cardinal.

NOTE Confidence: 0.91067636

 $00{:}15{:}44{.}240 \dashrightarrow 00{:}15{:}46{.}102$  And the follow up here is immediate

NOTE Confidence: 0.91067636

 $00{:}15{:}46.102 \dashrightarrow 00{:}15{:}47.784$  treatment over 99 weeks and the

NOTE Confidence: 0.91067636

 $00{:}15{:}47.784 \dashrightarrow 00{:}15{:}49.164$  patient reported outcomes are you

NOTE Confidence: 0.91067636

00:15:49.164 --> 00:15:51.080 can see them in front of you here,

NOTE Confidence: 0.91067636

 $00{:}15{:}51.080 \dashrightarrow 00{:}15{:}53.430$  the facet fatigue, the PGS,

NOTE Confidence: 0.91067636

 $00:15:53.430 \longrightarrow 00:15:53.838$  the PG,

NOTE Confidence: 0.91067636

00:15:53.838 --> 00:15:55.834 I see the 12 item SF12 and I noted

NOTE Confidence: 0.91067636

 $00:15:55.834 \rightarrow 00:15:57.364$  for specific reasons that you'll

- NOTE Confidence: 0.91067636
- $00:15:57.364 \longrightarrow 00:15:59.769$  see on the next slide what that
- NOTE Confidence: 0.91067636
- $00:15:59.769 \rightarrow 00:16:01.639$  includes both physical and mental
- NOTE Confidence: 0.91067636
- $00:16:01.639 \rightarrow 00:16:03.164$  component scores and finally
- NOTE Confidence: 0.91067636
- $00:16:03.164 \rightarrow 00:16:05.099$  the europol visual analog scale.
- NOTE Confidence: 0.804984824285714
- $00:16:07.330 \rightarrow 00:16:11.130$  And here are the baselines and the patient
- NOTE Confidence: 0.804984824285714
- $00{:}16{:}11{.}130 \dashrightarrow 00{:}16{:}13{.}990$  sample sizes and the mean effects.
- NOTE Confidence: 0.804984824285714
- $00{:}16{:}13{.}990 \dashrightarrow 00{:}16{:}15{.}862$  And in the right column here I put for
- NOTE Confidence: 0.804984824285714
- $00:16:15.862 \rightarrow 00:16:17.574$  you what the investigators reported
- NOTE Confidence: 0.804984824285714
- $00{:}16{:}17{.}574 \dashrightarrow 00{:}16{:}19{.}384$  as clinically important changes that
- NOTE Confidence: 0.804984824285714
- $00:16:19.384 \rightarrow 00:16:21.436$  were derived in private prior studies.
- NOTE Confidence: 0.804984824285714
- $00:16:21.440 \longrightarrow 00:16:24.002$  So we can actually interpret what
- NOTE Confidence: 0.804984824285714
- $00:16:24.002 \rightarrow 00:16:26.139$  is cleanly clinically meaningful or
- NOTE Confidence: 0.804984824285714
- $00:16:26.139 \rightarrow 00:16:27.426$  potentially clinically meaningful.
- NOTE Confidence: 0.804984824285714
- $00{:}16{:}27{.}426 \dashrightarrow 00{:}16{:}30{.}494$  So the mean age of these patients
- NOTE Confidence: 0.804984824285714
- $00:16:30.494 \rightarrow 00:16:32.608$  was 6780% of them were women and
- NOTE Confidence: 0.804984824285714

 $00:16:32.608 \rightarrow 00:16:34.965$  you can see the facet fatigue score

NOTE Confidence: 0.804984824285714

 $00{:}16{:}34.965 \dashrightarrow 00{:}16{:}36.701$  with an improvement of 8.8.

NOTE Confidence: 0.804984824285714

 $00:16:36.701 \rightarrow 00:16:37.656$  Right in the middle there,

NOTE Confidence: 0.804984824285714

 $00:16:37.660 \rightarrow 00:16:39.406$  with the standard error of 2.1,

NOTE Confidence: 0.804984824285714

00:16:39.406 --> 00:16:41.486 you'll note a reported clinically

NOTE Confidence: 0.804984824285714

 $00:16:41.486 \rightarrow 00:16:43.150$  important change which is

NOTE Confidence: 0.804984824285714

 $00:16:43.215 \longrightarrow 00:16:45.357$  available here is more than five.

NOTE Confidence: 0.804984824285714

 $00{:}16{:}45.360 \dashrightarrow 00{:}16{:}47.656$  You have to think about that in the

NOTE Confidence: 0.804984824285714

 $00{:}16{:}47.656 \dashrightarrow 00{:}16{:}50.120$  context of the standard error now,

NOTE Confidence: 0.804984824285714

 $00:16:50.120 \longrightarrow 00:16:51.137$  the SF 12,

NOTE Confidence: 0.804984824285714

 $00:16:51.137 \longrightarrow 00:16:52.832$  the physical and the mental

NOTE Confidence: 0.804984824285714

 $00:16:52.832 \rightarrow 00:16:54.070$  cognitive scores as well.

NOTE Confidence: 0.804984824285714

 $00{:}16{:}54.070 \dashrightarrow 00{:}16{:}56.722$  Hit above the report of clinically

NOTE Confidence: 0.804984824285714

 $00:16:56.722 \longrightarrow 00:16:58.863$  important changes with statement lab

NOTE Confidence: 0.804984824285714

 $00:16:58.863 \longrightarrow 00:17:01.578$  use and you'll see an added about 4.9

NOTE Confidence: 0.804984824285714

 $00:17:01.578 \rightarrow 00:17:04.468$  points for the physical component,

 $00:17:04.470 \longrightarrow 00:17:06.798 4.0$  points for the mental component.

NOTE Confidence: 0.804984824285714

 $00{:}17{:}06{.}800 \dashrightarrow 00{:}17{:}09{.}576$  And the last piece within the rows you

NOTE Confidence: 0.804984824285714

00:17:09.576 --> 00:17:12.498 see the EQ visual analog score scale

NOTE Confidence: 0.804984824285714

 $00:17:12.498 \rightarrow 00:17:15.180$  again and add an improvement there,

NOTE Confidence: 0.804984824285714

 $00{:}17{:}15{.}180 \dashrightarrow 00{:}17{:}17{.}476$  but there is not a study that has

NOTE Confidence: 0.804984824285714

00:17:17.476 --> 00:17:18.907 derived invalidated a reported

NOTE Confidence: 0.804984824285714

 $00:17:18.907 \rightarrow 00:17:20.499$  clinically important change here.

NOTE Confidence: 0.804984824285714

 $00:17:20.500 \longrightarrow 00:17:22.420$  And so that is that's why I put

NOTE Confidence: 0.804984824285714

 $00:17:22.420 \longrightarrow 00:17:24.020$  that as a non applicable.

NOTE Confidence: 0.804984824285714

00:17:24.020 --> 00:17:26.843 Now if you look at PGI S&P GIC,

NOTE Confidence: 0.804984824285714

 $00:17:26.843 \rightarrow 00:17:30.140$  you can see too that for the pgis

NOTE Confidence: 0.804984824285714

00:17:30.140 --> 00:17:32.076 31% there was a 31% improvement

NOTE Confidence: 0.804984824285714

 $00:17:32.076 \longrightarrow 00:17:34.556$  in the proportion of patients

NOTE Confidence: 0.804984824285714

 $00{:}17{:}34{.}560 \dashrightarrow 00{:}17{:}36{.}124$  reporting nor mild fatigue.

NOTE Confidence: 0.804984824285714

 $00{:}17{:}36{.}124 \dashrightarrow 00{:}17{:}39{.}349$  So it more patients by the conclusion of

 $00:17:39.349 \rightarrow 00:17:42.142$  the study reported no or mild fatigue

NOTE Confidence: 0.804984824285714

 $00{:}17{:}42.142 \dashrightarrow 00{:}17{:}44.571$  and the delta there was from about

NOTE Confidence: 0.804984824285714

00:17:44.571 --> 00:17:47.689 mid 40s to mid 70s percentage wise.

NOTE Confidence: 0.804984824285714

 $00{:}17{:}47.689 \dashrightarrow 00{:}17{:}50.605$  And finally the PGIC by the end of

NOTE Confidence: 0.804984824285714

 $00{:}17{:}50.605 \dashrightarrow 00{:}17{:}52.866$  the study 71 of the patients who were

NOTE Confidence: 0.804984824285714

 $00{:}17{:}52.866 \dashrightarrow 00{:}17{:}55.062$  reporting a positive change from the

NOTE Confidence: 0.804984824285714

 $00:17:55.062 \rightarrow 00:17:57.405$  baseline from where they had started from.

NOTE Confidence: 0.804984824285714

 $00:17:57.410 \longrightarrow 00:17:58.550$  So take home.

NOTE Confidence: 0.804984824285714

 $00{:}17{:}58{.}550 \dashrightarrow 00{:}18{:}01{.}537$  So the condenser part BPRO data it

NOTE Confidence: 0.804984824285714

 $00:18:01.537 \rightarrow 00:18:03.982$  appears that September map demonstrate

NOTE Confidence: 0.804984824285714

 $00{:}18{:}03{.}982 \dashrightarrow 00{:}18{:}06{.}578$  can demonstrate benefits that are

NOTE Confidence: 0.804984824285714

 $00:18:06.578 \longrightarrow 00:18:08.940$  associated with its use specifically on

NOTE Confidence: 0.804984824285714

 $00{:}18{:}08{.}940 \dashrightarrow 00{:}18{:}11{.}170$  fatigue and overall quality of life.

NOTE Confidence: 0.804984824285714

 $00{:}18{:}11{.}170 \dashrightarrow 00{:}18{:}12{.}952$  The benefits appear to maintain for

NOTE Confidence: 0.804984824285714

 $00:18:12.952 \rightarrow 00:18:14.793$  more than one year and mentioned

NOTE Confidence: 0.804984824285714

 $00:18:14.793 \longrightarrow 00:18:16.569$  median follow up in 99 weeks.

- NOTE Confidence: 0.804984824285714
- $00:18:16.570 \rightarrow 00:18:19.372$  And and this is important patients
- NOTE Confidence: 0.804984824285714
- $00:18:19.372 \longrightarrow 00:18:21.240$  previously previously treated with
- NOTE Confidence: 0.804984824285714
- 00:18:21.312 --> 00:18:23.584 placebo did demonstrate a brisk
- NOTE Confidence: 0.804984824285714
- $00:18:23.584 \rightarrow 00:18:25.726$  PR O improvement in Part B.
- NOTE Confidence: 0.804984824285714
- $00{:}18{:}25{.}730 \dashrightarrow 00{:}18{:}27{.}106$  So these are the patients who went from.
- NOTE Confidence: 0.804984824285714
- $00:18:27.110 \longrightarrow 00:18:28.818$  Cebu to site map so they are able
- NOTE Confidence: 0.804984824285714
- 00:18:28.818 --> 00:18:30.774 to catch up to the patients who
- NOTE Confidence: 0.804984824285714
- $00:18:30.774 \longrightarrow 00:18:32.224$  had been on sitemap before.
- NOTE Confidence: 0.66837746
- $00:18:34.890 \longrightarrow 00:18:36.526$  Moving to a plenary,
- NOTE Confidence: 0.66837746
- $00{:}18{:}36{.}526 \dashrightarrow 00{:}18{:}40{.}550$  this is Edgar Tigard and ITP Egard Tiger mod.
- NOTE Confidence: 0.66837746
- $00{:}18{:}40{.}550 \dashrightarrow 00{:}18{:}43{.}838$  Is an IG1 FC fragment and a natural
- NOTE Confidence: 0.66837746
- $00{:}18{:}43{.}838 \dashrightarrow 00{:}18{:}46{.}990$  ligand for the neonatal FC receptor.
- NOTE Confidence: 0.66837746
- $00{:}18{:}46{.}990 \dashrightarrow 00{:}18{:}48{.}502$  It's engineered to competitively
- NOTE Confidence: 0.66837746
- $00{:}18{:}48{.}502 \dashrightarrow 00{:}18{:}51{.}701$  bind to FCRN with a high affinity and
- NOTE Confidence: 0.66837746
- $00:18:51.701 \rightarrow 00:18:54.287$  prevent the recycling of endogenous IG,
- NOTE Confidence: 0.66837746

 $00:18:54.290 \longrightarrow 00:18:56.150$  but it doesn't affect albumin.

NOTE Confidence: 0.66837746

00:18:56.150 --> 00:18:57.944 This drug has been improved in

NOTE Confidence: 0.66837746

00:18:57.944 --> 00:18:59.727 my<br/>asthenia gravis and here I present

NOTE Confidence: 0.66837746

 $00{:}18{:}59{.}727 \dashrightarrow 00{:}19{:}01{.}568$  to you the results from advanced 4

NOTE Confidence: 0.66837746

 $00{:}19{:}01{.}568 \dashrightarrow 00{:}19{:}03{.}409$  which is a phase three multicenter,

NOTE Confidence: 0.66837746

 $00:19:03.410 \longrightarrow 00:19:06.428$  double-blind, placebo-controlled RCT.

NOTE Confidence: 0.66837746

 $00:19:06.430 \rightarrow 00:19:09.000$  In patients with immune thrombocytopenia,

NOTE Confidence: 0.66837746

 $00:19:09.000 \rightarrow 00:19:11.214$  generally speaking when we think about

NOTE Confidence: 0.66837746

00:19:11.214 --> 00:19:12.690 pathogenic autoantibodies and ITP,

NOTE Confidence: 0.66837746

 $00{:}19{:}12.690 \dashrightarrow 00{:}19{:}14.070$  we think about increased platelet

NOTE Confidence: 0.66837746

00:19:14.070 --> 00:19:15.914 clearance as one of the mechanisms

NOTE Confidence: 0.66837746

00:19:15.914 --> 00:19:17.570 in inhibiting platelet production

NOTE Confidence: 0.66837746

 $00{:}19{:}17{.}570 \dashrightarrow 00{:}19{:}19{.}226$  and impacting platelet function.

NOTE Confidence: 0.66837746

 $00:19:19.230 \longrightarrow 00:19:21.310$  You see all of those listed in a

NOTE Confidence: 0.66837746

 $00{:}19{:}21{.}310 \dashrightarrow 00{:}19{:}23{.}448$  schematic to the left and then on

NOTE Confidence: 0.66837746

 $00:19:23.448 \rightarrow 00:19:26.010$  the right the schematic for the

- NOTE Confidence: 0.66837746
- 00:19:26.089 $\operatorname{-->}$ 00:19:29.835 recycling of your endogenous IG and

 $00:19:29.835 \rightarrow 00:19:34.618$  where F guys taking mod is is acting.

NOTE Confidence: 0.66837746

00:19:34.620 --> 00:19:35.992 Now for this RCT,

NOTE Confidence: 0.66837746

 $00:19:35.992 \longrightarrow 00:19:38.640$  you had to have been an adult,

NOTE Confidence: 0.66837746

 $00:19:38.640 \longrightarrow 00:19:40.930$  so at least 18 years of age and to have

NOTE Confidence: 0.66837746

00:19:40.997 --> 00:19:43.589 chronic or persistent ITP and as a reminder,

NOTE Confidence: 0.66837746

00:19:43.590 --> 00:19:44.196 chronic ITP,

NOTE Confidence: 0.66837746

 $00{:}19{:}44.196 \dashrightarrow 00{:}19{:}46.620$  ITP of duration at 12 months or more,

NOTE Confidence: 0.66837746

 $00:19:46.620 \rightarrow 00:19:50.084$  persistent is 3 to 3 to 12 months.

NOTE Confidence: 0.66837746

 $00{:}19{:}50{.}090 \dashrightarrow 00{:}19{:}52{.}071$  You have to have two platelet counts

NOTE Confidence: 0.66837746

 $00{:}19{:}52{.}071 \dashrightarrow 00{:}19{:}54{.}162$  of less than 30,000 during the

NOTE Confidence: 0.66837746

 $00{:}19{:}54.162 \dashrightarrow 00{:}19{:}55.664$  screening period and the screening

NOTE Confidence: 0.66837746

 $00{:}19{:}55{.}664 \dashrightarrow 00{:}19{:}57{.}330$  period lasted 2 weeks for this trial.

NOTE Confidence: 0.66837746

 $00{:}19{:}57{.}330 \dashrightarrow 00{:}20{:}00{.}120$  And you had to have been on at least

NOTE Confidence: 0.66837746

 $00{:}20{:}00{.}120 \dashrightarrow 00{:}20{:}02{.}185$  two ITP treatments or one prior

 $00{:}20{:}02{.}185 \dashrightarrow 00{:}20{:}03{.}940$  treatment and one concurrent treatment.

NOTE Confidence: 0.66837746

 $00:20:03.940 \longrightarrow 00:20:05.950$  Those are the eligibility criteria,

NOTE Confidence: 0.66837746

 $00:20:05.950 \longrightarrow 00:20:07.708$  an important point for this trial

NOTE Confidence: 0.66837746

 $00{:}20{:}07{.}708 \dashrightarrow 00{:}20{:}09{.}934$  that's not listed on the slide because

NOTE Confidence: 0.66837746

 $00{:}20{:}09{.}934 \dashrightarrow 00{:}20{:}11{.}594$  it was an eligibility criteria.

NOTE Confidence: 0.66837746

 $00:20:11.600 \longrightarrow 00:20:12.950$  But once the trial started,

NOTE Confidence: 0.66837746

 $00{:}20{:}12.950 \dashrightarrow 00{:}20{:}15.242$  these patients needed to be maintained

NOTE Confidence: 0.66837746

 $00:20:15.242 \longrightarrow 00:20:17.937$  on the same dosing of whatever they

NOTE Confidence: 0.66837746

 $00{:}20{:}17{.}937 \dashrightarrow 00{:}20{:}20{.}127$  were on previously for their IT.

NOTE Confidence: 0.66837746

 $00{:}20{:}20{.}130 \dashrightarrow 00{:}20{:}21.638$  Be without those escalations.

NOTE Confidence: 0.66837746

 $00:20:21.638 \rightarrow 00:20:24.297$  So the treatment period was 24 weeks NOTE Confidence: 0.66837746

 $00:20:24.297 \rightarrow 00:20:26.259$  and patients were randomized 2 to

NOTE Confidence: 0.66837746

 $00{:}20{:}26{.}259 \dashrightarrow 00{:}20{:}29{.}255$  one to Edgar Sigma 10 milligrams per NOTE Confidence: 0.66837746

00:20:29.255 --> 00:20:31.203 kilogram intravenously versus placebo.

NOTE Confidence: 0.66837746

 $00{:}20{:}31{.}210$  -->  $00{:}20{:}33{.}802$  And there was a period as you can see NOTE Confidence: 0.66837746

 $00:20:33.802 \rightarrow 00:20:36.986$  in front of you here where you could
- NOTE Confidence: 0.66837746
- $00:20:36.986 \rightarrow 00:20:39.859$  have those adjustments of I've got taken mod.

 $00:20:39.860 \longrightarrow 00:20:40.838$  At the end of the trial,

NOTE Confidence: 0.66837746

 $00:20:40.840 \longrightarrow 00:20:41.996$  as we'll talk about,

NOTE Confidence: 0.66837746

00:20:41.996 --> 00:20:43.730 there's a follow-up period and more

NOTE Confidence: 0.66837746

 $00{:}20{:}43.786 \dashrightarrow 00{:}20{:}46.534$  than 90% went on to enroll in the

NOTE Confidence: 0.66837746

 $00{:}20{:}46.534 \dashrightarrow 00{:}20{:}48.653$  Open label extension called Advanced

NOTE Confidence: 0.66837746

 $00:20:48.653 \rightarrow 00:20:52.115$  Plus that is in its early phases now.

NOTE Confidence: 0.66837746

 $00:20:52.120 \longrightarrow 00:20:53.605$  These are the baseline characteristics

NOTE Confidence: 0.66837746

 $00:20:53.605 \rightarrow 00:20:54.496$  for these patients.

NOTE Confidence: 0.66837746

 $00:20:54.500 \longrightarrow 00:20:56.978$  You can see that they match

NOTE Confidence: 0.66837746

 $00:20:56.978 \longrightarrow 00:20:58.217$  up reasonably well.

NOTE Confidence: 0.66837746

00:20:58.220 --> 00:20:59.072 In particular,

NOTE Confidence: 0.66837746

 $00{:}20{:}59{.}072 \dashrightarrow 00{:}21{:}02{.}054$  I'll point out The Who bleeding scores

NOTE Confidence: 0.66837746

 $00{:}21{:}02{.}054 \dashrightarrow 00{:}21{:}04{.}614$  pretty similar across the board patients

NOTE Confidence: 0.66837746

 $00{:}21{:}04{.}614$  -->  $00{:}21{:}07{.}739$  with three or more prior ITP the rapies,

 $00:21:07.740 \rightarrow 00:21:09.380$  patients that we technically think

NOTE Confidence: 0.66837746

00:21:09.380 --> 00:21:11.520 of as quote UN quote refractory.

NOTE Confidence: 0.66837746

 $00{:}21{:}11{.}520 \dashrightarrow 00{:}21{:}13{.}984$  That's how the trial referred to them NOTE Confidence: 0.66837746

00:21:13.984 --> 00:21:16.889 as well and that's about 6 to 7 out

NOTE Confidence: 0.66837746

00:21:16.889 --> 00:21:19.737 of 10 patients in both arms and to

NOTE Confidence: 0.66837746

 $00{:}21{:}19{.}737 \dashrightarrow 00{:}21{:}21{.}732$  the concurrent ITP therapy types.

NOTE Confidence: 0.66837746

00:21:21.740 --> 00:21:23.908 Baseline being utilized, steroids,

NOTE Confidence: 0.66837746

00:21:23.908 --> 00:21:24.450 tipra,

NOTE Confidence: 0.66837746

 $00{:}21{:}24{.}450 \dashrightarrow 00{:}21{:}24{.}838$  is,

NOTE Confidence: 0.66837746

 $00{:}21{:}24.838 \dashrightarrow 00{:}21{:}26.390$  and other immune suppressants

NOTE Confidence: 0.66837746

00:21:26.390 --> 00:21:27.702 all reasonably nicely matched,

NOTE Confidence: 0.66837746

 $00:21:27.702 \longrightarrow 00:21:29.670$  and so here in this case,

NOTE Confidence: 0.66837746

 $00{:}21{:}29.670 \dashrightarrow 00{:}21{:}32.764$  you can see that this random allocation

NOTE Confidence: 0.66837746

 $00{:}21{:}32{.}764 \dashrightarrow 00{:}21{:}35{.}247$  has probably served its purpose

NOTE Confidence: 0.66837746

 $00{:}21{:}35{.}247 \dashrightarrow 00{:}21{:}37{.}395$  of controlling for confounding.

NOTE Confidence: 0.66837746

 $00:21:37.400 \longrightarrow 00:21:39.045$  The endpoints here are the

00:21:39.045 --> 00:21:40.690 here's the primary endpoint and

NOTE Confidence: 0.8144564045

00:21:40.748 --> 00:21:42.393 also key secondary endpoints all

NOTE Confidence: 0.8144564045

 $00:21:42.393 \rightarrow 00:21:44.900$  to say that all platelets specific

NOTE Confidence: 0.8144564045

00:21:44.900 - 00:21:46.484 secondary endpoints were met.

NOTE Confidence: 0.8144564045

 $00{:}21{:}46{.}484 \dashrightarrow 00{:}21{:}48{.}860$  The primary endpoint was the proportion

NOTE Confidence: 0.8144564045

 $00{:}21{:}48{.}924 \dashrightarrow 00{:}21{:}50{.}922$  of patients with a sustained count

NOTE Confidence: 0.8144564045

 $00:21:50.922 \rightarrow 00:21:53.350$  response and as typical in ITP literature,

NOTE Confidence: 0.8144564045

 $00:21:53.350 \rightarrow 00:21:55.674$  this was defined as a platelet count

NOTE Confidence: 0.8144564045

 $00:21:55.674 \longrightarrow 00:21:58.447$  of 50,000 or more and in this case on

NOTE Confidence: 0.8144564045

 $00{:}21{:}58{.}447 \dashrightarrow 00{:}22{:}01{.}180$  at least four out of 6 clinic visits

NOTE Confidence: 0.8144564045

 $00:22:01.180 \longrightarrow 00:22:03.460$  during the conclusion of this period,

NOTE Confidence: 0.8144564045

 $00{:}22{:}03.460 \dashrightarrow 00{:}22{:}05.658$  in this case weeks 19 through 24,

NOTE Confidence: 0.8144564045

 $00:22:05.660 \longrightarrow 00:22:07.200$  of course in the absence of ITP.

NOTE Confidence: 0.8144564045

 $00{:}22{:}07{.}200 \dashrightarrow 00{:}22{:}09{.}186$  Others and then key secondary endpoints

NOTE Confidence: 0.8144564045

00:22:09.186 --> 00:22:11.350 include cumulative weeks of Disease Control,

 $00:22:11.350 \longrightarrow 00:22:12.946$  so just the number of weeks

NOTE Confidence: 0.8144564045

00:22:12.946 --> 00:22:13.744 of Disease Control,

NOTE Confidence: 0.8144564045

 $00:22:13.750 \longrightarrow 00:22:15.460$  something called sustained

NOTE Confidence: 0.8144564045

 $00:22:15.460 \longrightarrow 00:22:17.170$  platelet count response.

NOTE Confidence: 0.8144564045

 $00{:}22{:}17.170 \dashrightarrow 00{:}22{:}19.336$  And the durable sustained platelet count

NOTE Confidence: 0.8144564045

00:22:19.336 --> 00:22:21.493 response which is just extending that

NOTE Confidence: 0.8144564045

 $00{:}22{:}21{.}493 \dashrightarrow 00{:}22{:}23{.}768$  risk exposure period out to week 17.

NOTE Confidence: 0.8144564045

 $00{:}22{:}23.770 \dashrightarrow 00{:}22{:}25.814$  And so there's a significance on the

NOTE Confidence: 0.8144564045

 $00{:}22{:}25.814 \dashrightarrow 00{:}22{:}27.722$  platelet count and all of these the

NOTE Confidence: 0.8144564045

 $00{:}22{:}27.722 \dashrightarrow 00{:}22{:}29.714$  take homes from this plenary abstract NOTE Confidence: 0.8144564045

 $00:22:29.714 \rightarrow 00:22:31.727$  whereas that lowering total IG levels

NOTE Confidence: 0.8144564045

00:22:31.727 --> 00:22:33.653 by targeting the neonatal FC receptor

NOTE Confidence: 0.8144564045

 $00{:}22{:}33.653 \dashrightarrow 00{:}22{:}35.407$  appears to demonstrate statistically

NOTE Confidence: 0.8144564045

 $00:22:35.407 \rightarrow 00:22:37.239$  significant improvements in primary

NOTE Confidence: 0.8144564045

 $00:22:37.239 \rightarrow 00:22:38.985$  and secondary platelet endpoints.

NOTE Confidence: 0.8144564045

 $00:22:38.985 \rightarrow 00:22:41.905$  The drug also appears to be well tolerated

 $00:22:41.905 \rightarrow 00:22:44.269$  without new safety signals that did not

NOTE Confidence: 0.8144564045

 $00{:}22{:}44.269 \dashrightarrow 00{:}22{:}46.700$  have an opportunity to include that here.

NOTE Confidence: 0.8144564045

 $00{:}22{:}46.700 \dashrightarrow 00{:}22{:}48.812$  But most adverse adverse events were

NOTE Confidence: 0.8144564045

 $00:22:48.812 \rightarrow 00:22:50.999$  reported as quote mild to moderate.

NOTE Confidence: 0.8144564045

 $00{:}22{:}51{.}000 \dashrightarrow 00{:}22{:}53{.}868$  And finally the open label extension

NOTE Confidence: 0.8144564045

00:22:53.868 --> 00:22:55.780 period is ongoing currently.

NOTE Confidence: 0.8144564045

 $00:22:55.780 \longrightarrow 00:22:58.324$  Now to wrap up this little portion with

NOTE Confidence: 0.8144564045

 $00{:}22{:}58{.}324 \dashrightarrow 00{:}23{:}00{.}853$  a third abstract from the Cleveland

NOTE Confidence: 0.8144564045

 $00{:}23{:}00{.}853 \dashrightarrow 00{:}23{:}03{.}577$  Clinic of 300 plus consecutive patients NOTE Confidence: 0.8144564045

 $00{:}23{:}03{.}651 \dashrightarrow 00{:}23{:}06{.}495$  treated with splenectomy for a variety

NOTE Confidence: 0.8144564045

00:23:06.495 --> 00:23:08.391 of different immune cytopenias.

NOTE Confidence: 0.8144564045

 $00{:}23{:}08{.}400 \dashrightarrow 00{:}23{:}10{.}476$  So the investigators here wanted to

NOTE Confidence: 0.8144564045

00:23:10.476 --> 00:23:12.328 identify whether they could isolate

NOTE Confidence: 0.8144564045

 $00{:}23{:}12{.}328 \dashrightarrow 00{:}23{:}14{.}388$  risk factors that could potentially

NOTE Confidence: 0.8144564045

 $00{:}23{:}14.388$  -->  $00{:}23{:}16.476$  predict response to splenectomy and NOTE Confidence: 0.8144564045

 $00:23:16.476 \rightarrow 00:23:18.396$  adult patients with immune cytopenias.

NOTE Confidence: 0.8144564045

 $00{:}23{:}18{.}400 \dashrightarrow 00{:}23{:}19{.}339$  On the right,

NOTE Confidence: 0.8144564045

 $00{:}23{:}19{.}339 \dashrightarrow 00{:}23{:}21{.}530$  you see a schematic of total splenectomy

NOTE Confidence: 0.8144564045

00:23:21.595 - 00:23:23.407 cases that they reviewed over the

NOTE Confidence: 0.8144564045

 $00:23:23.407 \longrightarrow 00:23:25.718$  course of 20 years from 2000 to 2020.

NOTE Confidence: 0.8144564045

 $00:23:25.720 \longrightarrow 00:23:28.090$  And here you had 1800 patients.

NOTE Confidence: 0.8144564045

 $00:23:28.090 \rightarrow 00:23:29.987$  There was a bunch of patients excluded

NOTE Confidence: 0.8144564045

 $00:23:29.987 \rightarrow 00:23:32.296$  as they were trying to hone in on

NOTE Confidence: 0.8144564045

00:23:32.296 -> 00:23:33.444 cytopenias and then ultimately

NOTE Confidence: 0.8144564045

 $00:23:33.444 \longrightarrow 00:23:34.749$  on immune cytopenias.

NOTE Confidence: 0.8144564045

 $00{:}23{:}34.750 \dashrightarrow 00{:}23{:}36.178$  And at the very bottom I circled

NOTE Confidence: 0.8144564045

 $00:23:36.178 \longrightarrow 00:23:36.790$  for urine red.

NOTE Confidence: 0.8144564045

 $00:23:36.790 \longrightarrow 00:23:38.872$  You can see what the diagnosis

NOTE Confidence: 0.8144564045

 $00:23:38.872 \rightarrow 00:23:40.570$  were that they considered ITP,

NOTE Confidence: 0.8144564045

00:23:40.570 --> 00:23:41.968 autoimmune hemolytic anemia,

NOTE Confidence: 0.8144564045

00:23:41.968 --> 00:23:44.298 Evans syndrome and autoimmune neutropenia,

- NOTE Confidence: 0.8144564045
- $00:23:44.300 \longrightarrow 00:23:46.244$  neutropenia in general.

00:23:46.244 --> 00:23:49.484 This was a retrospective study,

NOTE Confidence: 0.8144564045

 $00:23:49.490 \rightarrow 00:23:52.508$  339 patients and the majority were

NOTE Confidence: 0.8144564045

 $00:23:52.508 \rightarrow 00:23:55.160$  ITP and autoimmune hemolytic anemia.

NOTE Confidence: 0.8144564045

 $00{:}23{:}55{.}160 \dashrightarrow 00{:}23{:}57{.}316$  Their results are are a little bit

NOTE Confidence: 0.8144564045

 $00{:}23{:}57{.}316$  -->  $00{:}23{:}59{.}221$  remarkable even for the fact that

NOTE Confidence: 0.8144564045

 $00:23:59.221 \rightarrow 00:24:01.069$  this is retrospective study and here

NOTE Confidence: 0.8144564045

 $00:24:01.069 \rightarrow 00:24:03.399$  you can see ITP autoimmune hemolytic

NOTE Confidence: 0.8144564045

 $00{:}24{:}03{.}399 \dashrightarrow 00{:}24{:}04{.}971$ anemia and autoimmune neutropenia

NOTE Confidence: 0.8144564045

 $00:24:04.971 \rightarrow 00:24:07.010$  at the very least being presented

NOTE Confidence: 0.8144564045

 $00{:}24{:}07{.}010 \dashrightarrow 00{:}24{:}09{.}140$  and simple pie charts for having

NOTE Confidence: 0.8144564045

00:24:09.140 --> 00:24:11.285 complete versus partial versus no

NOTE Confidence: 0.8144564045

 $00:24:11.285 \longrightarrow 00:24:12.572$  responses to splenectomy.

NOTE Confidence: 0.8144564045

 $00{:}24{:}12{.}580 \dashrightarrow 00{:}24{:}15{.}055$  And at the bottom you actually also see how

NOTE Confidence: 0.8144564045

 $00{:}24{:}15.055 \dashrightarrow 00{:}24{:}17.340$  fast those responses occurred in weeks.

 $00:24:17.340 \rightarrow 00:24:19.602$  The overall response for all patients

NOTE Confidence: 0.8144564045

 $00{:}24{:}19.602 \dashrightarrow 00{:}24{:}22.300$  with 74% complete response rate of

NOTE Confidence: 0.8144564045

 $00:24:22.300 \longrightarrow 00:24:25.299$  86 and a partial response of 14%.

NOTE Confidence: 0.8144564045

 $00:24:25.299 \longrightarrow 00:24:26.556$  In these patients,

NOTE Confidence: 0.8144564045

 $00{:}24{:}26.556 \dashrightarrow 00{:}24{:}29.070$  but perhaps the bigger take home

NOTE Confidence: 0.8144564045

 $00:24:29.144 \longrightarrow 00:24:30.940$  point was the following.

NOTE Confidence: 0.8144564045

 $00{:}24{:}30{.}940 \dashrightarrow 00{:}24{:}33{.}082$  And one out of five cases there

NOTE Confidence: 0.8144564045

 $00:24:33.082 \longrightarrow 00:24:34.764$  was a discordant diagnosis from

NOTE Confidence: 0.8144564045

 $00{:}24{:}34{.}764 \dashrightarrow 00{:}24{:}37{.}193$  pre to post operation on the left.

NOTE Confidence: 0.8144564045

 $00:24:37.200 \longrightarrow 00:24:38.904$  In the left column you see

NOTE Confidence: 0.8144564045

 $00{:}24{:}38{.}904 \dashrightarrow 00{:}24{:}39{.}756$  the splenectomy indication.

NOTE Confidence: 0.8144564045

 $00:24:39.760 \longrightarrow 00:24:42.406$  In the middle you see what the

NOTE Confidence: 0.8144564045

 $00{:}24{:}42{.}406 \dashrightarrow 00{:}24{:}43{.}540$  actual postoperative pathologic

NOTE Confidence: 0.8567871172

 $00:24:43.601 \rightarrow 00:24:46.072$  diagnosis was and the frequency of this

NOTE Confidence: 0.8567871172

 $00:24:46.072 \rightarrow 00:24:48.539$  occurring in total to be exactly was 19%.

NOTE Confidence: 0.8567871172

 $00:24:48.540 \longrightarrow 00:24:50.934$  So 19% of patients were discordant

 $00:24:50.934 \rightarrow 00:24:53.356$  from pre to post operative

NOTE Confidence: 0.8567871172

 $00:24:53.356 \rightarrow 00:24:55.716$  diagnosis again in these 300.

NOTE Confidence: 0.8567871172

 $00:24:55.716 \rightarrow 00:24:57.332$  Ask consecutively treated patients

NOTE Confidence: 0.8567871172

 $00{:}24{:}57{.}332 \dashrightarrow 00{:}24{:}59{.}884$  over the course of 2000 to 2020

NOTE Confidence: 0.8567871172

 $00:24:59.884 \rightarrow 00:25:02.070$  twenty years in the Cleveland Clinic.

NOTE Confidence: 0.8567871172

 $00{:}25{:}02{.}070 \dashrightarrow 00{:}25{:}04{.}694$  And to wrap up with one final take

NOTE Confidence: 0.8567871172

 $00:25:04.694 \rightarrow 00:25:07.252$  home is the investigators did try

NOTE Confidence: 0.8567871172

 $00{:}25{:}07{.}252 \dashrightarrow 00{:}25{:}09{.}976$  to isolate the risk factors that

NOTE Confidence: 0.8567871172

 $00{:}25{:}10.056 \dashrightarrow 00{:}25{:}12.851$  could predict response versus not

NOTE Confidence: 0.8567871172

 $00{:}25{:}12.851 \dashrightarrow 00{:}25{:}14.998$  predict response and these are being

NOTE Confidence: 0.8567871172

 $00{:}25{:}14.998 \dashrightarrow 00{:}25{:}16.540$  parsed out further as I understand

NOTE Confidence: 0.8567871172

 $00{:}25{:}16.591 \dashrightarrow 00{:}25{:}18.041$  in the actual manuscript that's

NOTE Confidence: 0.8567871172

00:25:18.041 --> 00:25:19.491 being written up and probably

NOTE Confidence: 0.8567871172

 $00{:}25{:}19{.}546 \dashrightarrow 00{:}25{:}21{.}306$  published in the next 6 to 12 months.

NOTE Confidence: 0.8567871172

 $00{:}25{:}21{.}310 \dashrightarrow 00{:}25{:}23{.}389$  But the big take home points here,

 $00:25:23.390 \longrightarrow 00:25:25.400 \text{ most of these are crossing}$ 

NOTE Confidence: 0.8567871172

 $00{:}25{:}25{.}400 \dashrightarrow 00{:}25{:}27{.}410$  your odds ratio of 1,

NOTE Confidence: 0.8567871172

 $00:25:27.410 \longrightarrow 00:25:30.476$  but you'll see that young age in particular

NOTE Confidence: 0.8567871172

 $00{:}25{:}30.476 \dashrightarrow 00{:}25{:}32.660$  age less than 40 years seem to predict.

NOTE Confidence: 0.8567871172

 $00{:}25{:}32.660 \dashrightarrow 00{:}25{:}34.495$  Their response to splenectomy as

NOTE Confidence: 0.8567871172

 $00{:}25{:}34{.}495{\:}{-}{>}00{:}25{:}37{.}197$  well as primary ITP also seemed to

NOTE Confidence: 0.8567871172

 $00{:}25{:}37{.}197 \dashrightarrow 00{:}25{:}39{.}192$  predict for favorable response to

NOTE Confidence: 0.8567871172

 $00:25:39.192 \rightarrow 00:25:41.749$  splenectomy on the converse side of it,

NOTE Confidence: 0.8567871172

 $00{:}25{:}41.750 \dashrightarrow 00{:}25{:}43.950$  requiring multiple the rapies predicted

NOTE Confidence: 0.8567871172

 $00:25:43.950 \rightarrow 00:25:46.700$  for poor response to splenectomy.

NOTE Confidence: 0.8567871172

 $00{:}25{:}46.700 \dashrightarrow 00{:}25{:}47.645$  So take homes.

NOTE Confidence: 0.8567871172

 $00:25:47.645 \rightarrow 00:25:49.220$  From the studies that splenectomy

NOTE Confidence: 0.8567871172

00:25:49.220 --> 00:25:50.780 remains a valuable option,

NOTE Confidence: 0.8567871172

 $00:25:50.780 \rightarrow 00:25:52.930$  specifically in patients whose values

NOTE Confidence: 0.8567871172

 $00{:}25{:}52{.}930 \dashrightarrow 00{:}25{:}55{.}080$  and preferences align with surgery.

NOTE Confidence: 0.8567871172

 $00:25:55.080 \rightarrow 00:25:58.116$  And there's a surprisingly high proportion,

 $00{:}25{:}58{.}120 \dashrightarrow 00{:}26{:}02{.}150$  one out of five that had an added value of

NOTE Confidence: 0.8567871172

 $00{:}26{:}02{.}253 \dashrightarrow 00{:}26{:}06{.}135$  the diagnostic component in their course.

NOTE Confidence: 0.8567871172

00:26:06.135 --> 00:26:08.235 And so with that,

NOTE Confidence: 0.8567871172

00:26:08.240 --> 00:26:10.418 I want to say thank you and I'm going

NOTE Confidence: 0.8567871172

 $00{:}26{:}10{.}418 \dashrightarrow 00{:}26{:}12{.}728$  to transition over to Doctor Sharda.

NOTE Confidence: 0.89827398

00:26:19.660 --> 00:26:20.659 Thank you, George.

NOTE Confidence: 0.871566085714286

 $00{:}26{:}23.520 \dashrightarrow 00{:}26{:}26.397$  I have nothing to disclose as well.

NOTE Confidence: 0.871566085714286

 $00:26:26.400 \rightarrow 00:26:30.096$  I will mostly be concentrating on

NOTE Confidence: 0.871566085714286

 $00:26:30.100 \longrightarrow 00:26:32.460$  some abstracts, interesting abstracts

NOTE Confidence: 0.871566085714286

 $00:26:32.460 \rightarrow 00:26:36.000$  in the thrombosis realm and mostly

NOTE Confidence: 0.871566085714286

 $00{:}26{:}36{.}083 \dashrightarrow 00{:}26{:}38{.}459$  cancer associated throm bosis.

NOTE Confidence: 0.871566085714286

 $00{:}26{:}38{.}460 \dashrightarrow 00{:}26{:}41{.}292$  The first one is the the catheter three

NOTE Confidence: 0.871566085714286

 $00{:}26{:}41.292 \dashrightarrow 00{:}26{:}43.878$  study which was a prospective study of

NOTE Confidence: 0.871566085714286

 $00{:}26{:}43.880 \dashrightarrow 00{:}26{:}46.690$  apixaban for central venous catheter,

NOTE Confidence: 0.871566085714286

 $00{:}26{:}46.690 \dashrightarrow 00{:}26{:}48.709$  associated upper extremity,

00:26:48.709 --> 00:26:52.074 venous thromboembolism and cancer patients.

NOTE Confidence: 0.871566085714286

 $00{:}26{:}52{.}080 \dashrightarrow 00{:}26{:}55{.}383$  And this was, this comes from at

NOTE Confidence: 0.871566085714286

 $00{:}26{:}55{.}383 \dashrightarrow 00{:}26{:}58{.}048$  least three senators in Canada.

NOTE Confidence: 0.871566085714286

 $00:26:58.050 \longrightarrow 00:27:01.809$  So this was a a multi center

NOTE Confidence: 0.871566085714286

 $00:27:01.809 \longrightarrow 00:27:03.750$  prospective cohort study.

NOTE Confidence: 0.6957774275

00:27:06.730 --> 00:27:10.522 In patients with CVC associated upper

NOTE Confidence: 0.6957774275

 $00:27:10.522 \rightarrow 00:27:14.509$  extremity DVT they were treated with.

NOTE Confidence: 0.6957774275

 $00{:}27{:}14.510 \dashrightarrow 00{:}27{:}16.892$  On a low molecular weight he parin

NOTE Confidence: 0.6957774275

 $00{:}27{:}16.892 \dashrightarrow 00{:}27{:}19.582$  dalteparin in their case for seven days NOTE Confidence: 0.6957774275

 $00{:}27{:}19{.}582 \dashrightarrow 00{:}27{:}22{.}402$  followed by a full dose of a pixaban for NOTE Confidence: 0.6957774275

 $00{:}27{:}22{.}402 \dashrightarrow 00{:}27{:}25{.}194$  11 weeks and and the patients were NOTE Confidence: 0.6957774275

 $00:27:25.194 \rightarrow 00:27:28.466$  followed for for at least 12 weeks.

NOTE Confidence: 0.6957774275

 $00{:}27{:}28{.}470 \dashrightarrow 00{:}27{:}31{.}356$  The inclusion criteria was all adults

NOTE Confidence: 0.6957774275

 $00:27:31.356 \rightarrow 00:27:33.873$  with with active malignancy and

NOTE Confidence: 0.6957774275

 $00:27:33.873 \rightarrow 00:27:36.463$  and clinically significant that is

NOTE Confidence: 0.6957774275

 $00:27:36.463 \rightarrow 00:27:38.979$  symptomatic upper extremity DVT in

 $00{:}27{:}38{.}979 \dashrightarrow 00{:}27{:}41{.}199$  association with the counter a CVC

NOTE Confidence: 0.6957774275

 $00{:}27{:}41.199 \dashrightarrow 00{:}27{:}43.906$  and the main exclusion criteria were.

NOTE Confidence: 0.6957774275

00:27:43.906 --> 00:27:47.098 Patients with active bleeding or clip

NOTE Confidence: 0.6957774275

 $00:27:47.098 \longrightarrow 00:27:51.018$  bits less than 75 or a need for dual NOTE Confidence: 0.6957774275

00:27:51.018 --> 00:27:53.191 antiplatelet therapy as well as most

NOTE Confidence: 0.6957774275

 $00{:}27{:}53{.}191 \dashrightarrow 00{:}27{:}55{.}546$  of the patients with hematologic

NOTE Confidence: 0.6957774275

 $00:27:55.546 \rightarrow 00:27:58.417$  malignancies or planned for stem cell

NOTE Confidence: 0.6957774275

 $00{:}27{:}58{.}417 \dashrightarrow 00{:}28{:}01{.}135$  transplant as well as pulmonary embolism

NOTE Confidence: 0.6957774275

 $00{:}28{:}01{.}140 \dashrightarrow 00{:}28{:}05{.}310$  with only with hemodynamic instability.

NOTE Confidence: 0.7885213266666667

00:28:07.560 --> 00:28:10.986 The primary outcome was catheter survival

NOTE Confidence: 0.7885213266666667

 $00{:}28{:}10{.}986 \dashrightarrow 00{:}28{:}14{.}299$  at three months and the secondary

NOTE Confidence: 0.7885213266666667

 $00{:}28{:}14.299 \dashrightarrow 00{:}28{:}17.497$  outcomes were any types of symptomatic

NOTE Confidence: 0.7885213266666667

 $00{:}28{:}17.497 \dashrightarrow 00{:}28{:}20.272$  recurrent venous throm boembolism as

NOTE Confidence: 0.7885213266666667

 $00{:}28{:}20{.}272 \dashrightarrow 00{:}28{:}22{.}876$  well as bleeding both major as well

NOTE Confidence: 0.7885213266666667

 $00{:}28{:}22{.}876$  -->  $00{:}28{:}24{.}958$  as clinically relevant non major

 $00:28:24.958 \rightarrow 00:28:27.484$  bleeds and deaths from any causes.

NOTE Confidence: 0.7885213266666667

 $00:28:27.490 \longrightarrow 00:28:33.458$  Umm, so here on the the

NOTE Confidence: 0.7885213266666667

00:28:33.458 --> 00:28:35.066 patients demographics here,

NOTE Confidence: 0.7885213266666667

 $00:28:35.070 \longrightarrow 00:28:37.968$  the 70 patients from 3 senators

NOTE Confidence: 0.7885213266666667

 $00:28:37.970 \longrightarrow 00:28:40.370$  majority were female, about 60%.

NOTE Confidence: 0.7885213266666667

 $00:28:40.370 \longrightarrow 00:28:41.759$  Median age 62.

NOTE Confidence: 0.842329573

 $00:28:43.790 \longrightarrow 00:28:46.022$  The diagnostic modality used

NOTE Confidence: 0.842329573

 $00:28:46.022 \rightarrow 00:28:48.812$  in most patients were Doppler

NOTE Confidence: 0.842329573

00:28:48.812 --> 00:28:50.650 ultrasounds and as you can see

NOTE Confidence: 0.842329573

 $00:28:50.650 \rightarrow 00:28:51.674$  these are symptomatic events.

NOTE Confidence: 0.842329573

 $00{:}28{:}51{.}680 \dashrightarrow 00{:}28{:}54{.}866$  So almost 75% of the patients

NOTE Confidence: 0.842329573

00:28:54.866 --> 00:28:56.990 actually have proximal upper

NOTE Confidence: 0.842329573

00:28:57.085 --> 00:28:59.833 extremity DVT involving subclavian,

NOTE Confidence: 0.842329573

 $00{:}28{:}59{.}833 \dashrightarrow 00{:}29{:}02{.}397$  at least subclavian veins.

NOTE Confidence: 0.89616046444444

 $00:29:04.590 \longrightarrow 00:29:06.230$  And this is perhaps slightly

NOTE Confidence: 0.89616046444444

 $00:29:06.230 \rightarrow 00:29:07.542$  different from our practice,

 $00:29:07.550 \longrightarrow 00:29:09.206$  so about 80% of the patients.

NOTE Confidence: 0.89616046444444

 $00:29:09.210 \longrightarrow 00:29:12.330$  So these were mostly outpatient.

NOTE Confidence: 0.89616046444444

 $00:29:12.330 \rightarrow 00:29:14.120$  The patients being treated outpatients

NOTE Confidence: 0.89616046444444

 $00{:}29{:}14.120 \dashrightarrow 00{:}29{:}17.420$  and and about 80% of them had picks

NOTE Confidence: 0.89616046444444

 $00:29:17.420 \longrightarrow 00:29:20.096$  and only 20% had portacaths and as NOTE Confidence: 0.89616046444444

 $00:29:20.096 \rightarrow 00:29:22.779$  you can see the type of cancer about

NOTE Confidence: 0.89616046444444

 $00{:}29{:}22{.}779 \dashrightarrow 00{:}29{:}25{.}555$  a third were breast and a third were

NOTE Confidence: 0.89616046444444

 $00:29:25.635 \rightarrow 00:29:28.185$  colon and the remaining were others.

NOTE Confidence: 0.89616046444444

00:29:28.190 --> 00:29:30.068 So coming to the primary outcome,

NOTE Confidence: 0.89616046444444

00:29:30.070 - 00:29:34.036 so catheter survival so adds 12 weeks,

NOTE Confidence: 0.89616046444444

 $00{:}29{:}34.036 \dashrightarrow 00{:}29{:}39.332$  40 patients had so which is about 5760%

NOTE Confidence: 0.89616046444444

 $00{:}29{:}39{.}332 \dashrightarrow 00{:}29{:}44{.}504$  had catheter still present and functioning.

NOTE Confidence: 0.89616046444444

 $00{:}29{:}44{.}510$  -->  $00{:}29{:}48{.}731$  But if you can see the reason for removal NOTE Confidence: 0.89616046444444

 $00{:}29{:}48.731 \dashrightarrow 00{:}29{:}51.590$  actually most of the patients who had

NOTE Confidence: 0.89616046444444

 $00{:}29{:}51{.}590 \dashrightarrow 00{:}29{:}54{.}886$  it removed was because of end of the

 $00:29:54.886 \longrightarrow 00:29:57.190$  therapeutic need which is about 20.

NOTE Confidence: 0.89616046444444

 $00{:}29{:}57{.}190 \dashrightarrow 00{:}30{:}00{.}006$  One patients or 30% and then a minor

NOTE Confidence: 0.89616046444444

 $00:30:00.006 \rightarrow 00:30:01.922$  proportion of the patients with

NOTE Confidence: 0.89616046444444

 $00:30:01.922 \rightarrow 00:30:04.582$  with other reasons which is you know

NOTE Confidence: 0.89616046444444

 $00{:}30{:}04.655 \dashrightarrow 00{:}30{:}07.103$  infection or two patients died and

NOTE Confidence: 0.89616046444444

 $00{:}30{:}07{.}103 \dashrightarrow 00{:}30{:}11{.}419$  there were no recurrent events and so.

NOTE Confidence: 0.896160464444444

00:30:11.420 --> 00:30:14.138 If you consider.

NOTE Confidence: 0.89616046444444

 $00:30:14.140 \rightarrow 00:30:16.268$  Or exclude the end of the rapeutic needs.

NOTE Confidence: 0.89616046444444

 $00{:}30{:}16.270 \dashrightarrow 00{:}30{:}18.140$  The the catheter survival was

NOTE Confidence: 0.89616046444444

 $00:30:18.140 \longrightarrow 00:30:21.798$  almost 100% with the pixman therapy.

NOTE Confidence: 0.89616046444444

 $00:30:21.800 \rightarrow 00:30:24.278$  The safety outcomes only one patient

NOTE Confidence: 0.89616046444444

00:30:24.278 --> 00:30:27.258 had a recurrent DVT and the same arm,

NOTE Confidence: 0.89616046444444

 $00:30:27.260 \longrightarrow 00:30:30.100$  and even in this patient the line

NOTE Confidence: 0.89616046444444

 $00:30:30.100 \longrightarrow 00:30:33.176$  was not removed and was a functional.

NOTE Confidence: 0.89616046444444

 $00:30:33.180 \longrightarrow 00:30:35.908$  There were twelve bleeds,

NOTE Confidence: 0.89616046444444

 $00:30:35.908 \rightarrow 00:30:40.136$  six major and six minor bleeds

00:30:40.136 -> 00:30:43.313 and most happened within the first

NOTE Confidence: 0.89616046444444

 $00:30:43.313 \longrightarrow 00:30:44.868$  two months of of treatment.

NOTE Confidence: 0.89616046444444

 $00{:}30{:}44.870 \dashrightarrow 00{:}30{:}46.725$  There were two deaths and they were

NOTE Confidence: 0.89616046444444

 $00:30:46.725 \rightarrow 00:30:51.160$  both delayed and and cancer related.

NOTE Confidence: 0.89616046444444

 $00{:}30{:}51{.}160 \dashrightarrow 00{:}30{:}54{.}730$  So limitations of course it's a single

NOTE Confidence: 0.89616046444444

 $00{:}30{:}54{.}730 \dashrightarrow 00{:}30{:}57{.}814$  arm and most of the patients were

NOTE Confidence: 0.89616046444444

 $00:30:57.814 \rightarrow 00:31:00.663$  outpatients and so perhaps not as ill

NOTE Confidence: 0.89616046444444

 $00:31:00.663 \dashrightarrow 00:31:03.127$  and with the limited follow but but

NOTE Confidence: 0.89616046444444

 $00{:}31{:}03{.}209 \dashrightarrow 00{:}31{:}05{.}905$  I I guess for our our practice many

NOTE Confidence: 0.89616046444444

00:31:05.905 --> 00:31:08.760 of these or most of these patients

NOTE Confidence: 0.89616046444444

00:31:08.760 --> 00:31:10.940 actually had picks our patient

NOTE Confidence: 0.89616046444444

 $00:31:11.021 \dashrightarrow 00:31:13.277$  as compared to a Porter cats.

NOTE Confidence: 0.89616046444444

 $00{:}31{:}13{.}280 \dashrightarrow 00{:}31{:}15{.}830$  So the conclusions were that the

NOTE Confidence: 0.89616046444444

00:31:15.830 --> 00:31:18.198 pixabaj should promise in treating

NOTE Confidence: 0.89616046444444

 $00{:}31{:}18.198 \dashrightarrow 00{:}31{:}20.546$  central venous catheter associated

00:31:20.546 - 00:31:22.307 upper extremity DVT.

NOTE Confidence: 0.89616046444444

 $00:31:22.310 \longrightarrow 00:31:24.605$  And the observed bleeding rates

NOTE Confidence: 0.89616046444444

 $00:31:24.605 \rightarrow 00:31:26.900$  were lower than as previously

NOTE Confidence: 0.89616046444444

 $00:31:26.900 \longrightarrow 00:31:30.020$  described with rivaroxaban.

NOTE Confidence: 0.89616046444444

 $00{:}31{:}30{.}020 \dashrightarrow 00{:}31{:}34{.}835$  And so here are the the other two studies.

NOTE Confidence: 0.89616046444444

 $00:31:34.840 \longrightarrow 00:31:36.178$  Done previously by the same group.

NOTE Confidence: 0.89616046444444

 $00{:}31{:}36{.}180 \dashrightarrow 00{:}31{:}38{.}714$  So the first one was the catheter

NOTE Confidence: 0.89616046444444

 $00:31:38.714 \rightarrow 00:31:40.572$  study which was low molecular

NOTE Confidence: 0.89616046444444

 $00:31:40.572 \rightarrow 00:31:42.565$  weight heparin followed by widening

NOTE Confidence: 0.89616046444444

 $00:31:42.565 \rightarrow 00:31:45.055$  the antagonist and then the more

NOTE Confidence: 0.89616046444444

 $00{:}31{:}45.055 \dashrightarrow 00{:}31{:}47.739$  recent one was a catheter 2 which

NOTE Confidence: 0.89616046444444

 $00{:}31{:}47.739 \dashrightarrow 00{:}31{:}49.990$  was River rockband without a lead

NOTE Confidence: 0.896160464444444

 $00{:}31{:}49{.}990 \dashrightarrow 00{:}31{:}52{.}114$  in with the loonie weight heparin.

NOTE Confidence: 0.89616046444444

 $00:31:52.120 \longrightarrow 00:31:54.080$  And here as you can see there are

NOTE Confidence: 0.89616046444444

 $00:31:54.080 \longrightarrow 00:31:56.521$  a lot more bleeds and then the the

NOTE Confidence: 0.89616046444444

 $00:31:56.521 \dashrightarrow 00:31:58.248$  the current bonus the dalte parin

 $00:31:58.248 \rightarrow 00:32:00.884$  followed by Pixar ban with perhaps

NOTE Confidence: 0.89616046444444

 $00:32:00.884 \longrightarrow 00:32:02.420$  with less Pittsburgh.

NOTE Confidence: 0.89616046444444

 $00:32:02.420 \longrightarrow 00:32:04.922$  I think the most important point is that in.

NOTE Confidence: 0.89616046444444

 $00:32:04.930 \longrightarrow 00:32:07.210$  In most of these patients,

NOTE Confidence: 0.89616046444444

 $00:32:07.210 \longrightarrow 00:32:10.058$  despite proximal and symptomatic

NOTE Confidence: 0.89616046444444

 $00{:}32{:}10.058 \dashrightarrow 00{:}32{:}14.330$  upper extremity DVT's are the lines

NOTE Confidence: 0.89616046444444

 $00{:}32{:}14{.}436 \dashrightarrow 00{:}32{:}17{.}784$  were not removed and and were not

NOTE Confidence: 0.89616046444444

 $00{:}32{:}17.784 \dashrightarrow 00{:}32{:}19.874$  associated with infusion failure and

NOTE Confidence: 0.89616046444444

 $00{:}32{:}19{.}874 \dashrightarrow 00{:}32{:}22{.}486$  and the lines were were able

NOTE Confidence: 0.89616046444444

 $00:32:22.486 \dashrightarrow 00:32:27.260$  to be saved with anticoagulation.

NOTE Confidence: 0.89616046444444

 $00:32:27.260 \rightarrow 00:32:30.426$  So coming to the second one which

NOTE Confidence: 0.89616046444444

00:32:30.426 --> 00:32:32.610 is abstract #519 and

NOTE Confidence: 0.839978205185185

 $00{:}32{:}34{.}800 \dashrightarrow 00{:}32{:}36{.}781$  the title of the abstract is only

NOTE Confidence: 0.839978205185185

00:32:36.781 --> 00:32:38.963 dynamics of C reactive protein to

NOTE Confidence: 0.839978205185185

 $00{:}32{:}38{.}963 \dashrightarrow 00{:}32{:}41{.}073$  predict risk of venous throm boembolism

 $00:32:41.073 \rightarrow 00:32:43.376$  in patients with cancer treated

NOTE Confidence: 0.839978205185185

 $00:32:43.376 \rightarrow 00:32:45.236$  with immune checkpoint inhibitors.

NOTE Confidence: 0.839978205185185

00:32:45.240 --> 00:32:49.305 And this comes from Austria, Vienna,

NOTE Confidence: 0.839978205185185

00:32:49.305 --> 00:32:54.480 Austria. So just to be quick,

NOTE Confidence: 0.839978205185185

 $00{:}32{:}54{.}480 \dashrightarrow 00{:}32{:}57{.}260$  because I'm an embolism.

NOTE Confidence: 0.839978205185185

 $00{:}32{:}57{.}260 \dashrightarrow 00{:}33{:}00{.}711$  Is being recognized as a major complication

NOTE Confidence: 0.839978205185185

 $00:33:00.711 \rightarrow 00:33:03.660$  of immune checkpoint inhibitor therapy.

NOTE Confidence: 0.839978205185185

00:33:03.660 - 00:33:05.760 The rates have been described as

NOTE Confidence: 0.839978205185185

 $00:33:05.760 \longrightarrow 00:33:09.050$  high as 25% but the prothrombin

NOTE Confidence: 0.839978205185185

 $00:33:09.050 \rightarrow 00:33:11.640$  prothrombotic effect is the these

NOTE Confidence: 0.839978205185185

 $00:33:11.730 \longrightarrow 00:33:13.634$  immune checkpoint inhibitors as

NOTE Confidence: 0.839978205185185

 $00{:}33{:}13.634 \dashrightarrow 00{:}33{:}17.667$  well as the the risk factors are

NOTE Confidence: 0.839978205185185

00:33:17.667 --> 00:33:20.397 unclear because the risk factors,

NOTE Confidence: 0.839978205185185

 $00:33:20.400 \longrightarrow 00:33:22.230$  the traditional risk factors and the

NOTE Confidence: 0.839978205185185

 $00:33:22.230 \rightarrow 00:33:24.380$  scoring system such as the KORANA score,

NOTE Confidence: 0.839978205185185

 $00:33:24.380 \longrightarrow 00:33:27.230$  they do not function as well.

 $00:33:27.230 \longrightarrow 00:33:31.058$  In the setting of checkpoint inhibitors.

NOTE Confidence: 0.839978205185185

 $00:33:31.060 \rightarrow 00:33:33.348$  So basically the goal of the study was

NOTE Confidence: 0.839978205185185

 $00:33:33.348 \rightarrow 00:33:35.403$  to explore early dynamics of systemic

NOTE Confidence: 0.839978205185185

 $00:33:35.403 \dashrightarrow 00:33:38.031$  CRP levels after initiation of the immune

NOTE Confidence: 0.839978205185185

 $00:33:38.031 \rightarrow 00:33:40.191$  checkpoint habits for prediction of

NOTE Confidence: 0.839978205185185

 $00{:}33{:}40{.}191 \dashrightarrow 00{:}33{:}43{.}770$  venous throm boembolism in these patients.

NOTE Confidence: 0.839978205185185

00:33:43.770 --> 00:33:46.518 And why CRP?

NOTE Confidence: 0.839978205185185

 $00{:}33{:}46{.}518$  -->  $00{:}33{:}50{.}984$  Because CRP has been shown to be a

NOTE Confidence: 0.839978205185185

 $00{:}33{:}50{.}984 \dashrightarrow 00{:}33{:}53{.}801$  predictor of poorer outcome or higher

NOTE Confidence: 0.839978205185185

 $00:33:53.801 \rightarrow 00:33:58.130$  designed CRP as well as a CRP response.

NOTE Confidence: 0.839978205185185

 $00:33:58.130 \dashrightarrow 00:34:00.686$  CRP Flair has been associated with

NOTE Confidence: 0.839978205185185

 $00:34:00.686 \dashrightarrow 00:34:03.140$  poor outcomes in these patients.

NOTE Confidence: 0.839978205185185

 $00{:}34{:}03{.}140 \dashrightarrow 00{:}34{:}06{.}710$  And and it's well recognized that the

NOTE Confidence: 0.839978205185185

 $00:34:06.710 \longrightarrow 00:34:08.886$  developer systemic antitumoral immune

NOTE Confidence: 0.839978205185185

 $00{:}34{:}08.886 \dashrightarrow 00{:}34{:}11.554$  response associated with a major

 $00:34:11.554 \rightarrow 00:34:14.184$  inflammatory response in which CRP

NOTE Confidence: 0.839978205185185

 $00:34:14.184 \rightarrow 00:34:17.504$  has been shown to be a major marker.

NOTE Confidence: 0.839978205185185

 $00{:}34{:}17.510 \dashrightarrow 00{:}34{:}21.094$  Umm. So the methods.

NOTE Confidence: 0.839978205185185

 $00:34:21.094 \rightarrow 00:34:23.602$  So this was a retrospective cohort

NOTE Confidence: 0.839978205185185

 $00:34:23.602 \longrightarrow 00:34:26.214$  study of about 405 patients.

NOTE Confidence: 0.839978205185185

 $00:34:26.214 \rightarrow 00:34:29.999$  These were patients with cancer

NOTE Confidence: 0.839978205185185

 $00{:}34{:}29{.}999 \dashrightarrow 00{:}34{:}34{.}708$  treated in in Med UNI Vienna.

NOTE Confidence: 0.839978205185185

 $00{:}34{:}34{.}710 \dashrightarrow 00{:}34{:}37{.}070$  The.

NOTE Confidence: 0.839978205185185

 $00:34:37.070 \longrightarrow 00:34:39.331$  The follow-up was at least for the

NOTE Confidence: 0.839978205185185

00:34:39.331 - > 00:34:41.752 duration of IC ICI therapy until

NOTE Confidence: 0.839978205185185

00:34:41.752 --> 00:34:43.688 subsequent anti cancer therapy

NOTE Confidence: 0.839978205185185

 $00{:}34{:}43.688 \dashrightarrow 00{:}34{:}46.795$  death or a maximum of three months

NOTE Confidence: 0.839978205185185

00:34:46.795 --> 00:34:49.808 of the last cycle of the immune

NOTE Confidence: 0.839978205185185

00:34:49.808 --> 00:34:52.068 checkpoint inhibitor therapy and

NOTE Confidence: 0.839978205185185

 $00:34:52.068 \rightarrow 00:34:57.260$  and the endpoints were DTE.

NOTE Confidence: 0.839978205185185

 $00:34:57.260 \rightarrow 00:34:59.654$  That were mostly pulmonary embolism and DVT,

- NOTE Confidence: 0.839978205185185
- 00:34:59.660 --> 00:35:02.180 but also recorded for splanchnic,
- NOTE Confidence: 0.839978205185185
- $00:35:02.180 \longrightarrow 00:35:03.592$  venous thrombosis,
- NOTE Confidence: 0.839978205185185
- $00{:}35{:}03.592 \dashrightarrow 00{:}35{:}05.710$  catheter related throm bosis
- NOTE Confidence: 0.839978205185185
- $00:35:05.710 \longrightarrow 00:35:08.534$  and other other events.
- NOTE Confidence: 0.839978205185185
- 00:35:08.540 > 00:35:10.646 In terms of the CRP dynamics,
- NOTE Confidence: 0.839978205185185
- $00{:}35{:}10.650 \dashrightarrow 00{:}35{:}14.208$  the CRP was measured at baseline
- NOTE Confidence: 0.839978205185185
- $00:35:14.210 \longrightarrow 00:35:15.866$  that is within the four weeks,
- NOTE Confidence: 0.839978205185185
- $00:35:15.870 \longrightarrow 00:35:18.035$  within four weeks prior to
- NOTE Confidence: 0.839978205185185
- $00:35:18.035 \rightarrow 00:35:20.748$  institution of this therapy and then
- NOTE Confidence: 0.839978205185185
- $00:35:20.748 \rightarrow 00:35:22.628$  it was longitudinally monitored
- NOTE Confidence: 0.839978205185185
- $00:35:22.628 \rightarrow 00:35:25.508$  for the first three months after
- NOTE Confidence: 0.839978205185185
- $00:35:25.508 \rightarrow 00:35:27.748$  the initiation of the therapy.
- NOTE Confidence: 0.839978205185185
- $00:35:27.750 \dashrightarrow 00:35:30.487$  And for the purpose of this study
- NOTE Confidence: 0.839978205185185
- $00{:}35{:}30{.}487 \dashrightarrow 00{:}35{:}33{.}122$  this the the CRP dynamics were
- NOTE Confidence: 0.839978205185185
- $00{:}35{:}33{.}122 \dashrightarrow 00{:}35{.}35{.}876$  defined either as CRP flare which
- NOTE Confidence: 0.839978205185185

 $00:35:35.876 \rightarrow 00:35:38.912$  is increase in the CRP by by.

NOTE Confidence: 0.839978205185185

 $00{:}35{:}38{.}912 \dashrightarrow 00{:}35{:}42{.}780$  At least 2.5 fold over the baseline

NOTE Confidence: 0.839978205185185

 $00:35:42.780 \longrightarrow 00:35:46.350$  or a CRP response which was 50%

NOTE Confidence: 0.839978205185185

 $00:35:46.350 \rightarrow 00:35:50.400$  relative decrease from the baseline.

NOTE Confidence: 0.839978205185185

 $00:35:50.400 \dashrightarrow 00:35:52.830$  Um.

NOTE Confidence: 0.839978205185185

 $00:35:52.830 \longrightarrow 00:35:56.526$  So the most important in terms of the

NOTE Confidence: 0.839978205185185

 $00:35:56.526 \longrightarrow 00:35:59.043$  cohort demographics is that most of

NOTE Confidence: 0.839978205185185

 $00:35:59.043 \rightarrow 00:36:04.400$  the patients were staged for malignancies.

NOTE Confidence: 0.839978205185185

 $00:36:04.400 \longrightarrow 00:36:06.638$  Of of a variety of types,

NOTE Confidence: 0.839978205185185

 $00:36:06.640 \rightarrow 00:36:09.590$  mostly therapies where are cancers

NOTE Confidence: 0.839978205185185

 $00:36:09.590 \rightarrow 00:36:14.035$  known to be known to respond to to

NOTE Confidence: 0.839978205185185

 $00{:}36{:}14.035 \dashrightarrow 00{:}36{:}16.612$  immune checkpoint inhibitors and then

NOTE Confidence: 0.839978205185185

 $00:36:16.612 \rightarrow 00:36:20.480$  many of the patients had received or

NOTE Confidence: 0.839978205185185

 $00:36:20.480 \longrightarrow 00:36:23.680$  seen multiple lines of the rapies.

NOTE Confidence: 0.839978205185185

 $00:36:23.680 \longrightarrow 00:36:26.720$  The the median follow up for the

NOTE Confidence: 0.839978205185185

 $00:36:26.720 \longrightarrow 00:36:28.780$  study for was about 8.5 months.

00:36:31.280 --> 00:36:35.918 Umm, so, so defining CRP flare.

NOTE Confidence: 0.524805423333333

00:36:35.920 --> 00:36:39.760 So among the 405 patients,

NOTE Confidence: 0.524805423333333

00:36:39.760 --> 00:36:41.310 70% had a CRP flare,

NOTE Confidence: 0.524805423333333

 $00{:}36{:}41{.}310 \dashrightarrow 00{:}36{:}45{.}441$  which is again a rise in CRP of greater

NOTE Confidence: 0.524805423333333

 $00:36:45.441 \longrightarrow 00:36:48.927$  than 2.5 folds over the baseline.

NOTE Confidence: 0.524805423333333

 $00:36:48.930 \longrightarrow 00:36:55.170$  And then there, so let me so in

NOTE Confidence: 0.524805423333333

 $00:36:55.170 \rightarrow 00:36:58.434$  terms of the different a definition,

NOTE Confidence: 0.524805423333333

 $00:36:58.434 \longrightarrow 00:37:02.500$  so basically some 78 to 80% had the

NOTE Confidence: 0.524805423333333

 $00{:}37{:}02.500 \dashrightarrow 00{:}37{:}06.346$  CRP flare and then about a third had

NOTE Confidence: 0.524805423333333

 $00:37:06.346 \rightarrow 00:37:10.662$  CRP response which is drop in CRP.

NOTE Confidence: 0.524805423333333

00:37:10.662 -> 00:37:17.010 Either after a flare or in about um.

NOTE Confidence: 0.524805423333333

00:37:17.010 -> 00:37:19.446 14% of the patients without a flare

NOTE Confidence: 0.524805423333333

 $00{:}37{:}19{.}446 \dashrightarrow 00{:}37{:}22{.}694$  to to less than 50% of the baseline

NOTE Confidence: 0.524805423333333

 $00:37:22.694 \rightarrow 00:37:26.350$  and then about 1/3 of the patients

NOTE Confidence: 0.524805423333333

 $00{:}37{:}26.350 \dashrightarrow 00{:}37{:}28.408$  did not or were non responders which,

 $00:37:28.410 \longrightarrow 00:37:30.542$  which is their CRP,

NOTE Confidence: 0.524805423333333

 $00{:}37{:}30{.}542 \dashrightarrow 00{:}37{:}33{.}780$  did not reduce to 50% of the baseline.

NOTE Confidence: 0.783852911428572

 $00{:}37{:}36{.}550 \dashrightarrow 00{:}37{:}40{.}806$  And then based on the CRP dynamics,

NOTE Confidence: 0.783852911428572

 $00:37:40.810 \longrightarrow 00:37:44.410$  the the the authors found that the risk

NOTE Confidence: 0.783852911428572

 $00{:}37{:}44{.}410 \dashrightarrow 00{:}37{:}48{.}200$  of DVT E the cumulative risk of DVT

NOTE Confidence: 0.783852911428572

00:37:48.200 --> 00:37:53.408 was about 3.5 fold in in patients who

NOTE Confidence: 0.783852911428572

 $00{:}37{:}53{.}408 \dashrightarrow 00{:}37{:}59{.}588$  had a CRP flare irrespective of of.

NOTE Confidence: 0.783852911428572

 $00:37:59.590 \longrightarrow 00:38:01.478$  A response or not?

NOTE Confidence: 0.801023083181818

 $00:38:03.730 \longrightarrow 00:38:04.600$  More importantly,

NOTE Confidence: 0.801023083181818

 $00:38:04.600 \rightarrow 00:38:08.080$  they also found that the the risk of

NOTE Confidence: 0.801023083181818

00:38:08.164 --> 00:38:11.158 DVT was associated with an increase

NOTE Confidence: 0.801023083181818

 $00:38:11.158 \rightarrow 00:38:14.050$  mortality according to the CRP flare.

NOTE Confidence: 0.801023083181818

00:38:14.050 --> 00:38:17.370 So the hazard ratio for death after VE

NOTE Confidence: 0.801023083181818

 $00{:}38{:}17{.}370 \dashrightarrow 00{:}38{:}20{.}457$  Justed for cancer type was about 3.5

NOTE Confidence: 0.801023083181818

 $00:38:20.457 \rightarrow 00:38:23.166$  fold in patients with CRV CRV flare

NOTE Confidence: 0.801023083181818

 $00{:}38{:}23.166 \dashrightarrow 00{:}38{:}26.038$  and then adjusted for the stage of

 $00:38:26.038 \longrightarrow 00:38:32.450$  the cancer was 3.21 fold again. Um.

NOTE Confidence: 0.720324951428571

 $00{:}38{:}34{.}910 \dashrightarrow 00{:}38{:}37{.}115$  In patients with with their CRP flare.

NOTE Confidence: 0.82518405

 $00:38:39.760 \dashrightarrow 00:38:44.448$  So the conclusions were that's the early

NOTE Confidence: 0.82518405

00:38:44.448 --> 00:38:47.309 dynamics of systemic CRP levels are

NOTE Confidence: 0.82518405

00:38:47.309 --> 00:38:50.333 associated with the risk of VTE during

NOTE Confidence: 0.82518405

00:38:50.333 --> 00:38:52.699 immune checkpoint inhibitor therapy and

NOTE Confidence: 0.82518405

 $00{:}38{:}52.699 \dashrightarrow 00{:}38{:}56.014$  the highest risk of DVT was observed

NOTE Confidence: 0.82518405

 $00{:}38{:}56{.}014 \dashrightarrow 00{:}38{:}59{.}767$  in patients with early CRP flare after

NOTE Confidence: 0.82518405

 $00:38:59.767 \dashrightarrow 00:39:03.596$  ICI initiation and then the lowest risk NOTE Confidence: 0.82518405

 $00:39:03.596 \rightarrow 00:39:07.740$  was in patients where the CRP drop.

NOTE Confidence: 0.82518405

 $00:39:07.740 \longrightarrow 00:39:10.435$  Dropped below 50% with no prior flare,

NOTE Confidence: 0.82518405

 $00{:}39{:}10.440 \dashrightarrow 00{:}39{:}13.618$  but this was a very small proportion

NOTE Confidence: 0.82518405

 $00:39:13.618 \rightarrow 00:39:15.908$  of patients about 12 to 14%.

NOTE Confidence: 0.82518405

 $00{:}39{:}15{.}910 \dashrightarrow 00{:}39{:}18{.}774$  And then they also found a potential risk,

NOTE Confidence: 0.82518405

00:39:18.780 --> 00:39:22.104 a link between immune checkpoint inhibitor NOTE Confidence: 0.82518405

- 00:39:22.104 --> 00:39:24.320 induced systemic inflammatory response
- NOTE Confidence: 0.82518405
- $00{:}39{:}24{.}393 \dashrightarrow 00{:}39{:}27.635$  and risk of CTE in in addition to an
- NOTE Confidence: 0.82518405
- $00{:}39{:}27.635 \dashrightarrow 00{:}39{:}30.387$  independent association of of Vt with
- NOTE Confidence: 0.82518405
- $00{:}39{:}30{.}387 \dashrightarrow 00{:}39{:}33{.}955$  mortality in patients who have a CRP flair.
- NOTE Confidence: 0.82518405
- $00:39:33.960 \longrightarrow 00:39:35.766$  So I think with this I'll end.
- NOTE Confidence: 0.891980224
- $00:39:43.910 \longrightarrow 00:39:44.768$  Well, that's great.
- NOTE Confidence: 0.891980224
- $00:39:44.768 \longrightarrow 00:39:46.198$  Thank you all for those
- NOTE Confidence: 0.891980224
- $00:39:46.198 \rightarrow 00:39:46.770$  great presentations.
- NOTE Confidence: 0.891980224
- $00{:}39{:}46{.}770 \dashrightarrow 00{:}39{:}48{.}706$  So thanks so much.
- NOTE Confidence: 0.891980224
- 00:39:48.706 --> 00:39:51.126 I if people have questions,
- NOTE Confidence: 0.891980224
- $00{:}39{:}51{.}130 \dashrightarrow 00{:}39{:}53{.}244$  please put them in the Q& amp;A or
- NOTE Confidence: 0.891980224
- $00:39:53.244 \rightarrow 00:39:55.355$  the chat and while we're waiting
- NOTE Confidence: 0.891980224
- 00:39:55.355 --> 00:39:57.605 for them to come in perhaps
- NOTE Confidence: 0.891980224
- $00:39:57.605 \longrightarrow 00:39:59.708$  some I can start with a few.
- NOTE Confidence: 0.867096442857143
- 00:40:02.110 --> 00:40:03.958 If Doctor Van Doren is still on,
- NOTE Confidence: 0.867096442857143
- $00:40:03.960 \longrightarrow 00:40:04.842$  and I know she might have

- NOTE Confidence: 0.867096442857143
- $00{:}40{:}04{.}842 \dashrightarrow 00{:}40{:}05{.}730$  had to go into clinic,
- NOTE Confidence: 0.867096442857143
- $00:40:05.730 \longrightarrow 00:40:07.470$  looks like she did step off.
- NOTE Confidence: 0.867096442857143
- 00:40:07.470 --> 00:40:11.043 So George, I I have a question for you.
- NOTE Confidence: 0.867096442857143
- 00:40:11.050 00:40:15.298 In the study with Subtitle MIB
- NOTE Confidence: 0.867096442857143
- $00:40:15.298 \longrightarrow 00:40:17.348$  and cold agglutinin disease,
- NOTE Confidence: 0.867096442857143
- $00{:}40{:}17.348 \dashrightarrow 00{:}40{:}20.470$  you noted that there was an increase
- NOTE Confidence: 0.867096442857143
- $00{:}40{:}20{.}470 \dashrightarrow 00{:}40{:}22.738$  in patient reported outcomes.
- NOTE Confidence: 0.867096442857143
- 00:40:22.738 --> 00:40:25.432 Quality of life improved despite
- NOTE Confidence: 0.867096442857143
- $00{:}40{:}25{.}432 \dashrightarrow 00{:}40{:}27{.}542$  the fact that these individuals
- NOTE Confidence: 0.867096442857143
- $00:40:27.542 \rightarrow 00:40:30.210$  did not require blood transfusions.
- NOTE Confidence: 0.867096442857143
- $00:40:30.210 \longrightarrow 00:40:31.968$  Could you postulate on why they
- NOTE Confidence: 0.867096442857143
- $00:40:31.968 \longrightarrow 00:40:33.920$  may have had this improvement?
- NOTE Confidence: 0.867096442857143
- $00:40:33.920 \rightarrow 00:40:36.202$  In the way they felt without having
- NOTE Confidence: 0.867096442857143
- $00{:}40{:}36{.}202 \dashrightarrow 00{:}40{:}38{.}529$  a need for blood transfusion.
- NOTE Confidence: 0.803603747142857
- $00{:}40{:}39{.}210 \dashrightarrow 00{:}40{:}42{.}017$  Thank you, Bob. Such a great question.
- NOTE Confidence: 0.803603747142857

 $00{:}40{:}42.020 \dashrightarrow 00{:}40{:}44.150$  There's a thud in the

NOTE Confidence: 0.803603747142857

00:40:44.150 - > 00:40:45.854 hemolytic community in general,

NOTE Confidence: 0.803603747142857

 $00:40:45.860 \rightarrow 00:40:47.904$  both in autoimmune hemolytic anemia and PNH

NOTE Confidence: 0.803603747142857

 $00:40:47.904 \rightarrow 00:40:49.900$  and other disorders where we see hemolysis,

NOTE Confidence: 0.803603747142857

 $00:40:49.900 \longrightarrow 00:40:52.932$  that quality of life is affected by the

NOTE Confidence: 0.803603747142857

00:40:52.932 --> 00:40:55.117 hemolysis independent of hemoglobin as well,

NOTE Confidence: 0.803603747142857

00:40:55.120 --> 00:40:57.868 in addition to hemoglobin drops and

NOTE Confidence: 0.803603747142857

 $00:40:57.868 \rightarrow 00:40:59.700$  low hemoglobin hemoglobin levels.

NOTE Confidence: 0.803603747142857

 $00{:}40{:}59{.}700 \dashrightarrow 00{:}41{:}01{.}710$  The idea being that in

NOTE Confidence: 0.803603747142857

 $00:41:01.710 \longrightarrow 00:41:02.856$  a chronically hemolytic,

NOTE Confidence: 0.803603747142857

 $00:41:02.856 \longrightarrow 00:41:04.536$  in a chronic hemolytic stage,

NOTE Confidence: 0.803603747142857

 $00:41:04.540 \longrightarrow 00:41:05.995$  you have an underlying degree

NOTE Confidence: 0.803603747142857

 $00:41:05.995 \longrightarrow 00:41:06.577$  of inflammation.

NOTE Confidence: 0.803603747142857

 $00:41:06.580 \longrightarrow 00:41:08.506$  At least that's the theory that's

NOTE Confidence: 0.803603747142857

 $00:41:08.506 \rightarrow 00:41:09.790$  being posited that's contributing

NOTE Confidence: 0.803603747142857

 $00:41:09.840 \longrightarrow 00:41:11.035$  perhaps to this fatigue and

 $00:41:11.035 \longrightarrow 00:41:12.620$  the idea being that if we can.

NOTE Confidence: 0.803603747142857

 $00{:}41{:}12.620 \dashrightarrow 00{:}41{:}15.735$  Shut down the hemolysis or maybe let's

NOTE Confidence: 0.803603747142857

 $00:41:15.735 \rightarrow 00:41:19.550$  say decrease it with ages like symbolab,

NOTE Confidence: 0.803603747142857

 $00:41:19.550 \longrightarrow 00:41:23.166$  the monoclonal C1S antibody for cold

NOTE Confidence: 0.803603747142857

00:41:23.166 --> 00:41:26.134 agglutinin disease or anti C3 and C5

NOTE Confidence: 0.803603747142857

 $00{:}41{:}26{.}134 \dashrightarrow 00{:}41{:}28{.}330$  the rapies for example in pH that we

NOTE Confidence: 0.803603747142857

 $00:41:28.330 \rightarrow 00:41:30.436$  can further improve quality of life.

NOTE Confidence: 0.803603747142857

 $00{:}41{:}30{.}440 \dashrightarrow 00{:}41{:}32{.}258$  And I think this also underscores

NOTE Confidence: 0.803603747142857

 $00:41:32.258 \longrightarrow 00:41:33.616$  too that umm, you know,

NOTE Confidence: 0.803603747142857

 $00:41:33.616 \longrightarrow 00:41:35.786$  we we focus a lot in the past on

NOTE Confidence: 0.803603747142857

 $00{:}41{:}35.786 \dashrightarrow 00{:}41{:}37.742$  these hard outcomes which are of

NOTE Confidence: 0.803603747142857

 $00{:}41{:}37.742 \dashrightarrow 00{:}41{:}39.410$  course important like hemoglobin,

NOTE Confidence: 0.803603747142857

 $00:41:39.410 \longrightarrow 00:41:41.500$  but there's an additional component

NOTE Confidence: 0.803603747142857

 $00{:}41{:}41{.}500 \dashrightarrow 00{:}41{:}43{.}172$  to quality of life.

NOTE Confidence: 0.803603747142857

 $00{:}41{:}43.180 \dashrightarrow 00{:}41{:}44.800$  Beyond that now that is difficult

 $00:41:44.800 \longrightarrow 00:41:46.868$  to capture and I think that the

NOTE Confidence: 0.803603747142857

 $00:41:46.868 \rightarrow 00:41:48.408$  investigators could have done a

NOTE Confidence: 0.803603747142857

 $00:41:48.408 \longrightarrow 00:41:49.914$  better job honestly with similar

NOTE Confidence: 0.803603747142857

 $00:41:49.914 \rightarrow 00:41:52.239$  map and in fact most of phase three

NOTE Confidence: 0.803603747142857

 $00:41:52.239 \rightarrow 00:41:53.406$  investigations currently looking

NOTE Confidence: 0.803603747142857

 $00:41:53.406 \longrightarrow 00:41:55.740$  at quality of life use patient

NOTE Confidence: 0.803603747142857

 $00:41:55.803 \rightarrow 00:41:57.608$  reported outcomes which is good.

NOTE Confidence: 0.803603747142857

00:41:57.610 --> 00:42:00.060 But most of the times they're not

NOTE Confidence: 0.803603747142857

 $00:42:00.060 \rightarrow 00:42:01.252$  validated externally validated.

NOTE Confidence: 0.803603747142857

 $00:42:01.252 \longrightarrow 00:42:03.778$  And the one for sure sure fire

NOTE Confidence: 0.803603747142857

 $00:42:03.778 \rightarrow 00:42:06.370$  way to robustly look at these,

NOTE Confidence: 0.803603747142857

 $00:42:06.370 \longrightarrow 00:42:08.614$  although that takes a little bit

NOTE Confidence: 0.803603747142857

 $00:42:08.614 \rightarrow 00:42:11.436$  more money and effort is to actually

NOTE Confidence: 0.803603747142857

00:42:11.436 - 00:42:13.516 measure quality of life directly.

NOTE Confidence: 0.803603747142857

 $00:42:13.520 \longrightarrow 00:42:15.340$  With direct patient interviews,

NOTE Confidence: 0.803603747142857

 $00:42:15.340 \rightarrow 00:42:18.460$  that that's a conversation for another time.

- NOTE Confidence: 0.803603747142857
- $00{:}42{:}18{.}460 \dashrightarrow 00{:}42{:}20{.}231$  But that's a conversation I have had
- NOTE Confidence: 0.803603747142857
- $00{:}42{:}20{.}231 \dashrightarrow 00{:}42{:}21.696$  with colleagues in the BMT space
- NOTE Confidence: 0.803603747142857
- $00:42:21.696 \rightarrow 00:42:23.236$  and other spaces who want to truly
- NOTE Confidence: 0.803603747142857
- $00:42:23.290 \rightarrow 00:42:24.898$  capture the quality of life beyond,
- NOTE Confidence: 0.803603747142857
- 00:42:24.900 --> 00:42:26.916 let's say like just the questionnaire stuff,
- NOTE Confidence: 0.803603747142857
- $00{:}42{:}26{.}920 \dashrightarrow 00{:}42{:}28{.}020$  12 or whatever it is.
- NOTE Confidence: 0.857836389230769
- 00:42:29.040 --> 00:42:30.224 That's great. Thanks, George.
- NOTE Confidence: 0.857836389230769
- $00:42:30.224 \longrightarrow 00:42:32.422$  I wonder if some of that could
- NOTE Confidence: 0.857836389230769
- $00{:}42{:}32{.}422 \dashrightarrow 00{:}42{:}34{.}232$  be applied to individuals who
- NOTE Confidence: 0.857836389230769
- $00{:}42{:}34{.}232 \dashrightarrow 00{:}42{:}35{.}680$  have non transfusion dependent
- NOTE Confidence: 0.857836389230769
- $00:42:35.738 \longrightarrow 00:42:37.766$  thalassemia as well who have fatigue.
- NOTE Confidence: 0.857836389230769
- $00{:}42{:}37{.}770 \dashrightarrow 00{:}42{:}41{.}118$  That's really fascinating. Yeah.
- NOTE Confidence: 0.857836389230769
- 00:42:41.120 --> 00:42:43.400 Anish, I I have a question for you if I may.
- NOTE Confidence: 0.857836389230769
- $00{:}42{:}43{.}400 \dashrightarrow 00{:}42{:}46{.}060$  So the the last abstract you presented
- NOTE Confidence: 0.857836389230769
- $00:42:46.060 \rightarrow 00:42:49.438$  with CRP and immune checkpoint inhibitors.
- NOTE Confidence: 0.857836389230769

00:42:49.440 --> 00:42:52.536 You know, obviously if we were

NOTE Confidence: 0.857836389230769

 $00{:}42{:}52{.}536 \dashrightarrow 00{:}42{:}54{.}600$  to intervene with prophylaxis,

NOTE Confidence: 0.857836389230769

 $00:42:54.600 \rightarrow 00:42:58.980$  measuring CRP's would be.

NOTE Confidence: 0.857836389230769

 $00:42:58.980 \longrightarrow 00:43:00.708$  It would be too late in a sense,

NOTE Confidence: 0.857836389230769

 $00:43:00.710 \longrightarrow 00:43:03.645$  so you couldn't measure the

NOTE Confidence: 0.857836389230769

 $00{:}43{:}03{.}645 \dashrightarrow 00{:}43{:}06{.}580$  CRP and then intervene with.

NOTE Confidence: 0.857836389230769

 $00:43:06.580 \longrightarrow 00:43:07.612$  With anticoagulant because

NOTE Confidence: 0.857836389230769

 $00:43:07.612 \longrightarrow 00:43:09.676$  it would be after the fact.

NOTE Confidence: 0.857836389230769

 $00:43:09.680 \longrightarrow 00:43:11.176$  So my question is,

NOTE Confidence: 0.857836389230769

 $00:43:11.176 \rightarrow 00:43:13.046$  are the CRP changes similar

NOTE Confidence: 0.857836389230769

 $00:43:13.046 \rightarrow 00:43:14.600$  from cycle to cycle?

NOTE Confidence: 0.857836389230769

00:43:14.600 --> 00:43:17.525 So can you use a cycle of CRP and

NOTE Confidence: 0.857836389230769

 $00{:}43{:}17.525 \dashrightarrow 00{:}43{:}20.109$  anticipate that in the next cycle

NOTE Confidence: 0.857836389230769

 $00:43:20.109 \rightarrow 00:43:21.853$  of immune checkpoint inhibitors

NOTE Confidence: 0.857836389230769

 $00:43:21.853 \dashrightarrow 00:43:24.656$  that change in CRP will be the same?

NOTE Confidence: 0.89731385

 $00:43:28.030 \rightarrow 00:43:29.696$  I think it's a very good question.

- NOTE Confidence: 0.7843728
- 00:43:32.140 --> 00:43:34.890 You know, if the majority of the patients,

 $00:43:34.890 \rightarrow 00:43:43.479$  about 7080% had a CRP flare and so my.

NOTE Confidence: 0.7843728

 $00:43:43.480 \longrightarrow 00:43:45.232$  And and so and.

NOTE Confidence: 0.7843728

 $00:43:45.232 \rightarrow 00:43:47.422$  These were the group with.

NOTE Confidence: 0.7843728

 $00:43:47.430 \longrightarrow 00:43:49.710$  With irrespective of whether

NOTE Confidence: 0.7843728

 $00:43:49.710 \longrightarrow 00:43:51.990$  they had a response,

NOTE Confidence: 0.7843728

 $00:43:51.990 \rightarrow 00:43:56.086$  you know and you know they halved their

NOTE Confidence: 0.7843728

00:43:56.086 --> 00:43:58.813 CRP irrespective of that they were

NOTE Confidence: 0.7843728

 $00{:}43{:}58.813 \dashrightarrow 00{:}44{:}02.967$  they were at high risk for for events and so.

NOTE Confidence: 0.7843728

00:44:02.970 --> 00:44:07.836 Although it's a very interesting observation,

NOTE Confidence: 0.7843728

 $00:44:07.840 \longrightarrow 00:44:09.568$  and you know this question comes,

NOTE Confidence: 0.7843728

 $00{:}44{:}09{.}570 \dashrightarrow 00{:}44{:}12{.}498$  it's coming up more and more.

NOTE Confidence: 0.7843728

 $00:44:12.500 \rightarrow 00:44:16.195$  It's it's again you know 80% of the of the

NOTE Confidence: 0.7843728

 $00{:}44{:}16.195 \dashrightarrow 00{:}44{:}19.348$  patients who are at risk and so it's it's.

NOTE Confidence: 0.7843728

 $00:44:19.350 \longrightarrow 00:44:23.976$  It's again a major, it's a.

 $00{:}44{:}23.980 \dashrightarrow 00{:}44{:}26.416$  It I think the this whole,

NOTE Confidence: 0.7843728

 $00:44:26.420 \longrightarrow 00:44:27.884$  this whole, you know,

NOTE Confidence: 0.7843728

 $00{:}44{:}27.884 \dashrightarrow 00{:}44{:}30.780$  CRP as a marker of inflammatory response.

NOTE Confidence: 0.842828760769231

 $00:44:33.240 \longrightarrow 00:44:35.720$  As a marker for VTE in these patients

NOTE Confidence: 0.842828760769231

 $00:44:35.720 \longrightarrow 00:44:38.399$  in this group will have to be refined

NOTE Confidence: 0.842828760769231

00:44:38.399 --> 00:44:40.931 a little more just because you know NOTE Confidence: 0.842828760769231

 $00:44:40.931 \rightarrow 00:44:43.474$  they're just the 80% eighty 85% of

NOTE Confidence: 0.842828760769231

 $00:44:43.474 \rightarrow 00:44:45.580$  the patients are at they're claiming

NOTE Confidence: 0.842828760769231

00:44:45.651 --> 00:44:48.059 or at high risk which does not really NOTE Confidence: 0.842828760769231

00:44:48.060 --> 00:44:51.508 help us that much if I didn't answer

NOTE Confidence: 0.842828760769231

 $00{:}44{:}51{.}508 \dashrightarrow 00{:}44{:}52{.}888$  your question directly but that's

NOTE Confidence: 0.842828760769231

 $00{:}44{:}52{.}888 \dashrightarrow 00{:}44{:}54{.}836$  what came to my mind and like you

NOTE Confidence: 0.842828760769231

00:44:54.836 --> 00:44:56.258 know again yes it's interesting but

NOTE Confidence: 0.842828760769231

00:44:56.258 --> 00:44:57.767 it's you know you're you're telling

NOTE Confidence: 0.842828760769231

 $00:44:57.767 \longrightarrow 00:44:59.585$  me that most of the patients are

NOTE Confidence: 0.842828760769231

 $00:44:59.585 \longrightarrow 00:45:01.930$  at high risk so so you know
- NOTE Confidence: 0.770090885555556
- $00:45:02.880 \longrightarrow 00:45:03.489$  so there's a.
- NOTE Confidence: 0.770090885555556
- $00:45:03.489 \rightarrow 00:45:04.707$  Question that came in the chat,
- NOTE Confidence: 0.770090885555556
- $00:45:04.710 \rightarrow 00:45:06.975$  the question and answer extending
- NOTE Confidence: 0.770090885555556
- $00{:}45{:}06{.}975 \dashrightarrow 00{:}45{:}10{.}243$  this and the the question was are
- NOTE Confidence: 0.770090885555556
- $00{:}45{:}10{.}243 \dashrightarrow 00{:}45{:}12{.}548$  there recommendations that do CRP
- NOTE Confidence: 0.770090885555556
- $00:45:12.548 \rightarrow 00:45:14.546$  levels prior to immunotherapy and
- NOTE Confidence: 0.770090885555556
- $00:45:14.546 \longrightarrow 00:45:16.850$  then monitor them on a monthly
- NOTE Confidence: 0.770090885555556
- $00:45:16.920 \longrightarrow 00:45:19.041$  basis and is there any role at
- NOTE Confidence: 0.770090885555556
- $00{:}45{:}19{.}041 \dashrightarrow 00{:}45{:}21{.}411$  this point for prophylaxis and the
- NOTE Confidence: 0.770090885555556
- 00:45:21.411 --> 00:45:23.726 individual asking us about aspirin?
- NOTE Confidence: 0.770090885555556
- $00{:}45{:}23.730 \dashrightarrow 00{:}45{:}24.378$  I think this was
- NOTE Confidence: 0.865354305333333
- $00{:}45{:}24.390 \dashrightarrow 00{:}45{:}27.120$  a question that was asked at the
- NOTE Confidence: 0.865354305333333
- $00{:}45{:}27{.}120 \dashrightarrow 00{:}45{:}30{.}236$  meeting as well and there are none.
- NOTE Confidence: 0.865354305333333
- $00:45:30.240 \rightarrow 00:45:32.610$  I'm not sure that our, you know,
- NOTE Confidence: 0.865354305333333
- $00:45:32.610 \longrightarrow 00:45:34.085$  what the European practice is,
- NOTE Confidence: 0.865354305333333

00:45:34.090 --> 00:45:36.428 but I don't think that it's been,

NOTE Confidence: 0.865354305333333

00:45:36.430 --> 00:45:39.358 you know, done. It's such a.

NOTE Confidence: 0.865354305333333

00:45:39.360 --> 00:45:43.077 Such a, you know, such a nonspecific,

NOTE Confidence: 0.865354305333333

 $00{:}45{:}43.080 \dashrightarrow 00{:}45{:}44.952$  you know, test among everything else

NOTE Confidence: 0.865354305333333

 $00:45:44.952 \rightarrow 00:45:47.038$  that has been happening and being done.

NOTE Confidence: 0.865354305333333

 $00{:}45{:}47.040 \dashrightarrow 00{:}45{:}49.560$  And I'm I'm not sure that

NOTE Confidence: 0.865354305333333

 $00:45:49.560 \longrightarrow 00:45:52.030$  it's being routinely done. So.

NOTE Confidence: 0.85177893

 $00:45:54.300 \longrightarrow 00:45:56.036$  The question of prophylaxis,

NOTE Confidence: 0.85177893

 $00{:}45{:}56{.}036 \dashrightarrow 00{:}45{:}58{.}206$  I think that there are.

NOTE Confidence: 0.85177893

 $00:45:58.210 \longrightarrow 00:46:01.802$  There are um I, I,

NOTE Confidence: 0.85177893

00:46:01.802 --> 00:46:04.057 I it's it's hypothesis hypothesis

NOTE Confidence: 0.85177893

 $00{:}46{:}04.057 \dashrightarrow 00{:}46{:}06.402$  generating and it's I wonder if

NOTE Confidence: 0.85177893

00:46:06.402 --> 00:46:08.870 it's you know if these group of

NOTE Confidence: 0.85177893

 $00{:}46{:}08{.}870 \dashrightarrow 00{:}46{:}10{.}735$  patients should be separately sort

NOTE Confidence: 0.85177893

 $00:46:10.735 \longrightarrow 00:46:12.859$  of included in all the prophylaxis

NOTE Confidence: 0.85177893

 $00:46:12.859 \rightarrow 00:46:14.877$  trials that are that are being

- NOTE Confidence: 0.85177893
- 00:46:14.877 --> 00:46:17.886 you know undertaken and and

NOTE Confidence: 0.85177893

 $00{:}46{:}17.886 \dashrightarrow 00{:}46{:}21.510$  perhaps a more correlation you know.

NOTE Confidence: 0.85177893

 $00:46:21.510 \rightarrow 00:46:23.414$  Those those types of studies be done

NOTE Confidence: 0.85177893

 $00:46:23.414 \rightarrow 00:46:24.990$  including CRP and other markers.

NOTE Confidence: 0.8879602125

 $00:46:25.040 \longrightarrow 00:46:26.480$  Yeah, this is fascinating.

NOTE Confidence: 0.8879602125

 $00{:}46{:}26{.}480 \dashrightarrow 00{:}46{:}29{.}329$  A lot of area for research for sure.

NOTE Confidence: 0.8879602125

00:46:29.330 --> 00:46:31.298 I'm George, I I had a

NOTE Confidence: 0.8879602125

 $00:46:31.298 \longrightarrow 00:46:33.090$  question for you as well.

NOTE Confidence: 0.8879602125

 $00{:}46{:}33.090 \dashrightarrow 00{:}46{:}36.290$  In your study where or in the study

NOTE Confidence: 0.8879602125

 $00:46:36.290 \rightarrow 00:46:39.514$  you reviewed where a splenectomy was

NOTE Confidence: 0.8879602125

 $00{:}46{:}39{.}514 \dashrightarrow 00{:}46{:}41{.}850$  performed for immune cytopenias,

NOTE Confidence: 0.8879602125

00:46:41.850 --> 00:46:44.316 you noted that I think about 20% of the

NOTE Confidence: 0.8879602125

 $00{:}46{:}44{.}316$  -->  $00{:}46{:}46{.}044$  patients and new diagnosis was made.

NOTE Confidence: 0.8879602125

 $00{:}46{:}46{.}050 \dashrightarrow 00{:}46{:}48{.}865$  So an additional diagnosis as

NOTE Confidence: 0.8879602125

 $00{:}46{:}48.865 \dashrightarrow 00{:}46{:}50.954$  presumably potentially A cause

NOTE Confidence: 0.8879602125

 $00:46:50.954 \rightarrow 00:46:54.002$  for the immune cytopenia and I'm

NOTE Confidence: 0.8879602125

 $00:46:54.002 \longrightarrow 00:46:56.281$  wondering if the dates what the

NOTE Confidence: 0.8879602125

 $00:46:56.281 \longrightarrow 00:46:58.540$  dates of the of the study?

NOTE Confidence: 0.8879602125

 $00:46:58.540 \longrightarrow 00:46:59.260$  We're done.

NOTE Confidence: 0.8879602125

00:46:59.260 --> 00:47:01.060 And in particular I'm thinking

NOTE Confidence: 0.8879602125

 $00{:}47{:}01.060 \dashrightarrow 00{:}47{:}03.032$  that with modern techniques of NOTE Confidence: 0.8879602125

 $00{:}47{:}03.032 \dashrightarrow 00{:}47{:}04.692$  flow cytometry and molecular

NOTE Confidence: 0.8879602125

 $00:47:04.692 \rightarrow 00:47:06.780$  studies on the peripheral blood,

NOTE Confidence: 0.8879602125

 $00{:}47{:}06{.}780 \dashrightarrow 00{:}47{:}09{.}748$  would we still expect to see that

NOTE Confidence: 0.8879602125

 $00{:}47{:}09{.}748 \dashrightarrow 00{:}47{:}12{.}289$  high rate of an additional diagnosis NOTE Confidence: 0.8879602125

 $00:47:12.289 \rightarrow 00:47:14.827$  made before a splenectomy is done? NOTE Confidence: 0.829688564

00:47:15.260 --> 00:47:16.840 It's such a good question, Bob.

NOTE Confidence: 0.829688564

 $00:47:16.840 \longrightarrow 00:47:19.086$  This abstract I think caught

NOTE Confidence: 0.829688564

 $00:47:19.086 \longrightarrow 00:47:20.418$  a lot of people off guard,

NOTE Confidence: 0.829688564

 $00{:}47{:}20{.}420 \dashrightarrow 00{:}47{:}21{.}805$  especially because and of course

NOTE Confidence: 0.829688564

 $00:47:21.805 \longrightarrow 00:47:23.190$  all of these are oralists,

- NOTE Confidence: 0.829688564
- $00:47:23.190 \longrightarrow 00:47:24.550$  but especially because this
- NOTE Confidence: 0.829688564
- $00:47:24.550 \longrightarrow 00:47:25.910$  was a retrospective analysis.
- NOTE Confidence: 0.829688564
- $00:47:25.910 \longrightarrow 00:47:28.526$  So usually don't expect such a hard hitting.
- NOTE Confidence: 0.829688564
- $00{:}47{:}28.530 \dashrightarrow 00{:}47{:}30.710$  Opponent because again these
- NOTE Confidence: 0.829688564
- $00:47:30.710 \longrightarrow 00:47:32.345$  are consecutively treated
- NOTE Confidence: 0.829688564
- $00{:}47{:}32{.}345 \dashrightarrow 00{:}47{:}33{.}980$  patients with splenectomy.
- NOTE Confidence: 0.829688564
- $00:47:33.980 \longrightarrow 00:47:36.166$  The years were 2002, 2020,
- NOTE Confidence: 0.829688564
- $00:47:36.166 \rightarrow 00:47:38.480$  the median follow up they did not report on,
- NOTE Confidence: 0.829688564
- $00:47:38.480 \longrightarrow 00:47:40.328$  but as I was in touch with investigators
- NOTE Confidence: 0.829688564
- $00:47:40.328 \longrightarrow 00:47:41.800$  they noted that they're tabulating
- NOTE Confidence: 0.829688564
- $00:47:41.800 \longrightarrow 00:47:43.405$  it as they're putting together
- NOTE Confidence: 0.829688564
- 00:47:43.405 --> 00:47:44.987 their manuscript now because I was
- NOTE Confidence: 0.829688564
- 00:47:44.987 --> 00:47:46.319 curious you know how many years
- NOTE Confidence: 0.829688564
- $00{:}47{:}46.320 \dashrightarrow 00{:}47{:}49.011$  since also what was not reported
- NOTE Confidence: 0.829688564
- $00{:}47{:}49.011 \dashrightarrow 00{:}47{:}51.522$  and what they're looking at and the
- NOTE Confidence: 0.829688564

- $00{:}47{:}51{.}522 \dashrightarrow 00{:}47{:}54{.}049$  question that had asked was are these
- NOTE Confidence: 0.829688564
- $00:47:54.049 \rightarrow 00:47:55.900$  diagnostic changes and they were,
- NOTE Confidence: 0.829688564
- 00:47:55.900 --> 00:47:57.388 I should just clarify too that
- NOTE Confidence: 0.829688564
- $00:47:57.388 \rightarrow 00:47:58.750$  investigators are calling them changes.
- NOTE Confidence: 0.829688564
- $00{:}47{:}58.750 \dashrightarrow 00{:}48{:}01.738$  So not only the fact was
- NOTE Confidence: 0.829688564
- $00:48:01.738 \longrightarrow 00:48:05.220$  that initial indication not.
- NOTE Confidence: 0.829688564
- 00:48:05.220 --> 00:48:06.459 They're calling the initial
- NOTE Confidence: 0.829688564
- 00:48:06.459 --> 00:48:07.428 indication is incorrect,
- NOTE Confidence: 0.829688564
- $00{:}48{:}07{.}430 \dashrightarrow 00{:}48{:}09{.}280$  meaning that the entire diagnosis
- NOTE Confidence: 0.829688564
- $00:48:09.280 \longrightarrow 00:48:11.130$  was switched to the postoperative
- NOTE Confidence: 0.829688564
- $00:48:11.192 \rightarrow 00:48:13.348$  diagnosis as opposed to being added on,
- NOTE Confidence: 0.829688564
- $00:48:13.350 \longrightarrow 00:48:14.454$  which is interesting.
- NOTE Confidence: 0.829688564
- $00:48:14.454 \longrightarrow 00:48:16.662$  And so when I asked about.
- NOTE Confidence: 0.829688564
- 00:48:16.670 00:48:18.294 Whether this was time variant or not,
- NOTE Confidence: 0.829688564
- $00:48:18.300 \rightarrow 00:48:20.958$  meaning that like let's say in the 2000s,
- NOTE Confidence: 0.829688564
- 00:48:20.958 --> 00:48:21.534 2005 period,

- NOTE Confidence: 0.829688564
- $00:48:21.534 \rightarrow 00:48:23.550$  is that where we're catching all of
- NOTE Confidence: 0.829688564
- $00{:}48{:}23.608 \dashrightarrow 00{:}48{:}25.496$  those 20% or is it mostly kind of
- NOTE Confidence: 0.829688564
- $00:48:25.496 \longrightarrow 00:48:27.510$  kind of the same across the board?
- NOTE Confidence: 0.829688564
- $00:48:27.510 \longrightarrow 00:48:29.328$  They weren't able to answer that
- NOTE Confidence: 0.829688564
- $00:48:29.328 \longrightarrow 00:48:31.208$  question only to say that it
- NOTE Confidence: 0.829688564
- $00:48:31.208 \longrightarrow 00:48:32.946$  appeared that there is not like
- NOTE Confidence: 0.829688564
- $00:48:32.946 \longrightarrow 00:48:35.050$  a huge spike in the early data,
- NOTE Confidence: 0.829688564
- $00{:}48{:}35{.}050 \dashrightarrow 00{:}48{:}37{.}094$  although it might be a little bit
- NOTE Confidence: 0.829688564
- 00:48:37.094 --> 00:48:38.799 less moving forward it seems like,
- NOTE Confidence: 0.829688564
- $00{:}48{:}38{.}800 \dashrightarrow 00{:}48{:}40{.}249$  and we'll see what the manuscript shows.
- NOTE Confidence: 0.829688564
- $00:48:40.250 \longrightarrow 00:48:41.570$  I won't speculate beyond that,
- NOTE Confidence: 0.829688564
- $00{:}48{:}41{.}570 \dashrightarrow 00{:}48{:}43{.}682$  but it seems like these misdiagnoses
- NOTE Confidence: 0.829688564
- $00{:}48{:}43.682 \dashrightarrow 00{:}48{:}45.090$  may still be happening.
- NOTE Confidence: 0.829688564
- 00:48:45.090 --> 00:48:45.526 And again,
- NOTE Confidence: 0.829688564
- 00:48:45.526 --> 00:48:46.616 I mean the Cleveland Clinic
- NOTE Confidence: 0.829688564

 $00:48:46.616 \longrightarrow 00:48:47.890$  is a fantastic health system.

NOTE Confidence: 0.829688564

 $00{:}48{:}47{.}890 \dashrightarrow 00{:}48{:}49{.}668$  And so if this is indeed accurate

NOTE Confidence: 0.829688564

00:48:49.668 --> 00:48:51.806 and if this is what they ultimately

NOTE Confidence: 0.829688564

 $00:48:51.806 \longrightarrow 00:48:52.796$  end up reporting,

NOTE Confidence: 0.829688564

 $00:48:52.800 \longrightarrow 00:48:54.288$  I think this is something that we all

NOTE Confidence: 0.829688564

00:48:54.288 --> 00:48:55.782 have to pay attention to because if

NOTE Confidence: 0.829688564

 $00{:}48{:}55{.}782 \dashrightarrow 00{:}48{:}57{.}609$  this is happening in the Cleveland Clinic,

NOTE Confidence: 0.829688564

 $00{:}48{:}57.610 \dashrightarrow 00{:}48{:}59.522$  then I don't think we're immune to that

NOTE Confidence: 0.829688564

 $00{:}48{:}59{.}522 \dashrightarrow 00{:}49{:}01{.}230$  either here at Yale or anywhere else.

NOTE Confidence: 0.708265374

 $00{:}49{:}01{.}380 \dashrightarrow 00{:}49{:}03{.}080$  Yeah, that's really fascinating, George.

NOTE Confidence: 0.708265374

 $00:49:03.080 \longrightarrow 00:49:05.456$  So diseases that are really truly

NOTE Confidence: 0.708265374

 $00{:}49{:}05{.}456 \dashrightarrow 00{:}49{:}07{.}576$  isolated to the spleen at least

NOTE Confidence: 0.708265374

00:49:07.576 --> 00:49:08.916 by our current techniques to

NOTE Confidence: 0.708265374

 $00:49:08.916 \longrightarrow 00:49:10.419$  to discover them in the blood,

NOTE Confidence: 0.708265374

 $00{:}49{:}10{.}420 \dashrightarrow 00{:}49{:}13{.}040$  yeah, that's that is fascinating.

NOTE Confidence: 0.708265374

00:49:13.040 --> 00:49:14.756 And Anish and if I may,

- NOTE Confidence: 0.708265374
- $00:49:14.760 \longrightarrow 00:49:18.110$  your catheter obso so another.
- NOTE Confidence: 0.708265374
- $00:49:18.110 \longrightarrow 00:49:19.450$  So another question came in,
- NOTE Confidence: 0.708265374
- $00{:}49{:}19{.}450 \dashrightarrow 00{:}49{:}20{.}650$  this is for you Anish.
- NOTE Confidence: 0.708265374
- $00:49:20.650 \longrightarrow 00:49:22.948$  So many factors affect the CRP
- NOTE Confidence: 0.708265374
- $00{:}49{:}22{.}948 \dashrightarrow 00{:}49{:}26{.}100$  level and how do you know the CRP
- NOTE Confidence: 0.708265374
- $00:49:26.100 \longrightarrow 00:49:28.398$  elevation is due to the immune
- NOTE Confidence: 0.708265374
- 00:49:28.485 --> 00:49:31.257 checkpoint inhibitor or infection?
- NOTE Confidence: 0.708265374
- $00:49:31.260 \longrightarrow 00:49:33.128$  That developed afterwards perhaps.
- NOTE Confidence: 0.826564288333333
- 00:49:33.200 --> 00:49:34.430 Yeah, it's a very good question.
- NOTE Confidence: 0.826564288333333
- $00{:}49{:}34{.}430 \dashrightarrow 00{:}49{:}36{.}152$  I mean it's just such a nonspecific
- NOTE Confidence: 0.826564288333333
- $00:49:36.152 \rightarrow 00:49:37.503$  marker but but there's something
- NOTE Confidence: 0.826564288333333
- 00:49:37.503 --> 00:49:39.456 about it because you know it's a,
- NOTE Confidence: 0.826564288333333
- $00{:}49{:}39{.}460 \dashrightarrow 00{:}49{:}41{.}602$  it's a significant rise and it's a
- NOTE Confidence: 0.826564288333333
- 00:49:41.602 --> 00:49:44.238 although it's a retrospectively done study,
- NOTE Confidence: 0.826564288333333
- $00:49:44.240 \longrightarrow 00:49:49.140$  but it's a cohort and.
- NOTE Confidence: 0.826564288333333

 $00:49:49.140 \longrightarrow 00:49:51.812$  And there there is clearly a pattern that

NOTE Confidence: 0.826564288333333

 $00:49:51.812 \rightarrow 00:49:54.557$  has been previously recognized as well.

NOTE Confidence: 0.826564288333333

 $00:49:54.560 \longrightarrow 00:49:56.880$  So one of the citations

NOTE Confidence: 0.826564288333333

 $00:49:56.880 \longrightarrow 00:49:59.200$  that had looked into CRP,

NOTE Confidence: 0.826564288333333

00:49:59.200 --> 00:50:00.904 I don't know how you know well they

NOTE Confidence: 0.826564288333333

 $00:50:00.904 \rightarrow 00:50:02.538$  they can adjust for other things.

NOTE Confidence: 0.826564288333333

 $00{:}50{:}02{.}540 \dashrightarrow 00{:}50{:}04{.}718$  I mean these are patients with

NOTE Confidence: 0.826564288333333

 $00{:}50{:}04.718 \dashrightarrow 00{:}50{:}06.170$  systemic you know metastatic

NOTE Confidence: 0.826564288333333

 $00:50:06.235 \rightarrow 00:50:08.669$  malignancies and but they even

NOTE Confidence: 0.826564288333333

 $00:50:08.669 \rightarrow 00:50:11.567$  previously when when they had reported.

NOTE Confidence: 0.82461002

 $00{:}50{:}14.930 \dashrightarrow 00{:}50{:}18.115$  CRP Flair and and mortality or poor

NOTE Confidence: 0.82461002

00:50:18.115 --> 00:50:21.466 outcomes they they it was a similar

NOTE Confidence: 0.82461002

 $00{:}50{:}21.466 \dashrightarrow 00{:}50{:}24.590$  kind of dynamic so that it had been

NOTE Confidence: 0.82461002

 $00{:}50{:}24.590 \dashrightarrow 00{:}50{:}27.580$  recognized and and so it's a good question,

NOTE Confidence: 0.82461002

 $00:50:27.580 \rightarrow 00:50:30.220$  but it's such a such a nonspecific marker.

NOTE Confidence: 0.812899864

00:50:31.230 --> 00:50:33.670 OK, thank you. And George,

- NOTE Confidence: 0.812899864
- 00:50:33.670 -> 00:50:34.980 if we can go back to you for a minute,
- NOTE Confidence: 0.812899864
- $00:50:34.980 \longrightarrow 00:50:41.020$  the the the amide trial.
- NOTE Confidence: 0.812899864
- 00:50:41.020 --> 00:50:41.790 Fascinating drug.
- NOTE Confidence: 0.812899864
- $00{:}50{:}41.790 \dashrightarrow 00{:}50{:}44.485$  And I assume that there is a
- NOTE Confidence: 0.812899864
- $00{:}50{:}44{.}485 \dashrightarrow 00{:}50{:}46{.}836$  potential that this could be used
- NOTE Confidence: 0.812899864
- $00:50:46.836 \rightarrow 00:50:48.726$  in any autoimmune disease where
- NOTE Confidence: 0.812899864
- $00:50:48.803 \rightarrow 00:50:50.798$  IG is felt to be the culprit.
- NOTE Confidence: 0.812899864
- $00:50:50.800 \longrightarrow 00:50:52.155$  Is that how you're thinking
- NOTE Confidence: 0.812899864
- $00:50:52.155 \longrightarrow 00:50:53.239$  about this as well?
- NOTE Confidence: 0.752498774
- $00:50:53.750 \longrightarrow 00:50:55.100$  Well, I'll say that's how the
- NOTE Confidence: 0.752498774
- $00{:}50{:}55{.}100 \dashrightarrow 00{:}50{:}57{.}880$  pharmaceutical company is thinking about it.
- NOTE Confidence: 0.752498774
- 00:50:57.880 --> 00:51:00.166 Because I've had a I've had
- NOTE Confidence: 0.752498774
- $00{:}51{:}00{.}166 \dashrightarrow 00{:}51{:}01{.}690$  a conversation with them.
- NOTE Confidence: 0.752498774
- 00:51:01.690 00:51:04.786 Yeah. So it was approved this,
- NOTE Confidence: 0.752498774
- $00:51:04.790 \longrightarrow 00:51:06.542$  this drug was approved for my
- NOTE Confidence: 0.752498774

00:51:06.542 --> 00:51:08.050 senior Gravis just last year.

NOTE Confidence: 0.752498774

 $00{:}51{:}08.050 \dashrightarrow 00{:}51{:}09.760$  They're looking at it and they

NOTE Confidence: 0.752498774

00:51:09.760 --> 00:51:10.942 have obviously, as I presented,

NOTE Confidence: 0.752498774

 $00:51:10.942 \longrightarrow 00:51:12.166$  have looked at it and ITP.

NOTE Confidence: 0.752498774

 $00:51:12.170 \longrightarrow 00:51:14.294$  But I know that they're really

NOTE Confidence: 0.752498774

00:51:14.294 --> 00:51:16.965 excited about the whole host of neuro

NOTE Confidence: 0.752498774

 $00{:}51{:}16.965 \dashrightarrow 00{:}51{:}19.329$  autoimmune disorders that are out there.

NOTE Confidence: 0.752498774

00:51:19.330 --> 00:51:22.426 And if it works and if it's successful,

NOTE Confidence: 0.752498774

00:51:22.430 --> 00:51:24.566 you can make an argument that

NOTE Confidence: 0.752498774

00:51:24.566 $\operatorname{-->}$ 00:51:26.890 this kind of mechanism could then

NOTE Confidence: 0.752498774

 $00{:}51{:}26{.}890 \dashrightarrow 00{:}51{:}28{.}945$  theoretically help with any disease

NOTE Confidence: 0.752498774

 $00{:}51{:}28{.}945 \dashrightarrow 00{:}51{:}31{.}970$  that has this pathologic auto antibody.

NOTE Confidence: 0.752498774

 $00{:}51{:}31{.}970 \dashrightarrow 00{:}51{:}34{.}160$  Component or at least it's worth

NOTE Confidence: 0.752498774

 $00:51:34.160 \longrightarrow 00:51:36.359$  testing in any disease like that,

NOTE Confidence: 0.752498774

 $00{:}51{:}36{.}360 \dashrightarrow 00{:}51{:}37{.}848$  especially if they ultimately go on

NOTE Confidence: 0.752498774

 $00:51:37.848 \longrightarrow 00:51:39.333$  to prove that the safety profile

- NOTE Confidence: 0.752498774
- $00{:}51{:}39{.}333 \dashrightarrow 00{:}51{:}40{.}894$  is what they claim it to be.
- NOTE Confidence: 0.752498774
- $00:51:40.900 \rightarrow 00:51:42.895$  Because as we've seen with other drugs,
- NOTE Confidence: 0.752498774
- $00:51:42.900 \rightarrow 00:51:44.461$  even phase two or phase three studies
- NOTE Confidence: 0.752498774
- 00:51:44.461 -> 00:51:45.760 sometimes are not enough, right.
- NOTE Confidence: 0.752498774
- $00{:}51{:}45{.}760 \dashrightarrow 00{:}51{:}47{.}260$  When you post marketing surveillance
- NOTE Confidence: 0.752498774
- $00{:}51{:}47.260 \dashrightarrow 00{:}51{:}49.070$  phase four studies to really see
- NOTE Confidence: 0.752498774
- 00:51:49.070 00:51:50.455 an effect across rare diseases,
- NOTE Confidence: 0.752498774
- 00:51:50.460 -> 00:51:51.395 presumably they're going to be
- NOTE Confidence: 0.752498774
- 00:51:51.395 --> 00:51:52.900 looking at a lot of rare diseases,
- NOTE Confidence: 0.752498774
- $00:51:52.900 \rightarrow 00:51:56.160$  this autoimmune, neurological space.
- NOTE Confidence: 0.752498774
- $00:51:56.160 \longrightarrow 00:51:56.534$  So yeah,
- NOTE Confidence: 0.752498774
- $00:51:56.534 \longrightarrow 00:51:57.656$  I think there's a good amount
- NOTE Confidence: 0.752498774
- $00{:}51{:}57{.}656$  -->  $00{:}51{:}58{.}359$  of excitement with it.
- NOTE Confidence: 0.752498774
- $00{:}51{:}58{.}360 \dashrightarrow 00{:}52{:}00{.}562$  I'm curious to see what happens
- NOTE Confidence: 0.752498774
- $00:52:00.562 \rightarrow 00:52:01.574$  going forward, but.
- NOTE Confidence: 0.752498774

 $00:52:01.574 \longrightarrow 00:52:03.492$  I do expect that we're going to

NOTE Confidence: 0.752498774

 $00{:}52{:}03{.}492 \dashrightarrow 00{:}52{:}05{.}710$  see a dozen plus trials within next

NOTE Confidence: 0.752498774

00:52:05.710 --> 00:52:08.365 10 years in a bunch of autoimmune

NOTE Confidence: 0.752498774

 $00{:}52{:}08{.}365 \dashrightarrow 00{:}52{:}10{.}835$  mediated disorders with this mechanism.

NOTE Confidence: 0.841814783571429

 $00{:}52{:}11{.}600 \dashrightarrow 00{:}52{:}14{.}000$  And then presumably since B cells and plasma

NOTE Confidence: 0.841814783571429

 $00:52:14.000 \rightarrow 00:52:16.217$  cells are not being affected directly,

NOTE Confidence: 0.841814783571429

 $00{:}52{:}16.220 \dashrightarrow 00{:}52{:}18.060$  the immunosuppression will be

NOTE Confidence: 0.841814783571429

 $00:52:18.060 \longrightarrow 00:52:20.820$  less than with the drug that.

NOTE Confidence: 0.841814783571429

 $00{:}52{:}20{.}820 \dashrightarrow 00{:}52{:}24{.}236$  Causes apoptosis or death of B cells present

NOTE Confidence: 0.7421815225

 $00:52:24.250 \rightarrow 00:52:25.612$  really good. That's a really good

NOTE Confidence: 0.7421815225

 $00{:}52{:}25{.}612 \dashrightarrow 00{:}52{:}27{.}389$  .1 that I hadn't actually discussed

NOTE Confidence: 0.7421815225

 $00:52:27.390 \rightarrow 00:52:29.020$  with with the pharmaceutical company,

NOTE Confidence: 0.7421815225

 $00{:}52{:}29{.}020 \dashrightarrow 00{:}52{:}30{.}810$  but one that makes a lot of sense to me.

NOTE Confidence: 0.886699574

 $00:52:32.790 \longrightarrow 00:52:34.470$  The data will tell us, I think.

NOTE Confidence: 0.886699574

 $00:52:34.470 \longrightarrow 00:52:36.240$  I think so too. Yeah,

NOTE Confidence: 0.888791608

 $00:52:36.280 \longrightarrow 00:52:37.330$  it would be nice, right?

- NOTE Confidence: 0.888791608
- $00:52:37.330 \longrightarrow 00:52:38.770$  Often we're hoping that this is
- NOTE Confidence: 0.888791608
- $00{:}52{:}38{.}770 \dashrightarrow 00{:}52{:}40{.}728$  going to be like the next big thing.
- NOTE Confidence: 0.888791608
- $00:52:40.730 \longrightarrow 00:52:41.935$  Hopefully that ends up actually
- NOTE Confidence: 0.888791608
- $00:52:41.935 \rightarrow 00:52:43.480$  being the case here. We'll see.
- NOTE Confidence: 0.732658515
- $00{:}52{:}44.720 \dashrightarrow 00{:}52{:}46.305$  A doctor Sharda question about
- NOTE Confidence: 0.732658515
- 00:52:46.305 --> 00:52:48.226 the catheter study, if I may.
- NOTE Confidence: 0.732658515
- $00:52:48.226 \rightarrow 00:52:51.000$  I noted that in the catheter three study,
- NOTE Confidence: 0.732658515
- $00{:}52{:}51{.}000 \dashrightarrow 00{:}52{:}53{.}610$  the authors used a low molecular
- NOTE Confidence: 0.732658515
- $00{:}52{:}53{.}610 \dashrightarrow 00{:}52{:}56{.}263$  weight he parin for a week and
- NOTE Confidence: 0.732658515
- $00:52:56.263 \longrightarrow 00:52:58.318$  then transition to a doac.
- NOTE Confidence: 0.732658515
- $00{:}52{:}58{.}320 \dashrightarrow 00{:}52{:}59{.}856$  Pixabay and that in the,
- NOTE Confidence: 0.732658515
- $00{:}52{:}59{.}860 \dashrightarrow 00{:}53{:}01{.}918$  in the case of that study,
- NOTE Confidence: 0.732658515
- $00:53:01.920 \longrightarrow 00:53:04.770$  do you think that's necessary it
- NOTE Confidence: 0.732658515
- $00{:}53{:}04{.}770 \dashrightarrow 00{:}53{:}07{.}320$  seems like that's excessive treatment
- NOTE Confidence: 0.732658515
- $00:53:07.320 \rightarrow 00:53:10.155$  quote excessive compared to that?
- NOTE Confidence: 0.732658515

- 00:53:10.160 --> 00:53:10.410 I was
- NOTE Confidence: 0.869618186
- $00:53:10.420 \longrightarrow 00:53:11.390$  also surprised to see that.
- NOTE Confidence: 0.869618186
- $00:53:11.390 \longrightarrow 00:53:14.084$  But I think that to increase
- NOTE Confidence: 0.869618186
- $00:53:14.084 \rightarrow 00:53:16.419$  their recruitment they did that.
- NOTE Confidence: 0.869618186
- $00{:}53{:}16.420 \dashrightarrow 00{:}53{:}20.472$  I think most of us have a bias to I I
- NOTE Confidence: 0.869618186
- $00{:}53{:}20{.}472 \dashrightarrow 00{:}53{:}22{.}680$  know many people tell me like you know,
- NOTE Confidence: 0.869618186
- $00:53:22.680 \rightarrow 00:53:24.750$  you want your patient to cool off like with
- NOTE Confidence: 0.869618186
- $00:53:24.750 \longrightarrow 00:53:27.035$  a heparin and then you know do something.
- NOTE Confidence: 0.869618186
- 00:53:27.040 --> 00:53:28.330 But it, it's strange, you know,
- NOTE Confidence: 0.869618186
- $00{:}53{:}28{.}330 \dashrightarrow 00{:}53{:}29{.}968$  this is something that someone would do
- NOTE Confidence: 0.869618186
- $00:53:29.968 \rightarrow 00:53:32.006$  with say the bigger trend, you know,
- NOTE Confidence: 0.869618186
- $00:53:32.006 \rightarrow 00:53:33.771$  because that's what the originally
- NOTE Confidence: 0.869618186
- 00:53:33.771 -> 00:53:35.579 studies were kind of designed.
- NOTE Confidence: 0.869618186
- $00{:}53{:}35{.}580 \dashrightarrow 00{:}53{:}39{.}143$  But I think this was also to
- NOTE Confidence: 0.869618186
- $00:53:39.143 \longrightarrow 00:53:40.670$  increase the recruitment.
- NOTE Confidence: 0.869618186
- $00:53:40.670 \longrightarrow 00:53:43.134$  And so they allowed like 7 days

- NOTE Confidence: 0.869618186
- $00:53:43.134 \rightarrow 00:53:45.320$  of of and they made a protocol,
- NOTE Confidence: 0.869618186
- 00:53:45.320 --> 00:53:46.840 I mean everyone's treated about
- NOTE Confidence: 0.869618186
- 00:53:46.840 --> 00:53:49.080 seven days of of Dalteparin,
- NOTE Confidence: 0.869618186
- $00:53:49.080 \rightarrow 00:53:50.940$  Romario heparin followed by Pixar lamp,
- NOTE Confidence: 0.869618186
- $00:53:50.940 \dashrightarrow 00:53:53.208$  whereas it didn't do it for rivaroxaban.
- NOTE Confidence: 0.842956651428571
- 00:53:54.190 --> 00:53:56.566 OK. And so you don't think the the
- NOTE Confidence: 0.842956651428571
- $00:53:56.566 \rightarrow 00:53:58.805$  issue was people had cancer therefore
- NOTE Confidence: 0.842956651428571
- $00:53:58.805 \rightarrow 00:54:01.570$  they might need a heparin like drug
- NOTE Confidence: 0.842956651428571
- $00{:}54{:}01{.}570 \dashrightarrow 00{:}54{:}03{.}936$  before they get switched to a doac?
- NOTE Confidence: 0.857704832857143
- $00{:}54{:}04{.}090 \dashrightarrow 00{:}54{:}06{.}367$  No, I think this is this was done rather
- NOTE Confidence: 0.857704832857143
- $00:54:06.367 \rightarrow 00:54:08.431$  quickly and this was done after you know,
- NOTE Confidence: 0.857704832857143
- $00{:}54{:}08{.}431 \dashrightarrow 00{:}54{:}10{.}840$  Adobe Saban and others already.
- NOTE Confidence: 0.857704832857143
- $00:54:10.840 \rightarrow 00:54:13.620$  I guess you know, you know the
- NOTE Confidence: 0.857704832857143
- $00:54:13.620 \longrightarrow 00:54:14.930$  data was already out there. So
- NOTE Confidence: 0.73521526
- $00:54:14.940 \rightarrow 00:54:17.684$  OK great. I think the most most
- NOTE Confidence: 0.762768184615385

00:54:17.700 --> 00:54:19.398 I think the conclude, the interesting

NOTE Confidence: 0.762768184615385

 $00:54:19.398 \rightarrow 00:54:21.338$  thing was and this often comes up,

NOTE Confidence: 0.762768184615385

 $00:54:21.340 \longrightarrow 00:54:25.132$  which is what to do with the line I I NOTE Confidence: 0.762768184615385

 $00:54:25.132 \rightarrow 00:54:28.060$  liked the fact that these were real

NOTE Confidence: 0.762768184615385

 $00:54:28.060 \rightarrow 00:54:29.620$  like symptomatic proximal events.

NOTE Confidence: 0.762768184615385

00:54:29.620 --> 00:54:32.924 I mean 3/4 of them had subclavian

NOTE Confidence: 0.762768184615385

00:54:32.924 --> 00:54:35.326 involves actually many had pulmonary

NOTE Confidence: 0.762768184615385

 $00:54:35.326 \rightarrow 00:54:38.902$  embolisms to and they were able to save

NOTE Confidence: 0.762768184615385

 $00:54:38.991 \rightarrow 00:54:42.027$  like like if you combine especially.

NOTE Confidence: 0.762768184615385

 $00{:}54{:}42.030 \dashrightarrow 00{:}54{:}45.327$  The, the the Warfarin trial is from

NOTE Confidence: 0.762768184615385

 $00:54:45.330 \longrightarrow 00:54:46.446$  2003 four or something like that

NOTE Confidence: 0.762768184615385

 $00:54:46.446 \rightarrow 00:54:47.949$  I think it was published in 2006.

NOTE Confidence: 0.762768184615385

 $00:54:47.950 \longrightarrow 00:54:50.631$  But at least if you combine the

NOTE Confidence: 0.762768184615385

 $00{:}54{:}50{.}631 \dashrightarrow 00{:}54{:}52{.}709$ rivaroxaban and apixaban you can see

NOTE Confidence: 0.762768184615385

 $00{:}54{:}52{.}709 \dashrightarrow 00{:}54{:}55{.}062$  that you know the lines can be can

NOTE Confidence: 0.762768184615385

 $00:54:55.062 \rightarrow 00:54:57.206$  be saved without really recurrence

- NOTE Confidence: 0.762768184615385
- 00:54:57.206 --> 00:54:59.866 or symptoms or post traumatic
- NOTE Confidence: 0.762768184615385
- $00:54:59.866 \dashrightarrow 00:55:02.886$  syndrome and can be used very safely.
- NOTE Confidence: 0.762768184615385
- 00:55:02.890 --> 00:55:05.445 So that's I think is pretty good
- NOTE Confidence: 0.762768184615385
- $00{:}55{:}05{.}445 \dashrightarrow 00{:}55{:}06{.}540$  data to have.
- NOTE Confidence: 0.827710378888889
- $00:55:07.190 \longrightarrow 00:55:08.520$  Just one follow-up question to
- NOTE Confidence: 0.827710378888889
- $00:55:08.520 \longrightarrow 00:55:10.116$  you and then we'll we'll end
- NOTE Confidence: 0.827710378888889
- $00:55:10.116 \rightarrow 00:55:11.600$  and there may not be data here.
- NOTE Confidence: 0.827710378888889
- 00:55:11.600 --> 00:55:13.464 But so if if you had a patient
- NOTE Confidence: 0.827710378888889
- $00{:}55{:}13.464 \dashrightarrow 00{:}55{:}15.314$  who had a symptomatic line
- NOTE Confidence: 0.827710378888889
- $00:55:15.314 \rightarrow 00:55:17.070$  associated thrombus and cancer,
- NOTE Confidence: 0.827710378888889
- $00:55:17.070 \longrightarrow 00:55:19.541$  would you start at all with a
- NOTE Confidence: 0.827710378888889
- $00{:}55{:}19{.}541 \dashrightarrow 00{:}55{:}21{.}029$  low molecular weight heparin
- NOTE Confidence: 0.827710378888889
- $00:55:21.029 \rightarrow 00:55:23.918$  or would you just begin with a
- NOTE Confidence: 0.827710378888889
- 00:55:23.918 --> 00:55:25.880 dull ache apixaban, let's say
- NOTE Confidence: 0.779273528333333
- $00:55:26.250 \longrightarrow 00:55:27.606$  I would just begin with the,
- NOTE Confidence: 0.779273528333333

 $00:55:27.610 \longrightarrow 00:55:28.710$  with the, with the doc.

NOTE Confidence: 0.779273528333333

00:55:28.710 --> 00:55:29.695 I mean I was following the

NOTE Confidence: 0.779273528333333

 $00{:}55{:}29.695 \dashrightarrow 00{:}55{:}31.830$  River Rock Seban thing as it is

NOTE Confidence: 0.779273528333333

 $00:55:31.830 \rightarrow 00:55:33.030$  and now we've been using them,

NOTE Confidence: 0.779273528333333

00:55:33.030 --> 00:55:35.730 you know, kind of interchangeably.

NOTE Confidence: 0.779273528333333

00:55:35.730 --> 00:55:37.330 So I definitely would just,

NOTE Confidence: 0.779273528333333

 $00:55:37.330 \longrightarrow 00:55:38.360$  you know, pick in the.

NOTE Confidence: 0.81018688

00:55:38.850 --> 00:55:41.610 Great. OK. Thank you. Well.

NOTE Confidence: 0.81018688

 $00{:}55{:}41.610 \dashrightarrow 00{:}55{:}43.080$  And the hour is almost up.

NOTE Confidence: 0.81018688

 $00:55:43.080 \rightarrow 00:55:45.420$  I'd like to thank our speakers.

NOTE Confidence: 0.81018688

 $00:55:45.420 \rightarrow 00:55:47.256$  I these are really great abstracts

NOTE Confidence: 0.81018688

 $00{:}55{:}47.256 \dashrightarrow 00{:}55{:}49.074$  you chose to present and they're

NOTE Confidence: 0.81018688

 $00:55:49.074 \rightarrow 00:55:51.210$  some of them are clearly going to be

NOTE Confidence: 0.81018688

 $00:55:51.270 \dashrightarrow 00:55:52.908$  practice changing I think for all

NOTE Confidence: 0.81018688

 $00{:}55{:}52{.}908 \dashrightarrow 00{:}55{:}55{.}149$  of us and we're all excited about.

NOTE Confidence: 0.81018688

 $00:55:55.149 \rightarrow 00:55:57.447$  Seeing these new drugs and development

NOTE Confidence: 0.81018688
00:55:57.447 --> 00:55:59.397 and new ideas brought forth.
NOTE Confidence: 0.81018688
00:55:59.400 --> 00:56:03.303 So thank you both very much and thank
NOTE Confidence: 0.81018688
00:56:03.303 --> 00:56:05.284 you to the participants who are here.
NOTE Confidence: 0.81018688
00:56:05.290 --> 00:56:07.030 We really enjoyed having you
NOTE Confidence: 0.81018688
00:56:07.030 --> 00:56:09.429 and I hope everyone has a nice
NOTE Confidence: 0.81018688
00:56:09.429 --> 00:56:11.187 rest of the day and weekend.
NOTE Confidence: 0.81018688

00:56:11.190 --> 00:56:12.999 Bye, bye now.