## WEBVTT

NOTE duration: "01:02:36.5230000"

NOTE language:en-us

NOTE Confidence: 0.84039795

 $00:00:00.000 \longrightarrow 00:00:02.205$  But it's 1202 an Why don't we

NOTE Confidence: 0.84039795

 $00{:}00{:}02.205 \dashrightarrow 00{:}00{:}04.140$  get started 'cause I want to make

NOTE Confidence: 0.84809178

 $00:00:04.140 \longrightarrow 00:00:05.796$  sure everyone has time.

NOTE Confidence: 0.84809178

00:00:05.796 --> 00:00:06.916 I welcome everybody.

NOTE Confidence: 0.84809178

 $00{:}00{:}06.916 \dashrightarrow 00{:}00{:}09.025$  This is actually our last Cancer

NOTE Confidence: 0.84809178

 $00:00:09.025 \longrightarrow 00:00:11.140$  Center grand rounds of calendar year

NOTE Confidence: 0.84809178

 $00:00:11.140 \longrightarrow 00:00:15.419$  2020 and what a year it has been. A

NOTE Confidence: 0.8406525

 $00:00:15.420 \longrightarrow 00:00:17.710$  lot of lot of things

NOTE Confidence: 0.8406525

00:00:17.710 --> 00:00:21.830 have happened, a lot of great work and it

NOTE Confidence: 0.8406525

 $00:00:21.830 \longrightarrow 00:00:24.674$  seems almost fitting that actually theme

NOTE Confidence: 0.8406525

 $00:00:24.674 \longrightarrow 00:00:28.239$  for our our last grand rounds is our.

NOTE Confidence: 0.8406525

00:00:28.240 --> 00:00:30.689 Our division of hematology.

NOTE Confidence: 0.8406525

00:00:30.690 --> 00:00:34.380 And which we are extremely proud. And among

NOTE Confidence: 0.86493784

 $00:00:34.380 \longrightarrow 00:00:37.140$  the highlights of all the many

 $00{:}00{:}37.140 \dashrightarrow 00{:}00{:}38.990$  accomplishments in the division

NOTE Confidence: 0.86493784

 $00{:}00{:}38.990 \dashrightarrow 00{:}00{:}41.752$  was actually the results of our

NOTE Confidence: 0.86493784

00:00:41.752 --> 00:00:44.518 search for our new division chief.

NOTE Confidence: 0.86493784

 $00:00:44.520 \longrightarrow 00:00:47.750$  As, as you've heard, we had a

NOTE Confidence: 0.86493784

 $00{:}00{:}47.750 \dashrightarrow 00{:}00{:}50.050$  national search an without question.

NOTE Confidence: 0.86493784

 $00:00:50.050 \longrightarrow 00:00:52.360$  There was one person that

NOTE Confidence: 0.86493784

 $00:00:52.360 \longrightarrow 00:00:54.200$  the committee felt very

NOTE Confidence: 0.86493784

 $00:00:54.200 \longrightarrow 00:00:56.510$  strongly rose to the top,

NOTE Confidence: 0.86493784

 $00:00:56.510 \longrightarrow 00:00:59.125$  and that is Doctor Stephanie

NOTE Confidence: 0.86493784

 $00:00:59.125 \longrightarrow 00:01:00.694$  Allyne a recognized.

NOTE Confidence: 0.86493784

 $00{:}01{:}00.700 --> 00{:}01{:}01.606 \ Physician \ scientists,$ 

NOTE Confidence: 0.86493784

00:01:01.606 --> 00:01:02.966 clinician educator, leader,

NOTE Confidence: 0.86493784

 $00{:}01{:}02.966 \dashrightarrow 00{:}01{:}06.146$  and which is so pleased to have

NOTE Confidence: 0.86493784

00:01:06.146 --> 00:01:08.873 Stephanie now in that role in

NOTE Confidence: 0.86493784

00:01:08.873 --> 00:01:10.686 the really extraordinary legacy

00:01:10.686 --> 00:01:12.498 of accomplishment in hematology

NOTE Confidence: 0.8392685

00:01:12.500 --> 00:01:15.680 detail. So I'm going to turn it

NOTE Confidence: 0.8392685

 $00{:}01{:}15.680 \dashrightarrow 00{:}01{:}17.952$  over to Stephanie to introduce

NOTE Confidence: 0.8392685

 $00:01:17.952 \longrightarrow 00:01:19.768$  our esteemed 2 speakers.

NOTE Confidence: 0.74015343

 $00:01:20.910 \longrightarrow 00:01:23.976$  Like Italian, thank you for this honor.

NOTE Confidence: 0.74015343

 $00:01:23.980 \longrightarrow 00:01:26.710$  So I'm really honored to introduce two

NOTE Confidence: 0.74015343

 $00{:}01{:}26.710 \dashrightarrow 00{:}01{:}30.109$  over my dear dear colleagues and friends,

NOTE Confidence: 0.74015343

 $00:01:30.110 \longrightarrow 00:01:32.826$  and our first speaker of the day

NOTE Confidence: 0.74015343

 $00{:}01{:}32.826 \dashrightarrow 00{:}01{:}34.930$  is Doctor Nikolai productive.

NOTE Confidence: 0.74015343

00:01:34.930 --> 00:01:36.244 He's associate professor,

NOTE Confidence: 0.74015343

 $00{:}01{:}36.244 \to 00{:}01{:}38.353$  internal medicine, hematology, and Sir.

NOTE Confidence: 0.74015343

 $00:01:38.353 \longrightarrow 00:01:40.819$  Just as the associate director of

NOTE Confidence: 0.74015343

00:01:40.819 --> 00:01:43.068 Hematology Oncology Fellowship program,

NOTE Confidence: 0.74015343

 $00:01:43.070 \longrightarrow 00:01:45.478$  he is also the from T for

NOTE Confidence: 0.74015343

 $00:01:45.478 \longrightarrow 00:01:47.749$  education on the Duffy service.

NOTE Confidence: 0.74015343

 $00{:}01{:}47.750 \dashrightarrow 00{:}01{:}50.024$ Nicolai received his MD and PhD

00:01:50.024 --> 00:01:52.040 from Saint Peters Burg State,

NOTE Confidence: 0.74015343

 $00{:}01{:}52.040 \dashrightarrow 00{:}01{:}54.152$  Pablo Medical University and completed his

NOTE Confidence: 0.74015343

00:01:54.152 --> 00:01:56.719 fellowship at Yale in hematology oncology,

NOTE Confidence: 0.74015343

 $00:01:56.720 \longrightarrow 00:01:59.807$  after which we get to keep him and Nikolai

NOTE Confidence: 0.74015343

 $00{:}01{:}59.807 \dashrightarrow 00{:}02{:}01.939$ Nikolai's clinical practice and research

NOTE Confidence: 0.74015343

 $00:02:01.939 \longrightarrow 00:02:04.513$  are focused on my light neoplasms,

NOTE Confidence: 0.74015343

 $00:02:04.520 \longrightarrow 00:02:05.936$  including acute minor.

NOTE Confidence: 0.74015343

 $00{:}02{:}05.936 \rightarrow 00{:}02{:}08.296$  Kenya models plastic syndromes and

NOTE Confidence: 0.74015343

 $00:02:08.296 \longrightarrow 00:02:10.406$  in particular my lucrative neoplasms

NOTE Confidence: 0.74015343

 $00:02:10.406 \longrightarrow 00:02:12.961$  in which he really is an expert.

NOTE Confidence: 0.74015343

 $00:02:12.970 \longrightarrow 00:02:15.525$  Nikolai serves as a Pi for a

NOTE Confidence: 0.74015343

 $00{:}02{:}15.525 \dashrightarrow 00{:}02{:}17.330$  number of clinical studies.

NOTE Confidence: 0.74015343

 $00{:}02{:}17.330 \dashrightarrow 00{:}02{:}19.094$  Their industry sponsored cooperative

NOTE Confidence: 0.74015343

 $00{:}02{:}19.094 \dashrightarrow 00{:}02{:}20.858$  group investigator initiated and

NOTE Confidence: 0.74015343

 $00:02:20.858 \longrightarrow 00:02:22.870$  his clinical care and his trials.

00:02:22.870 --> 00:02:24.850 He really makes a difference

NOTE Confidence: 0.74015343

 $00:02:24.850 \longrightarrow 00:02:26.038$  for his patience.

NOTE Confidence: 0.74015343

00:02:26.040 --> 00:02:26.832 So nicholi,

NOTE Confidence: 0.74015343

 $00:02:26.832 \longrightarrow 00:02:29.208$  we look forward to your time.

NOTE Confidence: 0.77378833

00:02:29.210 --> 00:02:30.395 Thank you Stephanie,

NOTE Confidence: 0.77378833

 $00:02:30.395 \longrightarrow 00:02:31.975$  for this kind introduction.

NOTE Confidence: 0.77378833

 $00:02:31.980 \longrightarrow 00:02:33.560$  I'll be talking about

NOTE Confidence: 0.77378833

 $00:02:33.560 \longrightarrow 00:02:34.745$  polycythemia Vera today.

NOTE Confidence: 0.77378833

 $00{:}02{:}34.750 \dashrightarrow 00{:}02{:}37.255$  I will talk about Epidemiology, prognosis.

NOTE Confidence: 0.77378833

 $00:02:37.255 \longrightarrow 00:02:39.880$  And a real world outcomes.

NOTE Confidence: 0.77378833

 $00:02:39.880 \longrightarrow 00:02:42.260$  Are these are my disclosures?

NOTE Confidence: 0.77378833

00:02:42.260 --> 00:02:43.980 So, first of all,

NOTE Confidence: 0.77378833

 $00{:}02{:}43.980 \dashrightarrow 00{:}02{:}45.700$  polycythemia Vera belongs to

NOTE Confidence: 0.77378833

 $00:02:45.700 \longrightarrow 00:02:48.256$  the Group of Milo proliferative

NOTE Confidence: 0.77378833

00:02:48.256 --> 00:02:50.946 neoplasms based on W2 2016

NOTE Confidence: 0.77378833

 $00{:}02{:}50.946 \dashrightarrow 00{:}02{:}52.964$  classification mpanza divided into

00:02:52.964 --> 00:02:55.556 pH positive or BCR ABL positive?

NOTE Confidence: 0.77378833

00:02:55.560 --> 00:02:58.416 Or also known as chronic myeloid

NOTE Confidence: 0.77378833

 $00:02:58.416 \longrightarrow 00:03:00.780$  leukemia as well as BCR,

NOTE Confidence: 0.77378833

00:03:00.780 --> 00:03:03.160 ABL negative Milo proliferative neoplasms,

NOTE Confidence: 0.77378833

 $00{:}03{:}03.160 \dashrightarrow 00{:}03{:}05.902$  and among them there are classical

NOTE Confidence: 0.77378833

 $00:03:05.902 \longrightarrow 00:03:07.273$  mpanza including polycythemia

NOTE Confidence: 0.77378833

 $00:03:07.273 \longrightarrow 00:03:09.328$  Vera we're discussing today.

NOTE Confidence: 0.77378833

 $00{:}03{:}09.330 \dashrightarrow 00{:}03{:}11.370$  Also essential thrombocythemia.

NOTE Confidence: 0.77378833

00:03:11.370 --> 00:03:14.300 And primary myelofibrosis so the

NOTE Confidence: 0.77378833

00:03:14.300 --> 00:03:16.970 definition is based on WTO 2016

NOTE Confidence: 0.77378833

 $00{:}03{:}16.970 \dashrightarrow 00{:}03{:}18.920$  criteria represented on the slide.

NOTE Confidence: 0.77378833

 $00:03:18.920 \longrightarrow 00:03:22.128$  To diagnose the very you have to have

NOTE Confidence: 0.77378833

 $00{:}03{:}22.128 \dashrightarrow 00{:}03{:}24.933$  three major criteria on the left or

NOTE Confidence: 0.77378833

 $00:03:24.933 \longrightarrow 00:03:27.904$  two first 2 first major criteria and

NOTE Confidence: 0.77378833

 $00:03:27.904 \longrightarrow 00:03:30.790$  then minor criterion on the right.

 $00:03:30.790 \longrightarrow 00:03:32.486$  The major criteria include

NOTE Confidence: 0.77378833

00:03:32.486 --> 00:03:33.758 elevation of hemoglobin.

NOTE Confidence: 0.77378833

00:03:33.760 --> 00:03:35.875 This is the hallmark feature

NOTE Confidence: 0.77378833

 $00:03:35.875 \longrightarrow 00:03:37.144$  of this condition,

NOTE Confidence: 0.77378833

 $00:03:37.150 \longrightarrow 00:03:39.663$  and that's what makes it different from

NOTE Confidence: 0.77378833

 $00:03:39.663 \longrightarrow 00:03:42.239$  other classical Milo proliferative neoplasms.

NOTE Confidence: 0.77378833

 $00:03:42.240 \longrightarrow 00:03:43.593$  The bone marrow.

NOTE Confidence: 0.77378833

 $00:03:43.593 \longrightarrow 00:03:45.397$  Biopsy is necessary and

NOTE Confidence: 0.77378833

 $00{:}03{:}45.397 \dashrightarrow 00{:}03{:}47.778$  usually shows up on my loses.

NOTE Confidence: 0.77378833

 $00:03:47.780 \longrightarrow 00:03:49.800$  Excessive presence of red blood

NOTE Confidence: 0.77378833

 $00{:}03{:}49.800 \dashrightarrow 00{:}03{:}51.416$  cells and myeloid precursors,

NOTE Confidence: 0.77378833

00:03:51.420 --> 00:03:53.838 as well as megakaryocytes and then.

NOTE Confidence: 0.77378833

00:03:53.840 --> 00:03:54.244 Finally,

NOTE Confidence: 0.77378833

00:03:54.244 --> 00:03:57.476 there is one of two Jack two mutations,

NOTE Confidence: 0.77378833

00:03:57.480 --> 00:03:59.500 Jack 2V617F mutation or Jack.

NOTE Confidence: 0.77378833

 $00:03:59.500 \longrightarrow 00:04:02.321$  Two exon 12 mutation in very rare

 $00:04:02.321 \longrightarrow 00:04:04.346$  circumstances, about 2% or less.

NOTE Confidence: 0.77378833

 $00{:}04{:}04.346 \to 00{:}04{:}06.770$  When this mutations are not present,

NOTE Confidence: 0.77378833

 $00:04:06.770 \longrightarrow 00:04:09.752$  you need lower throughput and level

NOTE Confidence: 0.77378833

00:04:09.752 --> 00:04:11.740 to diagnose polycythemia Vera.

NOTE Confidence: 0.77378833

 $00{:}04{:}11.740 \dashrightarrow 00{:}04{:}14.848$  So the history of Mila proliferate

NOTE Confidence: 0.77378833

 $00:04:14.848 \longrightarrow 00:04:17.424$  diseases is interesting if at

NOTE Confidence: 0.77378833

 $00:04:17.424 \longrightarrow 00:04:19.920$  first they were described as a

NOTE Confidence: 0.77378833

 $00:04:19.920 \longrightarrow 00:04:22.700$  group by Doctor William Damashek,

NOTE Confidence: 0.77378833

 $00:04:22.700 \longrightarrow 00:04:25.790$  he immigrated with his family from

NOTE Confidence: 0.77378833

 $00{:}04{:}25.790 \dashrightarrow 00{:}04{:}29.344$ Russia to Massachusetts at the age of

NOTE Confidence: 0.77378833

00:04:29.344 --> 00:04:32.158 three and then stayed in Massachusetts,

NOTE Confidence: 0.77378833

 $00{:}04{:}32.160 \dashrightarrow 00{:}04{:}35.639$  was working in Tufts when he described

NOTE Confidence: 0.77378833

 $00{:}04{:}35.639 \dashrightarrow 00{:}04{:}36.633$  myeloproliferative diseases.

NOTE Confidence: 0.77378833

 $00:04:36.640 \longrightarrow 00:04:39.215$  This group of conditions became

NOTE Confidence: 0.77378833

 $00:04:39.215 \longrightarrow 00:04:41.790$  reportable to seer the lodge.

 $00:04:41.790 \longrightarrow 00:04:45.012$  Registry of cancer patients in the

NOTE Confidence: 0.77378833

 $00:04:45.012 \longrightarrow 00:04:48.469$  United States in 2001 and in 2008

NOTE Confidence: 0.77378833

00:04:48.469 --> 00:04:51.290 W show renamed MP dies to MPs,

NOTE Confidence: 0.77378833

 $00:04:51.290 \longrightarrow 00:04:53.670$  so from Milo proliferative diseases,

NOTE Confidence: 0.77378833

 $00:04:53.670 \longrightarrow 00:04:56.040$  they became I'll of proliferative

NOTE Confidence: 0.77378833

00:04:56.040 --> 00:04:59.332 neoplasms in Part B, cause in 2005,

NOTE Confidence: 0.77378833

00:04:59.332 --> 00:05:01.652 Jack 2V617F mutation was identified

NOTE Confidence: 0.77378833

 $00:05:01.652 \longrightarrow 00:05:04.908$  as a driver mutation in majority of

NOTE Confidence: 0.77378833

 $00{:}05{:}04.908 \dashrightarrow 00{:}05{:}08.250$  patients with PD ET an Milo fibrosis

NOTE Confidence: 0.77378833

 $00:05:08.250 \longrightarrow 00:05:11.799$  in 2006 nipple exam 10 mutation another.

NOTE Confidence: 0.77378833

 $00{:}05{:}11.800 \to 00{:}05{:}14.158$  Driver mutational Jack Stat pathway which

NOTE Confidence: 0.77378833

00:05:14.158 --> 00:05:16.610 is activated in those malignancies,

NOTE Confidence: 0.77378833

 $00:05:16.610 \longrightarrow 00:05:19.226$  was discovered and then in 2007,

NOTE Confidence: 0.77378833

 $00:05:19.230 \longrightarrow 00:05:20.978$  another Jack mutation Jack.

NOTE Confidence: 0.77378833

00:05:20.978 --> 00:05:23.600 Two exon 12 mutation was described.

NOTE Confidence: 0.77378833

 $00{:}05{:}23.600 \dashrightarrow 00{:}05{:}25.800$  Finally in 2013 call reticular

 $00:05:25.800 \longrightarrow 00:05:28.463$  mutation was described and if you

NOTE Confidence: 0.77378833

 $00{:}05{:}28.463 \dashrightarrow 00{:}05{:}30.791$  look at polycythemia Vera which is

NOTE Confidence: 0.77378833

 $00:05:30.791 \longrightarrow 00:05:33.650$  the subject of my presentation today,

NOTE Confidence: 0.77378833

 $00:05:33.650 \longrightarrow 00:05:36.260$  most of the patients will have

NOTE Confidence: 0.77378833

00:05:36.260 --> 00:05:38.890 Jack 2V617F mutation 97 percent 1%

NOTE Confidence: 0.77378833

 $00:05:38.890 \longrightarrow 00:05:42.746$  will have Jack to exam 12 and then.

NOTE Confidence: 0.77378833

 $00:05:42.750 \longrightarrow 00:05:46.950$  2% of patients will have other drivers.

NOTE Confidence: 0.77378833

 $00:05:46.950 \longrightarrow 00:05:49.500$  So the polycythemia Vera Epidemiology

NOTE Confidence: 0.77378833

 $00{:}05{:}49.500 \dashrightarrow 00{:}05{:}52.650$  was recently summarized in our review.

NOTE Confidence: 0.77378833

00:05:52.650 --> 00:05:56.157 As you can see the patients with

NOTE Confidence: 0.77378833

 $00:05:56.157 \longrightarrow 00:05:58.350$  this diagnosis are older,

NOTE Confidence: 0.77378833

 $00:05:58.350 \longrightarrow 00:06:01.969$  median age of diagnosis is 65 years.

NOTE Confidence: 0.77378833

 $00{:}06{:}01.970 \dashrightarrow 00{:}06{:}05.078$  It's not the most common malignancy.

NOTE Confidence: 0.77378833

 $00:06:05.080 \longrightarrow 00:06:08.182$  The incidence is only .5 to

NOTE Confidence: 0.77378833

 $00:06:08.182 \longrightarrow 00:06:09.733 400,000$  person years.

 $00:06:09.740 \longrightarrow 00:06:12.150$  Estimated prevalence in the USA

NOTE Confidence: 0.77378833

 $00:06:12.150 \longrightarrow 00:06:16.309$  is 25 to 57 per 100,000 persons.

NOTE Confidence: 0.77378833

 $00:06:16.310 \longrightarrow 00:06:18.380$  And median overall survival is

NOTE Confidence: 0.77378833

 $00:06:18.380 \longrightarrow 00:06:20.036$  12 to 14 years,

NOTE Confidence: 0.77378833

 $00:06:20.040 \longrightarrow 00:06:21.895$  which is less than expected

NOTE Confidence: 0.77378833

 $00{:}06{:}21.895 \dashrightarrow 00{:}06{:}23.750$  in age and gender matched

NOTE Confidence: 0.8806727

 $00:06:23.820 \longrightarrow 00:06:24.590$  population.

NOTE Confidence: 0.8806727

 $00:06:24.590 \longrightarrow 00:06:28.670$  5 year relative survival is 84 to 89%.

NOTE Confidence: 0.8806727

 $00{:}06{:}28.670 \dashrightarrow 00{:}06{:}31.614$  Uh, so if you look at this graph,

NOTE Confidence: 0.8806727

 $00:06:31.620 \longrightarrow 00:06:33.490$  you will appreciate that males

NOTE Confidence: 0.8806727

 $00{:}06{:}33.490 \dashrightarrow 00{:}06{:}35.360$  diagnosed with this condition the

NOTE Confidence: 0.8806727

 $00:06:35.423 \longrightarrow 00:06:37.529$  little bit more common than females.

NOTE Confidence: 0.8806727

 $00:06:37.530 \longrightarrow 00:06:39.738$  You can see males and blue.

NOTE Confidence: 0.8806727

 $00:06:39.740 \longrightarrow 00:06:42.316$  This is divided in different age groups.

NOTE Confidence: 0.8806727

 $00:06:42.320 \longrightarrow 00:06:44.462$  One other thing you can appreciate here

NOTE Confidence: 0.8806727

 $00:06:44.462 \longrightarrow 00:06:46.762$  is that this condition is extremely

 $00:06:46.762 \longrightarrow 00:06:48.967$  rarely diagnosed in younger patients.

NOTE Confidence: 0.8806727

 $00:06:48.970 \longrightarrow 00:06:51.546$  Those who look way younger than 40.

NOTE Confidence: 0.8806727

 $00:06:51.550 \longrightarrow 00:06:54.421$  So this is one of the large cohort studies

NOTE Confidence: 0.8806727

00:06:54.421 --> 00:06:57.076 in one institution and Mayo Clinic,

NOTE Confidence: 0.8806727

 $00:06:57.080 \longrightarrow 00:06:59.030$  which looked at survival of.

NOTE Confidence: 0.8806727

 $00:06:59.030 \longrightarrow 00:07:01.400$  Patients with classical Milo proliferative

NOTE Confidence: 0.8806727

 $00:07:01.400 \longrightarrow 00:07:04.267$  neoplasms and here you can appreciate

NOTE Confidence: 0.8806727

 $00:07:04.267 \longrightarrow 00:07:07.200$  that 80 survival yellow line is less

NOTE Confidence: 0.8806727

 $00:07:07.200 \longrightarrow 00:07:09.628$  than survival of general population.

NOTE Confidence: 0.8806727

 $00:07:09.630 \longrightarrow 00:07:12.936$  The dark blue line and polycythemia

NOTE Confidence: 0.8806727

00:07:12.936 --> 00:07:17.790 Vera in red is worse survival than ET.

NOTE Confidence: 0.8806727

 $00:07:17.790 \dashrightarrow 00:07:21.978$  So the etiology of Milo prolifera.

NOTE Confidence: 0.8806727

00:07:21.980 --> 00:07:23.584 Trackmania plasma goes beyond

NOTE Confidence: 0.8806727

 $00:07:23.584 \longrightarrow 00:07:24.386$  driver mutations.

NOTE Confidence: 0.8806727

00:07:24.390 --> 00:07:26.390 We know the driver mutations.

 $00:07:26.390 \longrightarrow 00:07:28.796$  We also just figured out that

NOTE Confidence: 0.8806727

 $00:07:28.796 \longrightarrow 00:07:30.400$  they may occur many,

NOTE Confidence: 0.8806727

 $00{:}07{:}30.400 \dashrightarrow 00{:}07{:}32.410$  many years before MPN diagnosis.

NOTE Confidence: 0.8806727

00:07:32.410 --> 00:07:35.210 During this ash meeting a week ago,

NOTE Confidence: 0.8806727

 $00:07:35.210 \longrightarrow 00:07:37.968$  there was a presentation which showed that

NOTE Confidence: 0.8806727

00:07:37.968 --> 00:07:40.429 these mutations may develop in neutral,

NOTE Confidence: 0.8806727

 $00:07:40.430 \longrightarrow 00:07:43.349$  but factors leading to the acquisition and

NOTE Confidence: 0.8806727

 $00:07:43.349 \longrightarrow 00:07:46.040$  development of MPN are much less clear.

NOTE Confidence: 0.8806727

 $00:07:46.040 \longrightarrow 00:07:47.369$  So in fact,

NOTE Confidence: 0.8806727

00:07:47.369 --> 00:07:49.584 MPM doesn't develop in everyone

NOTE Confidence: 0.8806727

 $00{:}07{:}49.584 \dashrightarrow 00{:}07{:}52.209$  who has Jack two mutations.

NOTE Confidence: 0.8806727

 $00:07:52.210 \longrightarrow 00:07:54.034$  The other interesting observation

NOTE Confidence: 0.8806727

 $00:07:54.034 \longrightarrow 00:07:57.255$  is that there is higher incidence of

NOTE Confidence: 0.8806727

 $00{:}07{:}57.255 \dashrightarrow 00{:}07{:}59.300$  mpanza in first degree relatives.

NOTE Confidence: 0.8806727

 $00:07:59.300 \longrightarrow 00:08:03.368$  It's actually 7 times more likely.

NOTE Confidence: 0.8806727

 $00:08:03.370 \longrightarrow 00:08:05.794$  The patients that first degree relatives

 $00:08:05.794 \longrightarrow 00:08:08.647$  are seven times more likely to develop

NOTE Confidence: 0.8806727

 $00:08:08.647 \longrightarrow 00:08:10.987$  MPs and German driver mutations inject

NOTE Confidence: 0.8806727

 $00:08:10.987 \longrightarrow 00:08:13.767$  to color it economical genes uncommon.

NOTE Confidence: 0.8806727

 $00:08:13.770 \longrightarrow 00:08:16.656$  It is felt that congenital predisposition

NOTE Confidence: 0.8806727

 $00:08:16.656 \longrightarrow 00:08:19.013$  due to certain polymorphisms help

NOTE Confidence: 0.8806727

00:08:19.013 --> 00:08:21.155 to acquire MPM and families overall

NOTE Confidence: 0.8806727

 $00:08:21.155 \longrightarrow 00:08:24.454$  within 5 to 10% of MPN patients

NOTE Confidence: 0.8806727

 $00{:}08{:}24.454 \dashrightarrow 00{:}08{:}26.398$  have germline predisposition.

NOTE Confidence: 0.8806727

 $00:08:26.400 \longrightarrow 00:08:29.610$  So we started the extrinsic factors

NOTE Confidence: 0.8806727

 $00:08:29.610 \longrightarrow 00:08:31.750$  influencing on the development

NOTE Confidence: 0.8806727

00:08:31.836 --> 00:08:33.540 of polycythemia Vera,

NOTE Confidence: 0.8806727

 $00:08:33.540 \longrightarrow 00:08:35.784$  among other myeloproliferative neoplasm's,

NOTE Confidence: 0.8806727

 $00:08:35.784 \longrightarrow 00:08:39.580$  and for that we used in HRP,

NOTE Confidence: 0.8806727

 $00:08:39.580 \longrightarrow 00:08:42.874$  diet and health study cohort with

NOTE Confidence: 0.8806727

 $00:08:42.874 \longrightarrow 00:08:45.070$  more than 450,000 participants.

00:08:45.070 --> 00:08:48.358 Median follow-up was 15 1/2 years.

NOTE Confidence: 0.8806727

 $00{:}08{:}48.360 --> 00{:}08{:}51.420 \ 490 \ \mathrm{ampion} \ \mathrm{cases} \ \mathrm{were} \ \mathrm{discovered}$ 

NOTE Confidence: 0.8806727

 $00:08:51.420 \longrightarrow 00:08:54.480$  among them 190 PV cases.

NOTE Confidence: 0.8806727

 $00:08:54.480 \longrightarrow 00:08:57.231$  So it is well known that tobacco

NOTE Confidence: 0.8806727

 $00:08:57.231 \longrightarrow 00:08:59.570$  is a bad carcinogen,

NOTE Confidence: 0.8806727

 $00:08:59.570 \longrightarrow 00:09:02.538$  and we were able to show that

NOTE Confidence: 0.8806727

 $00:09:02.538 \longrightarrow 00:09:05.418$  there is increased risk of MPs

NOTE Confidence: 0.8806727

 $00:09:05.418 \longrightarrow 00:09:07.438$  velopment one smoking women.

NOTE Confidence: 0.8806727

 $00{:}09{:}07.440 \dashrightarrow 00{:}09{:}10.056$  So the other interesting finding of

NOTE Confidence: 0.8806727

00:09:10.056 --> 00:09:12.352 this study was identification of

NOTE Confidence: 0.8806727

 $00{:}09{:}12.352 \dashrightarrow 00{:}09{:}14.767$  coffee intake as protective against

NOTE Confidence: 0.8806727

 $00{:}09{:}14.767 \dashrightarrow 00{:}09{:}16.699$  development of polycythemia Vera.

NOTE Confidence: 0.8806727

 $00:09:16.700 \longrightarrow 00:09:19.423$  You can see that high versus low

NOTE Confidence: 0.8806727

00:09:19.423 --> 00:09:21.875 coffee intake was associated with

NOTE Confidence: 0.8806727

 $00:09:21.875 \longrightarrow 00:09:24.880$  decreased incidence of that diagnosis.

NOTE Confidence: 0.8806727

 $00:09:24.880 \longrightarrow 00:09:26.696$  Consumption of decaffeinated coffee

 $00:09:26.696 \longrightarrow 00:09:28.966$  did not have protective effect.

NOTE Confidence: 0.8806727

 $00:09:28.970 \longrightarrow 00:09:35.066$  We also looked at different micronutrients.

NOTE Confidence: 0.8806727

 $00:09:35.070 \longrightarrow 00:09:37.025$  And food groups and identified

NOTE Confidence: 0.8806727

 $00:09:37.025 \longrightarrow 00:09:39.392$  food consumption is one of the

NOTE Confidence: 0.8806727

 $00:09:39.392 \longrightarrow 00:09:41.450$  risks of the development of PV.

NOTE Confidence: 0.8388302

 $00:09:45.420 \longrightarrow 00:09:47.676$  He as well as sugar intake,

NOTE Confidence: 0.8388302

 $00:09:47.680 \longrightarrow 00:09:49.570$  which is also associated navaira.

NOTE Confidence: 0.8388302

 $00:09:49.570 \longrightarrow 00:09:51.957$  So to conclude, it's good to have

NOTE Confidence: 0.8388302

 $00:09:51.957 \longrightarrow 00:09:54.847$  a Cup of coffee in the morning,

NOTE Confidence: 0.8388302

 $00:09:54.850 \longrightarrow 00:09:57.858$  but not with sugar and without a cigarette.

NOTE Confidence: 0.8388302

 $00:09:57.860 \longrightarrow 00:10:00.110$  So the common clinical features.

NOTE Confidence: 0.8388302

 $00:10:00.110 \longrightarrow 00:10:02.850$  Of polycythemia Vera include microvascular

NOTE Confidence: 0.8388302

 $00{:}10{:}02.850 \dashrightarrow 00{:}10{:}04.494$  complications like headache,

NOTE Confidence: 0.8388302

00:10:04.500 --> 00:10:06.144 aerothermal, alja dizziness,

NOTE Confidence: 0.8388302

 $00:10:06.144 \longrightarrow 00:10:08.336$  paresthesias and blurred vision

00:10:08.336 --> 00:10:09.432 microvascular complications,

NOTE Confidence: 0.8388302

 $00{:}10{:}09.440 --> 00{:}10{:}11.090 \ \mathrm{including \ heart \ attacks},$ 

NOTE Confidence: 0.8388302

 $00:10:11.090 \longrightarrow 00:10:13.840$  strokes and venous thrombotic events.

NOTE Confidence: 0.8388302

00:10:13.840 --> 00:10:16.580 Patients with PD may suffer

NOTE Confidence: 0.8388302

00:10:16.580 --> 00:10:18.224 from constitutional symptoms,

NOTE Confidence: 0.8388302

00:10:18.230 --> 00:10:20.422 including fatigue, night sweats,

NOTE Confidence: 0.8388302

 $00:10:20.422 \longrightarrow 00:10:22.896$  weight loss, and teaching.

NOTE Confidence: 0.8388302

 $00:10:22.896 \longrightarrow 00:10:24.960$  Specifically aquagenic parictis.

NOTE Confidence: 0.8388302

 $00{:}10{:}24.960 \dashrightarrow 00{:}10{:}27.140$  Splenomegaly occurs in less than

NOTE Confidence: 0.8388302

00:10:27.140 --> 00:10:29.918 half of the patients and patients

NOTE Confidence: 0.8388302

00:10:29.918 --> 00:10:32.483 with PD may have splenomegaly

NOTE Confidence: 0.8388302

 $00:10:32.483 \longrightarrow 00:10:34.535$  associated symptoms as well.

NOTE Confidence: 0.8388302

 $00:10:34.540 \longrightarrow 00:10:37.816$  Most of morbidity and mortality in this

NOTE Confidence: 0.8388302

00:10:37.816 --> 00:10:41.190 group of patients comes from thrombo SIS,

NOTE Confidence: 0.8388302

00:10:41.190 --> 00:10:43.582 arterial and venous thrombosis

NOTE Confidence: 0.8388302

 $00:10:43.582 \longrightarrow 00:10:45.974$  occur in about 20%.

 $00:10:45.980 \longrightarrow 00:10:48.635$  Of patience and you can see that this is

NOTE Confidence: 0.8388302

 $00:10:48.635 \longrightarrow 00:10:51.496$  the data from cohort of more than 1500

NOTE Confidence: 0.8388302

00:10:51.496 --> 00:10:54.379 patients with them in follow up of 6.9 years,

NOTE Confidence: 0.8388302

00:10:54.380 --> 00:10:55.990 but not only promote transposes,

NOTE Confidence: 0.8388302

 $00:10:55.990 \longrightarrow 00:10:57.605$  the danger that these patients

NOTE Confidence: 0.8388302

00:10:57.605 --> 00:10:59.220 can also develop major hemorrhage,

NOTE Confidence: 0.8388302

 $00:10:59.220 \longrightarrow 00:11:01.158$  and it is known that polycythemia

NOTE Confidence: 0.8388302

 $00:11:01.158 \longrightarrow 00:11:02.127$  Vera is strong,

NOTE Confidence: 0.8388302

00:11:02.130 --> 00:11:05.098 but humor odijk disorder.

NOTE Confidence: 0.8388302

 $00:11:05.100 \longrightarrow 00:11:07.160$  So what is feared most

NOTE Confidence: 0.8388302

 $00{:}11{:}07.160 --> 00{:}11{:}08.396 \text{ is disease progression},$ 

NOTE Confidence: 0.8388302

 $00:11:08.400 \longrightarrow 00:11:10.560$  and patients with polycythemia may

NOTE Confidence: 0.8388302

 $00{:}11{:}10.560 \dashrightarrow 00{:}11{:}12.720$  progress to post PV myelofibrosis

NOTE Confidence: 0.8388302

 $00:11:12.788 \longrightarrow 00:11:15.430$  about 10% of patients in 10 years.

NOTE Confidence: 0.8388302

 $00:11:15.430 \longrightarrow 00:11:17.761$  But even more scary with progression to

 $00:11:17.761 \longrightarrow 00:11:20.339$  last phase of Milo proliferative neoplasm

NOTE Confidence: 0.8388302

 $00:11:20.339 \longrightarrow 00:11:22.854$  or secondary acute myeloid leukemia.

NOTE Confidence: 0.8388302

 $00:11:22.860 \longrightarrow 00:11:24.508$  As you can see,

NOTE Confidence: 0.8388302

00:11:24.508 --> 00:11:26.950 4% of the patients will develop

NOTE Confidence: 0.8388302

 $00:11:26.950 \longrightarrow 00:11:29.879$  AML after 10 years of follow up.

NOTE Confidence: 0.8388302

 $00:11:29.880 \longrightarrow 00:11:33.410$  It is a little bit more than 80 but much

NOTE Confidence: 0.8388302

 $00{:}11{:}33.506 \dashrightarrow 00{:}11{:}36.686$  less than the primary myelofibrosis.

NOTE Confidence: 0.8388302

 $00{:}11{:}36.690 \dashrightarrow 00{:}11{:}40.710$  So also we sometimes can observe

NOTE Confidence: 0.8388302

 $00{:}11{:}40.710 \dashrightarrow 00{:}11{:}43.390$  evolution of essential thrombocythemia

NOTE Confidence: 0.8388302

00:11:43.493 --> 00:11:46.955 Jack Two V 617 mutation positive

NOTE Confidence: 0.8388302

00:11:46.955 --> 00:11:48.686 two polycythemia Vera.

NOTE Confidence: 0.8388302

 $00:11:48.690 \longrightarrow 00:11:52.506$  Can we predict the risk of disease evolution?

NOTE Confidence: 0.8388302

 $00{:}11{:}52.510 \dashrightarrow 00{:}11{:}55.204$  Can we predict progression to Milo

NOTE Confidence: 0.8388302

00:11:55.204 --> 00:11:57.750 fibrosis or acute myeloid leukemia?

NOTE Confidence: 0.8388302

00:11:57.750 --> 00:12:01.089 So we participated in this multicenter study,

NOTE Confidence: 0.8388302

 $00:12:01.090 \longrightarrow 00:12:03.475$  which looked at the largest

00:12:03.475 --> 00:12:05.860 US based PV data set.

NOTE Confidence: 0.8388302

 $00:12:05.860 \longrightarrow 00:12:08.275$  We contributed 100 patients to

NOTE Confidence: 0.8388302

00:12:08.275 --> 00:12:11.187 this 500 patient cohort and what

NOTE Confidence: 0.8388302

00:12:11.187 --> 00:12:13.635 looked at is Lucas Cytosis over

NOTE Confidence: 0.8388302

00:12:13.635 --> 00:12:16.162 year and its Association with

NOTE Confidence: 0.8388302

00:12:16.162 --> 00:12:19.197 disease evolution and thrombo SIS.

NOTE Confidence: 0.8388302

 $00:12:19.200 \longrightarrow 00:12:23.220$  It turns out that this.

NOTE Confidence: 0.8388302

00:12:23.220 --> 00:12:25.495 White cell count trajectory did

NOTE Confidence: 0.8388302

00:12:25.495 --> 00:12:27.315 not associate with thrombosis,

NOTE Confidence: 0.8388302

 $00:12:27.320 \longrightarrow 00:12:30.554$  but was associated with increased risk of

NOTE Confidence: 0.8388302

00:12:30.554 --> 00:12:33.248 transformation to post TV Milo fibrosis,

NOTE Confidence: 0.8388302

 $00:12:33.250 \longrightarrow 00:12:35.074$  as well as MPs.

NOTE Confidence: 0.8388302

00:12:35.074 --> 00:12:36.898 Unlike my with leukemia,

NOTE Confidence: 0.8388302

 $00:12:36.900 \longrightarrow 00:12:39.175$  this study used very interesting

NOTE Confidence: 0.8388302

00:12:39.175 --> 00:12:40.085 statistical approach,

00:12:40.090 --> 00:12:41.914 so-called group based trajectory

NOTE Confidence: 0.8388302

 $00:12:41.914 \longrightarrow 00:12:44.650$  modeling which is usually used in

NOTE Confidence: 0.8388302

00:12:44.723 --> 00:12:46.631 social and behavioral Sciences

NOTE Confidence: 0.8388302

 $00:12:46.631 \longrightarrow 00:12:49.016$  and this allowed to capture

NOTE Confidence: 0.8388302

 $00:12:49.016 \longrightarrow 00:12:50.883$  infrequent or delayed phenomena

NOTE Confidence: 0.8388302

 $00:12:50.883 \longrightarrow 00:12:53.083$  from the landmark start point.

NOTE Confidence: 0.8388302

 $00:12:53.090 \longrightarrow 00:12:55.616$  Over the course of the disease,

NOTE Confidence: 0.8388302

 $00:12:55.620 \longrightarrow 00:12:58.707$  as opposed to other studies which looked

NOTE Confidence: 0.8388302

 $00{:}12{:}58.707 \dashrightarrow 00{:}13{:}01.507$  at Lucas Cytosis at one time point.

NOTE Confidence: 0.8388302

 $00:13:01.510 \longrightarrow 00:13:03.988$  So is WBC increases surrogate marker

NOTE Confidence: 0.8388302

 $00{:}13{:}03.988 \mathrel{--}{>} 00{:}13{:}06.132$  or of disease evolution potential

NOTE Confidence: 0.8388302

 $00{:}13{:}06.132 \dashrightarrow 00{:}13{:}08.664$  or is a prompt for cytoreduction,

NOTE Confidence: 0.8388302

 $00:13:08.670 \longrightarrow 00:13:10.770$  allowing us to prevent it?

NOTE Confidence: 0.8388302

 $00:13:10.770 \longrightarrow 00:13:13.717$  This particular question is not answered yet.

NOTE Confidence: 0.8388302

 $00:13:13.720 \longrightarrow 00:13:16.012$  I am privileged to represent our

NOTE Confidence: 0.8388302

 $00{:}13{:}16.012 \dashrightarrow 00{:}13{:}18.350$  Cancer Center 1 NCM guideline,

 $00:13:18.350 \longrightarrow 00:13:20.675$  panel developing guidelines for Milo

NOTE Confidence: 0.8388302

 $00{:}13{:}20.675 \to 00{:}13{:}23.260$  proliferative neoplasm and I'm going to.

NOTE Confidence: 0.8388302

 $00:13:23.260 \longrightarrow 00:13:26.164$  I show you the section which is related

NOTE Confidence: 0.8388302

 $00:13:26.164 \longrightarrow 00:13:28.398$  to management of polycythemia Vera.

NOTE Confidence: 0.8388302

 $00:13:28.400 \longrightarrow 00:13:30.710$  So the goals of management is to

NOTE Confidence: 0.8388302

 $00:13:30.710 \longrightarrow 00:13:32.791$  reduce the risk of thrombosis

NOTE Confidence: 0.8388302

 $00:13:32.791 \longrightarrow 00:13:34.318$  and hemorrhage control.

NOTE Confidence: 0.817933

 $00{:}13{:}34.320 \dashrightarrow 00{:}13{:}36.690$  The symptoms and try to prevent

NOTE Confidence: 0.817933

 $00:13:36.690 \longrightarrow 00:13:38.270$  and delay disease transformation.

NOTE Confidence: 0.817933

 $00:13:38.270 \longrightarrow 00:13:40.580$  Everyone with a diagnosis of PV

NOTE Confidence: 0.817933

 $00{:}13{:}40.580 \dashrightarrow 00{:}13{:}42.590$  should be receiving low dose

NOTE Confidence: 0.817933

 $00:13:42.590 \longrightarrow 00:13:44.990$  aspirin as well as be phlebotomist.

NOTE Confidence: 0.817933

 $00{:}13{:}44.990 \dashrightarrow 00{:}13{:}47.755$  Two hematic rate goal of less than

NOTE Confidence: 0.817933

 $00{:}13{:}47.755 \dashrightarrow 00{:}13{:}49.586$ 545% cardiovascular risk factors have

NOTE Confidence: 0.817933

 $00:13:49.586 \longrightarrow 00:13:52.767$  to be managed as well as this as

 $00:13:52.767 \longrightarrow 00:13:54.695$  cardiovascular mobility and mortality.

NOTE Confidence: 0.817933

 $00{:}13{:}54.700 \dashrightarrow 00{:}13{:}56.920$  Is common among these patients,

NOTE Confidence: 0.817933

 $00:13:56.920 \longrightarrow 00:13:59.692$  so the evidence behind aspirin in

NOTE Confidence: 0.817933

 $00:13:59.692 \longrightarrow 00:14:02.010$  polycythemia Vera comes from this

NOTE Confidence: 0.817933

 $00:14:02.010 \longrightarrow 00:14:04.380$  study which was published in 2004

NOTE Confidence: 0.817933

00:14:04.380 --> 00:14:07.130 in New England Journal of medicine.

NOTE Confidence: 0.817933

 $00:14:07.130 \longrightarrow 00:14:08.806$  Is this so called?

NOTE Confidence: 0.817933

00:14:08.806 --> 00:14:11.320 The CLAP study evaluation of aspirin

NOTE Confidence: 0.817933

 $00{:}14{:}11.404 \dashrightarrow 00{:}14{:}14.194$  in polycythemia and it looked at

NOTE Confidence: 0.817933

00:14:14.194 --> 00:14:16.899 probability of survival free of marker.

NOTE Confidence: 0.8374873

 $00{:}14{:}19.080 \dashrightarrow 00{:}14{:}21.576$  Action and stroke and death from

NOTE Confidence: 0.8374873

 $00:14:21.576 \longrightarrow 00:14:24.188$  cardiovascular causes as well as P and DVT.

NOTE Confidence: 0.8374873

 $00:14:24.190 \longrightarrow 00:14:26.362$  That was the combined endpoint the

NOTE Confidence: 0.8374873

 $00{:}14{:}26.362 \dashrightarrow 00{:}14{:}28.570$  as pirin uses as opposed to placebo.

NOTE Confidence: 0.8374873

 $00:14:28.570 \longrightarrow 00:14:29.974$  Users had 60% risk.

NOTE Confidence: 0.8374873

00:14:29.974 --> 00:14:31.729 Reduction of adverse events and

 $00:14:31.729 \longrightarrow 00:14:33.663$  incidents of major bleeding episodes

NOTE Confidence: 0.8374873

 $00:14:33.663 \longrightarrow 00:14:35.183$  was not significantly different

NOTE Confidence: 0.8374873

 $00:14:35.183 \longrightarrow 00:14:37.328$  in this low dose aspirin group.

NOTE Confidence: 0.8374873

 $00:14:37.330 \longrightarrow 00:14:39.997$  So the next recommendation in the guidelines

NOTE Confidence: 0.8374873

 $00:14:39.997 \longrightarrow 00:14:42.810$  is to keep him at ecrit below 45%.

NOTE Confidence: 0.8374873

 $00:14:42.810 \longrightarrow 00:14:45.309$  The study which was published in New

NOTE Confidence: 0.8374873

00:14:45.309 --> 00:14:47.550 England Journal of Medicine in 2013,

NOTE Confidence: 0.8374873

 $00{:}14{:}47.550 \dashrightarrow 00{:}14{:}49.890$  confirmed this goal, which we actually.

NOTE Confidence: 0.8374873

00:14:49.890 --> 00:14:52.070 Using practice for many years,

NOTE Confidence: 0.8374873

00:14:52.070 --> 00:14:54.680 even before this article was published,

NOTE Confidence: 0.8374873

 $00:14:54.680 \longrightarrow 00:14:57.662$  it turns out that this stricter control

NOTE Confidence: 0.8374873

 $00{:}14{:}57.662 \dashrightarrow 00{:}14{:}59.528$  of hematocrit using Phlebotomies

NOTE Confidence: 0.8374873

 $00:14:59.528 \longrightarrow 00:15:02.093$  as well as cytoreductive therapies

NOTE Confidence: 0.8374873

 $00{:}15{:}02.093 \dashrightarrow 00{:}15{:}04.711$  is associated with four times

NOTE Confidence: 0.8374873

 $00:15:04.711 \longrightarrow 00:15:07.176$  decreased risk of traumatic events.

 $00:15:07.180 \longrightarrow 00:15:10.402$  So in regards to management of

NOTE Confidence: 0.8374873

 $00{:}15{:}10.402 \dashrightarrow 00{:}15{:}12.013$  cardiovascular risk factors.

NOTE Confidence: 0.8374873

00:15:12.020 --> 00:15:14.799 Our group looked at use of statins

NOTE Confidence: 0.8374873

 $00:15:14.799 \longrightarrow 00:15:17.132$  and survival among older patients

NOTE Confidence: 0.8374873

 $00:15:17.132 \longrightarrow 00:15:19.792$  with polycythemia Vera using serum

NOTE Confidence: 0.8374873

 $00{:}15{:}19.792 \dashrightarrow 00{:}15{:}22.139$  Medicaid and Medicare data set,

NOTE Confidence: 0.8374873

 $00:15:22.140 \longrightarrow 00:15:24.440$  so we identified them 721

NOTE Confidence: 0.8374873

00:15:24.440 --> 00:15:25.820 polycythemia Vera patients.

NOTE Confidence: 0.8374873

 $00:15:25.820 \longrightarrow 00:15:27.200$  Little bit more.

NOTE Confidence: 0.8374873

 $00:15:27.200 \longrightarrow 00:15:30.420$  Half of them use statins after diagnosis.

NOTE Confidence: 0.8374873

 $00{:}15{:}30.420 \dashrightarrow 00{:}15{:}33.180$  Using univariate analysis on the left,

NOTE Confidence: 0.8374873

 $00:15:33.180 \longrightarrow 00:15:35.480$  we showed that starting users

NOTE Confidence: 0.8374873

 $00:15:35.480 \longrightarrow 00:15:36.860$  had improved survival.

NOTE Confidence: 0.8374873

 $00:15:36.860 \longrightarrow 00:15:38.381$  In multivariate analysis.

NOTE Confidence: 0.8374873

 $00:15:38.381 \longrightarrow 00:15:40.916$  We also showed that proportion

NOTE Confidence: 0.8374873

 $00:15:40.916 \longrightarrow 00:15:42.640$  of these covered.

 $00:15:42.640 \longrightarrow 00:15:44.970$  By 10 increase of proportion

NOTE Confidence: 0.8374873

 $00:15:44.970 \longrightarrow 00:15:47.774$  of discovered by 10% led to

NOTE Confidence: 0.8374873

 $00:15:47.774 \longrightarrow 00:15:51.043$  reduction of risk of death by 18%.

NOTE Confidence: 0.8374873

00:15:51.050 --> 00:15:53.385 So status is certainly beneficial

NOTE Confidence: 0.8374873

 $00:15:53.385 \longrightarrow 00:15:55.720$  for this group of patients.

NOTE Confidence: 0.8374873

 $00{:}15{:}55.720 \dashrightarrow 00{:}15{:}58.516$  All the patients with polycythemia Vera,

NOTE Confidence: 0.8374873

 $00:15:58.520 \longrightarrow 00:16:01.052$  so the center of the algorithm

NOTE Confidence: 0.8374873

00:16:01.052 --> 00:16:03.296 of management of patients with

NOTE Confidence: 0.8374873

 $00{:}16{:}03.296 \dashrightarrow 00{:}16{:}05.671$  polycythemia is there risk risk

NOTE Confidence: 0.8374873

 $00{:}16{:}05.671 \dashrightarrow 00{:}16{:}08.330$  stratification based on 11 criteria.

NOTE Confidence: 0.8374873

 $00{:}16{:}08.330 \dashrightarrow 00{:}16{:}10.660$  So patients are considered high

NOTE Confidence: 0.8374873

 $00:16:10.660 \longrightarrow 00:16:12.524$  risk for traumatic events,

NOTE Confidence: 0.8374873

 $00:16:12.530 \longrightarrow 00:16:13.898$  arterial and venous.

NOTE Confidence: 0.8374873

 $00:16:13.898 \longrightarrow 00:16:16.634$  If they are older than 60,

NOTE Confidence: 0.8374873

00:16:16.640 --> 00:16:18.901 or if they had history of Trumbo

 $00:16:18.901 \longrightarrow 00:16:21.074$  SIS so this patients beyond

NOTE Confidence: 0.8374873

 $00{:}16{:}21.074 \dashrightarrow 00{:}16{:}23.326$  aspirin phlebotomy to America,

NOTE Confidence: 0.8374873

 $00:16:23.330 \longrightarrow 00:16:25.435$  lesson 45 and modification of

NOTE Confidence: 0.8374873

 $00:16:25.435 \longrightarrow 00:16:27.540$  cardiovascular risk factors should be

NOTE Confidence: 0.8374873

00:16:27.607 --> 00:16:30.421 on site to re directed therapy and

NOTE Confidence: 0.8374873

 $00:16:30.421 \longrightarrow 00:16:32.528$  frontline therapy recommended to this

NOTE Confidence: 0.8374873

 $00:16:32.528 \longrightarrow 00:16:35.024$  patience is either hydroxyurea or interferon.

NOTE Confidence: 0.8374873

00:16:35.030 --> 00:16:38.117 So of course if patients are not high risk

NOTE Confidence: 0.8374873

 $00{:}16{:}38.117 \dashrightarrow 00{:}16{:}41.298$  and they developed worsening of symptoms,

NOTE Confidence: 0.8374873

 $00:16:41.300 \longrightarrow 00:16:43.120$  they have new traumatic

NOTE Confidence: 0.8374873

 $00:16:43.120 \longrightarrow 00:16:44.940$  events or bleeding events.

NOTE Confidence: 0.8374873

00:16:44.940 --> 00:16:47.030 They do not tolerate phlebotomy,

NOTE Confidence: 0.8374873

00:16:47.030 --> 00:16:48.802 which they continuously require,

NOTE Confidence: 0.8374873

 $00:16:48.802 \longrightarrow 00:16:51.460$  or they have elevated white cell

NOTE Confidence: 0.8374873

 $00:16:51.536 \longrightarrow 00:16:53.720$  count as well as platelet count.

NOTE Confidence: 0.8374873

00:16:53.720 --> 00:16:56.639 Cytoreductive therapy may be used as well,

 $00:16:56.640 \longrightarrow 00:16:58.530$  so there are no randomized

NOTE Confidence: 0.8374873

 $00{:}16{:}58.530 \dashrightarrow 00{:}17{:}00.420$  studies looking at hydroxyurea in

NOTE Confidence: 0.8374873

 $00:17:00.484 \longrightarrow 00:17:02.500$  patients with polycythemia Vera.

NOTE Confidence: 0.8374873

 $00:17:02.500 \longrightarrow 00:17:05.363$  The reason why we're using it is

NOTE Confidence: 0.8374873

 $00:17:05.363 \longrightarrow 00:17:07.509$  mostly extrapolation from the studies,

NOTE Confidence: 0.8374873

 $00:17:07.510 \longrightarrow 00:17:09.600$  which were done for essential

NOTE Confidence: 0.8374873

00:17:09.600 --> 00:17:10.436 thrombocythemia patients,

NOTE Confidence: 0.8374873

00:17:10.440 --> 00:17:14.193 so we looked at 820 older patients with TV,

NOTE Confidence: 0.8374873

 $00{:}17{:}14.200 \dashrightarrow 00{:}17{:}16.430$  once again using CR Medicee.

NOTE Confidence: 0.8374873

 $00{:}17{:}16.430 \dashrightarrow 00{:}17{:}19.562$  Medicare data set and found out

NOTE Confidence: 0.8374873

 $00:17:19.562 \longrightarrow 00:17:22.696$  that about 40% of those patients

NOTE Confidence: 0.8374873

 $00:17:22.696 \longrightarrow 00:17:26.350$  who are high risk under did that,

NOTE Confidence: 0.8374873

 $00{:}17{:}26.350 \dashrightarrow 00{:}17{:}29.218$  and looking at the treatment with

NOTE Confidence: 0.8374873

00:17:29.218 --> 00:17:32.090 everybody and specifically with hydroxyurea,

NOTE Confidence: 0.8374873

 $00:17:32.090 \longrightarrow 00:17:35.776$  we found out that every 1010% increase

00:17:35.776 --> 00:17:39.112 in proportion of days covered by

NOTE Confidence: 0.8374873

 $00:17:39.112 \longrightarrow 00:17:41.775$  hydroxyurea led to decrease risk

NOTE Confidence: 0.8374873

 $00:17:41.775 \longrightarrow 00:17:43.567$  of death by 8%.

NOTE Confidence: 0.8374873

00:17:43.570 --> 00:17:47.236 Similarly, increase of PTC by 10%.

NOTE Confidence: 0.8374873

 $00:17:47.240 \longrightarrow 00:17:50.360$  Lead to decrease of trim bushes by 8%,

NOTE Confidence: 0.8374873

 $00:17:50.360 \longrightarrow 00:17:52.460$  so this is certainly an effective

NOTE Confidence: 0.8374873

00:17:52.460 --> 00:17:54.722 treatment which are not only helps

NOTE Confidence: 0.8374873

 $00:17:54.722 \longrightarrow 00:17:56.717$  to prevent traumatic events but

NOTE Confidence: 0.8374873

 $00{:}17{:}56.717 {\:{\circ}{\circ}{\circ}}>00{:}17{:}58.820$  also improves survival in older

NOTE Confidence: 0.8374873

 $00:17:58.820 \longrightarrow 00:18:00.500$  patients with polycythemia Vera.

NOTE Confidence: 0.80290896

 $00{:}18{:}00.500 \longrightarrow 00{:}18{:}03.772$  As you can see, the benefit of lobotomy

NOTE Confidence: 0.80290896

 $00:18:03.772 \longrightarrow 00:18:06.719$  was also confirmed in this study.

NOTE Confidence: 0.80290896

00:18:06.720 --> 00:18:09.919 So why hydroxyurea works for PV patients?

NOTE Confidence: 0.80290896

 $00:18:09.920 \longrightarrow 00:18:11.924$  It's an oral chemotherapeutic

NOTE Confidence: 0.80290896

 $00:18:11.924 \longrightarrow 00:18:13.928$  agent that inhibits ribonucleotide

NOTE Confidence: 0.80290896

 $00:18:13.928 \longrightarrow 00:18:16.199$  reduct ase and interferes with the

 $00:18:16.199 \longrightarrow 00:18:18.599$  process of DNA synthesis and repair.

NOTE Confidence: 0.80290896

 $00:18:18.600 \longrightarrow 00:18:22.044$  It is cheap and has a reasonably

NOTE Confidence: 0.80290896

 $00:18:22.044 \longrightarrow 00:18:24.792$  favorable toxicity profile as well as

NOTE Confidence: 0.80290896

00:18:24.792 --> 00:18:27.284 long term safety data, including in

NOTE Confidence: 0.80290896

 $00:18:27.284 \longrightarrow 00:18:29.569$  children with sickle cell disease.

NOTE Confidence: 0.80290896

 $00:18:29.570 \longrightarrow 00:18:33.002$  Its mechanism of action in PV is debated

NOTE Confidence: 0.80290896

 $00:18:33.002 \longrightarrow 00:18:36.726$  but may include impact on blood counts.

NOTE Confidence: 0.80290896

 $00:18:36.730 \longrightarrow 00:18:38.970$  Ability to reduce neutrophil activity.

NOTE Confidence: 0.80290896

00:18:38.970 --> 00:18:41.465 Decreased expression of the filial

NOTE Confidence: 0.80290896

 $00:18:41.465 \longrightarrow 00:18:43.960$  adhesion molecules and in use

NOTE Confidence: 0.80290896

 $00:18:44.043 \longrightarrow 00:18:46.147$  of nitric oxide generation.

NOTE Confidence: 0.80290896

 $00:18:46.150 \longrightarrow 00:18:49.086$  Side effects occur and the drug is not

NOTE Confidence: 0.80290896

 $00{:}18{:}49.086 \dashrightarrow 00{:}18{:}51.272$  tolerated by about 20% of patients.

NOTE Confidence: 0.80290896

 $00:18:51.272 \longrightarrow 00:18:53.468$  The side effects include mild suppression,

NOTE Confidence: 0.80290896

00:18:53.470 --> 00:18:54.202 mucocutaneous ulcers,

00:18:54.202 --> 00:18:55.666 non Melanoma skin cancers.

NOTE Confidence: 0.80290896

00:18:55.670 --> 00:18:57.774 It is also teratogenic.

NOTE Confidence: 0.80290896

 $00:18:57.774 \longrightarrow 00:18:59.878$  So the big question,

NOTE Confidence: 0.80290896

 $00{:}18{:}59.880 \dashrightarrow 00{:}19{:}02.844$  which is still debated during MPM

NOTE Confidence: 0.80290896

 $00:19:02.844 \longrightarrow 00:19:06.970$  meetings and on the pages of publications,

NOTE Confidence: 0.80290896

 $00:19:06.970 \longrightarrow 00:19:08.605$  is hydroxyurea relationship

NOTE Confidence: 0.80290896

 $00:19:08.605 \longrightarrow 00:19:10.240$  with second malignancies,

NOTE Confidence: 0.80290896

 $00:19:10.240 \longrightarrow 00:19:11.872$  that hydroxyurea increase

NOTE Confidence: 0.80290896

 $00{:}19{:}11.872 \dashrightarrow 00{:}19{:}14.048$  risk of 2nd malignancies.

NOTE Confidence: 0.80290896

 $00:19:14.050 \longrightarrow 00:19:18.145$  We again use your Medicare data set to look

NOTE Confidence: 0.80290896

 $00:19:18.145 \longrightarrow 00:19:22.769$  at second malignancies and one MPN patients.

NOTE Confidence: 0.80290896

 $00:19:22.770 \longrightarrow 00:19:26.124$  As you can see we started

NOTE Confidence: 0.80290896

 $00:19:26.124 \longrightarrow 00:19:28.930$  more than 3000 patients and.

NOTE Confidence: 0.80290896

 $00:19:28.930 \longrightarrow 00:19:31.667$  About 40% of them had polycythemia Vera.

NOTE Confidence: 0.80290896

 $00:19:31.670 \longrightarrow 00:19:34.798$  This patients were followed up to 10 years.

NOTE Confidence: 0.80290896

 $00:19:34.800 \longrightarrow 00:19:37.260$  Median follow-up was 2.67 years and

 $00:19:37.260 \longrightarrow 00:19:39.878$  median age of diagnosis was 77 years,

NOTE Confidence: 0.80290896

 $00:19:39.880 \longrightarrow 00:19:42.624$  so it's a little bit older than

NOTE Confidence: 0.80290896

00:19:42.624 --> 00:19:44.866 General PD population because of

NOTE Confidence: 0.80290896

00:19:44.866 --> 00:19:47.346 Medicare requirement for this study.

NOTE Confidence: 0.80290896

00:19:47.350 --> 00:19:50.176 So 65\% of patients used hydroxyurea,

NOTE Confidence: 0.80290896

00:19:50.180 --> 00:19:53.484 allowing us to look at two groups,

NOTE Confidence: 0.80290896

 $00:19:53.490 \longrightarrow 00:19:55.378$  hydroxyurea users and nonusers.

NOTE Confidence: 0.80290896

00:19:55.378 --> 00:19:58.210 It is well known that second

NOTE Confidence: 0.80290896

00:19:58.291 --> 00:20:00.179 malignancy is common in.

NOTE Confidence: 0.80290896

00:20:00.180 --> 00:20:02.430 Patients with mild proliferative neoplasms,

NOTE Confidence: 0.80290896

00:20:02.430 --> 00:20:06.462 it is not really clear exactly why that is,

NOTE Confidence: 0.80290896

 $00:20:06.470 \longrightarrow 00:20:09.613$  but you can see that in our

NOTE Confidence: 0.80290896

00:20:09.613 --> 00:20:10.960 cohort of patients,

NOTE Confidence: 0.80290896

00:20:10.960 --> 00:20:13.200 about 8.8% developed second malignancy,

NOTE Confidence: 0.80290896

 $00:20:13.200 \longrightarrow 00:20:15.900$  more than half solid second malignancies,

 $00:20:15.900 \longrightarrow 00:20:17.692$  and among patients with

NOTE Confidence: 0.80290896

 $00:20:17.692 \longrightarrow 00:20:18.588$  hematological malignancies.

NOTE Confidence: 0.80290896

 $00{:}20{:}18.590 \dashrightarrow 00{:}20{:}20{:}905$  Majority developed AML and MD

NOTE Confidence: 0.80290896

 $00:20:20.905 \longrightarrow 00:20:24.555$  S as expected in this group of

NOTE Confidence: 0.80290896

 $00:20:24.555 \longrightarrow 00:20:27.035$  patients with myeloid neoplasms.

NOTE Confidence: 0.80290896

 $00:20:27.040 \longrightarrow 00:20:29.926$  So when we compare two groups,

NOTE Confidence: 0.80290896

 $00:20:29.930 \longrightarrow 00:20:32.340$  hydroxyurea users and non users

NOTE Confidence: 0.80290896

00:20:32.340 --> 00:20:33.786 using univariate analysis,

NOTE Confidence: 0.80290896

 $00{:}20{:}33.790 \dashrightarrow 00{:}20{:}36.682$  we found no difference in incidence

NOTE Confidence: 0.80290896

 $00:20:36.682 \longrightarrow 00:20:38.128$  of 2nd malignancies.

NOTE Confidence: 0.80290896

 $00{:}20{:}38.130 \dashrightarrow 00{:}20{:}40.365$  In the multivariable analysis of

NOTE Confidence: 0.80290896

00:20:40.365 --> 00:20:43.131 hydroxyurea use and type of 2nd

NOTE Confidence: 0.80290896

 $00:20:43.131 \longrightarrow 00:20:45.813$  malignancies we found no difference in

NOTE Confidence: 0.80290896

 $00:20:45.813 \longrightarrow 00:20:48.729$  occurrence of all second malignancies,

NOTE Confidence: 0.80290896

00:20:48.730 --> 00:20:51.140 solid second malignancies and he

NOTE Confidence: 0.80290896

 $00:20:51.140 \longrightarrow 00:20:53.550$  metalogic non myeloid second malignancy's.

 $00:20:53.550 \longrightarrow 00:20:56.550$  We also did an analysis specifically.

NOTE Confidence: 0.80290896

 $00:20:56.550 \longrightarrow 00:20:58.560$  Aimed at my Lloyd second malignancies

NOTE Confidence: 0.80290896

 $00:20:58.560 \longrightarrow 00:21:01.398$  and there was no difference here either.

NOTE Confidence: 0.80290896

00:21:01.400 --> 00:21:04.100 So moving on this algorithm,

NOTE Confidence: 0.80290896

 $00:21:04.100 \longrightarrow 00:21:07.004$  if cytoreductive therapy stops

NOTE Confidence: 0.80290896

 $00:21:07.004 \longrightarrow 00:21:10.634$  working or is not tolerated.

NOTE Confidence: 0.80290896

 $00:21:10.640 \longrightarrow 00:21:12.698$  Have an option of second line

NOTE Confidence: 0.80290896

00:21:12.698 --> 00:21:14.070 sector reduction with ruxolitinib,

NOTE Confidence: 0.80290896

 $00:21:14.070 \longrightarrow 00:21:16.128$  which is the only FDA approved

NOTE Confidence: 0.80290896

 $00:21:16.128 \longrightarrow 00:21:17.500$  drug by the way,

NOTE Confidence: 0.80290896

 $00{:}21{:}17.500 \dashrightarrow 00{:}21{:}19.690$ in polycythemia Vera neither hydroxyurea

NOTE Confidence: 0.80290896

 $00:21:19.690 \longrightarrow 00:21:22.246$  nor interferon I approved at this

NOTE Confidence: 0.80290896

 $00{:}21{:}22.246 \dashrightarrow 00{:}21{:}24.614$  time in the United States by the FDA.

NOTE Confidence: 0.80290896

 $00:21:24.620 \longrightarrow 00:21:28.561$  So the interferon is used in Milo

NOTE Confidence: 0.80290896

 $00:21:28.561 \longrightarrow 00:21:31.360$  proliferative neoplasms for many years,

00:21:31.360 --> 00:21:34.390 and it is associated with decently

NOTE Confidence: 0.80290896

 $00:21:34.390 \longrightarrow 00:21:37.156$  high rates of haematological response

NOTE Confidence: 0.80290896

 $00:21:37.156 \longrightarrow 00:21:39.788$  reduction and independence form.

NOTE Confidence: 0.80290896

00:21:39.790 --> 00:21:42.118 Phlebotomies improvement of symptoms,

NOTE Confidence: 0.80290896

 $00:21:42.118 \longrightarrow 00:21:45.980$  and in some patients up to 30%

NOTE Confidence: 0.80290896

 $00{:}21{:}45.980 \dashrightarrow 00{:}21{:}48.224$  significant reduction and disappearance

NOTE Confidence: 0.80290896

 $00:21:48.224 \longrightarrow 00:21:51.029$  of Jack 2V617F positive cells.

NOTE Confidence: 0.80290896

00:21:51.030 --> 00:21:54.876 Side effects include flu like symptoms.

NOTE Confidence: 0.80290896

 $00{:}21{:}54.880 \dashrightarrow 00{:}21{:}56.144$  Psychiatric conditions and that's

NOTE Confidence: 0.80290896

 $00:21:56.144 \longrightarrow 00:21:58.040$  why this drug is not given

NOTE Confidence: 0.8312497

 $00:21:58.097 \longrightarrow 00:21:59.807$  to patients with psychiatric disorders

NOTE Confidence: 0.8312497

 $00:21:59.807 \longrightarrow 00:22:02.000$  as well as autoimmune side effects.

NOTE Confidence: 0.8312497

 $00:22:02.000 \longrightarrow 00:22:03.352$  Side effects are better

NOTE Confidence: 0.8312497

 $00{:}22{:}03.352 \dashrightarrow 00{:}22{:}04.366$  with regulated preparations,

NOTE Confidence: 0.8312497

 $00:22:04.370 \longrightarrow 00:22:06.750$  which can be given once a week.

NOTE Confidence: 0.8312497

00:22:06.750 --> 00:22:09.116 One other thing which is quite important,

 $00:22:09.120 \longrightarrow 00:22:11.913$  this drug is not teratogenic and is

NOTE Confidence: 0.8312497

 $00:22:11.913 \longrightarrow 00:22:14.727$  preferred for younger patients with P Viera.

NOTE Confidence: 0.8312497

 $00:22:14.730 \longrightarrow 00:22:17.390$  So it has potential for disease modification

NOTE Confidence: 0.8312497

 $00:22:17.390 \longrightarrow 00:22:19.599$  by targeting the malignant clone,

NOTE Confidence: 0.8312497

 $00:22:19.600 \longrightarrow 00:22:22.235$  which is evidenced by disappearance

NOTE Confidence: 0.8312497

00:22:22.235 --> 00:22:24.870 of Jack 2V617F positive cells

NOTE Confidence: 0.8312497

 $00:22:24.951 \longrightarrow 00:22:27.136$  and some of those patients.

NOTE Confidence: 0.8312497

00:22:27.140 --> 00:22:29.936 This meta analysis of 41 studies,

NOTE Confidence: 0.8312497

 $00:22:29.940 \longrightarrow 00:22:31.341$  including 12181 patients,

NOTE Confidence: 0.8312497

 $00:22:31.341 \longrightarrow 00:22:34.610$  more than 500 of them had PV.

NOTE Confidence: 0.8312497

00:22:34.610 --> 00:22:37.990 The overall response rate was 75% with

NOTE Confidence: 0.8312497

 $00:22:37.990 \longrightarrow 00:22:40.890$  complete haematological response of 50.

NOTE Confidence: 0.8312497

 $00{:}22{:}40.890 \dashrightarrow 00{:}22{:}43.386$  He presented in meta regression analysis.

NOTE Confidence: 0.8312497

 $00:22:43.390 \longrightarrow 00:22:45.886$  There was no different from between.

NOTE Confidence: 0.8312497

 $00:22:45.890 \longrightarrow 00:22:48.392$  No difference between Montag later than

 $00:22:48.392 \longrightarrow 00:22:50.542$  pig related interference in regards

NOTE Confidence: 0.8312497

 $00{:}22{:}50.542 \dashrightarrow 00{:}22{:}53.008$  to response rates and thrombo embolic

NOTE Confidence: 0.8312497

 $00:22:53.008 \longrightarrow 00:22:54.718$  events and treatment discontinuation

NOTE Confidence: 0.8312497

00:22:54.718 --> 00:22:57.166 due to adverse events were not

NOTE Confidence: 0.8312497

 $00:22:57.166 \longrightarrow 00:22:59.654$  frequent .5% and 6.5% per year,

NOTE Confidence: 0.8312497

 $00:22:59.654 \longrightarrow 00:23:00.070$  respectively.

NOTE Confidence: 0.8312497

 $00:23:00.070 \longrightarrow 00:23:00.964$  Molecular responses,

NOTE Confidence: 0.8312497

 $00:23:00.964 \longrightarrow 00:23:03.199$  which is certainly interesting because

NOTE Confidence: 0.8312497

 $00{:}23{:}03.199 \dashrightarrow 00{:}23{:}05.909$  we hope that this drug is disease.

NOTE Confidence: 0.8312497

00:23:05.910 --> 00:23:07.995 Modifying could not be analyzed

NOTE Confidence: 0.8312497

 $00{:}23{:}07.995 \dashrightarrow 00{:}23{:}10.080$  in this particular meta analysis.

NOTE Confidence: 0.8312497

 $00:23:10.080 \longrightarrow 00:23:11.319$  You took heterogeneity.

NOTE Confidence: 0.8312497

 $00{:}23{:}11.319 \dashrightarrow 00{:}23{:}13.384$  Of definition and outcome assessments.

NOTE Confidence: 0.8312497

00:23:13.390 --> 00:23:14.156 In conclusion,

NOTE Confidence: 0.8312497

00:23:14.156 --> 00:23:16.071 we thought that both regulated

NOTE Confidence: 0.8312497

 $00{:}23{:}16.071 \dashrightarrow 00{:}23{:}17.677$  interference and non peculated

 $00:23:17.677 \longrightarrow 00:23:20.017$  interferon can be effective and safe.

NOTE Confidence: 0.8312497

 $00:23:20.020 \longrightarrow 00:23:22.092$  One term in P.

NOTE Confidence: 0.8312497

 $00:23:22.092 \longrightarrow 00:23:23.128$  Vera patients.

NOTE Confidence: 0.8312497

 $00:23:23.130 \longrightarrow 00:23:25.140$  So this is the response study

NOTE Confidence: 0.8312497

 $00:23:25.140 \longrightarrow 00:23:27.752$  which led to have the approval of

NOTE Confidence: 0.8312497

00:23:27.752 --> 00:23:30.146 Jack inhibitor rock solid Nip for

NOTE Confidence: 0.8312497

 $00:23:30.146 \longrightarrow 00:23:32.447$  second line treatment in patients

NOTE Confidence: 0.8312497

 $00:23:32.447 \longrightarrow 00:23:34.727$  with Vera with primary endpoint

NOTE Confidence: 0.8312497

 $00:23:34.727 \longrightarrow 00:23:36.798$  being composite reduction of spleen

NOTE Confidence: 0.8312497

 $00{:}23{:}36.798 \dashrightarrow 00{:}23{:}38.406$  volume and hematocrit control.

NOTE Confidence: 0.8312497

 $00{:}23{:}38.410 \dashrightarrow 00{:}23{:}41.217$  As you can see it was accomplished

NOTE Confidence: 0.8312497

00:23:41.217 --> 00:23:43.226 in 21% of patients separately.

NOTE Confidence: 0.8312497

 $00:23:43.226 \longrightarrow 00:23:45.638$  Reduction of spleen volume by 35%

NOTE Confidence: 0.8312497

00:23:45.640 --> 00:23:48.482 was seen in almost 40% of patients

NOTE Confidence: 0.8312497

 $00{:}23{:}48.482 \dashrightarrow 00{:}23{:}50.978$  and 60% of patients could accomplish

 $00:23:50.978 \longrightarrow 00:23:53.138$  schematic control with this treatment.

NOTE Confidence: 0.8312497

 $00{:}23{:}53.140 \dashrightarrow 00{:}23{:}54.628$  This is important anti-inflammatory

NOTE Confidence: 0.8312497

 $00:23:54.628 \longrightarrow 00:23:57.328$  medication and one of the side effects

NOTE Confidence: 0.8312497

 $00:23:57.328 \longrightarrow 00:23:59.746$  may be infections including herpes Auster.

NOTE Confidence: 0.8312497

 $00:23:59.750 \longrightarrow 00:24:02.180$  So we recommend Shingrix vaccine to

NOTE Confidence: 0.8312497

 $00{:}24{:}02.180 \dashrightarrow 00{:}24{:}05.198$  all of our patients on rock solid net.

NOTE Confidence: 0.8312497

00:24:05.200 --> 00:24:07.420 Another side effect can be non

NOTE Confidence: 0.8312497

00:24:07.420 --> 00:24:09.326 Melanoma skin cancers which has

NOTE Confidence: 0.8312497

00:24:09.326 --> 00:24:11.111 increased incidence in Brooklyn of

NOTE Confidence: 0.8312497

 $00:24:11.111 \longrightarrow 00:24:13.760$  users but also in hydroxyurea users.

NOTE Confidence: 0.8312497

 $00{:}24{:}13.760 \dashrightarrow 00{:}24{:}17.064$  So I refer all my patients for German

NOTE Confidence: 0.8312497

 $00:24:17.064 \longrightarrow 00:24:18.760$  irregular dermatological evaluations.

NOTE Confidence: 0.8312497

 $00:24:18.760 \longrightarrow 00:24:21.868$  So we looked at 5 year relative

NOTE Confidence: 0.8312497

 $00:24:21.868 \longrightarrow 00:24:24.154$  survival probability for PV patients

NOTE Confidence: 0.8312497

 $00:24:24.154 \longrightarrow 00:24:25.898$  in the United States.

NOTE Confidence: 0.8312497

 $00:24:25.900 \longrightarrow 00:24:28.260$  Patients who are diagnosed between

 $00:24:28.260 \longrightarrow 00:24:31.470$  2001 and 2011 with end of observation

NOTE Confidence: 0.8312497

 $00{:}24{:}31.470 \dashrightarrow 00{:}24{:}35.193$  in 2016 and as you can see this five

NOTE Confidence: 0.8312497

00:24:35.193 --> 00:24:37.549 year relative survival unfortunately

NOTE Confidence: 0.8312497

 $00:24:37.549 \longrightarrow 00:24:39.905$  is not getting better,

NOTE Confidence: 0.8312497

 $00:24:39.910 \longrightarrow 00:24:43.350$  so we need new drugs which may improve

NOTE Confidence: 0.8312497

 $00:24:43.350 \longrightarrow 00:24:46.190$  survival by modifying the disease.

NOTE Confidence: 0.8312497

 $00:24:46.190 \longrightarrow 00:24:49.473$  So this study looked at GNU interference

NOTE Confidence: 0.8312497

 $00:24:49.473 \longrightarrow 00:24:52.469$  formulation so called role peg interferon.

NOTE Confidence: 0.8312497

 $00:24:52.470 \longrightarrow 00:24:55.550$  This is a European study phase three

NOTE Confidence: 0.8312497

 $00:24:55.550 \longrightarrow 00:24:58.010$  trial comparing group peginterferon.

NOTE Confidence: 0.8312497

 $00:24:58.010 \longrightarrow 00:25:00.275$  Against hydroxyurea in high risk

NOTE Confidence: 0.8312497

 $00{:}25{:}00.275 \dashrightarrow 00{:}25{:}02.087$  TV patient frontline treatment.

NOTE Confidence: 0.8312497

 $00:25:02.090 \longrightarrow 00:25:05.359$  The goal of the study was to

NOTE Confidence: 0.8312497

00:25:05.359 --> 00:25:07.698 show Noninferiority of Ro peg

NOTE Confidence: 0.8312497

00:25:07.698 --> 00:25:10.236 to hydroxyurea an at one year.

00:25:10.240 --> 00:25:11.188 Interestingly enough,

NOTE Confidence: 0.8312497

 $00:25:11.188 \longrightarrow 00:25:14.032$  they did not accomplish that primary

NOTE Confidence: 0.8312497

 $00:25:14.032 \longrightarrow 00:25:16.450$  endpoint of the hydroxyurea was

NOTE Confidence: 0.8312497

 $00{:}25{:}16.450 \dashrightarrow 00{:}25{:}18.785$  superior from the standpoint of

NOTE Confidence: 0.8312497

 $00:25:18.785 \longrightarrow 00:25:20.188$  inducing complete haematological

NOTE Confidence: 0.8312497

 $00:25:20.188 \longrightarrow 00:25:23.372$  responses as well as you can see here,

NOTE Confidence: 0.8312497

 $00{:}25{:}23.380 \dashrightarrow 00{:}25{:}25.670$  molecular responses at six months

NOTE Confidence: 0.8312497

 $00:25:25.670 \longrightarrow 00:25:27.960$  were higher among patients treated

NOTE Confidence: 0.8312497

 $00:25:28.033 \longrightarrow 00:25:29.179$  with hydroxyurea.

NOTE Confidence: 0.8312497

00:25:29.180 --> 00:25:32.428 So interferon in general takes time to work,

NOTE Confidence: 0.8312497

 $00{:}25{:}32.430 \dashrightarrow 00{:}25{:}34.782$  and that's what we observed over

NOTE Confidence: 0.8312497

 $00:25:34.782 \longrightarrow 00:25:36.350$  the course of this

NOTE Confidence: 0.854975

 $00:25:36.429 \longrightarrow 00:25:39.501$  study. So this is the publication which shows

NOTE Confidence: 0.854975

00:25:39.501 --> 00:25:42.976 data up to three years of follow-up data,

NOTE Confidence: 0.854975

 $00:25:42.980 \longrightarrow 00:25:45.890$  and you can see that in the second part of

NOTE Confidence: 0.854975

 $00:25:45.962 \longrightarrow 00:25:49.308$  the study interferon did better from the

00:25:49.308 --> 00:25:51.510 standpoint of haematological responses,

NOTE Confidence: 0.854975

 $00{:}25{:}51.510 \dashrightarrow 00{:}25{:}53.274$  which were statistically significantly

NOTE Confidence: 0.854975

00:25:53.274 --> 00:25:55.479 better than among patients taking

NOTE Confidence: 0.854975

 $00:25:55.479 \longrightarrow 00:25:57.598$  hydroxyurea as well as molecular responses,

NOTE Confidence: 0.854975

 $00:25:57.600 \longrightarrow 00:26:00.570$  and you can see that.

NOTE Confidence: 0.854975

 $00:26:00.570 \longrightarrow 00:26:02.830$  This is actually improving overtime.

NOTE Confidence: 0.854975

 $00:26:02.830 \longrightarrow 00:26:05.662$  This ash the follow up of the study

NOTE Confidence: 0.854975

00:26:05.662 --> 00:26:08.712 five year follow up was presented

NOTE Confidence: 0.854975

 $00:26:08.712 \longrightarrow 00:26:11.542$  showing continues that this translate

NOTE Confidence: 0.854975

 $00:26:11.542 \longrightarrow 00:26:14.271$  continuing as well as there are

NOTE Confidence: 0.854975

00:26:14.271 --> 00:26:16.351 no significant new side effects.

NOTE Confidence: 0.854975

 $00:26:16.360 \longrightarrow 00:26:19.078$  So this new formulation of the

NOTE Confidence: 0.854975

 $00{:}26{:}19.078 \dashrightarrow 00{:}26{:}21.838$ interferon can be given once every

NOTE Confidence: 0.854975

 $00:26:21.838 \longrightarrow 00:26:24.834$  three to four weeks after the first

NOTE Confidence: 0.854975

 $00:26:24.834 \longrightarrow 00:26:28.070$  year of treatment and is now approved

00:26:28.070 --> 00:26:30.882 in Europe by European Medicines Agency.

NOTE Confidence: 0.854975

 $00{:}26{:}30.882 \to 00{:}26{:}33.362$  The company making this medication

NOTE Confidence: 0.854975

 $00:26:33.362 \longrightarrow 00:26:36.233$  is bringing up to the bringing this

NOTE Confidence: 0.854975

 $00:26:36.233 \longrightarrow 00:26:39.152$  to the US market and it is likely

NOTE Confidence: 0.854975

 $00{:}26{:}39.152 \dashrightarrow 00{:}26{:}41.372$  that this medication will become

NOTE Confidence: 0.854975

 $00{:}26{:}41.372 \dashrightarrow 00{:}26{:}44.024$  available for our patients next year.

NOTE Confidence: 0.854975

 $00:26:44.024 \longrightarrow 00:26:46.652$  So there are few new treatments

NOTE Confidence: 0.854975

 $00{:}26{:}46.652 \dashrightarrow 00{:}26{:}49.561$  I wanted to mention before I end

NOTE Confidence: 0.854975

 $00:26:49.561 \longrightarrow 00:26:52.393$  this talk and few clinical trials

NOTE Confidence: 0.854975

00:26:52.393 --> 00:26:55.288 we're planning to participate in.

NOTE Confidence: 0.854975

00:26:55.290 --> 00:26:57.986 Is giving ability to all patients to enroll

NOTE Confidence: 0.854975

00:26:57.986 --> 00:27:00.919 on this study is offering new treatments,

NOTE Confidence: 0.854975

 $00:27:00.920 \longrightarrow 00:27:02.045$  some of them?

NOTE Confidence: 0.854975

 $00:27:02.045 \longrightarrow 00:27:03.920$  Maybe this is modifying so.

NOTE Confidence: 0.854975

 $00:27:03.920 \longrightarrow 00:27:06.279$  First of all, this is the given

NOTE Confidence: 0.854975

00:27:06.279 --> 00:27:08.789 a staff the age Deccan hitter,

 $00:27:08.790 \longrightarrow 00:27:13.254$  so leading to a situation of the histone.

NOTE Confidence: 0.854975

 $00{:}27{:}13.260 \to 00{:}27{:}15.064$  That transcriptions of genes

NOTE Confidence: 0.854975

 $00:27:15.064 \longrightarrow 00:27:16.868$  responsible for cell growth,

NOTE Confidence: 0.854975

00:27:16.870 --> 00:27:18.271 arrest, differentiation, apoptosis.

NOTE Confidence: 0.854975

 $00:27:18.271 \longrightarrow 00:27:22.092$  This drug is wanna be started in the

NOTE Confidence: 0.854975

 $00{:}27{:}22.092 \to 00{:}27{:}24.462$  phase three trial against hydroxyurea

NOTE Confidence: 0.854975

 $00:27:24.462 \longrightarrow 00:27:27.181$  for the frontline treatment of PV

NOTE Confidence: 0.854975

00:27:27.181 --> 00:27:29.046 patients with high risk disease.

NOTE Confidence: 0.854975

 $00{:}27{:}29.050 \dashrightarrow 00{:}27{:}32.326$  So the other class of drugs which

NOTE Confidence: 0.854975

 $00:27:32.326 \longrightarrow 00:27:34.459$  may be interesting is MDM.

NOTE Confidence: 0.854975

 $00:27:34.460 \longrightarrow 00:27:35.362$  Two inhibitors.

NOTE Confidence: 0.854975

00:27:35.362 --> 00:27:38.970 As you know MDM two inhibits TP53 function,

NOTE Confidence: 0.854975

 $00{:}27{:}38.970 \dashrightarrow 00{:}27{:}41.700$  and by inhibiting MDM two way

NOTE Confidence: 0.854975

 $00:27:41.700 \longrightarrow 00:27:44.400$  allowing TP 53 to perform.

NOTE Confidence: 0.854975

00:27:44.400 --> 00:27:45.082 It's wrong,

 $00:27:45.082 \longrightarrow 00:27:46.787$  not in the malignant cell,

NOTE Confidence: 0.854975

 $00:27:46.790 \longrightarrow 00:27:47.681$  by the way,

NOTE Confidence: 0.854975

00:27:47.681 --> 00:27:49.463 interfere on one of the mechanisms

NOTE Confidence: 0.854975

 $00:27:49.463 \longrightarrow 00:27:51.378$  of action of interferon would

NOTE Confidence: 0.854975

 $00:27:51.378 \longrightarrow 00:27:52.926$  be activations of genes,

NOTE Confidence: 0.854975

 $00:27:52.930 \longrightarrow 00:27:54.560$  increasing transcription of TP 53

NOTE Confidence: 0.854975

 $00{:}27{:}54.560 \dashrightarrow 00{:}27{:}57.304$  so the last study I want to mention

NOTE Confidence: 0.854975

00:27:57.304 --> 00:27:59.398 phase two trial of hepcidin analog.

NOTE Confidence: 0.854975

 $00{:}27{:}59.400 \dashrightarrow 00{:}28{:}02.039$  It's nice to see after discovery of

NOTE Confidence: 0.854975

 $00:28:02.039 \longrightarrow 00:28:04.434$  hepcidin 20 years ago that we have

NOTE Confidence: 0.854975

 $00{:}28{:}04.434 \dashrightarrow 00{:}28{:}06.966$  an analog and you know we now have

NOTE Confidence: 0.854975

 $00:28:06.966 \longrightarrow 00:28:09.290$  a test we can check for hepcidin.

NOTE Confidence: 0.854975

 $00:28:09.290 \longrightarrow 00:28:10.136$  Very expensive.

NOTE Confidence: 0.854975

 $00:28:10.136 \longrightarrow 00:28:13.520$  I never was able to do it but

NOTE Confidence: 0.854975

 $00:28:13.621 \longrightarrow 00:28:15.877$  now we also have a drug.

NOTE Confidence: 0.854975

 $00{:}28{:}15.880 \dashrightarrow 00{:}28{:}18.060$  Which basically shuts down transport

 $00:28:18.060 \longrightarrow 00:28:21.394$  of iron and locks it in the cells

NOTE Confidence: 0.854975

 $00{:}28{:}21.394 \dashrightarrow 00{:}28{:}23.907$  and this drug is used for patients

NOTE Confidence: 0.854975

 $00:28:23.989 \longrightarrow 00:28:26.054$  with severe who need phle botomies

NOTE Confidence: 0.854975

 $00:28:26.054 \longrightarrow 00:28:28.984$  and in an attempt to avoid iron

NOTE Confidence: 0.854975

 $00{:}28{:}28.984 \dashrightarrow 00{:}28{:}31.144$  deficiency which may have detrimental

NOTE Confidence: 0.854975

 $00:28:31.144 \longrightarrow 00:28:33.020$  effects on quality of life.

NOTE Confidence: 0.854975

 $00:28:33.020 \longrightarrow 00:28:34.241$  The preliminary results

NOTE Confidence: 0.854975

 $00:28:34.241 \longrightarrow 00:28:35.869$  which office to study,

NOTE Confidence: 0.854975

00:28:35.870 --> 00:28:38.726 which were presented at Ash week ago,

NOTE Confidence: 0.854975

 $00:28:38.730 \longrightarrow 00:28:39.963$  were quite promising.

NOTE Confidence: 0.854975

 $00:28:39.963 \longrightarrow 00:28:43.322$  No side effects and pretty much everyone on

NOTE Confidence: 0.854975

 $00:28:43.322 \longrightarrow 00:28:45.770$  this drug does not require phlebotomist.

NOTE Confidence: 0.854975

00:28:45.770 --> 00:28:46.248 Anymore.

NOTE Confidence: 0.854975

 $00:28:46.248 \longrightarrow 00:28:49.116$  So I'd like to conclude that

NOTE Confidence: 0.854975

 $00:28:49.116 \longrightarrow 00:28:51.995$  polycythemia Vera is driven by Jack

00:28:51.995 --> 00:28:54.713 2V617F mutation in the majority of

NOTE Confidence: 0.854975

 $00{:}28{:}54.713 \dashrightarrow 00{:}28{:}56.830$  cases in 97% sugar intake increases

NOTE Confidence: 0.854975

 $00{:}28{:}56.830 \dashrightarrow 00{:}28{:}58.990$  and coffee intake decreases the risk

NOTE Confidence: 0.854975

 $00:28:58.990 \longrightarrow 00:29:01.148$  of polycythemia Vera development.

NOTE Confidence: 0.854975

 $00:29:01.150 \longrightarrow 00:29:01.982$  In fact,

NOTE Confidence: 0.854975

 $00:29:01.982 \longrightarrow 00:29:04.062$  consumption of coffee moderate amounts

NOTE Confidence: 0.854975

 $00:29:04.062 \dashrightarrow 00:29:06.978$  can be considered part of normal lifestyle.

NOTE Confidence: 0.8039933

 $00{:}29{:}06.980 \dashrightarrow 00{:}29{:}09.055$  Increased white cell count is

NOTE Confidence: 0.8039933

 $00{:}29{:}09.055 \dashrightarrow 00{:}29{:}10.715$  associated with PV evolution.

NOTE Confidence: 0.8039933

00:29:10.720 --> 00:29:12.800 To post PD, Mila, fibrosis,

NOTE Confidence: 0.8039933

 $00:29:12.800 \longrightarrow 00:29:15.482$  MD, SNL user status should be

NOTE Confidence: 0.8039933

 $00:29:15.482 \longrightarrow 00:29:17.680$  considered in PV patients for.

NOTE Confidence: 0.8039933

00:29:17.680 --> 00:29:19.352 Cardiovascular disease risk reduction,

NOTE Confidence: 0.8039933

00:29:19.352 --> 00:29:21.024 hydroxyurea safe and effective,

NOTE Confidence: 0.8039933

 $00:29:21.030 \longrightarrow 00:29:23.970$  but interference holds promise to be disease.

NOTE Confidence: 0.8039933

 $00:29:23.970 \longrightarrow 00:29:26.065$  Modifying and normal treatments to

 $00:29:26.065 \longrightarrow 00:29:28.160$  prevent or delay disease transformation.

NOTE Confidence: 0.8039933

 $00:29:28.160 \longrightarrow 00:29:28.877$  I need it.

NOTE Confidence: 0.8039933

 $00:29:28.877 \longrightarrow 00:29:31.151$  At the end I would like to acknowledge

NOTE Confidence: 0.8039933

00:29:31.151 --> 00:29:33.801 funding from the Frederick Dilucca

NOTE Confidence: 0.8039933

00:29:33.801 --> 00:29:35.921 Foundation Yellow Corporate Center,

NOTE Confidence: 0.8039933

 $00:29:35.930 \longrightarrow 00:29:38.464$  allowing us to conduct the studies and

NOTE Confidence: 0.8039933

 $00:29:38.464 \longrightarrow 00:29:40.440$  my collaborators thank you very much.

NOTE Confidence: 0.73364645

 $00:29:41.830 \longrightarrow 00:29:42.709$  Nikolai absolute proof.

NOTE Confidence: 0.73364645

00:29:42.709 --> 00:29:44.760 So you can't see my coffee tears.

NOTE Confidence: 0.73364645

00:29:44.760 --> 00:29:47.680 It was coffee right now.

NOTE Confidence: 0.73364645

00:29:47.680 --> 00:29:50.169 Getting my very soon.

NOTE Confidence: 0.73364645

00:29:50.170 --> 00:29:51.838 Yeah, I think we just have.

NOTE Confidence: 0.73364645

 $00:29:51.840 \longrightarrow 00:29:53.716$  It may be time for just one

NOTE Confidence: 0.73364645

00:29:53.716 --> 00:29:55.148 or two questions because we

NOTE Confidence: 0.73364645

00:29:55.148 --> 00:29:56.840 want to give him his time.

 $00:29:56.840 \longrightarrow 00:29:58.230$  So are you thinking right?

NOTE Confidence: 0.73364645

 $00{:}29{:}58.230 \dashrightarrow 00{:}30{:}00.246$  So for example in the other matters.

NOTE Confidence: 0.73364645

 $00:30:00.250 \dashrightarrow 00:30:02.030$  Order in chronic malaria leukemia.

NOTE Confidence: 0.73364645

 $00:30:02.030 \longrightarrow 00:30:03.962$  We're thinking about Q or we

NOTE Confidence: 0.73364645

 $00:30:03.962 \longrightarrow 00:30:06.126$  want to get people off these

NOTE Confidence: 0.73364645

 $00:30:06.126 \longrightarrow 00:30:07.726$  long years of medication?

NOTE Confidence: 0.73364645

 $00:30:07.730 \longrightarrow 00:30:09.505$  Do you for see something

NOTE Confidence: 0.73364645

 $00:30:09.505 \longrightarrow 00:30:10.925$  like that for polycythemia

NOTE Confidence: 0.78337675

 $00{:}30{:}10.930 \dashrightarrow 00{:}30{:}13.149$ Vera? You know you would hope that

NOTE Confidence: 0.78337675

00:30:13.149 --> 00:30:15.355 there is known driver and inhibiting

NOTE Confidence: 0.78337675

 $00:30:15.355 \longrightarrow 00:30:17.335$  it will cure this patience.

NOTE Confidence: 0.78337675

00:30:17.340 --> 00:30:18.764 But unfortunately, like now,

NOTE Confidence: 0.78337675

00:30:18.764 --> 00:30:20.188 with rooks Lid NAP,

NOTE Confidence: 0.78337675

00:30:20.190 --> 00:30:23.030 which is in an incubator of Jack two,

NOTE Confidence: 0.78337675

 $00:30:23.030 \longrightarrow 00:30:24.810$  we don't really see that.

NOTE Confidence: 0.78337675

00:30:24.810 --> 00:30:27.967 In fact it is not disease modifying

 $00:30:27.967 \longrightarrow 00:30:31.379$  if you ask me that you know so.

NOTE Confidence: 0.78337675

00:30:31.380 --> 00:30:31.807 Unfortunately,

NOTE Confidence: 0.78337675

00:30:31.807 --> 00:30:34.796 the successes we've had in CML did

NOTE Confidence: 0.78337675

00:30:34.796 --> 00:30:37.009 not translate to pH negative MPs,

NOTE Confidence: 0.78337675

00:30:37.010 --> 00:30:38.213 but you know,

NOTE Confidence: 0.78337675

 $00:30:38.213 \longrightarrow 00:30:40.218$  we have promising future medications.

NOTE Confidence: 0.78337675

00:30:40.220 --> 00:30:42.458 Or perhaps we'll have something which

NOTE Confidence: 0.78337675

00:30:42.458 --> 00:30:44.900 is going to decrease or eliminate

NOTE Confidence: 0.78337675

 $00:30:44.900 \longrightarrow 00:30:46.660$  that difference in survival.

NOTE Confidence: 0.78337675

00:30:46.660 --> 00:30:48.665 Our PV patients have when

NOTE Confidence: 0.78337675

 $00{:}30{:}48.665 \dashrightarrow 00{:}30{:}50.269$  compared to regular population.

NOTE Confidence: 0.8129642

00:30:51.460 --> 00:30:54.178 OK, I see we have a comment from armor,

NOTE Confidence: 0.8129642

00:30:54.180 --> 00:30:55.884 great talk and many new exciting

NOTE Confidence: 0.8129642

 $00:30:55.884 \longrightarrow 00:30:57.500$  options available for these patients.

NOTE Confidence: 0.8129642

 $00:30:57.500 \longrightarrow 00:30:59.314$  So that was thank you Emerson.

00:30:59.314 --> 00:31:00.522 I share you enthusiasm.

NOTE Confidence: 0.8129642

 $00:31:00.522 \longrightarrow 00:31:02.027$  It is actually very challenging

NOTE Confidence: 0.8129642

 $00:31:02.030 \longrightarrow 00:31:03.962$  to do study for those patients because

NOTE Confidence: 0.8129642

 $00:31:03.962 \longrightarrow 00:31:05.820$  they have such a good prognosis

NOTE Confidence: 0.8129642

 $00:31:05.820 \longrightarrow 00:31:07.764$  comparing to all other cancer patients.

NOTE Confidence: 0.8129642

00:31:07.770 --> 00:31:10.173 So really have to have drugs which are not

NOTE Confidence: 0.8129642

 $00:31:10.173 \longrightarrow 00:31:12.598$  only working well but also well tolerated.

NOTE Confidence: 0.7842143

 $00:31:13.460 \longrightarrow 00:31:14.114$  Yeah, excellent.

NOTE Confidence: 0.7842143

 $00:31:14.114 \longrightarrow 00:31:16.076$  Well hematology is going to be

NOTE Confidence: 0.7842143

 $00:31:16.076 \longrightarrow 00:31:17.970$  around for many many more years.

NOTE Confidence: 0.7842143

 $00{:}31{:}17.970 --> 00{:}31{:}19.214$  So thank you, Nicola.

NOTE Confidence: 0.7842143

00:31:19.214 --> 00:31:22.148 I think we should move on with Tama talk,

NOTE Confidence: 0.7842143

 $00{:}31{:}22.150 \dashrightarrow 00{:}31{:}24.404$  so let me introduce Doctor to Microbee.

NOTE Confidence: 0.7842143

 $00:31:24.410 \longrightarrow 00:31:26.050$  He's associate Professor of Medicine

NOTE Confidence: 0.7842143

 $00{:}31{:}26.050 \dashrightarrow 00{:}31{:}27.690$  and the medical director informed

NOTE Confidence: 0.7842143

 $00:31:27.739 \longrightarrow 00:31:29.239$  Chief of Operations and Quality.

00:31:29.240 --> 00:31:31.208 And I think everybody knows that

NOTE Confidence: 0.7842143

00:31:31.208 --> 00:31:32.929 tomorrow with the entire Smilow

NOTE Confidence: 0.7842143

 $00:31:32.929 \longrightarrow 00:31:34.999$  team has gotten the he malignancy

NOTE Confidence: 0.7842143

 $00{:}31{:}34.999 \dashrightarrow 00{:}31{:}36.926$  service through the 1st surge of

NOTE Confidence: 0.7842143

 $00:31:36.926 \longrightarrow 00:31:38.576$  Covid an now the second surge.

NOTE Confidence: 0.7842143

 $00:31:38.580 \longrightarrow 00:31:40.708$  So thank you so much for that

NOTE Confidence: 0.7842143

 $00:31:40.708 \longrightarrow 00:31:42.738$  tomorrow also serves as the disease

NOTE Confidence: 0.7842143

 $00{:}31{:}42.738 \dashrightarrow 00{:}31{:}44.498$  aligned research team or direct

NOTE Confidence: 0.7842143

00:31:44.498 --> 00:31:46.610 leader from my light malignancies.

NOTE Confidence: 0.7842143

 $00{:}31{:}46.610 \dashrightarrow 00{:}31{:}48.500$  And tomorrow completed his doctorate

NOTE Confidence: 0.7842143

00:31:48.500 --> 00:31:50.390 in hematology oncology in Lyon,

NOTE Confidence: 0.7842143

 $00:31:50.390 \longrightarrow 00:31:52.484$  France, and then joined the Institute

NOTE Confidence: 0.7842143

 $00{:}31{:}52.484 \dashrightarrow 00{:}31{:}54.550$  Power Lee comment in Marseille,

NOTE Confidence: 0.7842143

00:31:54.550 --> 00:31:55.252 in France,

NOTE Confidence: 0.7842143

 $00:31:55.252 \longrightarrow 00:31:57.709$  and he completed a fellowship at Johns

00:31:57.709 --> 00:32:00.220 Hopkins University as a Fulbright alumnus,

NOTE Confidence: 0.7842143

 $00:32:00.220 \longrightarrow 00:32:02.536$  and I think that's how eventually

NOTE Confidence: 0.7842143

 $00:32:02.536 \longrightarrow 00:32:05.129$  we got tomorrow to join us here.

NOTE Confidence: 0.7842143

00:32:05.130 --> 00:32:07.392 So Demott is focused on again

NOTE Confidence: 0.7842143

00:32:07.392 --> 00:32:08.523 pilot malignancy's leukemia,

NOTE Confidence: 0.7842143

 $00:32:08.530 \dashrightarrow 00:32:11.698$  and I think his top will speak for his

NOTE Confidence: 0.7842143

 $00:32:11.698 \longrightarrow 00:32:14.114$  amazing expertise in treating these

NOTE Confidence: 0.7842143

 $00:32:14.114 \longrightarrow 00:32:17.096$  diseases and taking care of patients.

NOTE Confidence: 0.7842143

 $00:32:17.100 \longrightarrow 00:32:19.898$  So. To my valuers.

NOTE Confidence: 0.8486074

 $00:32:25.650 \longrightarrow 00:32:30.040$  Hope that everybody is seeing my screen now.

NOTE Confidence: 0.80601865

 $00{:}32{:}30.040 \dashrightarrow 00{:}32{:}34.675$  OK so for today I want to focus my

NOTE Confidence: 0.80601865

00:32:34.675 --> 00:32:38.723 presentation and one on the topic of

NOTE Confidence: 0.80601865

 $00:32:38.723 \longrightarrow 00:32:41.937$  Milo dysplastic syndrome and more

NOTE Confidence: 0.80601865

00:32:41.937 --> 00:32:44.972 precisely, on the patient exposed,

NOTE Confidence: 0.80601865

 $00:32:44.972 \longrightarrow 00:32:47.737$  hyperventilating agent and we experience

NOTE Confidence: 0.80601865

00:32:47.737 --> 00:32:50.269 hyper mediating agent failure.

 $00:32:52.640 \longrightarrow 00:32:57.230$  Anne. So here are my disclosures.

NOTE Confidence: 0.7758981

 $00:33:00.920 \longrightarrow 00:33:03.237$  An ad to start wanted just to

NOTE Confidence: 0.7758981

 $00:33:03.237 \longrightarrow 00:33:06.102$  to do a really quick reminder

NOTE Confidence: 0.7758981

00:33:06.102 --> 00:33:09.067 on my love dysplastic syndrome.

NOTE Confidence: 0.7758981

 $00:33:09.070 \longrightarrow 00:33:12.647$  Stressing that we have with this disease,

NOTE Confidence: 0.7758981

00:33:12.650 --> 00:33:14.698 Arelia turgeon's group of

NOTE Confidence: 0.7758981

00:33:14.698 --> 00:33:16.746 clonal bone marrow neoplasms,

NOTE Confidence: 0.7758981

 $00:33:16.750 \longrightarrow 00:33:20.292$  we have the cytopenias due to the

NOTE Confidence: 0.7758981

 $00:33:20.292 \longrightarrow 00:33:22.822$  ineffective in multiple years is

NOTE Confidence: 0.7758981

 $00{:}33{:}22.822 \dashrightarrow 00{:}33{:}25.588$  we have a bnormal blood and bone

NOTE Confidence: 0.7758981

00:33:25.588 --> 00:33:28.805 marrow cell morphology and the risk

NOTE Confidence: 0.7758981

 $00:33:28.805 \longrightarrow 00:33:31.555$  of clonal evolution and progression

NOTE Confidence: 0.7758981

 $00{:}33{:}31.555 \dashrightarrow 00{:}33{:}33.649$  to a cute myeloid leukemia.

NOTE Confidence: 0.73165816

00:33:36.610 --> 00:33:39.122 From a molecular standpoint,

NOTE Confidence: 0.73165816

 $00:33:39.122 \longrightarrow 00:33:42.890$  these diseases are extremely generous with

00:33:42.985 --> 00:33:46.350 some main driver spliceosome mutation,

NOTE Confidence: 0.73165816

 $00:33:46.350 \longrightarrow 00:33:50.826$  such as the three one mutation

NOTE Confidence: 0.73165816

 $00:33:50.826 \longrightarrow 00:33:54.397$  epigenetic targeted mutation such as

NOTE Confidence: 0.73165816

 $00:33:54.397 \longrightarrow 00:34:00.830$  at Ted 2 for example, and EMT 3A and.

NOTE Confidence: 0.73165816

 $00:34:00.830 \longrightarrow 00:34:02.730$  This eternity is also something

NOTE Confidence: 0.73165816

 $00:34:02.730 \longrightarrow 00:34:04.630$  we see in the prognosis.

NOTE Confidence: 0.73165816

 $00:34:04.630 \longrightarrow 00:34:06.569$  I'm not going to go in the

NOTE Confidence: 0.73165816

 $00{:}34{:}06.569 \dashrightarrow 00{:}34{:}08.547$  details of the risk stratification

NOTE Confidence: 0.73165816

 $00{:}34{:}08.547 \dashrightarrow 00{:}34{:}10.707$  of Milo dysplastic syndrome,

NOTE Confidence: 0.73165816

 $00:34:10.710 \longrightarrow 00:34:13.486$  but I just want you to focus your

NOTE Confidence: 0.73165816

 $00{:}34{:}13.486 \dashrightarrow 00{:}34{:}15.674$  attention on the right side of

NOTE Confidence: 0.73165816

 $00:34:15.674 \longrightarrow 00:34:18.304$  the panel where you would see that

NOTE Confidence: 0.73165816

 $00:34:18.304 \longrightarrow 00:34:21.258$  when we see a patient with mild

NOTE Confidence: 0.73165816

00:34:21.258 --> 00:34:22.776 dysplastic syndrome in clinic,

NOTE Confidence: 0.73165816

 $00:34:22.776 \longrightarrow 00:34:25.440$  we can see some one who has a median

NOTE Confidence: 0.73165816

 $00:34:25.521 \longrightarrow 00:34:28.566$  overall survival of more than eight years,

 $00:34:28.570 \longrightarrow 00:34:30.830$  as well as people that.

NOTE Confidence: 0.73165816

 $00:34:30.830 \longrightarrow 00:34:33.530$  In the worst case scenario,

NOTE Confidence: 0.73165816

 $00:34:33.530 \longrightarrow 00:34:36.230$  can progress to leukemia and

NOTE Confidence: 0.73165816

 $00:34:36.230 \longrightarrow 00:34:38.390$  die within a year,

NOTE Confidence: 0.73165816

 $00{:}34{:}38.390 \dashrightarrow 00{:}34{:}41.090$  and so addressing this eternity

NOTE Confidence: 0.73165816

 $00:34:41.090 \longrightarrow 00:34:44.870$  is something that is on your mind.

NOTE Confidence: 0.73165816

00:34:44.870 --> 00:34:47.570 Each time we're seeing patient

NOTE Confidence: 0.73165816

 $00{:}34{:}47.570 \dashrightarrow 00{:}34{:}49.730$  from the treatment standpoint,

NOTE Confidence: 0.73165816

 $00:34:49.730 \longrightarrow 00:34:53.160$  we can go from a pure observation

NOTE Confidence: 0.73165816

 $00:34:53.160 \longrightarrow 00:34:55.973$  for patients without any symptoms

NOTE Confidence: 0.73165816

 $00{:}34{:}55.973 \dashrightarrow 00{:}34{:}59.103$  or significant cytopenia to some

NOTE Confidence: 0.73165816

 $00{:}34{:}59.103 \dashrightarrow 00{:}35{:}01.800$  low intensity treatment such as.

NOTE Confidence: 0.73165816

 $00{:}35{:}01.800 \dashrightarrow 00{:}35{:}02.943$  Activating stimulating agent

NOTE Confidence: 0.73165816

 $00:35:02.943 \longrightarrow 00:35:04.467$  for patients with anemia,

NOTE Confidence: 0.73165816

 $00:35:04.470 \longrightarrow 00:35:06.762$  but in the context of the

00:35:06.762 --> 00:35:07.908 higher risk disease,

NOTE Confidence: 0.73165816

 $00:35:07.910 \dashrightarrow 00:35:10.154$  the mainstay of treatment as being

NOTE Confidence: 0.73165816

00:35:10.154 --> 00:35:12.110 to use iPod mitigating agent,

NOTE Confidence: 0.73165816

 $00:35:12.110 \longrightarrow 00:35:16.340$  namely as cited in or decide to be in.

NOTE Confidence: 0.73165816

 $00:35:16.340 \longrightarrow 00:35:19.332$  Over the last few years and for the

NOTE Confidence: 0.73165816

 $00:35:19.332 \longrightarrow 00:35:21.979$  few patient eligible allogeneic stem

NOTE Confidence: 0.73165816

 $00:35:21.979 \longrightarrow 00:35:24.399$  cell transplantation is obviously

NOTE Confidence: 0.73165816

 $00:35:24.399 \longrightarrow 00:35:28.290$  something that we would consider frontline.

NOTE Confidence: 0.73165816

 $00{:}35{:}28.290 \to 00{:}35{:}32.578$  That's a pretty classic for all NDS talk.

NOTE Confidence: 0.73165816

 $00:35:32.580 \longrightarrow 00:35:34.712$  That's basically the registration

NOTE Confidence: 0.73165816

 $00:35:34.712 \longrightarrow 00:35:38.470$  study of as a sighted in MD's,

NOTE Confidence: 0.73165816

 $00{:}35{:}38.470 \dashrightarrow 00{:}35{:}41.970$  showing that with Asia we are able

NOTE Confidence: 0.73165816

 $00:35:41.970 \longrightarrow 00:35:44.801$  to prolong the median overall

NOTE Confidence: 0.73165816

 $00:35:44.801 \longrightarrow 00:35:48.473$  survival of probably nine months in

NOTE Confidence: 0.73165816

 $00:35:48.473 \longrightarrow 00:35:52.360$  median as compared to conventional.

NOTE Confidence: 0.73165816

 $00{:}35{:}52.360 \dashrightarrow 00{:}35{:}54.530$  Care we definitely have evidences

 $00:35:54.530 \longrightarrow 00:35:57.615$  that the 24 months of median overall

NOTE Confidence: 0.73165816

 $00{:}35{:}57.615 \dashrightarrow 00{:}36{:}00.541$  survival that we see in this study

NOTE Confidence: 0.73165816

 $00{:}36{:}00.541 {\:{\circ}{\circ}{\circ}}>00{:}36{:}03.210$  are probably a bit overestimated as

NOTE Confidence: 0.73165816

 $00:36:03.210 \longrightarrow 00:36:06.682$  compared to what we see in real life.

NOTE Confidence: 0.73165816

 $00:36:06.682 \longrightarrow 00:36:08.418$  Probably around 18 months.

NOTE Confidence: 0.73165816

00:36:08.420 --> 00:36:11.168 And that's many works from basically

NOTE Confidence: 0.73165816

00:36:11.168 --> 00:36:14.188 the registry studies such as the group

NOTE Confidence: 0.73165816

00:36:14.188 --> 00:36:16.148 Uncle Phone, Digital Displays E,

NOTE Confidence: 0.73165816

00:36:16.148 --> 00:36:18.990 but also some really nice work of

NOTE Confidence: 0.73165816

00:36:19.067 --> 00:36:23.660 Stephen Armor. For example on CS.

NOTE Confidence: 0.73165816

 $00:36:23.660 \longrightarrow 00:36:25.052$  Data. So.

NOTE Confidence: 0.73165816

 $00:36:25.052 \longrightarrow 00:36:28.636$  What do we call activating agent failure?

NOTE Confidence: 0.73165816

 $00{:}36{:}28.640 \dashrightarrow 00{:}36{:}32.048$  Because we know that at the end 90

NOTE Confidence: 0.73165816

 $00{:}36{:}32.048 \dashrightarrow 00{:}36{:}35.174$  to 95% of the patient that we start

NOTE Confidence: 0.73165816

 $00:36:35.174 \longrightarrow 00:36:37.246$  treating with this iPod mediating

 $00:36:37.246 \longrightarrow 00:36:40.564$  agent will experience on the real failure.

NOTE Confidence: 0.73165816

 $00{:}36{:}40.570 \dashrightarrow 00{:}36{:}42.964$  We classically defined that as a

NOTE Confidence: 0.73165816

 $00:36:42.964 \longrightarrow 00:36:45.040$  lack of response or progression

NOTE Confidence: 0.73165816

 $00:36:45.040 \longrightarrow 00:36:47.833$  after at least four to six cycle

NOTE Confidence: 0.73165816

00:36:47.833 --> 00:36:49.939 of iPod mediating agent,

NOTE Confidence: 0.73165816

 $00:36:49.940 \longrightarrow 00:36:52.929$  there's no difference between as cited in

NOTE Confidence: 0.73165816

 $00:36:52.929 \longrightarrow 00:36:56.229$  or decided in from this standpoint and.

NOTE Confidence: 0.73165816

 $00:36:56.230 \longrightarrow 00:36:59.002$  One of the main features that

NOTE Confidence: 0.73165816

 $00{:}36{:}59.002 \dashrightarrow 00{:}37{:}00.850$  we see is really,

NOTE Confidence: 0.73165816

 $00{:}37{:}00.850 \dashrightarrow 00{:}37{:}02.890$  really limited overall survival

NOTE Confidence: 0.73165816

 $00{:}37{:}02.890 \dashrightarrow 00{:}37{:}04.930$  for patients experiencing failure

NOTE Confidence: 0.73165816

 $00:37:04.930 \longrightarrow 00:37:06.785$  treatment within average four

NOTE Confidence: 0.73165816

 $00:37:06.785 \longrightarrow 00:37:08.695$  to six months median survival,

NOTE Confidence: 0.73165816

 $00{:}37{:}08.700 \dashrightarrow 00{:}37{:}10.840$  and that's something that,

NOTE Confidence: 0.73165816

 $00:37:10.840 \longrightarrow 00:37:14.050$  as that we initially described almost

NOTE Confidence: 0.73165816

 $00:37:14.143 \longrightarrow 00:37:17.487$  10 years ago and that has been since

00:37:17.487 --> 00:37:20.340 reproduced in many different studies.

NOTE Confidence: 0.73165816

 $00:37:20.340 \longrightarrow 00:37:21.122$  So Interestingly,

NOTE Confidence: 0.73165816

 $00:37:21.122 \longrightarrow 00:37:23.859$  we have many reason why this hyper

NOTE Confidence: 0.73165816

00:37:23.859 --> 00:37:26.180 mitigating agent resistant can developed,

NOTE Confidence: 0.73165816

 $00:37:26.180 \longrightarrow 00:37:29.114$  but so far we can say that we have

NOTE Confidence: 0.73165816

 $00:37:29.114 \longrightarrow 00:37:32.705$  a home run we don't consider that we

NOTE Confidence: 0.73165816

 $00:37:32.705 \longrightarrow 00:37:35.516$  have a unifying theory to explain

NOTE Confidence: 0.73165816

 $00:37:35.516 \longrightarrow 00:37:38.687$  why we have this failure of this

NOTE Confidence: 0.7949301

 $00:37:38.690 \longrightarrow 00:37:39.474$  iPod engagement.

NOTE Confidence: 0.7949301

 $00:37:39.474 \longrightarrow 00:37:41.434$  We see phenomenon of clonal

NOTE Confidence: 0.7949301

00:37:41.434 --> 00:37:43.280 selection and clonal evolution,

NOTE Confidence: 0.7949301

 $00:37:43.280 \longrightarrow 00:37:45.410$  maybe potentially with some difference

NOTE Confidence: 0.7949301

 $00{:}37{:}45.410 \dashrightarrow 00{:}37{:}47.994$  of profiling between the patient that

NOTE Confidence: 0.7949301

 $00:37:47.994 \longrightarrow 00:37:50.358$  are completely refractory to the disease.

NOTE Confidence: 0.7949301

 $00:37:50.360 \longrightarrow 00:37:52.184$  In the patient that.

 $00:37:52.184 \longrightarrow 00:37:54.920$  Response and then progress after treatment.

NOTE Confidence: 0.7949301

 $00:37:54.920 \longrightarrow 00:37:56.925$  But many other mechanisms have

NOTE Confidence: 0.7949301

 $00:37:56.925 \longrightarrow 00:37:59.353$  been potentially put on the table

NOTE Confidence: 0.7949301

 $00:37:59.353 \longrightarrow 00:38:01.775$  as explaining what we see or to

NOTE Confidence: 0.7949301

 $00:38:01.775 \longrightarrow 00:38:04.284$  fatty affect change in nucleotide

NOTE Confidence: 0.7949301

 $00{:}38{:}04.284 \dashrightarrow 00{:}38{:}06.608$  analogue transporter expression of

NOTE Confidence: 0.7949301

 $00{:}38{:}06.608 \dashrightarrow 00{:}38{:}08.774$  immune checkpoint inhibitors and

NOTE Confidence: 0.7949301

 $00:38:08.774 \longrightarrow 00:38:11.258$  regulators and we will circle back

NOTE Confidence: 0.7949301

 $00{:}38{:}11.258 \dashrightarrow 00{:}38{:}14.178$  on that later in the presentation.

NOTE Confidence: 0.7949301

 $00{:}38{:}14.180 \dashrightarrow 00{:}38{:}16.714$  So for the moment there's still a

NOTE Confidence: 0.7949301

 $00{:}38{:}16.714 \dashrightarrow 00{:}38{:}19.923$  lot of open questions on explaining

NOTE Confidence: 0.7949301

 $00:38:19.923 \longrightarrow 00:38:22.639$  this hypomethylating agent failure.

NOTE Confidence: 0.7949301

 $00:38:22.640 \longrightarrow 00:38:24.876$  There's obviously also something

NOTE Confidence: 0.7949301

 $00{:}38{:}24.876 \dashrightarrow 00{:}38{:}28.230$  that is pretty clear which is

NOTE Confidence: 0.7949301

 $00:38:28.324 \longrightarrow 00:38:30.670$  the role of the stem cell.

NOTE Confidence: 0.7949301

 $00:38:30.670 \longrightarrow 00:38:33.676$  Quiescence and resistance MD's are stamps,

 $00:38:33.680 \longrightarrow 00:38:35.186$  stem cell diseases,

NOTE Confidence: 0.7949301

 $00{:}38{:}35.186 \dashrightarrow 00{:}38{:}37.696$  and even in responding patients.

NOTE Confidence: 0.7949301

 $00:38:37.700 \longrightarrow 00:38:38.638$  For example,

NOTE Confidence: 0.7949301

 $00:38:38.638 \longrightarrow 00:38:41.452$  correct there IMO globin and that

NOTE Confidence: 0.7949301

00:38:41.452 --> 00:38:45.229 have a decrease in their blast counts,

NOTE Confidence: 0.7949301

 $00:38:45.230 \longrightarrow 00:38:49.246$  like here in there in the blue line,

NOTE Confidence: 0.7949301

 $00:38:49.250 \longrightarrow 00:38:51.302$  we can still detect

NOTE Confidence: 0.7949301

 $00:38:51.302 \longrightarrow 00:38:52.328$  cytogenetics abnormalities.

NOTE Confidence: 0.7949301

00:38:52.330 --> 00:38:53.416 And more Interestingly,

NOTE Confidence: 0.7949301

 $00{:}38{:}53.416 \dashrightarrow 00{:}38{:}55.588$  we can still detect stem cells

NOTE Confidence: 0.7949301

00:38:55.588 --> 00:38:57.299 like LTC IC's for example,

NOTE Confidence: 0.7949301

 $00:38:57.300 \longrightarrow 00:38:59.075$  that harbors marker of the

NOTE Confidence: 0.7949301

00:38:59.075 --> 00:39:00.140 minor dysplastic syndrome,

NOTE Confidence: 0.7949301

 $00:39:00.140 \longrightarrow 00:39:02.108$  and so that's something that is

NOTE Confidence: 0.7949301

00:39:02.108 --> 00:39:04.264 important when it comes to the

00:39:04.264 --> 00:39:05.816 way we're considering treatment,

NOTE Confidence: 0.7949301

 $00:39:05.820 \longrightarrow 00:39:07.244$  not only for relapse,

NOTE Confidence: 0.7949301

 $00:39:07.244 \longrightarrow 00:39:09.752$  but on a more general basis from

NOTE Confidence: 0.7949301

 $00:39:09.752 \longrightarrow 00:39:12.080$  the from the from the get go on

NOTE Confidence: 0.7949301

 $00:39:12.080 \longrightarrow 00:39:14.339$  the diagnosis of this patient.

NOTE Confidence: 0.835378

 $00:39:17.010 \longrightarrow 00:39:19.938$  Let's talk about the treatment now.

NOTE Confidence: 0.835378

 $00:39:19.940 \longrightarrow 00:39:22.868$  We reviewed a few years ago.

NOTE Confidence: 0.835378

 $00:39:22.870 \longrightarrow 00:39:26.027$  What were the option for this patient

NOTE Confidence: 0.835378

 $00:39:26.027 \longrightarrow 00:39:28.720$  with some health care treatment?

NOTE Confidence: 0.835378

00:39:28.720 --> 00:39:31.688 And let's say that nothing is really

NOTE Confidence: 0.835378

 $00{:}39{:}31.688 \dashrightarrow 00{:}39{:}34.947$  satisfying with the exception of the few

NOTE Confidence: 0.835378

 $00:39:34.947 \longrightarrow 00:39:37.809$  patient that can potentially transition to

NOTE Confidence: 0.835378

 $00:39:37.889 \longrightarrow 00:39:40.919$  an allogeneic stem cell transplantation,

NOTE Confidence: 0.835378

00:39:40.920 --> 00:39:43.360 either directly after relapse, or,

NOTE Confidence: 0.835378

 $00:39:43.360 \longrightarrow 00:39:46.070$  for example, after intensive cytoreduction.

NOTE Confidence: 0.835378

 $00:39:46.070 \longrightarrow 00:39:46.896$  With chemotherapy,

 $00:39:46.896 \longrightarrow 00:39:49.787$  so there's been a lot of basically

NOTE Confidence: 0.835378

 $00{:}39{:}49.787 \dashrightarrow 00{:}39{:}51.742$  investigation around what we can do

NOTE Confidence: 0.835378

 $00:39:51.742 \longrightarrow 00:39:53.900$  when it comes to intensive treatment.

NOTE Confidence: 0.835378

00:39:53.900 --> 00:39:56.138 Brute force approaches for HMA failure.

NOTE Confidence: 0.835378

 $00:39:56.140 \dashrightarrow 00:40:00.320$  We try to dig deeper, a bit on the data that.

NOTE Confidence: 0.835378

 $00:40:00.320 \longrightarrow 00:40:02.180$  We initially generated.

NOTE Confidence: 0.835378

 $00:40:02.180 \longrightarrow 00:40:05.772$  On induction, as we may have a lot

NOTE Confidence: 0.835378

00:40:05.772 --> 00:40:08.400 of different type of induction,

NOTE Confidence: 0.835378

 $00{:}40{:}08.400 \dashrightarrow 00{:}40{:}11.564$  we can potentially use in this context.

NOTE Confidence: 0.835378

00:40:11.570 --> 00:40:14.754 Conventional 7 + 3 regimen like we would

NOTE Confidence: 0.835378

00:40:14.754 --> 00:40:17.989 be doing in newly diagnosed AML Internet

NOTE Confidence: 0.835378

 $00:40:17.989 \longrightarrow 00:40:21.080$  to hide those site arabien regimen.

NOTE Confidence: 0.835378

 $00{:}40{:}21.080 \rightarrow 00{:}40{:}23.350$  And that's something we're doing,

NOTE Confidence: 0.835378

 $00:40:23.350 \longrightarrow 00:40:26.325$  mostly on the European side as well

NOTE Confidence: 0.835378

 $00{:}40{:}26.325 {\: -->\:} 00{:}40{:}29.142$  as pure in analog based regimen

 $00:40:29.142 \longrightarrow 00:40:32.509$  such as flag or flag idea that.

NOTE Confidence: 0.835378

 $00:40:32.510 \longrightarrow 00:40:37.140$  We see on both side of the of the Atlantic,

NOTE Confidence: 0.835378

 $00:40:37.140 \longrightarrow 00:40:40.938$  and so we gather basically group

NOTE Confidence: 0.835378

 $00:40:40.938 \longrightarrow 00:40:42.837$  of 15 different.

NOTE Confidence: 0.835378

 $00:40:42.840 \longrightarrow 00:40:47.358$  Investigator you ran in the US and put

NOTE Confidence: 0.835378

00:40:47.358 --> 00:40:50.408 together basically a data set of 307

NOTE Confidence: 0.835378

 $00:40:50.408 \longrightarrow 00:40:52.793$  patient with maladies plastic syndrome

NOTE Confidence: 0.835378

 $00:40:52.793 \longrightarrow 00:40:55.510$  treated with induction chemotherapy.

NOTE Confidence: 0.835378

00:40:55.510 --> 00:40:58.750 We found that roughly.

NOTE Confidence: 0.835378

 $00:40:58.750 \longrightarrow 00:41:01.666$  41% of the patient will achieve

NOTE Confidence: 0.835378

 $00{:}41{:}01.666 \dashrightarrow 00{:}41{:}04.641$  a complete remission with only a

NOTE Confidence: 0.835378

 $00:41:04.641 \longrightarrow 00:41:07.455$  median overall survival of 11 months.

NOTE Confidence: 0.835378

 $00:41:07.460 \longrightarrow 00:41:10.820$  The two take home message from this

NOTE Confidence: 0.835378

 $00:41:10.820 \longrightarrow 00:41:14.327$  work that we developed at here with

NOTE Confidence: 0.835378

 $00{:}41{:}14.327 \dashrightarrow 00{:}41{:}18.294$ Brian Bowl a few years ago was one

NOTE Confidence: 0.835378

 $00:41:18.294 \longrightarrow 00:41:21.974$  that we do not so any real significant

 $00:41:21.980 \longrightarrow 00:41:24.665$  difference between the conventional 7

NOTE Confidence: 0.835378

 $00{:}41{:}24.665 \to 00{:}41{:}28.759 + 3$  the intensive hydac regimen or the.

NOTE Confidence: 0.835378

00:41:28.760 --> 00:41:29.240 Genopro,

NOTE Confidence: 0.835378

 $00:41:29.240 \longrightarrow 00:41:32.600$  Fabian based regimen and I think also

NOTE Confidence: 0.835378

 $00:41:32.600 \longrightarrow 00:41:34.652$  pretty importantly that all patient

NOTE Confidence: 0.835378

 $00:41:34.652 \longrightarrow 00:41:37.962$  that did not have a chance to bridge to

NOTE Confidence: 0.835378

 $00:41:37.962 \longrightarrow 00:41:40.102$  analogy in transplantation died within

NOTE Confidence: 0.835378

 $00{:}41{:}40.102 \dashrightarrow 00{:}41{:}43.098$  a year of the initiation of treatment.

NOTE Confidence: 0.835378

 $00:41:43.098 \longrightarrow 00:41:45.660$  So that's pretty telling on the

NOTE Confidence: 0.835378

 $00:41:45.735 \longrightarrow 00:41:48.081$  fact that we definitely need to

NOTE Confidence: 0.835378

00:41:48.081 --> 00:41:50.650 develop more option for this patient,

NOTE Confidence: 0.835378

 $00:41:50.650 \longrightarrow 00:41:53.176$  including from the initiation of response,

NOTE Confidence: 0.835378

 $00:41:53.180 \longrightarrow 00:41:56.008$  but also on the transplant to make

NOTE Confidence: 0.835378

 $00{:}41{:}56.008 \dashrightarrow 00{:}41{:}59.028$  sure that we can maximize access.

NOTE Confidence: 0.835378

 $00:41:59.030 \longrightarrow 00:42:05.078$  Uh, to transplant for all of these patients.

 $00:42:05.080 \longrightarrow 00:42:08.440$  One of the extension and one of the.

NOTE Confidence: 0.835378

 $00:42:08.440 \longrightarrow 00:42:10.184$  Development following this initial

NOTE Confidence: 0.835378

 $00:42:10.184 \longrightarrow 00:42:13.738$  study was to maybe try to use a

NOTE Confidence: 0.835378

00:42:13.738 --> 00:42:15.883 better drug for induction chemo

NOTE Confidence: 0.835378

00:42:15.883 --> 00:42:17.830 chemotherapy for this patient,

NOTE Confidence: 0.835378

 $00:42:17.830 \longrightarrow 00:42:20.452$  and we had CP351D liposomal formulation

NOTE Confidence: 0.835378

 $00{:}42{:}20.452 \dashrightarrow 00{:}42{:}23.517$  of Donna Mycin and Sitara been that

NOTE Confidence: 0.835378

 $00:42:23.517 \longrightarrow 00:42:26.415$  was approved two years ago three years

NOTE Confidence: 0.835378

 $00{:}42{:}26.494 \dashrightarrow 00{:}42{:}29.338$  ago now for acute myeloid leukemia

NOTE Confidence: 0.835378

00:42:29.338 --> 00:42:31.763 arising from Milo dysplastic syndrome.

NOTE Confidence: 0.835378

 $00{:}42{:}31.763 \dashrightarrow 00{:}42{:}34.901$  And so we're thinking about this

NOTE Confidence: 0.835378

00:42:34.901 --> 00:42:38.124 internally approaches that was kind of a

NOTE Confidence: 0.835378

 $00:42:38.124 \longrightarrow 00:42:40.870$  natural conclusion to basically try to use.

NOTE Confidence: 0.835378

 $00:42:40.870 \longrightarrow 00:42:44.398$  Pretty similar drug to achieve response in

NOTE Confidence: 0.835378

 $00:42:44.398 \longrightarrow 00:42:47.960$  HMA resistant BI lo dysplastic syndrome.

NOTE Confidence: 0.835378

 $00:42:47.960 \longrightarrow 00:42:51.915$  That's a phase two study that we

00:42:51.915 --> 00:42:54.720 developed with Prajwal Bodo at

NOTE Confidence: 0.835378

00:42:54.720 --> 00:42:57.215 Yale as a multicenter IIT,

NOTE Confidence: 0.835378

 $00{:}42{:}57.220 \dashrightarrow 00{:}43{:}01.116$  and the plan is basically to give two

NOTE Confidence: 0.835378

00:43:01.116 --> 00:43:04.567 cycles of induction with two days

NOTE Confidence: 0.835378

 $00{:}43{:}04.567 \dashrightarrow 00{:}43{:}08.113$  of CPX in acute myeloid leukemia.

NOTE Confidence: 0.835378

 $00:43:08.120 \longrightarrow 00:43:12.316$  We usually use three days of CPX, 4.

NOTE Confidence: 0.835378

00:43:12.316 --> 00:43:12.692 Induction,

NOTE Confidence: 0.835378

 $00:43:12.692 \longrightarrow 00:43:15.700$  but there's some data showing that from a

NOTE Confidence: 0.826597555

 $00:43:15.777 \longrightarrow 00:43:17.009$  safety standpoint,

NOTE Confidence: 0.826597555

00:43:17.010 --> 00:43:19.338 especially in elderly patient two days,

NOTE Confidence: 0.826597555

 $00{:}43{:}19.340 \dashrightarrow 00{:}43{:}20.896$  maybe probably more appropriate,

NOTE Confidence: 0.826597555

 $00:43:20.896 \longrightarrow 00:43:23.230$  and the patient that are responding,

NOTE Confidence: 0.826597555

 $00{:}43{:}23.230 \dashrightarrow 00{:}43{:}25.652$  we can continue for six cycle of

NOTE Confidence: 0.826597555

 $00:43:25.652 \longrightarrow 00:43:28.474$  maintenance with one day of civics or

NOTE Confidence: 0.826597555

 $00:43:28.474 \longrightarrow 00:43:30.614$  transition to bone marrow transplantation.

 $00:43:30.620 \longrightarrow 00:43:33.973$  The study is open to accrual after

NOTE Confidence: 0.826597555

 $00{:}43{:}33.973 \dashrightarrow 00{:}43{:}36.958$  the Covid adventures that we had over

NOTE Confidence: 0.826597555

 $00:43:36.958 \longrightarrow 00:43:39.940$  the last year and we open running.

NOTE Confidence: 0.826597555

 $00:43:39.940 \longrightarrow 00:43:42.646$  So all these non selected approach,

NOTE Confidence: 0.826597555

00:43:42.650 --> 00:43:44.510 induction chemotherapy but also

NOTE Confidence: 0.826597555

 $00:43:44.510 \longrightarrow 00:43:46.835$  basically non targeted agent that

NOTE Confidence: 0.826597555

 $00:43:46.835 \longrightarrow 00:43:49.430$  we have developed over the years.

NOTE Confidence: 0.826597555

 $00:43:49.430 \longrightarrow 00:43:50.729$  For the moment,

NOTE Confidence: 0.826597555

00:43:50.729 --> 00:43:53.760 let's say that we have not found

NOTE Confidence: 0.826597555

 $00:43:53.859 \longrightarrow 00:43:56.024$  any real good candidate to

NOTE Confidence: 0.826597555

 $00:43:56.024 \longrightarrow 00:43:58.920$  be a standard of care option,

NOTE Confidence: 0.826597555

 $00:43:58.920 \longrightarrow 00:44:01.180$  especially for patients that are

NOTE Confidence: 0.826597555

 $00:44:01.180 \longrightarrow 00:44:03.440$  not eligible for aggressive chemo.

NOTE Confidence: 0.826597555

 $00:44:03.440 \longrightarrow 00:44:06.961$  I've just listed here a few of

NOTE Confidence: 0.826597555

 $00:44:06.961 \longrightarrow 00:44:10.220$  the studies but as you can see.

NOTE Confidence: 0.826597555

 $00:44:10.220 \longrightarrow 00:44:13.142$  In lots of these general studies

00:44:13.142 --> 00:44:15.090 without any real targeting,

NOTE Confidence: 0.826597555

 $00:44:15.090 \longrightarrow 00:44:17.265$  when situation where the response

NOTE Confidence: 0.826597555

00:44:17.265 --> 00:44:20.450 rates are low and more importantly,

NOTE Confidence: 0.826597555

 $00{:}44{:}20.450 \dashrightarrow 00{:}44{:}22.885$  the overall survival seems still

NOTE Confidence: 0.826597555

 $00:44:22.885 \longrightarrow 00:44:25.320$  stuck below below one year,

NOTE Confidence: 0.826597555

 $00:44:25.320 \longrightarrow 00:44:30.108$  so we definitely need to do better.

NOTE Confidence: 0.826597555

 $00:44:30.110 \longrightarrow 00:44:32.910$  And that goes back to the way we

NOTE Confidence: 0.826597555

 $00:44:32.910 \longrightarrow 00:44:34.268$  considering the pathophysiology

NOTE Confidence: 0.826597555

 $00:44:34.268 \longrightarrow 00:44:36.017$  of this disease,

NOTE Confidence: 0.826597555

00:44:36.020 --> 00:44:39.388 and acknowledge that this HMA failure or not,

NOTE Confidence: 0.826597555

 $00:44:39.390 \longrightarrow 00:44:40.656$  and imaginas situation,

NOTE Confidence: 0.826597555

 $00:44:40.656 \longrightarrow 00:44:42.766$  just to give an example.

NOTE Confidence: 0.826597555

 $00{:}44{:}42.770 \dashrightarrow 00{:}44{:}45.423$  We see that from just a clinical

NOTE Confidence: 0.826597555

 $00:44:45.423 \longrightarrow 00:44:47.636$  standpoint we see different outcome

NOTE Confidence: 0.826597555

00:44:47.636 --> 00:44:50.636 in patients at our primary refractory

 $00:44:50.636 \longrightarrow 00:44:53.199$  and really do not respond at

NOTE Confidence: 0.826597555

 $00{:}44{:}53.199 \dashrightarrow 00{:}44{:}55.425$  all to hyper mediating agent in

NOTE Confidence: 0.826597555

 $00:44:55.430 \longrightarrow 00:44:57.114$  patients with relapsing disease.

NOTE Confidence: 0.826597555

 $00:44:57.114 \longrightarrow 00:44:59.219$  That basically seems to have

NOTE Confidence: 0.826597555

 $00:44:59.219 \longrightarrow 00:45:00.979$  a bit more favorable.

NOTE Confidence: 0.826597555

 $00:45:00.980 \longrightarrow 00:45:02.960$  Outcome in this context so

NOTE Confidence: 0.826597555

 $00:45:02.960 \longrightarrow 00:45:06.952$  still a lot of work to do on the

NOTE Confidence: 0.826597555

 $00{:}45{:}06.952 \dashrightarrow 00{:}45{:}09.347$  translational and basic science side.

NOTE Confidence: 0.826597555

 $00{:}45{:}09.350 \dashrightarrow 00{:}45{:}12.661$  One way we've tried to tackle this

NOTE Confidence: 0.826597555

 $00:45:12.661 \longrightarrow 00:45:15.463$  difference of outcome based on this

NOTE Confidence: 0.826597555

 $00{:}45{:}15.463 \dashrightarrow 00{:}45{:}18.049$  clinical finding was to deal with

NOTE Confidence: 0.826597555

 $00:45:18.049 \longrightarrow 00:45:21.187$  the stable disease with a slightly

NOTE Confidence: 0.826597555

00:45:21.187 --> 00:45:23.807 different term than just using.

NOTE Confidence: 0.826597555

 $00{:}45{:}23.810 \dashrightarrow 00{:}45{:}26.285$  Regular treatment by adding on

NOTE Confidence: 0.826597555

 $00:45:26.285 \longrightarrow 00:45:28.265$  on the hyperventilating agent,

NOTE Confidence: 0.826597555

 $00:45:28.270 \longrightarrow 00:45:30.945$  potentially drug that may be

 $00:45:30.945 \longrightarrow 00:45:34.152$  synergistic based on their mode of

NOTE Confidence: 0.826597555

 $00:45:34.152 \longrightarrow 00:45:37.197$  action or based on in vitro studies.

NOTE Confidence: 0.826597555

 $00:45:37.200 \longrightarrow 00:45:40.176$  We had several attempts at this

NOTE Confidence: 0.826597555

 $00:45:40.176 \longrightarrow 00:45:42.160$  over the last years.

NOTE Confidence: 0.826597555

 $00{:}45{:}42.160 \dashrightarrow 00{:}45{:}44.600$  An easy combination and logical

NOTE Confidence: 0.826597555

 $00:45:44.600 \longrightarrow 00:45:47.705$  combination was to add on the

NOTE Confidence: 0.826597555

 $00:45:47.705 \longrightarrow 00:45:50.560$  almighty engage in the second

NOTE Confidence: 0.826597555

 $00:45:50.560 \longrightarrow 00:45:52.273$  epigenetic targeted agent.

NOTE Confidence: 0.826597555

 $00:45:52.280 \longrightarrow 00:45:54.224$  As such, as H.

NOTE Confidence: 0.826597555

00:45:54.224 --> 00:45:55.196 Dark inhibitor,

NOTE Confidence: 0.826597555

00:45:55.200 --> 00:45:58.595 then we treated 19 patient with vorinostat,

NOTE Confidence: 0.826597555

 $00:45:58.600 \longrightarrow 00:46:02.023$  which is one of the first in

NOTE Confidence: 0.826597555

00:46:02.023 --> 00:46:04.429 Class Age document or with,

NOTE Confidence: 0.826597555

 $00:46:04.430 \longrightarrow 00:46:04.937$  unfortunately,

NOTE Confidence: 0.826597555

00:46:04.937 --> 00:46:06.965 pretty limited outcome really

 $00:46:06.965 \longrightarrow 00:46:10.259$  knows how that rate of only 10%,

NOTE Confidence: 0.826597555

 $00{:}46{:}10.260 \dashrightarrow 00{:}46{:}13.932$  but the median survival of 12 months in

NOTE Confidence: 0.826597555

 $00:46:13.932 \longrightarrow 00:46:17.280$  potentially a pretty selected population.

NOTE Confidence: 0.826597555

 $00:46:17.280 \longrightarrow 00:46:20.304$  We also tried to use a bit more recently,

NOTE Confidence: 0.826597555

 $00:46:20.310 \longrightarrow 00:46:23.006$  and that's not a fully public published yet.

NOTE Confidence: 0.826597555

 $00:46:23.010 \longrightarrow 00:46:24.906$  The addition of a smooth and

NOTE Confidence: 0.826597555

 $00:46:24.906 \longrightarrow 00:46:26.951$  inhibitor to try to use really

NOTE Confidence: 0.826597555

 $00:46:26.951 \longrightarrow 00:46:29.075$  work on the stem cell component.

NOTE Confidence: 0.826597555

00:46:29.080 --> 00:46:31.720 There's some individual data showing that

NOTE Confidence: 0.826597555

 $00:46:31.720 \longrightarrow 00:46:34.670$  this moves on emitter can potentially.

NOTE Confidence: 0.826597555

 $00{:}46{:}34.670 {\:{\circ}{\circ}{\circ}}>00{:}46{:}35.978$  Abrogates the resistance

NOTE Confidence: 0.826597555

 $00:46:35.978 \longrightarrow 00:46:37.286$  to hypomethylating agent,

NOTE Confidence: 0.826597555

 $00:46:37.290 \longrightarrow 00:46:39.912$  but so far the results were

NOTE Confidence: 0.826597555

00:46:39.912 --> 00:46:41.223 pretty disappointing too.

NOTE Confidence: 0.826597555

 $00:46:41.230 \longrightarrow 00:46:43.846$  Well not to be completely gloom.

NOTE Confidence: 0.826597555

 $00:46:43.850 \longrightarrow 00:46:46.895$  There's end at the at the probably

 $00:46:46.895 \longrightarrow 00:46:49.969$  light at the end of the tunnel.

NOTE Confidence: 0.826597555

 $00:46:49.970 \longrightarrow 00:46:52.150$  I need to highlight the

NOTE Confidence: 0.826597555

 $00:46:52.150 \longrightarrow 00:46:53.894$  work presented by armor.

NOTE Confidence: 0.826597555

 $00:46:53.900 \longrightarrow 00:46:56.516$  If you have a year ago.

NOTE Confidence: 0.826597555

 $00:46:56.520 \longrightarrow 00:46:58.245$  Basically at the ash meeting

NOTE Confidence: 0.826597555

 $00:46:58.245 \longrightarrow 00:47:01.205$  on the add on of venetoclax in

NOTE Confidence: 0.826597555

00:47:01.205 --> 00:47:03.509 maybe less selected population.

NOTE Confidence: 0.775830976

 $00:47:03.510 \longrightarrow 00:47:06.288$  24 patient is. Resistance with this

NOTE Confidence: 0.775830976

00:47:06.288 --> 00:47:10.488 edition of the BCL, two inhibitor or some

NOTE Confidence: 0.775830976

 $00:47:10.488 \longrightarrow 00:47:14.010$  real complete remission and some marrow.

NOTE Confidence: 0.775830976

 $00:47:14.010 \longrightarrow 00:47:17.626$  Chimia Free State with a six months program.

NOTE Confidence: 0.775830976

 $00{:}47{:}17.630 \dashrightarrow 00{:}47{:}20.535$  French fries survival 76% that from our

NOTE Confidence: 0.775830976

 $00{:}47{:}20.535 \dashrightarrow 00{:}47{:}23.069$  standard is pretty pretty promising.

NOTE Confidence: 0.775830976

00:47:23.070 --> 00:47:26.686 So statue and we will have more information,

NOTE Confidence: 0.775830976

 $00:47:26.690 \longrightarrow 00:47:29.903$  but that's one of the Avenue that

 $00:47:29.903 \longrightarrow 00:47:32.660$  we are currently investigating.

NOTE Confidence: 0.775830976

 $00:47:32.660 \longrightarrow 00:47:35.152$  Stop. That's. Pretty good,

NOTE Confidence: 0.775830976

00:47:35.152 --> 00:47:38.267 that's basically based on a

NOTE Confidence: 0.775830976

 $00:47:38.267 \longrightarrow 00:47:40.690$  combination of mode of action.

NOTE Confidence: 0.775830976

 $00:47:40.690 \longrightarrow 00:47:43.534$  That's still not something that really

NOTE Confidence: 0.775830976

 $00:47:43.534 \longrightarrow 00:47:46.388$  address the specificity of the clone

NOTE Confidence: 0.775830976

 $00:47:46.388 \longrightarrow 00:47:48.578$  of the Milo dysplastic syndrome,

NOTE Confidence: 0.775830976

 $00:47:48.580 \longrightarrow 00:47:51.172$  and maybe instead of using brute

NOTE Confidence: 0.775830976

00:47:51.172 --> 00:47:54.610 force to try to induce a response,

NOTE Confidence: 0.775830976

 $00:47:54.610 \longrightarrow 00:47:57.501$  we can maybe try to outsmart the

NOTE Confidence: 0.775830976

 $00:47:57.501 \longrightarrow 00:48:00.255$  disease rather than just using those

NOTE Confidence: 0.775830976

 $00{:}48{:}00.255 \dashrightarrow 00{:}48{:}02.640$  intensity or non selected approaches

NOTE Confidence: 0.775830976

 $00{:}48{:}02.640 \dashrightarrow 00{:}48{:}05.817$  in the context of Milo dysplastic.

NOTE Confidence: 0.775830976

 $00{:}48{:}05.820 --> 00{:}48{:}06.159 \ {\rm Syndrome},$ 

NOTE Confidence: 0.775830976

 $00:48:06.159 \longrightarrow 00:48:08.193$  where a bit less fortunate that

NOTE Confidence: 0.775830976

 $00:48:08.193 \longrightarrow 00:48:10.468$  in the acute model in the world,

 $00:48:10.470 \longrightarrow 00:48:13.368$  as we don't have so many targeted agent that

NOTE Confidence: 0.775830976

 $00{:}48{:}13.368 \dashrightarrow 00{:}48{:}16.436$  we can use at the majority of the patient,

NOTE Confidence: 0.775830976

 $00:48:16.440 \longrightarrow 00:48:18.645$  will have as a freebie wanted two

NOTE Confidence: 0.775830976

 $00:48:18.645 \longrightarrow 00:48:21.031$  SS two mutation that are for the

NOTE Confidence: 0.775830976

00:48:21.031 --> 00:48:22.746 moment at least non targetable,

NOTE Confidence: 0.775830976

 $00:48:22.750 \longrightarrow 00:48:24.875$  even if there's some basically

NOTE Confidence: 0.775830976

00:48:24.875 --> 00:48:27.783 development on the side and I'm going

NOTE Confidence: 0.775830976

 $00{:}48{:}27.783 \dashrightarrow 00{:}48{:}30.247$  to take the example of some product

NOTE Confidence: 0.775830976

 $00:48:30.247 \longrightarrow 00:48:33.163$  we have done in the in the IDH world.

NOTE Confidence: 0.775830976

 $00:48:33.170 \longrightarrow 00:48:35.600$  And that can potentially be avenues

NOTE Confidence: 0.775830976

 $00:48:35.600 \longrightarrow 00:48:38.326$  that we going to explore in the

NOTE Confidence: 0.775830976

 $00:48:38.326 \longrightarrow 00:48:40.720$  future to try to get a better

NOTE Confidence: 0.775830976

 $00{:}48{:}40.806 \dashrightarrow 00{:}48{:}42.910$  outcome for these patients.

NOTE Confidence: 0.775830976

 $00:48:42.910 \longrightarrow 00:48:45.454$  So we have this idea inhibit

NOTE Confidence: 0.775830976

 $00{:}48{:}45.454 \dashrightarrow 00{:}48{:}47.150$  or letter basically allosteric

 $00:48:47.229 \longrightarrow 00:48:49.819$  inhibitors from IDH two and IDH one.

NOTE Confidence: 0.775830976

00:48:49.820 --> 00:48:51.035 I did too.

NOTE Confidence: 0.775830976

00:48:51.035 --> 00:48:54.278 That's in a Sydney IDs, one that's evil.

NOTE Confidence: 0.775830976

 $00:48:54.278 \longrightarrow 00:48:57.120$  Setting it in both of the phase.

NOTE Confidence: 0.775830976

00:48:57.120 --> 00:48:59.556 One study of this compounds model,

NOTE Confidence: 0.775830976

00:48:59.560 --> 00:49:02.050 spastic syndrome patient were allowed

NOTE Confidence: 0.775830976

 $00:49:02.050 \longrightarrow 00:49:05.689$  after at least one line of treatment.

NOTE Confidence: 0.775830976

 $00:49:05.690 \longrightarrow 00:49:09.900$  76% of the patient seems to be able to to

NOTE Confidence: 0.775830976

 $00{:}49{:}10.005 \dashrightarrow 00{:}49{:}14.518$  respond with the IDH two sorry 559% of the

NOTE Confidence: 0.775830976

00:49:14.518 --> 00:49:18.710 patient seems to be able to respond to IDH,

NOTE Confidence: 0.775830976

 $00:49:18.710 \longrightarrow 00:49:22.805$  two inhibitor and maybe a bit more in the

NOTE Confidence: 0.775830976

 $00:49:22.805 \longrightarrow 00:49:26.620$  IDH one subclone with a 71% response rate.

NOTE Confidence: 0.775830976

00:49:26.620 --> 00:49:28.480 As you can see,

NOTE Confidence: 0.775830976

00:49:28.480 --> 00:49:31.270 that's pretty small samples of patient.

NOTE Confidence: 0.775830976

 $00:49:31.270 \longrightarrow 00:49:32.662$  There's ongoing investigation

NOTE Confidence: 0.775830976

00:49:32.662 --> 00:49:34.518 with this IDH inhibitor,

 $00:49:34.520 \longrightarrow 00:49:36.064$  single agent or combination.

NOTE Confidence: 0.775830976

 $00{:}49{:}36.064 \rightarrow 00{:}49{:}39.060$  The one thing that is pretty striking,

NOTE Confidence: 0.775830976

 $00:49:39.060 \longrightarrow 00:49:41.286$  the fact that we're probably in a

NOTE Confidence: 0.775830976

 $00:49:41.286 \longrightarrow 00:49:43.077$  situation where the duration of

NOTE Confidence: 0.775830976

00:49:43.077 --> 00:49:45.007 response is still pretty limited,

NOTE Confidence: 0.775830976 00:49:45.010 --> 00:49:45.435 so. NOTE Confidence: 0.775830976

 $00:49:45.435 \longrightarrow 00:49:47.560$  Potentially we can try to

NOTE Confidence: 0.775830976

 $00:49:47.560 \longrightarrow 00:49:49.811$  find some alternatives to IDH

NOTE Confidence: 0.775830976

 $00:49:49.811 \longrightarrow 00:49:51.667$  inhibitor on this context,

NOTE Confidence: 0.775830976

 $00{:}49{:}51.670 \dashrightarrow 00{:}49{:}54.070$  and that's potentially when I was

NOTE Confidence: 0.775830976

 $00:49:54.070 \longrightarrow 00:49:55.670$  mentioning outsmarting the disease.

NOTE Confidence: 0.775830976

00:49:55.670 --> 00:49:57.670 I'm not that smart guy,

NOTE Confidence: 0.775830976

 $00:49:57.670 \longrightarrow 00:50:00.014$  but I had the chance and that will

NOTE Confidence: 0.775830976

 $00:50:00.014 \longrightarrow 00:50:02.296$  work with really intelligent people

NOTE Confidence: 0.775830976

00:50:02.296 --> 00:50:04.464 branded Bindra Stephanie Allen,

 $00:50:04.470 \longrightarrow 00:50:05.202$  for example,

NOTE Confidence: 0.775830976

00:50:05.202 --> 00:50:07.764 and you may know the story that

NOTE Confidence: 0.775830976

 $00:50:07.764 \longrightarrow 00:50:10.275$  was developed by Ranjit over the

NOTE Confidence: 0.775830976

 $00:50:10.275 \longrightarrow 00:50:12.824$  last years about the fact that

NOTE Confidence: 0.775830976

00:50:12.824 --> 00:50:15.254 when you have an IDH mutation

NOTE Confidence: 0.775830976

 $00:50:15.254 \longrightarrow 00:50:17.142$  that was initially basically.

NOTE Confidence: 0.775830976

 $00{:}50{:}17.142 \dashrightarrow 00{:}50{:}21.174$  Developed and found in gliomas the

NOTE Confidence: 0.775830976

00:50:21.174 --> 00:50:25.490 fact of having these two hydroxy

NOTE Confidence: 0.775830976

 $00:50:25.490 \longrightarrow 00:50:29.130$  glutarate will basically impair the

NOTE Confidence: 0.775830976

 $00:50:29.130 \longrightarrow 00:50:33.276$  activity of the X Rays in the cell,

NOTE Confidence: 0.775830976

 $00:50:33.280 \longrightarrow 00:50:35.581$  decrease malicious recommendation,

NOTE Confidence: 0.775830976

 $00:50:35.581 \longrightarrow 00:50:40.183$  repair and create a braknis phenotype.

NOTE Confidence: 0.775830976

 $00:50:40.190 \longrightarrow 00:50:43.178$  That obviously is interesting as a

NOTE Confidence: 0.775830976

 $00{:}50{:}43.178 \dashrightarrow 00{:}50{:}45.170$  potentially chemo radio sensitizer,

NOTE Confidence: 0.775830976

 $00:50:45.170 \longrightarrow 00:50:47.655$  but from all standpoints were

NOTE Confidence: 0.775830976

 $00:50:47.655 \longrightarrow 00:50:49.643$  especially interested in our.

 $00:50:49.650 \longrightarrow 00:50:52.740$  Potentially, we can use pop emitters

NOTE Confidence: 0.7622402

 $00:50:52.740 \longrightarrow 00:50:55.297$  to create synthetic lethality with

NOTE Confidence: 0.7622402

 $00:50:55.297 \longrightarrow 00:50:57.898$  this agent, and when we tested,

NOTE Confidence: 0.7622402

 $00:50:57.898 \longrightarrow 00:51:01.209$  basically when we move from gliomas to

NOTE Confidence: 0.7622402

 $00:51:01.209 \longrightarrow 00:51:04.089$  leukemias and Milo dysplastic syndromes,

NOTE Confidence: 0.7622402

 $00:51:04.090 \longrightarrow 00:51:07.036$  indeed, that's what we found that

NOTE Confidence: 0.7622402

 $00:51:07.036 \longrightarrow 00:51:10.310$  we were able to potentially.

NOTE Confidence: 0.7622402

 $00:51:10.310 \longrightarrow 00:51:13.226$  Induce apoptosis in samples of patient

NOTE Confidence: 0.7622402

 $00:51:13.226 \longrightarrow 00:51:16.490$  that were exposed to hyperventilate.

NOTE Confidence: 0.7622402

 $00:51:16.490 \longrightarrow 00:51:19.814$  Engagement that were exposed to IDH

NOTE Confidence: 0.7622402

 $00{:}51{:}19.814 \dashrightarrow 00{:}51{:}23.680$  inhibitor an that I came to development

NOTE Confidence: 0.7622402

 $00:51:23.680 \longrightarrow 00:51:28.290$  with NCI study right now of the olaparib.

NOTE Confidence: 0.7622402

 $00{:}51{:}28.290 \dashrightarrow 00{:}51{:}32.210$  The 1st in Class I DH pop inhibitor

NOTE Confidence: 0.7622402

 $00{:}51{:}32.210 \dashrightarrow 00{:}51{:}35.598$  for patient offering IDH mutation.

NOTE Confidence: 0.7622402

 $00:51:35.600 \longrightarrow 00:51:40.184$  So that's patient that as a diagnosis of.

00:51:40.190 --> 00:51:42.620 Acute myeloid leukemia or marriages.

NOTE Confidence: 0.7622402

 $00{:}51{:}42.620 \dashrightarrow 00{:}51{:}45.512$  Plastic syndrome with an IDH one

NOTE Confidence: 0.7622402

 $00{:}51{:}45.512 \dashrightarrow 00{:}51{:}48.970$  or IDH two mutation and at least

NOTE Confidence: 0.7622402

 $00:51:48.970 \longrightarrow 00:51:51.350$  one prior line of treatment,

NOTE Confidence: 0.7622402

 $00:51:51.350 \longrightarrow 00:51:54.260$  including in lot of this patient

NOTE Confidence: 0.7622402

00:51:54.260 --> 00:51:55.230 I permitting.

NOTE Confidence: 0.7622402

 $00:51:55.230 \longrightarrow 00:51:57.650$  Agent there are four cohorts

NOTE Confidence: 0.7622402

00:51:57.650 --> 00:51:59.586 that are currently investigated.

NOTE Confidence: 0.7622402

00:51:59.590 --> 00:52:02.990 One for patients with IDH, one IDH,

NOTE Confidence: 0.7622402

00:52:02.990 --> 00:52:05.415 two mutant email without prior

NOTE Confidence: 0.7622402

 $00{:}52{:}05.415 --> 00{:}52{:}06.870$  exposure to IDH.

NOTE Confidence: 0.7622402

 $00:52:06.870 \longrightarrow 00:52:10.307$  And if it or one with my

NOTE Confidence: 0.7622402

 $00:52:10.307 \longrightarrow 00:52:11.780$  dysplastic syndrome without.

NOTE Confidence: 0.7622402

 $00:52:11.780 \longrightarrow 00:52:12.824$  Exposure to ideas,

NOTE Confidence: 0.7622402

 $00:52:12.824 \longrightarrow 00:52:13.172$  debit,

NOTE Confidence: 0.7622402

00:52:13.172 --> 00:52:16.681 or an arm two and four are for patient

 $00:52:16.681 \longrightarrow 00:52:19.375$  in acute myeloid leukemia and maladies

NOTE Confidence: 0.7622402

 $00{:}52{:}19.375 \dashrightarrow 00{:}52{:}21.583$  plastic syndrome that were already

NOTE Confidence: 0.7622402

 $00:52:21.583 \longrightarrow 00:52:24.103$  exposed to IDH inhibitor in the

NOTE Confidence: 0.7622402

 $00{:}52{:}24.110 \dashrightarrow 00{:}52{:}26.987$  patient that are naive of IDH inhibitor.

NOTE Confidence: 0.7622402

 $00:52:26.990 \longrightarrow 00:52:29.606$  We have an early response assessments

NOTE Confidence: 0.7622402

 $00:52:29.606 \longrightarrow 00:52:32.927$  after one cycle and if we do not

NOTE Confidence: 0.7622402

 $00:52:32.927 \longrightarrow 00:52:34.797$  see any clear clinical benefit,

NOTE Confidence: 0.7622402

 $00:52:34.800 \longrightarrow 00:52:36.850$  this patient are usually discontinued.

NOTE Confidence: 0.7622402

00:52:36.850 --> 00:52:38.562 An transition classical IDH

NOTE Confidence: 0.7622402

 $00:52:38.562 \longrightarrow 00:52:41.130$  inhibitor for the patient that are

NOTE Confidence: 0.7622402

 $00:52:41.209 \longrightarrow 00:52:44.197$  responding to the patient that were

NOTE Confidence: 0.7622402

 $00:52:44.197 \longrightarrow 00:52:46.189$  previously exposed to accommodating.

NOTE Confidence: 0.7622402

 $00{:}52{:}46.190 \dashrightarrow 00{:}52{:}47.986$  Agent and IDH numitor.

NOTE Confidence: 0.7622402

 $00:52:47.986 \longrightarrow 00:52:50.680$  We are reassessing response after three,

NOTE Confidence: 0.7622402

00:52:50.680 --> 00:52:52.472 69 and 12 cycles,

 $00:52:52.472 \longrightarrow 00:52:54.712$  continuing the treatment until progression.

NOTE Confidence: 0.7622402

 $00:52:54.720 \longrightarrow 00:52:57.522$  The study has been activated this

NOTE Confidence: 0.7622402

 $00:52:57.522 \longrightarrow 00:53:00.311$  year and we're pretty happy to

NOTE Confidence: 0.7622402

 $00:53:00.311 \longrightarrow 00:53:02.795$  have over the last few months.

NOTE Confidence: 0.7622402

 $00:53:02.800 \longrightarrow 00:53:06.574$  Three patient included an in treatment

NOTE Confidence: 0.7622402

 $00:53:06.574 \longrightarrow 00:53:10.130$  an three patienten screening right now.

NOTE Confidence: 0.7622402

 $00:53:10.130 \longrightarrow 00:53:13.014$  One of the big interest of this

NOTE Confidence: 0.7622402

 $00:53:13.014 \longrightarrow 00:53:16.695$  work is also to see the pretty

NOTE Confidence: 0.7622402

 $00:53:16.695 \longrightarrow 00:53:19.039$  extensive collaboration we have.

NOTE Confidence: 0.7622402

00:53:19.040 --> 00:53:21.164 From a translational standpoint,

NOTE Confidence: 0.7622402

00:53:21.164 --> 00:53:23.288 that's collaboration with the

NOTE Confidence: 0.7622402

 $00:53:23.288 \longrightarrow 00:53:26.189$  NCI through more calf or what

NOTE Confidence: 0.7622402

 $00:53:26.189 \longrightarrow 00:53:27.949$  exam sequencing and sequencing.

NOTE Confidence: 0.7622402

00:53:27.950 --> 00:53:31.286 That's a lot of study done in hours

NOTE Confidence: 0.7622402

00:53:31.286 --> 00:53:34.469 at Yale with Ranjit and Stephanie

NOTE Confidence: 0.7622402

 $00:53:34.469 \longrightarrow 00:53:37.841$  to explore from ex vivo samples.

 $00:53:37.850 \longrightarrow 00:53:38.852$  DNA damage.

NOTE Confidence: 0.7622402

00:53:38.852 --> 00:53:39.353 Response,

NOTE Confidence: 0.7622402

 $00:53:39.353 \longrightarrow 00:53:42.359$  but also all these cells will

NOTE Confidence: 0.7622402

00:53:42.359 --> 00:53:45.859 behave put in the Mr Jimmys model

NOTE Confidence: 0.7622402

 $00:53:45.859 \longrightarrow 00:53:47.795$  that Stephanie is developing.

NOTE Confidence: 0.7622402

 $00:53:47.800 \longrightarrow 00:53:50.140$  We have collaboration with Domino's

NOTE Confidence: 0.7622402

00:53:50.140 --> 00:53:53.025 thanks to Pat Larusso and that

NOTE Confidence: 0.7622402

 $00:53:53.025 \longrightarrow 00:53:55.833$  collaboration with Jiggly to assess the

NOTE Confidence: 0.7622402

 $00:53:55.833 \longrightarrow 00:53:58.925$  evolution of the two hydroxy glutarate

NOTE Confidence: 0.7622402

 $00{:}53{:}58.925 \dashrightarrow 00{:}54{:}01.610$  and some metabolomics marker Anne.

NOTE Confidence: 0.7622402

 $00{:}54{:}01.610 \dashrightarrow 00{:}54{:}05.730$  Right now we are starting starting to work

NOTE Confidence: 0.7622402

 $00:54:05.730 \longrightarrow 00:54:09.297$  with winning Wong from the West Campus.

NOTE Confidence: 0.7622402

 $00{:}54{:}09.300 \dashrightarrow 00{:}54{:}14.646$  On single cell sequencing for this.

NOTE Confidence: 0.7622402

00:54:14.650 --> 00:54:16.170 Specific samples an studies,

NOTE Confidence: 0.7622402

 $00:54:16.170 \longrightarrow 00:54:18.450$  as we definitely think that we

 $00:54:18.520 \longrightarrow 00:54:20.722$  will have some clonal selection as

NOTE Confidence: 0.7622402

 $00:54:20.722 \longrightarrow 00:54:22.690$  potentially one of the mechanism

NOTE Confidence: 0.7622402

 $00{:}54{:}22.690 \dashrightarrow 00{:}54{:}24.840$  of resistance in this context.

NOTE Confidence: 0.7622402

 $00:54:24.840 \longrightarrow 00:54:25.881$  So stay tuned.

NOTE Confidence: 0.7622402

 $00:54:25.881 \longrightarrow 00:54:28.310$  That's a bit early to make any

NOTE Confidence: 0.7622402

 $00:54:28.392 \longrightarrow 00:54:29.550$  any conclusion.

NOTE Confidence: 0.7622402

 $00:54:29.550 \longrightarrow 00:54:31.674$  We just have a few patients

NOTE Confidence: 0.7622402

 $00:54:31.674 \longrightarrow 00:54:34.250$  in a few months on treatment,

NOTE Confidence: 0.7622402

 $00{:}54{:}34.250 \dashrightarrow 00{:}54{:}37.730$  but that's a developing story.

NOTE Confidence: 0.7622402

 $00:54:37.730 \longrightarrow 00:54:39.440$  As I was saying earlier,

NOTE Confidence: 0.7622402

 $00{:}54{:}39.440 \dashrightarrow 00{:}54{:}41.904$  one of the things that has also been

NOTE Confidence: 0.7622402

00:54:41.904 --> 00:54:44.227 mentioned as a mechanism of resistance,

NOTE Confidence: 0.7622402

 $00:54:44.230 \longrightarrow 00:54:47.598$  and I try to go fast on that.

NOTE Confidence: 0.7622402

00:54:47.600 --> 00:54:48.452 Is uh,

NOTE Confidence: 0.7622402

 $00:54:48.452 \longrightarrow 00:54:51.434$  even though logic escape of the matter.

NOTE Confidence: 0.72344524

 $00{:}54{:}51.440 \dashrightarrow 00{:}54{:}52.294$  Dysplastic syndrome.

 $00:54:52.294 \longrightarrow 00:54:55.283$  We have an over expression of PD,

NOTE Confidence: 0.72344524

 $00:54:55.290 \longrightarrow 00:54:59.364$  One PD L1 and C A4 in.

NOTE Confidence: 0.72344524

00:54:59.370 --> 00:55:01.222 Patient with hypomethylating agent

NOTE Confidence: 0.72344524

 $00{:}55{:}01.222 \dashrightarrow 00{:}55{:}04.000$  failure and that's led to several

NOTE Confidence: 0.72344524

 $00{:}55{:}04.075 \dashrightarrow 00{:}55{:}06.530$  several studies I'm mentioning here.

NOTE Confidence: 0.72344524

00:55:06.530 --> 00:55:08.434 Studies with basically ipis,

NOTE Confidence: 0.72344524

00:55:08.434 --> 00:55:10.338 nivo or Pam bro.

NOTE Confidence: 0.72344524

00:55:10.340 --> 00:55:12.951 I also need obviously to to mention

NOTE Confidence: 0.72344524

00:55:12.951 --> 00:55:16.122 that the study led by armor with

NOTE Confidence: 0.72344524

 $00:55:16.122 \longrightarrow 00:55:18.094$  basically edge darkening bitters

NOTE Confidence: 0.72344524

00:55:18.094 --> 00:55:20.348 plus checkpoint blockade inhibitors

NOTE Confidence: 0.72344524

 $00{:}55{:}20.348 \dashrightarrow 00{:}55{:}22.736$  that was recently published.

NOTE Confidence: 0.72344524

00:55:22.740 --> 00:55:24.222 For the moment,

NOTE Confidence: 0.72344524

 $00:55:24.222 \dashrightarrow 00:55:29.598$  let's say that we are not at the point where.

NOTE Confidence: 0.72344524

 $00:55:29.600 \longrightarrow 00:55:30.888$  It's a game changer.

00:55:30.888 --> 00:55:33.520 There may be some kind of response,

NOTE Confidence: 0.72344524

 $00:55:33.520 \longrightarrow 00:55:34.940$  but for the moment,

NOTE Confidence: 0.72344524

 $00:55:34.940 \longrightarrow 00:55:36.715$  nothing that is really perfect.

NOTE Confidence: 0.72344524

 $00:55:36.720 \longrightarrow 00:55:39.568$  So still a lot of work to do.

NOTE Confidence: 0.72344524

 $00:55:39.570 \longrightarrow 00:55:42.958$  One way we thought about that is

NOTE Confidence: 0.72344524

 $00:55:42.958 \longrightarrow 00:55:45.839$  potentially to try to bring this.

NOTE Confidence: 0.72344524

 $00{:}55{:}45.840 \dashrightarrow 00{:}55{:}47.664$  Potentially checkpoint inhibitor

NOTE Confidence: 0.72344524

 $00:55:47.664 \longrightarrow 00:55:50.096$  earlier in the development,

NOTE Confidence: 0.72344524

 $00:55:50.100 \longrightarrow 00:55:52.038$  and for instance,

NOTE Confidence: 0.72344524

 $00:55:52.038 \longrightarrow 00:55:55.914$  we're currently developing a study in

NOTE Confidence: 0.72344524

00:55:55.914 --> 00:56:00.593 an MD S an email of idea 2012 plus

NOTE Confidence: 0.72344524

 $00:56:00.593 \longrightarrow 00:56:05.026$  nivolumab in Phase one pilot study for

NOTE Confidence: 0.72344524

 $00:56:05.026 \longrightarrow 00:56:08.366$  patients that were already exposed

NOTE Confidence: 0.72344524

 $00:56:08.370 \longrightarrow 00:56:13.800$  to chemotherapy or iPod mediating agent.

NOTE Confidence: 0.72344524

 $00:56:13.800 \longrightarrow 00:56:16.656$  Another study has been on all and has

NOTE Confidence: 0.72344524

 $00:56:16.656 \longrightarrow 00:56:19.959$  to be restructured because of covid,

 $00:56:19.960 \longrightarrow 00:56:22.160$  but we're back in business

NOTE Confidence: 0.72344524

00:56:22.160 --> 00:56:24.360 and open to accrual oor.

NOTE Confidence: 0.72344524

 $00:56:24.360 \longrightarrow 00:56:26.560$  Since basically lost last week.

NOTE Confidence: 0.72344524

 $00:56:26.560 \longrightarrow 00:56:28.890$  Once again translation and collective

NOTE Confidence: 0.72344524

 $00:56:28.890 \longrightarrow 00:56:31.220$  studies are really important and

NOTE Confidence: 0.72344524

 $00:56:31.293 \longrightarrow 00:56:33.323$  we have some ongoing collaboration

NOTE Confidence: 0.72344524

 $00:56:33.323 \longrightarrow 00:56:36.960$  with Stephanie and will in one so.

NOTE Confidence: 0.72344524

 $00:56:36.960 \longrightarrow 00:56:39.669$  If I need to to summarize a bit where

NOTE Confidence: 0.72344524

 $00:56:39.669 \longrightarrow 00:56:42.524$  we are really quickly for the moment

NOTE Confidence: 0.72344524

 $00:56:42.524 \longrightarrow 00:56:44.847$  for this patient with permitting

NOTE Confidence: 0.72344524

 $00:56:44.847 \longrightarrow 00:56:47.782$  agent failure with Steven situation

NOTE Confidence: 0.72344524

 $00:56:47.782 \longrightarrow 00:56:50.130$  where aggressive management for

NOTE Confidence: 0.72344524

 $00:56:50.130 \longrightarrow 00:56:51.513$  transplant allogeneic transplant

NOTE Confidence: 0.72344524

 $00{:}56{:}51.513 \dashrightarrow 00{:}56{:}54.279$  candidate makes sense as we don't

NOTE Confidence: 0.72344524

 $00:56:54.279 \longrightarrow 00:56:56.572$  have any really reliable other

 $00:56:56.572 \longrightarrow 00:56:58.777$  option besides maybe some targeted

NOTE Confidence: 0.72344524

00:56:58.777 --> 00:57:01.106 therapy on small number of patients,

NOTE Confidence: 0.72344524

 $00{:}57{:}01.110 \dashrightarrow 00{:}57{:}04.454$  we do not have a reliable standard of

NOTE Confidence: 0.72344524

 $00:57:04.454 \longrightarrow 00:57:08.208$  care for patients and fit for treatment.

NOTE Confidence: 0.72344524

 $00:57:08.210 \longrightarrow 00:57:09.342$  Maybe even eight o'clock,

NOTE Confidence: 0.72344524

 $00:57:09.342 \longrightarrow 00:57:11.040$  maybe some other drug will come

NOTE Confidence: 0.72344524

 $00:57:11.097 \longrightarrow 00:57:12.687$  and will be confirmed as option,

NOTE Confidence: 0.72344524

 $00:57:12.690 \longrightarrow 00:57:14.370$  but for the moment that's still

NOTE Confidence: 0.72344524

 $00.57:14.370 \longrightarrow 00.57:14.930$  pretty struggling.

NOTE Confidence: 0.83678097

 $00:57:17.220 \longrightarrow 00:57:19.971$  The way the field is moving is

NOTE Confidence: 0.83678097

 $00{:}57{:}19.971 \dashrightarrow 00{:}57{:}22.033$  interesting and we are learning

NOTE Confidence: 0.83678097

 $00:57:22.033 \longrightarrow 00:57:24.439$  a lot from the email world.

NOTE Confidence: 0.83678097

 $00:57:24.440 \longrightarrow 00:57:27.032$  At the same time, we probably

NOTE Confidence: 0.83678097

 $00:57:27.032 \longrightarrow 00:57:28.760$  cannot really completely extrapolate

NOTE Confidence: 0.83678097

 $00:57:28.834 \longrightarrow 00:57:31.256$  everything we do from the email side,

NOTE Confidence: 0.83678097

 $00:57:31.260 \longrightarrow 00:57:33.260$  we know that the microenvironment,

 $00:57:33.260 \longrightarrow 00:57:35.265$  for example in Milo dysplastic

NOTE Confidence: 0.83678097

 $00:57:35.265 \longrightarrow 00:57:36.869$  syndrome is definitely different.

NOTE Confidence: 0.83678097

 $00:57:36.870 \longrightarrow 00:57:39.600$  We know that the ability of this

NOTE Confidence: 0.83678097

 $00:57:39.600 \longrightarrow 00:57:41.766$  patient to sustain any aggressive

NOTE Confidence: 0.83678097

 $00{:}57{:}41.766 \dashrightarrow 00{:}57{:}44.520$  treatment is definitely less than what

NOTE Confidence: 0.83678097

 $00:57:44.520 \longrightarrow 00:57:47.807$  we see in AML on other malignancy so.

NOTE Confidence: 0.83678097

 $00:57:47.810 \longrightarrow 00:57:49.755$  That's something that we need

NOTE Confidence: 0.83678097

 $00:57:49.755 \longrightarrow 00:57:51.700$  to work on and so.

NOTE Confidence: 0.83678097

 $00:57:51.700 \longrightarrow 00:57:54.598$  The best way we have to deal with this

NOTE Confidence: 0.83678097

 $00{:}57{:}54.598 \dashrightarrow 00{:}57{:}57.700$  HTML file is ready to try to avoid it

NOTE Confidence: 0.83678097

 $00:57:57.700 \longrightarrow 00:58:00.258$  and optimize the frontline treatment.

NOTE Confidence: 0.83678097

 $00:58:00.260 \longrightarrow 00:58:02.330$  We have lots of currently really

NOTE Confidence: 0.83678097

 $00:58:02.330 \longrightarrow 00:58:04.350$  exciting drugs in the pipeline.

NOTE Confidence: 0.83678097

 $00:58:04.350 \longrightarrow 00:58:07.275$  Lots of data that we presented at the Ash

NOTE Confidence: 0.83678097

 $00:58:07.275 \longrightarrow 00:58:10.295$  this year on Venetoclax Magnolia Map team.

 $00:58:10.300 \longrightarrow 00:58:10.998$  Three BitTorrent.

NOTE Confidence: 0.83678097

 $00{:}58{:}10.998 \dashrightarrow 00{:}58{:}14.390$  Amar has been part of some of these studies,

NOTE Confidence: 0.83678097

 $00:58:14.390 \longrightarrow 00:58:17.610$  so statue MBS Field is really moving

NOTE Confidence: 0.83678097

 $00:58:17.610 \longrightarrow 00:58:20.908$  and we hope to see the type of.

NOTE Confidence: 0.83678097

 $00:58:20.910 \longrightarrow 00:58:23.502$  Change in landscape that we have seen over

NOTE Confidence: 0.83678097

 $00:58:23.502 \longrightarrow 00:58:26.606$  at the last year in acute myeloid leukemia.

NOTE Confidence: 0.83678097

00:58:26.610 --> 00:58:27.594 So in conclusion,

NOTE Confidence: 0.83678097

00:58:27.594 --> 00:58:29.562 this this situation of hyper mediating

NOTE Confidence: 0.83678097

 $00{:}58{:}29.562 \dashrightarrow 00{:}58{:}31.388$  agent failure really represent some

NOTE Confidence: 0.83678097

 $00:58:31.388 \longrightarrow 00:58:33.548$  academic challenges we need to improve

NOTE Confidence: 0.83678097

 $00{:}58{:}33.603 \dashrightarrow 00{:}58{:}35.508$  our understanding of the Physiology.

NOTE Confidence: 0.83678097

 $00:58:35.510 \longrightarrow 00:58:37.270$  Pathophysiology of this situation to

NOTE Confidence: 0.83678097

 $00:58:37.270 \longrightarrow 00:58:40.158$  be able to help us to better define

NOTE Confidence: 0.83678097

 $00{:}58{:}40.158 \dashrightarrow 00{:}58{:}42.622$  the standard of care for this patient,

NOTE Confidence: 0.83678097

 $00:58:42.630 \longrightarrow 00:58:45.825$  we need to build resources we need to build,

NOTE Confidence: 0.83678097

 $00{:}58{:}45.830 \dashrightarrow 00{:}58{:}47.306$  represent repository and logical.

00:58:47.306 --> 00:58:49.520 Follow up for this patient which

NOTE Confidence: 0.83678097

 $00:58:49.581 \longrightarrow 00:58:50.979$  is sometimes challenging.

NOTE Confidence: 0.83678097 00:58:50.980 --> 00:58:52.750 I. NOTE Confidence: 0.83678097

 $00:58:52.750 \longrightarrow 00:58:55.294$  In the context of a disease that is

NOTE Confidence: 0.83678097

 $00:58:55.294 \longrightarrow 00:58:57.867$  treated in both small and big centers,

NOTE Confidence: 0.83678097

 $00:58:57.870 \longrightarrow 00:58:59.655$  we need to collaborate around

NOTE Confidence: 0.83678097

 $00:58:59.655 \longrightarrow 00:59:02.262$  academics to be able to really have

NOTE Confidence: 0.83678097

00:59:02.262 --> 00:59:04.524 significant number of patients to be

NOTE Confidence: 0.83678097

 $00:59:04.524 \longrightarrow 00:59:07.100$  able to answer the right question.

NOTE Confidence: 0.83678097

00:59:07.100 --> 00:59:08.786 I also think that it's important

NOTE Confidence: 0.83678097

 $00:59:08.786 \longrightarrow 00:59:11.377$  to keep in mind that there are some

NOTE Confidence: 0.83678097

 $00{:}59{:}11.377 \dashrightarrow 00{:}59{:}13.132$  clinical care challenges for that.

NOTE Confidence: 0.83678097

00:59:13.140 --> 00:59:15.042 The access to innovation to Center

NOTE Confidence: 0.83678097

00:59:15.042 --> 00:59:16.955 of excellence is not something that

NOTE Confidence: 0.83678097

 $00:59:16.955 \longrightarrow 00:59:18.978$  is a modulus in the country or

 $00:59:18.978 \longrightarrow 00:59:20.769$  just a modulus in Connecticut.

NOTE Confidence: 0.83678097

 $00{:}59{:}20.770 \dashrightarrow 00{:}59{:}22.996$  And that's definitely one of the mission.

NOTE Confidence: 0.83678097

 $00{:}59{:}23.000 \dashrightarrow 00{:}59{:}25.574$  I think we have at scale to be able

NOTE Confidence: 0.83678097

 $00:59:25.574 \longrightarrow 00:59:28.128$  to promote the access to innovation

NOTE Confidence: 0.83678097

 $00:59:28.128 \longrightarrow 00:59:31.205$  and promote the access to the Center

NOTE Confidence: 0.83678097

 $00:59:31.205 \longrightarrow 00:59:33.635$  of excellence that that we have.

NOTE Confidence: 0.83678097

 $00{:}59{:}33.640 \dashrightarrow 00{:}59{:}36.016$  We know that patients in Connecticut

NOTE Confidence: 0.83678097

 $00{:}59{:}36.016 \dashrightarrow 00{:}59{:}37.600$  without without snowstorm like

NOTE Confidence: 0.83678097

 $00{:}59{:}37.666 \dashrightarrow 00{:}59{:}39.676$  tomorrow will have potentially some

NOTE Confidence: 0.83678097

 $00:59:39.676 \longrightarrow 00:59:42.090$  some issues limiting the ability to

NOTE Confidence: 0.83678097

00:59:42.090 --> 00:59:44.118 to basically get to academic centers,

NOTE Confidence: 0.83678097

 $00:59:44.120 \longrightarrow 00:59:45.516$  get to clinical trial,

NOTE Confidence: 0.83678097

 $00:59:45.516 \longrightarrow 00:59:48.421$  and so I think that one of the

NOTE Confidence: 0.83678097

00:59:48.421 --> 00:59:50.605 mission that we have as academics

NOTE Confidence: 0.83678097

 $00:59:50.605 \longrightarrow 00:59:54.051$  is also to make sure that we can

NOTE Confidence: 0.83678097

00:59:54.051 --> 00:59:55.368 potentially bring research.

00:59:55.370 --> 00:59:58.040 Bring basically knew therapy and exciting

NOTE Confidence: 0.83678097

 $00:59:58.040 \longrightarrow 01:00:00.655$  therapy to the different sites where

NOTE Confidence: 0.83678097

 $01:00:00.655 \longrightarrow 01:00:03.727$  the patients are treated close to their home.

NOTE Confidence: 0.83678097

01:00:03.730 --> 01:00:07.874 With that I would like to thanks everyone.

NOTE Confidence: 0.83678097

 $01:00:07.880 \longrightarrow 01:00:08.384$  Right?

NOTE Confidence: 0.83678097

01:00:08.384 --> 01:00:11.408 Participate to this effort for sure.

NOTE Confidence: 0.83678097

01:00:11.410 --> 01:00:13.050 The Yellow Cancer Center

NOTE Confidence: 0.83678097

 $01:00:13.050 \longrightarrow 01:00:13.870$  group alphabetically.

NOTE Confidence: 0.83678097

 $01:00:13.870 \longrightarrow 01:00:14.686$  Steve Gore.

NOTE Confidence: 0.83678097

 $01:00:14.686 \longrightarrow 01:00:17.542$  My mentor Stephanie for lot of collaboration.

NOTE Confidence: 0.83678097

01:00:17.550 --> 01:00:17.965 Nicolai,

NOTE Confidence: 0.83678097

01:00:17.965 --> 01:00:20.455 Rory and armor for being such

NOTE Confidence: 0.83678097

 $01{:}00{:}20.455 \dashrightarrow 01{:}00{:}23.353$  trooper an such a great group to

NOTE Confidence: 0.83678097

01:00:23.353 --> 01:00:25.318 work with my dear colleagues,

NOTE Confidence: 0.83678097

 $01:00:25.320 \longrightarrow 01:00:27.370$  colleagues from the group Francophone,

01:00:27.370 --> 01:00:29.006 the Mirror Displays E,

NOTE Confidence: 0.83678097

 $01:00:29.006 \longrightarrow 01:00:31.460$  as well as collaborators in US,

NOTE Confidence: 0.76293355

01:00:31.460 --> 01:00:33.908 Europe. And now I should say,

NOTE Confidence: 0.76293355

01:00:33.910 --> 01:00:35.950 knew K should probably split.

NOTE Confidence: 0.76293355

01:00:35.950 --> 01:00:38.967 You can Europe now two weeks anyway.

NOTE Confidence: 0.76293355

 $01:00:38.970 \longrightarrow 01:00:40.728$  On that I'll take any questions

NOTE Confidence: 0.76293355

01:00:40.728 --> 01:00:43.045 I would like to thank you for

NOTE Confidence: 0.76293355

 $01:00:43.045 \longrightarrow 01:00:44.730$  your attention. Thanks so much.

NOTE Confidence: 0.7688253

 $01{:}00{:}45.920 \longrightarrow 01{:}00{:}48.880$  Sounds fantastic to my thank you so much.

NOTE Confidence: 0.7688253

 $01:00:48.880 \longrightarrow 01:00:53.029$  Really true for some, and MD's and AML and.

NOTE Confidence: 0.7688253

 $01{:}00{:}53.030 \dashrightarrow 01{:}00{:}54.788$  You know, as we are presenting,

NOTE Confidence: 0.7688253

 $01:00:54.790 \longrightarrow 01:00:55.672$  you've actually answered

NOTE Confidence: 0.7688253

01:00:55.672 --> 01:00:56.848 like my burning questions.

NOTE Confidence: 0.7688253

01:00:56.850 --> 01:00:59.964 We just get rid of a society in, you know,

NOTE Confidence: 0.7688253

 $01:00:59.964 \longrightarrow 01:01:03.020$  and use it for salvage after everything else.

NOTE Confidence: 0.7688253

01:01:03.020 --> 01:01:05.018 And that is certainly very exciting

 $01{:}05.018 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 01{:}07.882$  to see how you and the whole team are

NOTE Confidence: 0.7688253

 $01{:}07.882 \to 01{:}01{:}10.480$  going to come up with exciting trials.

NOTE Confidence: 0.7688253

01:01:10.480 --> 01:01:13.522 I think we're a little bit after the hour,

NOTE Confidence: 0.7688253

01:01:13.530 --> 01:01:16.673 but maybe. Say something sad,

NOTE Confidence: 0.7688253

 $01{:}01{:}16.673 \dashrightarrow 01{:}01{:}18.378$  or Nickelodeon request and then

NOTE Confidence: 0.7688253

 $01:01:18.378 \longrightarrow 01:01:20.745$  we have to let people go for two

NOTE Confidence: 0.7688253

01:01:20.745 --> 01:01:22.598 or getting kicked out of the room.

NOTE Confidence: 0.7688253

01:01:22.600 --> 01:01:23.368 Which is correct?

NOTE Confidence: 0.79769796

01:01:25.720 --> 01:01:27.630 No, I think that's definitely

NOTE Confidence: 0.79769796

 $01:01:27.630 \longrightarrow 01:01:30.279$  the HMA is a sign of care,

NOTE Confidence: 0.79769796

 $01:01:30.280 \longrightarrow 01:01:32.560$  but that's not a perfect one.

NOTE Confidence: 0.79769796

 $01:01:32.560 \longrightarrow 01:01:34.460$  So developing new agents or

NOTE Confidence: 0.79769796

01:01:34.460 --> 01:01:35.862 new formulation, for example,

NOTE Confidence: 0.79769796

 $01:01:35.862 \longrightarrow 01:01:38.109$  we have now access to oral formulation

NOTE Confidence: 0.79769796

 $01:01:38.109 \longrightarrow 01:01:40.158$  of these hypomethylating agent.

 $01:01:40.160 \longrightarrow 01:01:42.345$  That's definitely something that we

NOTE Confidence: 0.79769796

 $01{:}01{:}42.345 \dashrightarrow 01{:}01{:}45.233$  want to continue to develop with the

NOTE Confidence: 0.79769796

 $01:01:45.233 \longrightarrow 01:01:47.729$  idea that even if it may not improve

NOTE Confidence: 0.79769796

 $01:01:47.806 \longrightarrow 01:01:50.056$  the response rate or the overall

NOTE Confidence: 0.79769796

01:01:50.056 --> 01:01:52.434 survival and that may be something

NOTE Confidence: 0.79769796

 $01:01:52.434 \longrightarrow 01:01:55.930$  we can discuss as the way we can.

NOTE Confidence: 0.79769796

 $01:01:55.930 \longrightarrow 01:01:58.667$  I use this medication is a bit

NOTE Confidence: 0.79769796

 $01:01:58.667 \longrightarrow 01:01:59.840$  different than conventional

NOTE Confidence: 0.79769796

01:01:59.916 --> 01:02:01.771 accommodating age and we can

NOTE Confidence: 0.79769796

01:02:01.771 --> 01:02:03.970 improve quality of life of the.

NOTE Confidence: 0.79769796

 $01:02:03.970 \longrightarrow 01:02:05.294$  And access to care,

NOTE Confidence: 0.79769796

 $01:02:05.294 \longrightarrow 01:02:06.618$  so that's definitely something

NOTE Confidence: 0.79769796

 $01:02:06.618 \longrightarrow 01:02:08.890$  that is that is important for sure.

NOTE Confidence: 0.7976982

01:02:10.000 --> 01:02:11.416 Yeah, fantastic so Charlie,

NOTE Confidence: 0.7976982

 $01:02:11.416 \longrightarrow 01:02:13.540$  do you want to tell me?

NOTE Confidence: 0.7976982

 $01:02:13.540 \longrightarrow 01:02:15.312$  We probably have to break.

 $01:02:15.312 \longrightarrow 01:02:17.080$  No thank you tomorrow and

NOTE Confidence: 0.7976982

01:02:17.080 --> 01:02:18.849 Nikolai for two superb talks

NOTE Confidence: 0.7976982

 $01:02:18.850 \longrightarrow 01:02:21.326$  really as two to four's on two

NOTE Confidence: 0.7976982

 $01:02:21.326 \longrightarrow 01:02:23.099$  important areas of human logic.

NOTE Confidence: 0.7976982

01:02:23.100 --> 01:02:25.419 Malignancy's, thank you.

NOTE Confidence: 0.7976982

 $01:02:25.420 \longrightarrow 01:02:26.311$  Thank you alright.

NOTE Confidence: 0.7976982

 $01:02:26.311 \longrightarrow 01:02:28.844$  Well thank you so much and look forward

NOTE Confidence: 0.7976982

 $01:02:28.844 \longrightarrow 01:02:30.779$  to tackling these problems over

NOTE Confidence: 0.81829655

 $01:02:30.780 \longrightarrow 01:02:32.120$  the years. Thank you.

NOTE Confidence: 0.81829655

 $01:02:32.120 \longrightarrow 01:02:33.460$  Thanks everyone. Alright bye.