

WEBVTT

NOTE duration:"01:00:04"

NOTE recognizability:0.952

NOTE language:en-us

NOTE Confidence: 0.978871968461538

00:00:00.000 --> 00:00:02.574 For joining us tonight on this

NOTE Confidence: 0.978871968461538

00:00:02.574 --> 00:00:05.810 evening is a smaller shares a lecture.

NOTE Confidence: 0.978871968461538

00:00:05.810 --> 00:00:09.668 Tonight we will be discussing and lymphoma

NOTE Confidence: 0.978871968461538

00:00:09.668 --> 00:00:13.380 understanding new treatment advances.

NOTE Confidence: 0.978871968461538

00:00:13.380 --> 00:00:15.430 So for many of you who may not know me,

NOTE Confidence: 0.978871968461538

00:00:15.430 --> 00:00:18.251 I'm suddenly and one of the uncommon

NOTE Confidence: 0.978871968461538

00:00:18.251 --> 00:00:20.119 medical oncologist at Greenwich

NOTE Confidence: 0.978871968461538

00:00:20.119 --> 00:00:22.044 Hospital Smilow Cancer Center.

NOTE Confidence: 0.978871968461538

00:00:22.044 --> 00:00:24.718 And we are very happy and privileged

NOTE Confidence: 0.978871968461538

00:00:24.718 --> 00:00:27.614 to have doctor Francine files and

NOTE Confidence: 0.978871968461538

00:00:27.614 --> 00:00:30.054 Doctor Francesco Montanari joining us.

NOTE Confidence: 0.978871968461538

00:00:30.060 --> 00:00:32.258 Dr Fauci is a professor medicine in

NOTE Confidence: 0.978871968461538

00:00:32.258 --> 00:00:34.259 the section of medical oncology at

NOTE Confidence: 0.978871968461538

00:00:34.259 --> 00:00:37.162 the Yale Cancer Center and she is an
NOTE Confidence: 0.978871968461538

00:00:37.162 --> 00:00:39.194 internationally recognized clinician and
NOTE Confidence: 0.978871968461538

00:00:39.194 --> 00:00:41.734 clinical researcher with expertise in
NOTE Confidence: 0.978871968461538

00:00:41.740 --> 00:00:44.526 adult lymphoma and in stem Cell Alley.
NOTE Confidence: 0.978871968461538

00:00:44.530 --> 00:00:45.556 Transported transplantation,
NOTE Confidence: 0.978871968461538

00:00:45.556 --> 00:00:48.634 she has tried and tested therapies
NOTE Confidence: 0.978871968461538

00:00:48.634 --> 00:00:51.844 that have been used to treat thousands
NOTE Confidence: 0.978871968461538

00:00:51.844 --> 00:00:53.110 of cancer patients.
NOTE Confidence: 0.978871968461538

00:00:53.110 --> 00:00:55.420 And her research has potential
NOTE Confidence: 0.978871968461538

00:00:55.420 --> 00:00:57.730 to substantially impact the field
NOTE Confidence: 0.978871968461538

00:00:57.803 --> 00:00:59.968 of stem cell research benefiting
NOTE Confidence: 0.978871968461538

00:00:59.968 --> 00:01:02.930 patients at Yale and around the world.
NOTE Confidence: 0.978871968461538

00:01:02.930 --> 00:01:04.290 That our own Dr.
NOTE Confidence: 0.978871968461538

00:01:04.290 --> 00:01:06.330 Mountain Airy joined the our Smile
NOTE Confidence: 0.978871968461538

00:01:06.397 --> 00:01:08.593 of Kansas Hospital here at Greenwich
NOTE Confidence: 0.978871968461538

00:01:08.593 --> 00:01:09.710 at last year's.

NOTE Confidence: 0.978871968461538
00:01:09.710 --> 00:01:11.610 She's an assistant professor of
NOTE Confidence: 0.978871968461538
00:01:11.610 --> 00:01:13.663 clinical medicine and cares for
NOTE Confidence: 0.978871968461538
00:01:13.663 --> 00:01:15.567 patients with hematologic malignancies
NOTE Confidence: 0.978871968461538
00:01:15.570 --> 00:01:18.594 and she joined us from Columbia.
NOTE Confidence: 0.978871968461538
00:01:18.594 --> 00:01:21.730 Columbia Presbyterian Medical Center.
NOTE Confidence: 0.978871968461538
00:01:21.730 --> 00:01:22.157 Well,
NOTE Confidence: 0.978871968461538
00:01:22.157 --> 00:01:24.719 she was an assistant professor of
NOTE Confidence: 0.978871968461538
00:01:24.719 --> 00:01:26.920 medicine and experimental therapeutics.
NOTE Confidence: 0.978871968461538
00:01:26.920 --> 00:01:29.105 She received her medical degree
NOTE Confidence: 0.978871968461538
00:01:29.105 --> 00:01:31.773 from University of Pavia and she
NOTE Confidence: 0.978871968461538
00:01:31.773 --> 00:01:33.778 where she graduated Magna ***
NOTE Confidence: 0.978871968461538
00:01:33.780 --> 00:01:36.150 Lauda and completed her residency
NOTE Confidence: 0.978871968461538
00:01:36.150 --> 00:01:38.520 and fellowship at New University,
NOTE Confidence: 0.978871968461538
00:01:38.520 --> 00:01:40.360 where she was awarded the
NOTE Confidence: 0.978871968461538
00:01:40.360 --> 00:01:42.474 fellow Year Teaching award so.
NOTE Confidence: 0.978871968461538

00:01:42.474 --> 00:01:45.644 A few housekeeping tips before
NOTE Confidence: 0.978871968461538

00:01:45.644 --> 00:01:47.546 we get started,
NOTE Confidence: 0.978871968461538

00:01:47.550 --> 00:01:49.342 we would like everybody to be make sure
NOTE Confidence: 0.978871968461538

00:01:49.342 --> 00:01:51.000 that they're muted throughout the event.
NOTE Confidence: 0.978871968461538

00:01:51.000 --> 00:01:52.020 Once we start,
NOTE Confidence: 0.978871968461538

00:01:52.020 --> 00:01:54.960 we welcome you to ask questions by typing,
NOTE Confidence: 0.978871968461538

00:01:54.960 --> 00:01:56.640 typing them into the Q&A button
NOTE Confidence: 0.978871968461538

00:01:56.640 --> 00:01:58.520 at the bottom of your screen.
NOTE Confidence: 0.978871968461538

00:01:58.520 --> 00:02:00.020 At any point in the lecture,
NOTE Confidence: 0.978871968461538

00:02:00.020 --> 00:02:01.876 and we will save some time at the
NOTE Confidence: 0.978871968461538

00:02:01.876 --> 00:02:03.738 end to answer those questions.
NOTE Confidence: 0.978871968461538

00:02:03.740 --> 00:02:07.040 Thank you very much for joining us and
NOTE Confidence: 0.978871968461538

00:02:07.040 --> 00:02:10.490 let's allow me to get get get it started.
NOTE Confidence: 0.919683116666667

00:02:20.750 --> 00:02:23.468 So lymphoma, then farmers are cancer
NOTE Confidence: 0.919683116666667

00:02:23.468 --> 00:02:26.880 of or from the lymphatic system.
NOTE Confidence: 0.919683116666667

00:02:26.880 --> 00:02:30.592 It is a relatively uncommon cancer from the

NOTE Confidence: 0.919683116666667

00:02:30.592 --> 00:02:35.038 annual incidence is about 81,000 new cases.

NOTE Confidence: 0.919683116666667

00:02:35.040 --> 00:02:38.480 That makes up about 4% of all new cancer

NOTE Confidence: 0.919683116666667

00:02:38.480 --> 00:02:40.800 cases in our country and approximately

NOTE Confidence: 0.919683116666667

00:02:40.800 --> 00:02:43.500 20,000 people are projected to die

NOTE Confidence: 0.919683116666667

00:02:43.500 --> 00:02:47.150 from this illness this year alone.

NOTE Confidence: 0.919683116666667

00:02:47.150 --> 00:02:50.469 So this is just a diagram of what

NOTE Confidence: 0.919683116666667

00:02:50.469 --> 00:02:52.934 a lymphatic system looks like.

NOTE Confidence: 0.919683116666667

00:02:52.940 --> 00:02:55.495 I'd like to say that the lymphatic

NOTE Confidence: 0.919683116666667

00:02:55.495 --> 00:02:57.493 system anyway mirrors our circulatory

NOTE Confidence: 0.919683116666667

00:02:57.493 --> 00:02:59.989 system that covers our entire body.

NOTE Confidence: 0.919683116666667

00:02:59.990 --> 00:03:01.178 Unlike circuit or system,

NOTE Confidence: 0.919683116666667

00:03:01.178 --> 00:03:02.960 though it doesn't have a center.

NOTE Confidence: 0.919683116666667

00:03:02.960 --> 00:03:04.592 You know for the circuit or system is

NOTE Confidence: 0.919683116666667

00:03:04.592 --> 00:03:06.327 a heart that's the center of it all.

NOTE Confidence: 0.919683116666667

00:03:06.330 --> 00:03:07.810 Instead of lymphatic system,

NOTE Confidence: 0.919683116666667

00:03:07.810 --> 00:03:10.438 have few key organs such as the
NOTE Confidence: 0.919683116666667

00:03:10.438 --> 00:03:12.797 spleen and the famous and the bone
NOTE Confidence: 0.919683116666667

00:03:12.797 --> 00:03:14.929 marrow which is not included here.
NOTE Confidence: 0.919683116666667

00:03:14.930 --> 00:03:16.900 And I kind of like.
NOTE Confidence: 0.919683116666667

00:03:16.900 --> 00:03:19.321 To look at it as a like a subway
NOTE Confidence: 0.919683116666667

00:03:19.321 --> 00:03:22.047 map of the New York City are
NOTE Confidence: 0.919683116666667

00:03:22.047 --> 00:03:23.631 covering the entire surface.
NOTE Confidence: 0.919683116666667

00:03:23.640 --> 00:03:26.032 Start covering the entire
NOTE Confidence: 0.919683116666667

00:03:26.032 --> 00:03:28.550 body with nodes like stations.
NOTE Confidence: 0.919683116666667

00:03:28.550 --> 00:03:31.190 And cancel that can develop cancer
NOTE Confidence: 0.919683116666667

00:03:31.190 --> 00:03:33.528 that develops anywhere in the
NOTE Confidence: 0.919683116666667

00:03:33.528 --> 00:03:36.258 lymphatic system would be a lymphoma.
NOTE Confidence: 0.919683116666667

00:03:36.260 --> 00:03:38.810 And as Doctor Fauci will discuss,
NOTE Confidence: 0.919683116666667

00:03:38.810 --> 00:03:40.825 not only can the cancers
NOTE Confidence: 0.919683116666667

00:03:40.825 --> 00:03:42.437 developing these lymphatic glands,
NOTE Confidence: 0.919683116666667

00:03:42.440 --> 00:03:45.064 but they can also be found in our

NOTE Confidence: 0.919683116666667
00:03:45.064 --> 00:03:47.800 skin as well as mucosal services.
NOTE Confidence: 0.919683116666667
00:03:47.800 --> 00:03:49.035 And because of surfaces are
NOTE Confidence: 0.919683116666667
00:03:49.035 --> 00:03:50.896 parts of our body that come into
NOTE Confidence: 0.919683116666667
00:03:50.896 --> 00:03:52.048 contact with the outside.
NOTE Confidence: 0.988215906666667
00:03:54.740 --> 00:03:56.960 When we Christians think about informal,
NOTE Confidence: 0.988215906666667
00:03:56.960 --> 00:03:59.102 we divide them broadly into two
NOTE Confidence: 0.988215906666667
00:03:59.102 --> 00:04:00.720 separate groups, Hodgkin's lymphoma
NOTE Confidence: 0.988215906666667
00:04:00.720 --> 00:04:02.520 and non Hodgkin's lymphoma.
NOTE Confidence: 0.988215906666667
00:04:02.520 --> 00:04:04.977 Essentially in a simplistic way based on
NOTE Confidence: 0.988215906666667
00:04:04.977 --> 00:04:07.727 where their former selves derived from on
NOTE Confidence: 0.988215906666667
00:04:07.727 --> 00:04:10.709 this evening will be discussing mainly
NOTE Confidence: 0.988215906666667
00:04:10.709 --> 00:04:14.408 on about the non Hodgkin's lymphoma.
NOTE Confidence: 0.988215906666667
00:04:14.410 --> 00:04:16.723 And then on houses in the former can be
NOTE Confidence: 0.988215906666667
00:04:16.723 --> 00:04:18.626 further divided into B cell lymphoma,
NOTE Confidence: 0.988215906666667
00:04:18.630 --> 00:04:19.422 T cell lymphoma.
NOTE Confidence: 0.988215906666667

00:04:19.422 --> 00:04:23.112 And I, I suppose third category would be
NOTE Confidence: 0.988215906666667

00:04:23.112 --> 00:04:26.350 something called NK natural killer cell.
NOTE Confidence: 0.988215906666667

00:04:26.350 --> 00:04:30.602 Killer cells the that these two
NOTE Confidence: 0.988215906666667

00:04:30.602 --> 00:04:33.142 Doctor Montanari will discuss the
NOTE Confidence: 0.988215906666667

00:04:33.142 --> 00:04:36.437 advances in B cell lymphoma and doctor
NOTE Confidence: 0.988215906666667

00:04:36.437 --> 00:04:39.070 Fossil discussed AT cell lymphoma.
NOTE Confidence: 0.988215906666667

00:04:39.070 --> 00:04:41.630 Just a quick word before.
NOTE Confidence: 0.988215906666667

00:04:41.630 --> 00:04:45.278 We start our discussion.
NOTE Confidence: 0.988215906666667

00:04:45.280 --> 00:04:47.278 As many of you may know,
NOTE Confidence: 0.988215906666667

00:04:47.280 --> 00:04:50.445 chemotherapy has been utilized the
NOTE Confidence: 0.988215906666667

00:04:50.445 --> 00:04:53.610 treatment of malignancies for UM.
NOTE Confidence: 0.988215906666667

00:04:53.610 --> 00:04:59.193 I suppose since the 1950s and until 1997,
NOTE Confidence: 0.988215906666667

00:04:59.193 --> 00:05:01.258 treatment for lymphoma has been
NOTE Confidence: 0.988215906666667

00:05:01.258 --> 00:05:02.084 fairly consistent.
NOTE Confidence: 0.988215906666667

00:05:02.090 --> 00:05:04.814 Component made up of similar type
NOTE Confidence: 0.988215906666667

00:05:04.814 --> 00:05:07.074 of non specific medication that

NOTE Confidence: 0.988215906666667

00:05:07.074 --> 00:05:09.276 at times could be very toxic,

NOTE Confidence: 0.988215906666667

00:05:09.280 --> 00:05:12.934 toxic and in 1997 a new way of treating

NOTE Confidence: 0.988215906666667

00:05:12.934 --> 00:05:16.106 the foremost developed a medication

NOTE Confidence: 0.988215906666667

00:05:16.106 --> 00:05:18.521 called Rituxan overtaking map and

NOTE Confidence: 0.988215906666667

00:05:18.521 --> 00:05:21.336 thereafter many new advances in our

NOTE Confidence: 0.988215906666667

00:05:21.336 --> 00:05:24.353 call in oncology and specific treatment of.

NOTE Confidence: 0.988215906666667

00:05:24.360 --> 00:05:26.415 The former has followed and

NOTE Confidence: 0.988215906666667

00:05:26.415 --> 00:05:28.059 now without further ado,

NOTE Confidence: 0.988215906666667

00:05:28.060 --> 00:05:30.468 I'd like to present Dr Monk Montanari,

NOTE Confidence: 0.988215906666667

00:05:30.470 --> 00:05:32.270 who will discuss abuse,

NOTE Confidence: 0.988215906666667

00:05:32.270 --> 00:05:34.150 such offences, NPC lymphoma.

NOTE Confidence: 0.975534985

00:05:37.120 --> 00:05:42.120 I share my screen. So that we can be we want.

NOTE Confidence: 0.9899415

00:05:45.850 --> 00:05:51.050 Perfect so uhm. I will go through.

NOTE Confidence: 0.9899415

00:05:51.050 --> 00:05:52.902 Then a new treatment

NOTE Confidence: 0.9899415

00:05:52.902 --> 00:05:54.754 advances for visa lymphoma.

NOTE Confidence: 0.9899415

00:05:54.760 --> 00:05:57.105 Uh, my will start just briefly revealing
NOTE Confidence: 0.9899415

00:05:57.105 --> 00:05:59.310 the classification of non Hodgkin lymphoma,
NOTE Confidence: 0.9899415

00:05:59.310 --> 00:06:01.182 and then we'll review the treatment
NOTE Confidence: 0.9899415

00:06:01.182 --> 00:06:03.209 paradigm and what's new for aggressive
NOTE Confidence: 0.9899415

00:06:03.209 --> 00:06:06.009 in England lymphoma and right now
NOTE Confidence: 0.9899415

00:06:06.009 --> 00:06:09.447 we're using the word that organization
NOTE Confidence: 0.9899415

00:06:09.447 --> 00:06:11.572 classification from 2016 and this
NOTE Confidence: 0.9899415

00:06:11.572 --> 00:06:13.816 is the device for the addition.
NOTE Confidence: 0.9899415

00:06:13.820 --> 00:06:17.956 There are over 60 subtypes of non Hodgkin
NOTE Confidence: 0.9899415

00:06:17.956 --> 00:06:21.298 lymphoma and at every provision new.
NOTE Confidence: 0.9899415

00:06:21.300 --> 00:06:23.092 Subtypes are added up.
NOTE Confidence: 0.9899415

00:06:23.092 --> 00:06:25.332 I just went up up.
NOTE Confidence: 0.9899415

00:06:25.340 --> 00:06:28.815 I got your attention that if you start
NOTE Confidence: 0.9899415

00:06:28.815 --> 00:06:30.890 with selling common follicular lymphoma
NOTE Confidence: 0.9899415

00:06:30.890 --> 00:06:33.393 this only these two types constitute
NOTE Confidence: 0.9899415

00:06:33.393 --> 00:06:37.050 more than 50% of non Hodgkin lymphoma

NOTE Confidence: 0.9899415

00:06:37.050 --> 00:06:39.900 and therefore the other subtypes.

NOTE Confidence: 0.9899415

00:06:39.900 --> 00:06:41.916 The numbers for the other subtypes

NOTE Confidence: 0.9899415

00:06:41.916 --> 00:06:43.719 gets smaller and smaller in red.

NOTE Confidence: 0.9899415

00:06:43.720 --> 00:06:46.378 I highlighted the T cell lymphomas

NOTE Confidence: 0.9899415

00:06:46.378 --> 00:06:49.089 which are much more uncommon than

NOTE Confidence: 0.9899415

00:06:49.089 --> 00:06:52.085 the visa and when we think about.

NOTE Confidence: 0.9899415

00:06:52.090 --> 00:06:52.589 Lymphoma.

NOTE Confidence: 0.9899415

00:06:52.589 --> 00:06:55.583 We think about aggressive lymphoma and

NOTE Confidence: 0.9899415

00:06:55.583 --> 00:06:58.799 England comma and this is important

NOTE Confidence: 0.9899415

00:06:58.799 --> 00:07:01.539 repercussion on the treatment paradigms.

NOTE Confidence: 0.9899415

00:07:01.540 --> 00:07:03.982 And so when we talk about

NOTE Confidence: 0.9899415

00:07:03.982 --> 00:07:04.796 aggressive lymphoma,

NOTE Confidence: 0.9899415

00:07:04.800 --> 00:07:07.770 we think about lymphoma that are

NOTE Confidence: 0.9899415

00:07:07.770 --> 00:07:09.750 potentially curable with the

NOTE Confidence: 0.9899415

00:07:09.832 --> 00:07:12.388 intensive immunochemotherapy and

NOTE Confidence: 0.9899415

00:07:12.388 --> 00:07:14.620 sometimes a consideration with
NOTE Confidence: 0.9899415

00:07:14.620 --> 00:07:16.460 autologous stem cell transplant.
NOTE Confidence: 0.9899415

00:07:16.460 --> 00:07:19.280 These are lymphoma that poison an
NOTE Confidence: 0.9899415

00:07:19.280 --> 00:07:21.641 immediate threat to patients life
NOTE Confidence: 0.9899415

00:07:21.641 --> 00:07:24.053 and need to be aggressively treated
NOTE Confidence: 0.9899415

00:07:24.053 --> 00:07:27.307 and when the most common of these
NOTE Confidence: 0.9899415

00:07:27.307 --> 00:07:29.279 aggressive lymphoma is diffuse,
NOTE Confidence: 0.9899415

00:07:29.280 --> 00:07:32.148 large B cell lymphoma, that alone.
NOTE Confidence: 0.9899415

00:07:32.150 --> 00:07:34.958 And constitute a third of all
NOTE Confidence: 0.9899415

00:07:34.958 --> 00:07:36.830 that non Hodgkin lymphoma.
NOTE Confidence: 0.9899415

00:07:36.830 --> 00:07:38.918 Uhm, says the most common subtype.
NOTE Confidence: 0.9899415

00:07:38.920 --> 00:07:40.936 This is only something funny about
NOTE Confidence: 0.9899415

00:07:40.940 --> 00:07:44.324 25,000 cases per year in EU S and
NOTE Confidence: 0.9899415

00:07:44.324 --> 00:07:47.290 is usually diagnosed in stage 4.
NOTE Confidence: 0.9899415

00:07:47.290 --> 00:07:50.095 We are usually considered historic
NOTE Confidence: 0.9899415

00:07:50.095 --> 00:07:52.900 stratify patients based on design,

NOTE Confidence: 0.9899415
00:07:52.900 --> 00:07:54.515 international prognostic index based on
NOTE Confidence: 0.9899415
00:07:54.515 --> 00:07:57.579 age and the age at presentation performance,
NOTE Confidence: 0.9899415
00:07:57.580 --> 00:07:58.810 status stage,
NOTE Confidence: 0.9899415
00:07:58.810 --> 00:08:01.885 and number of extranodal disease
NOTE Confidence: 0.9899415
00:08:01.885 --> 00:08:04.584 psych you see, prognosis varies,
NOTE Confidence: 0.9899415
00:08:04.584 --> 00:08:07.710 and it is excellent for patients
NOTE Confidence: 0.9899415
00:08:07.803 --> 00:08:10.188 with that low risk disease.
NOTE Confidence: 0.9899415
00:08:10.190 --> 00:08:13.322 91% patients are alive for year
NOTE Confidence: 0.9899415
00:08:13.322 --> 00:08:15.770 after and potentially cured up.
NOTE Confidence: 0.9899415
00:08:15.770 --> 00:08:17.410 This number gets lower and
NOTE Confidence: 0.9899415
00:08:17.410 --> 00:08:18.394 lower with additional.
NOTE Confidence: 0.9899415
00:08:18.400 --> 00:08:21.965 Factors that we need to make things
NOTE Confidence: 0.9899415
00:08:21.965 --> 00:08:23.460 a little bit more complicated.
NOTE Confidence: 0.9899415
00:08:23.460 --> 00:08:25.220 Now we know that if you start to be selling,
NOTE Confidence: 0.9899415
00:08:25.220 --> 00:08:28.007 former doesn't come in one flavor through
NOTE Confidence: 0.9899415

00:08:28.007 --> 00:08:31.289 the utilization of gene expression profile.
NOTE Confidence: 0.9899415

00:08:31.290 --> 00:08:33.166 We know that we have germinal Center
NOTE Confidence: 0.9899415

00:08:33.166 --> 00:08:35.260 B cell like lymphoma and activity,
NOTE Confidence: 0.9899415

00:08:35.260 --> 00:08:36.264 peaceful life.
NOTE Confidence: 0.9899415

00:08:36.264 --> 00:08:38.964 That's two main categories of diffusers,
NOTE Confidence: 0.9899415

00:08:38.964 --> 00:08:39.760 Mr Lymphoma,
NOTE Confidence: 0.9899415

00:08:39.760 --> 00:08:42.028 that at the expression of different genes
NOTE Confidence: 0.9899415

00:08:42.028 --> 00:08:44.357 and that translate in a different behavior.
NOTE Confidence: 0.9899415

00:08:44.360 --> 00:08:47.078 These are survival curves based on
NOTE Confidence: 0.9899415

00:08:47.080 --> 00:08:48.685 germinal center and activity missile
NOTE Confidence: 0.9899415

00:08:48.685 --> 00:08:51.270 like and as you see Germinal Center.
NOTE Confidence: 0.9899415

00:08:51.270 --> 00:08:55.785 Time to do better with current treatments.
NOTE Confidence: 0.9899415

00:08:55.790 --> 00:08:58.870 As Doctor Lee mentioned at the beginning,
NOTE Confidence: 0.9899415

00:08:58.870 --> 00:09:03.376 the treatment paradigm for lymphoma and
NOTE Confidence: 0.9899415

00:09:03.376 --> 00:09:06.424 is relatively old chop chemotherapy.
NOTE Confidence: 0.9899415

00:09:06.424 --> 00:09:09.203 They want we currently use for these

NOTE Confidence: 0.9899415

00:09:09.203 --> 00:09:11.368 subtypes of disease has been introduced

NOTE Confidence: 0.9899415

00:09:11.368 --> 00:09:14.800 in 1976 and it was not until 1997.

NOTE Confidence: 0.9899415

00:09:14.800 --> 00:09:17.620 Then the taxing on the first

NOTE Confidence: 0.9899415

00:09:17.620 --> 00:09:19.030 UM monoclonal antibody,

NOTE Confidence: 0.9899415

00:09:19.030 --> 00:09:21.538 the first targeted drug for cancer.

NOTE Confidence: 0.9899415

00:09:21.540 --> 00:09:24.060 Was approved as you see here.

NOTE Confidence: 0.9899415

00:09:24.060 --> 00:09:25.221 Clearly taxi map.

NOTE Confidence: 0.9899415

00:09:25.221 --> 00:09:27.156 These are the overall survival.

NOTE Confidence: 0.9899415

00:09:27.160 --> 00:09:29.420 Curves are based on the

NOTE Confidence: 0.9899415

00:09:29.420 --> 00:09:30.776 international prognostic score.

NOTE Confidence: 0.972503282307692

00:09:30.780 --> 00:09:32.978 The risk factors that I showed you

NOTE Confidence: 0.972503282307692

00:09:32.978 --> 00:09:34.909 before and after the taxi model.

NOTE Confidence: 0.972503282307692

00:09:34.910 --> 00:09:36.770 This survival costs have

NOTE Confidence: 0.972503282307692

00:09:36.770 --> 00:09:38.630 been lifted up nicely,

NOTE Confidence: 0.972503282307692

00:09:38.630 --> 00:09:40.560 but since then several efforts

NOTE Confidence: 0.972503282307692

00:09:40.560 --> 00:09:43.120 have been done to improve further,
NOTE Confidence: 0.972503282307692

00:09:43.120 --> 00:09:45.562 more disturbed, and they did not
NOTE Confidence: 0.972503282307692

00:09:45.562 --> 00:09:48.958 translate into a new standard of treatment.
NOTE Confidence: 0.972503282307692

00:09:48.960 --> 00:09:51.815 Uh, there have been studies
NOTE Confidence: 0.972503282307692

00:09:51.815 --> 00:09:53.528 comparing more intensive.
NOTE Confidence: 0.972503282307692

00:09:53.530 --> 00:09:55.885 Treatment chemotherapy treatment options such
NOTE Confidence: 0.972503282307692

00:09:55.885 --> 00:09:59.518 as those adjusted on April compared to CHOP.
NOTE Confidence: 0.972503282307692

00:09:59.518 --> 00:10:01.648 There have been attempts to
NOTE Confidence: 0.972503282307692

00:10:01.648 --> 00:10:03.257 incorporate targeted new targeted
NOTE Confidence: 0.972503282307692

00:10:03.257 --> 00:10:05.665 agents into the arch of a backbone,
NOTE Confidence: 0.972503282307692

00:10:05.670 --> 00:10:07.490 but all these studies didn't
NOTE Confidence: 0.972503282307692

00:10:07.490 --> 00:10:10.000 translate in a in a benefit,
NOTE Confidence: 0.972503282307692

00:10:10.000 --> 00:10:12.610 and therefore, as of 2021,
NOTE Confidence: 0.972503282307692

00:10:12.610 --> 00:10:14.370 this current standard of
NOTE Confidence: 0.972503282307692

00:10:14.370 --> 00:10:16.516 care remain are chopped up.
NOTE Confidence: 0.972503282307692

00:10:16.516 --> 00:10:18.832 There's a lot of expectation from

NOTE Confidence: 0.972503282307692

00:10:18.832 --> 00:10:20.986 the upcoming American Society of

NOTE Confidence: 0.972503282307692

00:10:20.986 --> 00:10:22.842 Hematology meeting regarding the

NOTE Confidence: 0.972503282307692

00:10:22.842 --> 00:10:25.099 staff regarding the results of a.

NOTE Confidence: 0.972503282307692

00:10:25.100 --> 00:10:27.740 Studies comparing your child with

NOTE Confidence: 0.972503282307692

00:10:27.740 --> 00:10:30.356 a newer targeted drug with R.

NOTE Confidence: 0.972503282307692

00:10:30.360 --> 00:10:31.856 Chop the polarised rider,

NOTE Confidence: 0.972503282307692

00:10:31.856 --> 00:10:34.759 but it does not start not out yet.

NOTE Confidence: 0.972503282307692

00:10:34.760 --> 00:10:38.156 Uhm, beyond first line of treatment.

NOTE Confidence: 0.972503282307692

00:10:38.160 --> 00:10:40.344 So patients that do not respond

NOTE Confidence: 0.972503282307692

00:10:40.344 --> 00:10:42.524 or relapse after first line can

NOTE Confidence: 0.972503282307692

00:10:42.524 --> 00:10:44.468 still be cure and typically about

NOTE Confidence: 0.972503282307692

00:10:44.468 --> 00:10:47.077 20 to 40 patients can cure can

NOTE Confidence: 0.972503282307692

00:10:47.077 --> 00:10:48.967 be heard with the chemotherapy,

NOTE Confidence: 0.972503282307692

00:10:48.970 --> 00:10:52.448 such as the platinum based or

NOTE Confidence: 0.972503282307692

00:10:52.448 --> 00:10:54.698 gemcitabine based chemotherapy and

NOTE Confidence: 0.972503282307692

00:10:54.698 --> 00:10:56.530 autologous stem cell transplant.
NOTE Confidence: 0.972503282307692

00:10:56.530 --> 00:10:58.315 But unfortunately only a minority
NOTE Confidence: 0.972503282307692

00:10:58.315 --> 00:11:00.644 of patients end up liking receiving
NOTE Confidence: 0.972503282307692

00:11:00.644 --> 00:11:02.580 this intensive chemotherapy treatment
NOTE Confidence: 0.972503282307692

00:11:02.580 --> 00:11:05.000 because of age or comorbidities.
NOTE Confidence: 0.972503282307692

00:11:05.000 --> 00:11:07.334 Patients who do not respond to
NOTE Confidence: 0.972503282307692

00:11:07.334 --> 00:11:09.350 summer sterope or relapse after
NOTE Confidence: 0.972503282307692

00:11:09.350 --> 00:11:11.260 the Alex Cancer transplant are
NOTE Confidence: 0.972503282307692

00:11:11.260 --> 00:11:13.840 very likely to die from lymphoma,
NOTE Confidence: 0.972503282307692

00:11:13.840 --> 00:11:16.952 so a lot of research has been done
NOTE Confidence: 0.972503282307692

00:11:16.952 --> 00:11:19.589 to provide more options to this
NOTE Confidence: 0.972503282307692

00:11:19.589 --> 00:11:22.850 patient and over the past five years.
NOTE Confidence: 0.972503282307692

00:11:22.850 --> 00:11:25.251 A lot of new option had been
NOTE Confidence: 0.972503282307692

00:11:25.251 --> 00:11:26.680 approved as you see.
NOTE Confidence: 0.972503282307692

00:11:26.680 --> 00:11:30.238 Here at summarized cymatic antigen receptor,
NOTE Confidence: 0.972503282307692

00:11:30.240 --> 00:11:33.162 T cell three products have been

NOTE Confidence: 0.972503282307692
00:11:33.162 --> 00:11:36.600 approved since 2017 and then there
NOTE Confidence: 0.972503282307692
00:11:36.600 --> 00:11:39.675 are newer drugs targeted drugs.
NOTE Confidence: 0.972503282307692
00:11:39.680 --> 00:11:41.870 Three of them are monoclonal antibodies,
NOTE Confidence: 0.972503282307692
00:11:41.870 --> 00:11:44.438 two of which are antibody drug
NOTE Confidence: 0.972503282307692
00:11:44.438 --> 00:11:47.640 conjugated and one is a small molecule,
NOTE Confidence: 0.972503282307692
00:11:47.640 --> 00:11:49.575 and we'll see a little bit more in details.
NOTE Confidence: 0.972503282307692
00:11:49.580 --> 00:11:51.636 What are these cameras?
NOTE Confidence: 0.972503282307692
00:11:51.636 --> 00:11:53.460 Antigen receptor T cells?
NOTE Confidence: 0.972503282307692
00:11:53.460 --> 00:11:53.986 Essentially,
NOTE Confidence: 0.972503282307692
00:11:53.986 --> 00:11:56.090 these artists from patients
NOTE Confidence: 0.972503282307692
00:11:56.090 --> 00:11:57.668 that are collected.
NOTE Confidence: 0.972503282307692
00:11:57.670 --> 00:12:00.350 From and isolated from the blood of patients,
NOTE Confidence: 0.972503282307692
00:12:00.350 --> 00:12:02.070 they are sent to facility
NOTE Confidence: 0.972503282307692
00:12:02.070 --> 00:12:03.238 where they're sorted.
NOTE Confidence: 0.972503282307692
00:12:03.238 --> 00:12:06.106 The engineer the utilizing an active
NOTE Confidence: 0.972503282307692

00:12:06.106 --> 00:12:09.340 virus to insert genes and to make
NOTE Confidence: 0.972503282307692

00:12:09.340 --> 00:12:11.920 them express a special receptor that
NOTE Confidence: 0.972503282307692

00:12:12.002 --> 00:12:14.786 is called the car and undersurface.
NOTE Confidence: 0.972503282307692

00:12:14.790 --> 00:12:17.140 Then B cells are extended.
NOTE Confidence: 0.972503282307692

00:12:17.140 --> 00:12:19.232 Patient receive an immunosuppressive
NOTE Confidence: 0.972503282307692

00:12:19.232 --> 00:12:21.923 treatment in preparation of receiving
NOTE Confidence: 0.972503282307692

00:12:21.923 --> 00:12:25.308 these cells to create a favorable
NOTE Confidence: 0.972503282307692

00:12:25.308 --> 00:12:27.816 environment for this out to tribe.
NOTE Confidence: 0.972503282307692

00:12:27.820 --> 00:12:28.978 And then the sound was there,
NOTE Confidence: 0.972503282307692

00:12:28.980 --> 00:12:30.988 infused in the body.
NOTE Confidence: 0.972503282307692

00:12:30.988 --> 00:12:34.000 A targeted cancer cell and caused
NOTE Confidence: 0.972503282307692

00:12:34.000 --> 00:12:37.388 the death on the the cancer cell.
NOTE Confidence: 0.972503282307692

00:12:37.390 --> 00:12:37.717 Nice,
NOTE Confidence: 0.972503282307692

00:12:37.717 --> 00:12:38.044 some.
NOTE Confidence: 0.972503282307692

00:12:38.044 --> 00:12:41.000 Some of these cells are able to persist in
NOTE Confidence: 0.972503282307692

00:12:41.000 --> 00:12:43.421 the body for some for a period of time,

NOTE Confidence: 0.972503282307692
00:12:43.430 --> 00:12:45.134 helping with immunosurveillance.
NOTE Confidence: 0.972503282307692
00:12:45.134 --> 00:12:49.110 So this is a really knew technology.
NOTE Confidence: 0.972503282307692
00:12:49.110 --> 00:12:51.738 And since the approval of the
NOTE Confidence: 0.972503282307692
00:12:51.738 --> 00:12:54.300 first party product back in 2017,
NOTE Confidence: 0.972503282307692
00:12:54.300 --> 00:12:56.400 which is a second generation,
NOTE Confidence: 0.972503282307692
00:12:56.400 --> 00:12:58.770 newer cars have been approved.
NOTE Confidence: 0.972503282307692
00:12:58.770 --> 00:13:00.486 3rd Generation CARS,
NOTE Confidence: 0.972503282307692
00:13:00.486 --> 00:13:03.346 which differs from the second
NOTE Confidence: 0.972503282307692
00:13:03.346 --> 00:13:05.418 generation essentially in the
NOTE Confidence: 0.972503282307692
00:13:05.418 --> 00:13:07.944 costimulatory as signal and they are
NOTE Confidence: 0.98349206375
00:13:07.950 --> 00:13:10.911 less and less toxic compared to the
NOTE Confidence: 0.98349206375
00:13:10.911 --> 00:13:14.820 first to the first product which was.
NOTE Confidence: 0.98349206375
00:13:14.820 --> 00:13:17.165 Diffusion of diskarte can be
NOTE Confidence: 0.98349206375
00:13:17.165 --> 00:13:19.510 complicated by very severe cytokine
NOTE Confidence: 0.98349206375
00:13:19.591 --> 00:13:22.159 release syndrome and neurotoxicity.
NOTE Confidence: 0.98349206375

00:13:22.160 --> 00:13:25.786 Uhm, but they are able to really
NOTE Confidence: 0.98349206375

00:13:25.786 --> 00:13:28.736 achieve greater results in patients
NOTE Confidence: 0.98349206375

00:13:28.736 --> 00:13:31.328 that are otherwise refractory.
NOTE Confidence: 0.98349206375

00:13:31.330 --> 00:13:33.800 With every factory overlaps disease,
NOTE Confidence: 0.98349206375

00:13:33.800 --> 00:13:36.754 yet therefore tracks that I mentioned to
NOTE Confidence: 0.98349206375

00:13:36.754 --> 00:13:40.843 you up are these at this for for drugs here
NOTE Confidence: 0.98349206375

00:13:40.843 --> 00:13:44.632 three or monoclonal antibodies? As I said,
NOTE Confidence: 0.98349206375

00:13:44.632 --> 00:13:49.308 this is the loading and understood.
NOTE Confidence: 0.98349206375

00:13:49.310 --> 00:13:51.760 Special antibodies are smarter way to deliver
NOTE Confidence: 0.98349206375

00:13:51.760 --> 00:13:54.209 inside the cancer cell chemotherapy there.
NOTE Confidence: 0.98349206375

00:13:54.210 --> 00:13:56.106 What we call antibody,
NOTE Confidence: 0.98349206375

00:13:56.106 --> 00:13:58.476 drug conjugate and essentially the
NOTE Confidence: 0.98349206375

00:13:58.476 --> 00:14:01.161 the drug binds to the surface of
NOTE Confidence: 0.98349206375

00:14:01.161 --> 00:14:03.716 the cancer cell gets internalized.
NOTE Confidence: 0.98349206375

00:14:03.716 --> 00:14:06.461 Lisa Zane released the chemotherapy
NOTE Confidence: 0.98349206375

00:14:06.461 --> 00:14:09.309 agent in the case of political map.

NOTE Confidence: 0.98349206375

00:14:09.310 --> 00:14:11.110 Is that microtubule disruption agent

NOTE Confidence: 0.98349206375

00:14:11.110 --> 00:14:13.810 and that caused a doses of this style.

NOTE Confidence: 0.98349206375

00:14:13.810 --> 00:14:15.786 In the case of longest, took them up,

NOTE Confidence: 0.98349206375

00:14:15.786 --> 00:14:16.994 is an alkylating agent,

NOTE Confidence: 0.98349206375

00:14:17.000 --> 00:14:19.880 so similar mechanism of action different.

NOTE Confidence: 0.98349206375

00:14:19.880 --> 00:14:22.099 Uhm, different target that is see them

NOTE Confidence: 0.98349206375

00:14:22.099 --> 00:14:25.311 up is a antibody and that is a similar

NOTE Confidence: 0.98349206375

00:14:25.311 --> 00:14:27.897 tour attacks in having that is not

NOTE Confidence: 0.98349206375

00:14:27.897 --> 00:14:30.003 drug conjugated and Target City 19

NOTE Confidence: 0.98349206375

00:14:30.003 --> 00:14:32.754 this is the same target of the party

NOTE Confidence: 0.98349206375

00:14:32.760 --> 00:14:35.665 and Salinas are is an interesting new

NOTE Confidence: 0.98349206375

00:14:35.665 --> 00:14:38.073 drug that works totally different

NOTE Confidence: 0.98349206375

00:14:38.073 --> 00:14:41.313 and different way targeted a nuclear

NOTE Confidence: 0.98349206375

00:14:41.313 --> 00:14:44.201 expert protein and that is a media

NOTE Confidence: 0.98349206375

00:14:44.201 --> 00:14:47.046 is one of the mechanisms of Uncle

NOTE Confidence: 0.98349206375

00:14:47.046 --> 00:14:49.781 Genesis and it's preventing diffusers.
NOTE Confidence: 0.98349206375

00:14:49.781 --> 00:14:52.787 Comma, but also in multiple myeloma.
NOTE Confidence: 0.98349206375

00:14:52.790 --> 00:14:55.326 So lot of new option that have been
NOTE Confidence: 0.98349206375

00:14:55.326 --> 00:14:57.074 recently approved in a matter of
NOTE Confidence: 0.98349206375

00:14:57.074 --> 00:14:59.165 two years for diffuse large B cell
NOTE Confidence: 0.98349206375

00:14:59.165 --> 00:15:00.961 lymphoma under flaps refractory
NOTE Confidence: 0.98349206375

00:15:00.961 --> 00:15:03.102 standing up if we shift gears we're
NOTE Confidence: 0.98349206375

00:15:03.102 --> 00:15:04.790 going to talk about what is.
NOTE Confidence: 0.98349206375

00:15:04.790 --> 00:15:06.402 What are the treatment
NOTE Confidence: 0.98349206375

00:15:06.402 --> 00:15:08.014 paradigm for England lymphoma.
NOTE Confidence: 0.98349206375

00:15:08.020 --> 00:15:11.112 So in a little informal trade different
NOTE Confidence: 0.98349206375

00:15:11.112 --> 00:15:14.238 approach to these are incurable disease
NOTE Confidence: 0.98349206375

00:15:14.238 --> 00:15:17.730 and these are diseases that patients are
NOTE Confidence: 0.98349206375

00:15:17.730 --> 00:15:20.900 gonna live with and probably die with.
NOTE Confidence: 0.98349206375

00:15:20.900 --> 00:15:23.100 But not die from and.
NOTE Confidence: 0.98349206375

00:15:23.100 --> 00:15:25.977 So the purpose of treatment is to

NOTE Confidence: 0.98349206375

00:15:25.977 --> 00:15:28.274 minimize succeed city associated to

NOTE Confidence: 0.98349206375

00:15:28.274 --> 00:15:30.739 treatment and maximize the quality

NOTE Confidence: 0.98349206375

00:15:30.739 --> 00:15:33.420 of life producing to the minimum.

NOTE Confidence: 0.98349206375

00:15:33.420 --> 00:15:36.390 The toxicity.

NOTE Confidence: 0.98349206375

00:15:36.390 --> 00:15:40.520 Particular lymphoma accounts for 22%

NOTE Confidence: 0.98349206375

00:15:40.520 --> 00:15:42.764 of all information this than most

NOTE Confidence: 0.98349206375

00:15:42.764 --> 00:15:44.950 common in violently thrown out there,

NOTE Confidence: 0.98349206375

00:15:44.950 --> 00:15:47.490 and the most common treatment

NOTE Confidence: 0.98349206375

00:15:47.490 --> 00:15:49.522 strategies for indolent lymphoma,

NOTE Confidence: 0.98349206375

00:15:49.530 --> 00:15:51.470 particularly comma in particular,

NOTE Confidence: 0.98349206375

00:15:51.470 --> 00:15:54.472 is watch and wait, active surveillance.

NOTE Confidence: 0.98349206375

00:15:54.472 --> 00:15:58.189 We usually do not treat patients unless

NOTE Confidence: 0.98349206375

00:15:58.189 --> 00:16:01.051 they have they meet specific criteria

NOTE Confidence: 0.98349206375

00:16:01.051 --> 00:16:04.529 which refer to as Gulf Gulf criteria.

NOTE Confidence: 0.98349206375

00:16:04.530 --> 00:16:06.150 These are the group 2 the

NOTE Confidence: 0.98349206375

00:16:06.150 --> 00:16:06.960 link from follicular.
NOTE Confidence: 0.98349206375

00:16:06.960 --> 00:16:09.190 Criteria and essentially this criteria
NOTE Confidence: 0.98349206375

00:16:09.190 --> 00:16:12.753 based on the bulk of disease on the
NOTE Confidence: 0.98349206375

00:16:12.753 --> 00:16:15.665 presence of symptoms or end organ damage
NOTE Confidence: 0.98349206375

00:16:15.746 --> 00:16:18.700 in the absence of a buddies indication,
NOTE Confidence: 0.98349206375

00:16:18.700 --> 00:16:21.092 patients are monitored conservatively.
NOTE Confidence: 0.98349206375

00:16:21.092 --> 00:16:24.680 One exception is stage one disease.
NOTE Confidence: 0.98349206375

00:16:24.680 --> 00:16:27.626 It's very rare to diagnose Allen
NOTE Confidence: 0.98349206375

00:16:27.626 --> 00:16:31.186 film and stage one, and in that
NOTE Confidence: 0.98349206375

00:16:31.186 --> 00:16:33.846 instance radiotherapy can be curative.
NOTE Confidence: 0.98349206375

00:16:33.850 --> 00:16:34.474 Uhm?
NOTE Confidence: 0.98349206375

00:16:34.474 --> 00:16:36.970 These are typical approach.
NOTE Confidence: 0.98349206375

00:16:36.970 --> 00:16:37.886 Chemotherapy immunochemotherapy
NOTE Confidence: 0.98349206375

00:16:37.886 --> 00:16:41.092 approaches that we use as first line
NOTE Confidence: 0.98349206375

00:16:41.092 --> 00:16:42.898 treatment for indolent lymphoma.
NOTE Confidence: 0.98349206375

00:16:42.900 --> 00:16:45.636 Once the patient meets this criteria.

NOTE Confidence: 0.98349206375

00:16:45.640 --> 00:16:47.975 Bendamustine rituximab is a very

NOTE Confidence: 0.98349206375

00:16:47.975 --> 00:16:50.310 common regiment that is utilizes

NOTE Confidence: 0.98349206375

00:16:50.383 --> 00:16:52.178 less toxic than our chop.

NOTE Confidence: 0.98349206375

00:16:52.180 --> 00:16:54.832 Patients do not lose their hair

NOTE Confidence: 0.98349206375

00:16:54.832 --> 00:16:56.600 and it costs less

NOTE Confidence: 0.975165843333333

00:16:56.692 --> 00:16:59.757 milotic city and the instructions.

NOTE Confidence: 0.975165843333333

00:16:59.760 --> 00:17:02.574 Newer version of rituximab and it utilizes

NOTE Confidence: 0.975165843333333

00:17:02.574 --> 00:17:06.100 alone or in combination with chemotherapy.

NOTE Confidence: 0.975165843333333

00:17:06.100 --> 00:17:07.850 And then there are platforms

NOTE Confidence: 0.975165843333333

00:17:07.850 --> 00:17:08.900 that are chemotherapy.

NOTE Confidence: 0.975165843333333

00:17:08.900 --> 00:17:10.940 Freeman taxonomically Delight is a

NOTE Confidence: 0.975165843333333

00:17:10.940 --> 00:17:13.525 good option as a frontline treatment

NOTE Confidence: 0.975165843333333

00:17:13.525 --> 00:17:15.870 for indolent lymphoma based on

NOTE Confidence: 0.975165843333333

00:17:15.870 --> 00:17:18.900 their relevance pastry trial data.

NOTE Confidence: 0.975165843333333

00:17:18.900 --> 00:17:22.160 Once the patient completes induction then

NOTE Confidence: 0.975165843333333

00:17:22.160 --> 00:17:25.140 we typically perform maintenance with
NOTE Confidence: 0.9751658433333333

00:17:25.224 --> 00:17:28.770 anti CD 20 every three months for two years.
NOTE Confidence: 0.9751658433333333

00:17:28.770 --> 00:17:31.780 This has been shown to prolong the
NOTE Confidence: 0.9751658433333333

00:17:31.780 --> 00:17:34.329 remission from first line treatment.
NOTE Confidence: 0.9751658433333333

00:17:34.330 --> 00:17:36.058 But that's not have a big
NOTE Confidence: 0.9751658433333333

00:17:36.058 --> 00:17:37.830 impact on the overall survival,
NOTE Confidence: 0.9751658433333333

00:17:37.830 --> 00:17:40.454 and therefore now in the time in the
NOTE Confidence: 0.9751658433333333

00:17:40.454 --> 00:17:43.374 COVID era we are limiting the use of
NOTE Confidence: 0.9751658433333333

00:17:43.374 --> 00:17:45.807 maintenance with anti CD 20 antibody
NOTE Confidence: 0.9751658433333333

00:17:45.807 --> 00:17:48.057 because these are the antibody
NOTE Confidence: 0.9751658433333333

00:17:48.057 --> 00:17:49.950 that this antibiotic can cause.
NOTE Confidence: 0.9751658433333333

00:17:49.950 --> 00:17:52.591 I took an ugly Nina can wipe out the
NOTE Confidence: 0.9751658433333333

00:17:52.591 --> 00:17:55.045 good antibody that patients mount after
NOTE Confidence: 0.9751658433333333

00:17:55.045 --> 00:17:57.600 receiving the vaccine for COVID and poise.
NOTE Confidence: 0.9751658433333333

00:17:57.600 --> 00:18:01.100 Higher risk of infection beyond first line.
NOTE Confidence: 0.9751658433333333

00:18:01.100 --> 00:18:02.555 So follicular lymphoma,

NOTE Confidence: 0.975165843333333

00:18:02.555 --> 00:18:04.980 the Natural History of England.

NOTE Confidence: 0.975165843333333

00:18:04.980 --> 00:18:07.088 Common follicular lymphoma is

NOTE Confidence: 0.975165843333333

00:18:07.088 --> 00:18:09.196 characterized by multiple relapses.

NOTE Confidence: 0.975165843333333

00:18:09.200 --> 00:18:12.254 The duration of Response Times progressively

NOTE Confidence: 0.975165843333333

00:18:12.254 --> 00:18:15.739 to decrease after each line of treatment.

NOTE Confidence: 0.975165843333333

00:18:15.740 --> 00:18:18.572 There is a particular subset of

NOTE Confidence: 0.975165843333333

00:18:18.572 --> 00:18:21.180 patients which accounts for probably

NOTE Confidence: 0.975165843333333

00:18:21.180 --> 00:18:24.076 20% of the total and that presents a

NOTE Confidence: 0.975165843333333

00:18:24.076 --> 00:18:26.514 relapse of disease within 24 months

NOTE Confidence: 0.975165843333333

00:18:26.514 --> 00:18:29.754 from the first line and this group we

NOTE Confidence: 0.975165843333333

00:18:29.754 --> 00:18:32.604 referred to as POD 24 disorder patient.

NOTE Confidence: 0.975165843333333

00:18:32.604 --> 00:18:35.280 There is a lot of research.

NOTE Confidence: 0.975165843333333

00:18:35.280 --> 00:18:37.504 Going on for first of all to try

NOTE Confidence: 0.975165843333333

00:18:37.504 --> 00:18:38.640 to the United,

NOTE Confidence: 0.975165843333333

00:18:38.640 --> 00:18:41.226 identify them up front and then

NOTE Confidence: 0.975165843333333

00:18:41.226 --> 00:18:43.617 to create a treatment paradigm
NOTE Confidence: 0.9751658433333333

00:18:43.617 --> 00:18:45.957 to improve their prognosis.
NOTE Confidence: 0.9751658433333333

00:18:45.960 --> 00:18:48.535 But in general subsegment treatment
NOTE Confidence: 0.9751658433333333

00:18:48.535 --> 00:18:51.110 option for follicular England lymphoma
NOTE Confidence: 0.9751658433333333

00:18:51.181 --> 00:18:54.002 include another combination of an anti CD
NOTE Confidence: 0.9751658433333333

00:18:54.002 --> 00:18:56.818 20 antibody plus or minus chemotherapy.
NOTE Confidence: 0.9751658433333333

00:18:56.820 --> 00:19:00.150 We tend to utilize the same
NOTE Confidence: 0.9751658433333333

00:19:00.150 --> 00:19:01.991 agents rarely on leave.
NOTE Confidence: 0.9751658433333333

00:19:01.991 --> 00:19:04.980 The remission has been really long standing,
NOTE Confidence: 0.9751658433333333

00:19:04.980 --> 00:19:06.996 otherwise we try to alternate views
NOTE Confidence: 0.9751658433333333

00:19:06.996 --> 00:19:09.701 of the anti CD 20 antibodies and
NOTE Confidence: 0.9751658433333333

00:19:09.701 --> 00:19:11.851 different forms of chemotherapy and
NOTE Confidence: 0.9751658433333333

00:19:11.851 --> 00:19:14.354 then learn a little might are square
NOTE Confidence: 0.9751658433333333

00:19:14.354 --> 00:19:17.038 Lendl made it as if it was not used up.
NOTE Confidence: 0.9751658433333333

00:19:17.040 --> 00:19:20.750 Trump is a good option beyond Firstline
NOTE Confidence: 0.9751658433333333

00:19:20.750 --> 00:19:23.510 knew advanced in this field have

NOTE Confidence: 0.9751658433333333
00:19:23.510 --> 00:19:26.500 been done for third line agents.
NOTE Confidence: 0.9751658433333333
00:19:26.500 --> 00:19:30.260 We have noble agents that RPI 3K
NOTE Confidence: 0.9751658433333333
00:19:30.260 --> 00:19:32.840 inhibitors ezh 2 inhibitors and that
NOTE Confidence: 0.9751658433333333
00:19:32.840 --> 00:19:36.015 Carty also are an option for these
NOTE Confidence: 0.9751658433333333
00:19:36.015 --> 00:19:38.245 patients beyond the second line.
NOTE Confidence: 0.9751658433333333
00:19:38.250 --> 00:19:40.094 So briefly, PI3K inhibitor.
NOTE Confidence: 0.9751658433333333
00:19:40.094 --> 00:19:44.590 This is one of the most important pathway,
NOTE Confidence: 0.9751658433333333
00:19:44.590 --> 00:19:47.150 a most important intracellular pathway.
NOTE Confidence: 0.9751658433333333
00:19:47.150 --> 00:19:49.442 A master regulator for cancer is
NOTE Confidence: 0.9751658433333333
00:19:49.442 --> 00:19:51.650 downstream from the cell receptor,
NOTE Confidence: 0.9751658433333333
00:19:51.650 --> 00:19:54.338 and since 2014 until most recently
NOTE Confidence: 0.9751658433333333
00:19:54.338 --> 00:19:56.970 for drugs have been approved,
NOTE Confidence: 0.9751658433333333
00:19:56.970 --> 00:19:58.758 three or or one is intravenous
NOTE Confidence: 0.9751658433333333
00:19:58.758 --> 00:20:00.908 and the last one on release it.
NOTE Confidence: 0.9751658433333333
00:20:00.910 --> 00:20:02.750 It's a little bit different
NOTE Confidence: 0.9751658433333333

00:20:02.750 --> 00:20:04.222 because it's also targets.
NOTE Confidence: 0.9751658433333333

00:20:04.230 --> 00:20:05.718 Also seeking one accident,
NOTE Confidence: 0.9751658433333333

00:20:05.718 --> 00:20:09.059 but we have a lot of options that.
NOTE Confidence: 0.9751658433333333

00:20:09.060 --> 00:20:11.048 To target this pathway,
NOTE Confidence: 0.9751658433333333

00:20:11.048 --> 00:20:14.030 another pathway that has been targeted
NOTE Confidence: 0.9751658433333333

00:20:14.111 --> 00:20:17.063 is that ezh 2 ezh 2 is gonna be
NOTE Confidence: 0.9751658433333333

00:20:17.063 --> 00:20:19.435 genetical regulator of gene expression
NOTE Confidence: 0.9751658433333333

00:20:19.435 --> 00:20:22.369 is very important is crucial for
NOTE Confidence: 0.9751658433333333

00:20:22.370 --> 00:20:25.338 the normal B cell biology and for
NOTE Confidence: 0.9751658433333333

00:20:25.338 --> 00:20:27.490 the germinal center formation.
NOTE Confidence: 0.9751658433333333

00:20:27.490 --> 00:20:30.400 A mutation in these each two
NOTE Confidence: 0.9751658433333333

00:20:30.400 --> 00:20:33.568 suppressed the axis of the visa from
NOTE Confidence: 0.9751658433333333

00:20:33.568 --> 00:20:36.130 the germinal center and lock the
NOTE Confidence: 0.971793062307692

00:20:36.221 --> 00:20:39.262 selling business state and so.
NOTE Confidence: 0.971793062307692

00:20:39.262 --> 00:20:42.067 Blocking the each two activity
NOTE Confidence: 0.971793062307692

00:20:42.067 --> 00:20:44.539 resumed the differentiation of the

NOTE Confidence: 0.971793062307692

00:20:44.539 --> 00:20:46.982 B cell and allow up to system,

NOTE Confidence: 0.971793062307692

00:20:46.990 --> 00:20:49.118 and this is an oral drug that has

NOTE Confidence: 0.971793062307692

00:20:49.118 --> 00:20:50.803 been recently approved in 2020,

NOTE Confidence: 0.971793062307692

00:20:50.803 --> 00:20:53.168 giving another option for patients

NOTE Confidence: 0.971793062307692

00:20:53.168 --> 00:20:54.587 with follicular lymphoma.

NOTE Confidence: 0.971793062307692

00:20:54.590 --> 00:20:55.990 And, as I mentioned before,

NOTE Confidence: 0.971793062307692

00:20:55.990 --> 00:20:58.690 Carti have been recently approved in

NOTE Confidence: 0.971793062307692

00:20:58.690 --> 00:21:01.127 March for patients with follicular

NOTE Confidence: 0.971793062307692

00:21:01.127 --> 00:21:03.375 lymphoma beyond second line

NOTE Confidence: 0.971793062307692

00:21:03.375 --> 00:21:05.280 beyond second line of treatment.

NOTE Confidence: 0.98755778

00:21:07.560 --> 00:21:09.940 I just wanna mention briefly,

NOTE Confidence: 0.98755778

00:21:09.940 --> 00:21:11.772 mantle cell lymphoma A.

NOTE Confidence: 0.98755778

00:21:11.772 --> 00:21:15.420 It's a very rare subtype of lymphoma.

NOTE Confidence: 0.98755778

00:21:15.420 --> 00:21:17.088 It constitutes only 6%

NOTE Confidence: 0.98755778

00:21:17.088 --> 00:21:18.756 of non Hodgkin lymphoma.

NOTE Confidence: 0.98755778

00:21:18.760 --> 00:21:22.225 To retract simitli UM fifty
NOTE Confidence: 0.98755778

00:21:22.225 --> 00:21:24.997 50,000 cases per year,
NOTE Confidence: 0.98755778

00:21:25.000 --> 00:21:27.190 55,000 cases prettier in EU S.
NOTE Confidence: 0.98755778

00:21:27.190 --> 00:21:29.254 And to make things a little
NOTE Confidence: 0.98755778

00:21:29.254 --> 00:21:30.286 bit more complicated,
NOTE Confidence: 0.98755778

00:21:30.290 --> 00:21:32.420 comes in four different variants
NOTE Confidence: 0.98755778

00:21:32.420 --> 00:21:35.170 which we identify based on the
NOTE Confidence: 0.98755778

00:21:35.170 --> 00:21:37.910 proliferation index and biased allergy
NOTE Confidence: 0.98755778

00:21:37.910 --> 00:21:40.102 and independent mechanic violent,
NOTE Confidence: 0.98755778

00:21:40.110 --> 00:21:44.198 we treat as follicular lymphoma and CLL,
NOTE Confidence: 0.98755778

00:21:44.200 --> 00:21:47.506 but the blast site and aggressive
NOTE Confidence: 0.98755778

00:21:47.506 --> 00:21:49.710 varien require aggressive treatment.
NOTE Confidence: 0.98755778

00:21:49.710 --> 00:21:52.344 We use combination of immuno chemotherapy
NOTE Confidence: 0.98755778

00:21:52.344 --> 00:21:54.100 followed by intelligence concept
NOTE Confidence: 0.98755778

00:21:54.168 --> 00:21:58.460 transplant and 9320 maintenance.
NOTE Confidence: 0.98755778

00:21:58.460 --> 00:22:01.664 After a few patients with that in the past,

NOTE Confidence: 0.98755778

00:22:01.670 --> 00:22:04.166 we didn't have any option because

NOTE Confidence: 0.98755778

00:22:04.166 --> 00:22:05.830 when this disease relapses

NOTE Confidence: 0.98755778

00:22:05.904 --> 00:22:08.334 usually chemo refractory but most

NOTE Confidence: 0.98755778

00:22:08.334 --> 00:22:11.220 recently starting in 2013 drugs

NOTE Confidence: 0.98755778

00:22:11.220 --> 00:22:14.443 to target the Bruton kinase tiles

NOTE Confidence: 0.98755778

00:22:14.443 --> 00:22:16.558 and kindness have been developed.

NOTE Confidence: 0.98755778

00:22:16.560 --> 00:22:18.154 This is an important pathway

NOTE Confidence: 0.98755778

00:22:18.154 --> 00:22:20.638 downstream from the B cell receptor.

NOTE Confidence: 0.98755778

00:22:20.640 --> 00:22:23.083 That mantle cell income is very sensitive

NOTE Confidence: 0.98755778

00:22:23.083 --> 00:22:26.110 to and also chronic lymphocytic leukemia.

NOTE Confidence: 0.98755778

00:22:26.110 --> 00:22:27.916 Cursor generation on BK.

NOTE Confidence: 0.98755778

00:22:27.916 --> 00:22:30.742 Emitter approved was brutally in 2013

NOTE Confidence: 0.98755778

00:22:30.742 --> 00:22:33.814 and shortly after other two second

NOTE Confidence: 0.98755778

00:22:33.814 --> 00:22:35.910 generation of collaborative events

NOTE Confidence: 0.98755778

00:22:35.910 --> 00:22:38.330 and Brittany but been approved.

NOTE Confidence: 0.98755778

00:22:38.330 --> 00:22:41.438 The beauty of the second generation
NOTE Confidence: 0.98755778

00:22:41.440 --> 00:22:44.416 drugs is that they have a less of
NOTE Confidence: 0.98755778

00:22:44.416 --> 00:22:46.731 targeted fact and the the cardio
NOTE Confidence: 0.98755778

00:22:46.731 --> 00:22:49.760 toxicity that was one of the limiting.
NOTE Confidence: 0.98755778

00:22:49.760 --> 00:22:51.610 Side effect of being routinely
NOTE Confidence: 0.98755778

00:22:51.610 --> 00:22:54.174 as substantially decreased within
NOTE Confidence: 0.98755778

00:22:54.174 --> 00:22:55.456 newer generation.
NOTE Confidence: 0.98755778

00:22:55.460 --> 00:22:55.763 Uh,
NOTE Confidence: 0.98755778

00:22:55.763 --> 00:22:57.884 there is a newer drug which is
NOTE Confidence: 0.98755778

00:22:57.884 --> 00:23:00.237 called peer to Brewton if it's still
NOTE Confidence: 0.98755778

00:23:00.237 --> 00:23:02.601 in clinical trial with the name of
NOTE Confidence: 0.98755778

00:23:02.601 --> 00:23:05.073 Laakso 305 and is about to be approved,
NOTE Confidence: 0.98755778

00:23:05.080 --> 00:23:07.114 it is a bit like a mini bitter but
NOTE Confidence: 0.98755778

00:23:07.114 --> 00:23:08.790 works a little bit different than
NOTE Confidence: 0.98755778

00:23:08.790 --> 00:23:10.980 the prior one and the beauty of this
NOTE Confidence: 0.98755778

00:23:10.980 --> 00:23:16.100 drug is that is much better tolerated.

NOTE Confidence: 0.98755778

00:23:16.100 --> 00:23:18.056 I'm gonna finish here.

NOTE Confidence: 0.98755778

00:23:18.056 --> 00:23:21.557 I just want to highlight that all

NOTE Confidence: 0.98755778

00:23:21.557 --> 00:23:24.838 the new drugs that we discussed and

NOTE Confidence: 0.98755778

00:23:24.838 --> 00:23:27.858 this is this is all these drugs

NOTE Confidence: 0.98755778

00:23:27.858 --> 00:23:29.838 have been approved and received.

NOTE Confidence: 0.98755778

00:23:29.840 --> 00:23:32.396 An accelerated FDA approval based on

NOTE Confidence: 0.98755778

00:23:32.396 --> 00:23:35.125 the results of phase two clinical

NOTE Confidence: 0.98755778

00:23:35.125 --> 00:23:39.398 trials and it is crucial to encourage.

NOTE Confidence: 0.98755778

00:23:39.400 --> 00:23:41.402 You can research in this field not

NOTE Confidence: 0.98755778

00:23:41.402 --> 00:23:43.366 only to improve our current treatment

NOTE Confidence: 0.98755778

00:23:43.366 --> 00:23:45.460 paradigm and to deepen our knowledge

NOTE Confidence: 0.98755778

00:23:45.460 --> 00:23:46.839 of specific disease,

NOTE Confidence: 0.98755778

00:23:46.840 --> 00:23:48.877 but also with the purpose to increase

NOTE Confidence: 0.98755778

00:23:48.877 --> 00:23:50.511 survival of our patients with

NOTE Confidence: 0.98755778

00:23:50.511 --> 00:23:52.982 employment to improve their quality of life.

NOTE Confidence: 0.96532965

00:23:55.680 --> 00:23:59.976 And with this. I'm gonna
NOTE Confidence: 0.96532965

00:23:59.976 --> 00:24:01.600 stop shooting my screen.
NOTE Confidence: 0.92704785

00:24:21.020 --> 00:24:24.998 App. I think you're muted Doctor Lee.
NOTE Confidence: 0.92704785

00:24:25.000 --> 00:24:27.960 We cannot hear you, sorry. Well,
NOTE Confidence: 0.979652615

00:24:28.010 --> 00:24:29.350 thank you very much,
NOTE Confidence: 0.979652615

00:24:29.350 --> 00:24:31.360 Doctor Montanari and that was fantastic
NOTE Confidence: 0.979652615

00:24:31.360 --> 00:24:34.936 and now we will switch over to Doctor
NOTE Confidence: 0.979652615

00:24:34.936 --> 00:24:37.574 Fauci who is where as I said earlier,
NOTE Confidence: 0.979652615

00:24:37.580 --> 00:24:40.064 is a world leader in treatment of
NOTE Confidence: 0.979652615

00:24:40.064 --> 00:24:42.386 T seven former so doctor fast.
NOTE Confidence: 0.979652615

00:24:42.390 --> 00:24:44.102 If you could tell us So what makes
NOTE Confidence: 0.979652615

00:24:44.102 --> 00:24:45.737 T cell lymphoma different than
NOTE Confidence: 0.979652615

00:24:45.737 --> 00:24:47.540 be something formal, deductive,
NOTE Confidence: 0.979652615

00:24:47.540 --> 00:24:50.140 imaginary had discussed earlier?
NOTE Confidence: 0.943415392727273

00:24:50.730 --> 00:24:52.685 Well, Doctor Lee actually everything
NOTE Confidence: 0.943415392727273

00:24:52.685 --> 00:24:55.350 up makes T cell lymphoma different.

NOTE Confidence: 0.943415392727273

00:24:55.350 --> 00:24:56.982 They'd be selling phomma.

NOTE Confidence: 0.943415392727273

00:24:56.982 --> 00:24:58.614 It's harder to treat.

NOTE Confidence: 0.943415392727273

00:24:58.620 --> 00:25:01.175 It's rare and you know there are

NOTE Confidence: 0.943415392727273

00:25:01.175 --> 00:25:02.740 many different clinical issues

NOTE Confidence: 0.943415392727273

00:25:02.740 --> 00:25:05.164 that patients run into that are

NOTE Confidence: 0.943415392727273

00:25:05.164 --> 00:25:06.900 slightly different than B cell.

NOTE Confidence: 0.943415392727273

00:25:06.900 --> 00:25:08.979 So I'd like to go ahead and do a

NOTE Confidence: 0.943415392727273

00:25:08.979 --> 00:25:10.756 brief presentation and I'll try to

NOTE Confidence: 0.943415392727273

00:25:10.756 --> 00:25:12.979 touch on some of the key points.

NOTE Confidence: 0.943415392727273

00:25:12.980 --> 00:25:14.228 Can we get the next slide?

NOTE Confidence: 0.5417401

00:25:16.410 --> 00:25:17.110 Renee.

NOTE Confidence: 0.67407465

00:25:20.640 --> 00:25:24.420 Uh, OK. I think I might be able to

NOTE Confidence: 0.67407465

00:25:24.420 --> 00:25:27.312 advance them, so I just want to start

NOTE Confidence: 0.67407465

00:25:27.312 --> 00:25:29.709 off by saying that T cell lymphoma

NOTE Confidence: 0.67407465

00:25:29.709 --> 00:25:32.710 is a rare disease and a rare disease

NOTE Confidence: 0.67407465

00:25:32.710 --> 00:25:35.310 requires a center of excellence,
NOTE Confidence: 0.67407465

00:25:35.310 --> 00:25:37.310 really, for optimal treatment.
NOTE Confidence: 0.67407465

00:25:37.310 --> 00:25:40.110 For patients, the group at Yale does
NOTE Confidence: 0.67407465

00:25:40.110 --> 00:25:41.910 represent the center of excellence.
NOTE Confidence: 0.67407465

00:25:41.910 --> 00:25:44.280 For TSO Info, Ma and I just want to point
NOTE Confidence: 0.67407465

00:25:44.340 --> 00:25:46.652 out to all the patients and the folks
NOTE Confidence: 0.67407465

00:25:46.652 --> 00:25:48.491 listening in the audience that it's
NOTE Confidence: 0.67407465

00:25:48.491 --> 00:25:51.008 not just the doctors that you see here.
NOTE Confidence: 0.67407465

00:25:51.008 --> 00:25:53.132 Today, giving you this talk that
NOTE Confidence: 0.67407465

00:25:53.132 --> 00:25:55.018 contribute and help to take care
NOTE Confidence: 0.67407465

00:25:55.018 --> 00:25:57.060 of you that play a critical role
NOTE Confidence: 0.67407465

00:25:57.060 --> 00:25:59.174 in your care in the Cancer Center.
NOTE Confidence: 0.67407465

00:25:59.180 --> 00:26:01.070 Because there are many faces behind
NOTE Confidence: 0.67407465

00:26:01.070 --> 00:26:03.047 the scenes that are also critical
NOTE Confidence: 0.67407465

00:26:03.047 --> 00:26:04.347 and important to us.
NOTE Confidence: 0.67407465

00:26:04.350 --> 00:26:06.877 On this slide you see the path

NOTE Confidence: 0.67407465

00:26:06.877 --> 00:26:08.909 ologist such as Doctor Hsu,

NOTE Confidence: 0.67407465

00:26:08.910 --> 00:26:11.206 Dr Katz and Doctor Braddock who are

NOTE Confidence: 0.67407465

00:26:11.206 --> 00:26:13.683 the folks that actually look at your

NOTE Confidence: 0.67407465

00:26:13.683 --> 00:26:16.470 slides and make the diagnosis of lymphoma.

NOTE Confidence: 0.67407465

00:26:16.470 --> 00:26:18.774 And they also help us to subtype the

NOTE Confidence: 0.67407465

00:26:18.774 --> 00:26:20.999 type of lymphoma and oftentimes.

NOTE Confidence: 0.67407465

00:26:21.000 --> 00:26:23.772 They do immunostains to identify markers

NOTE Confidence: 0.67407465

00:26:23.772 --> 00:26:27.335 that help us to treat Doctor Kai is

NOTE Confidence: 0.67407465

00:26:27.335 --> 00:26:30.680 in the PET scan department here at Yale.

NOTE Confidence: 0.67407465

00:26:30.680 --> 00:26:33.494 The diagnostic imaging Group and of course,

NOTE Confidence: 0.67407465

00:26:33.500 --> 00:26:35.402 PET scans are critical to follow

NOTE Confidence: 0.67407465

00:26:35.402 --> 00:26:37.612 your disease as well as to diagnose

NOTE Confidence: 0.67407465

00:26:37.612 --> 00:26:39.663 the sites of lymphoma in your body

NOTE Confidence: 0.67407465

00:26:39.726 --> 00:26:42.070 and Doctor Chi is working with us to

NOTE Confidence: 0.67407465

00:26:42.070 --> 00:26:44.885 develop some novel ways to use PET

NOTE Confidence: 0.67407465

00:26:44.885 --> 00:26:47.110 scanning to actually detect residual
NOTE Confidence: 0.67407465

00:26:47.193 --> 00:26:49.690 disease after chemotherapy and then
NOTE Confidence: 0.67407465

00:26:49.690 --> 00:26:51.440 of course we have the clinical team.
NOTE Confidence: 0.67407465

00:26:51.440 --> 00:26:54.716 Myself, Doctor Sethi and Doctor Montanari,
NOTE Confidence: 0.67407465

00:26:54.720 --> 00:26:56.592 who is presenting today and then
NOTE Confidence: 0.67407465

00:26:56.592 --> 00:26:59.176 we also have the research group in
NOTE Confidence: 0.67407465

00:26:59.176 --> 00:27:00.018 the background.
NOTE Confidence: 0.67407465

00:27:00.020 --> 00:27:01.656 We have Doctor Marcus,
NOTE Confidence: 0.67407465

00:27:01.656 --> 00:27:03.292 musician and doctor Elias
NOTE Confidence: 0.67407465

00:27:03.292 --> 00:27:05.638 Loulis who are only two of many,
NOTE Confidence: 0.67407465

00:27:05.640 --> 00:27:08.727 many folks who are working in basic
NOTE Confidence: 0.67407465

00:27:08.727 --> 00:27:10.939 science laboratories studying your tissue,
NOTE Confidence: 0.67407465

00:27:10.940 --> 00:27:13.400 getting samples of blood and tumor
NOTE Confidence: 0.67407465

00:27:13.400 --> 00:27:15.426 tissue and studying various animal
NOTE Confidence: 0.67407465

00:27:15.426 --> 00:27:17.328 models of lymphoma to try to
NOTE Confidence: 0.67407465

00:27:17.328 --> 00:27:19.409 come up with novel therapies.

NOTE Confidence: 0.67407465

00:27:19.410 --> 00:27:21.944 So really this is a team approach.

NOTE Confidence: 0.67407465

00:27:21.950 --> 00:27:24.570 Next slide.

NOTE Confidence: 0.67407465

00:27:24.570 --> 00:27:28.160 So AT cell lymphoma I'll be at rare

NOTE Confidence: 0.67407465

00:27:28.160 --> 00:27:30.530 is actually increasing in incidence,

NOTE Confidence: 0.67407465

00:27:30.530 --> 00:27:32.480 so unlike B cells lymphoma where

NOTE Confidence: 0.67407465

00:27:32.480 --> 00:27:34.952 there are close to about 70,000 cases

NOTE Confidence: 0.67407465

00:27:34.952 --> 00:27:37.166 in the United States there's only

NOTE Confidence: 0.67407465

00:27:37.166 --> 00:27:39.515 about 9000 cases of T cell lymphoma,

NOTE Confidence: 0.67407465

00:27:39.520 --> 00:27:41.781 and there are a number of different

NOTE Confidence: 0.67407465

00:27:41.781 --> 00:27:43.651 reasons why tastes Alabama might

NOTE Confidence: 0.67407465

00:27:43.651 --> 00:27:44.489 be increasing.

NOTE Confidence: 0.67407465

00:27:44.490 --> 00:27:47.658 The first reason may be due to our

NOTE Confidence: 0.67407465

00:27:47.658 --> 00:27:49.822 pathology colleagues who have developed

NOTE Confidence: 0.67407465

00:27:49.822 --> 00:27:52.414 techniques to make the diagnosis in

NOTE Confidence: 0.67407465

00:27:52.414 --> 00:27:54.937 cases where it might be confusing.

NOTE Confidence: 0.67407465

00:27:54.940 --> 00:27:56.554 In some cases T cell lymphomas
NOTE Confidence: 0.67407465

00:27:56.554 --> 00:27:58.610 can look like be selling farmers,
NOTE Confidence: 0.67407465

00:27:58.610 --> 00:28:00.482 and they can also look like
NOTE Confidence: 0.67407465

00:28:00.482 --> 00:28:01.106 Hodgkin's disease.
NOTE Confidence: 0.67407465

00:28:01.110 --> 00:28:03.477 So I think some of the increase in incidents
NOTE Confidence: 0.67407465

00:28:03.477 --> 00:28:05.650 is related just to better diagnosis.
NOTE Confidence: 0.67407465

00:28:05.650 --> 00:28:08.219 But we also know that certain viruses,
NOTE Confidence: 0.67407465

00:28:08.220 --> 00:28:10.565 such as the EBV virus and the
NOTE Confidence: 0.67407465

00:28:10.565 --> 00:28:13.304 HTLV one virus which is found in
NOTE Confidence: 0.67407465

00:28:13.304 --> 00:28:15.374 the Mediterranean and in Japan,
NOTE Confidence: 0.67407465

00:28:15.380 --> 00:28:17.666 can be associated with T cell
NOTE Confidence: 0.67407465

00:28:17.666 --> 00:28:19.649 lymphoma and also the hepatitis
NOTE Confidence: 0.67407465

00:28:19.649 --> 00:28:22.330 virus and the HIV virus as well
NOTE Confidence: 0.67407465

00:28:22.330 --> 00:28:24.900 various chemicals in our atmosphere.
NOTE Confidence: 0.67407465

00:28:24.900 --> 00:28:26.600 Chemicals in our food.
NOTE Confidence: 0.67407465

00:28:26.600 --> 00:28:27.450 Agent Orange,

NOTE Confidence: 0.984753245

00:28:27.450 --> 00:28:29.865 which is dioxin perhaps also

NOTE Confidence: 0.984753245

00:28:29.865 --> 00:28:32.280 contribute to lymphoma in general,

NOTE Confidence: 0.984753245

00:28:32.280 --> 00:28:34.170 as do immunosuppressive drugs that are

NOTE Confidence: 0.984753245

00:28:34.170 --> 00:28:36.909 now being used for a lot of different

NOTE Confidence: 0.984753245

00:28:36.909 --> 00:28:38.689 autoimmune diseases such as rheumatoid,

NOTE Confidence: 0.984753245

00:28:38.690 --> 00:28:40.470 arthritis, psoriasis, and colitis.

NOTE Confidence: 0.984753245

00:28:40.470 --> 00:28:43.505 Some of these diseases affect your immune

NOTE Confidence: 0.984753245

00:28:43.505 --> 00:28:46.012 system in a way where various kinds

NOTE Confidence: 0.984753245

00:28:46.012 --> 00:28:49.018 of lymphomas could actually spring up.

NOTE Confidence: 0.984753245

00:28:49.020 --> 00:28:51.624 Celiac sprue is a disease where folks

NOTE Confidence: 0.984753245

00:28:51.624 --> 00:28:54.029 basically can't eat wheat because they

NOTE Confidence: 0.984753245

00:28:54.029 --> 00:28:56.864 have sensitivity to gluten and in patients.

NOTE Confidence: 0.984753245

00:28:56.870 --> 00:28:59.030 With celiac sprue, there isn't an

NOTE Confidence: 0.984753245

00:28:59.030 --> 00:29:01.389 incidence of intestinal T cell lymphoma.

NOTE Confidence: 0.984753245

00:29:01.390 --> 00:29:04.810 I'll be it rare and then finally I think the

NOTE Confidence: 0.984753245

00:29:04.889 --> 00:29:08.309 most common causes random genetic mutations.

NOTE Confidence: 0.984753245

00:29:08.310 --> 00:29:10.270 Of course, every cancer patient who comes

NOTE Confidence: 0.984753245

00:29:10.270 --> 00:29:12.807 in wants to know how did I get this cancer?

NOTE Confidence: 0.984753245

00:29:12.810 --> 00:29:14.510 What did I do wrong?

NOTE Confidence: 0.984753245

00:29:14.510 --> 00:29:16.702 But the bottom line is that you probably

NOTE Confidence: 0.984753245

00:29:16.702 --> 00:29:18.674 didn't do anything wrong because many

NOTE Confidence: 0.984753245

00:29:18.674 --> 00:29:21.090 of these are just random mutations that

NOTE Confidence: 0.984753245

00:29:21.090 --> 00:29:22.655 occur and those mutations accumulate

NOTE Confidence: 0.984753245

00:29:22.655 --> 00:29:25.942 and they end up causing cancer.

NOTE Confidence: 0.984753245

00:29:25.942 --> 00:29:28.990 Uh, next slide.

NOTE Confidence: 0.984753245

00:29:28.990 --> 00:29:31.608 So clinical features of T cell boamah

NOTE Confidence: 0.984753245

00:29:31.608 --> 00:29:34.967 and Doctor Lee alluded to this in his

NOTE Confidence: 0.984753245

00:29:34.967 --> 00:29:36.510 introduction. He selling bombers.

NOTE Confidence: 0.984753245

00:29:36.510 --> 00:29:38.730 Unlike BSO lymphomas like to go

NOTE Confidence: 0.984753245

00:29:38.730 --> 00:29:41.298 to different tissues in your body.

NOTE Confidence: 0.984753245

00:29:41.300 --> 00:29:41.816 In fact,

NOTE Confidence: 0.984753245

00:29:41.816 --> 00:29:44.220 if you look at various tissues in your body,

NOTE Confidence: 0.984753245

00:29:44.220 --> 00:29:46.670 there are normal T cells within those

NOTE Confidence: 0.984753245

00:29:46.670 --> 00:29:48.836 tissues and those normal T cells

NOTE Confidence: 0.984753245

00:29:48.836 --> 00:29:50.936 are there to protect you against

NOTE Confidence: 0.984753245

00:29:50.936 --> 00:29:52.879 foreign antigens and infections.

NOTE Confidence: 0.984753245

00:29:52.880 --> 00:29:55.010 So they're basically fighters and

NOTE Confidence: 0.984753245

00:29:55.010 --> 00:29:57.140 soldiers that are protecting your

NOTE Confidence: 0.984753245

00:29:57.206 --> 00:29:59.670 body and they're in the skin.

NOTE Confidence: 0.984753245

00:29:59.670 --> 00:30:02.988 The GI system, such as your intestines,

NOTE Confidence: 0.984753245

00:30:02.990 --> 00:30:03.648 the liver,

NOTE Confidence: 0.984753245

00:30:03.648 --> 00:30:05.951 and the spleen in your nose and

NOTE Confidence: 0.984753245

00:30:05.951 --> 00:30:07.379 in your sinus is,

NOTE Confidence: 0.984753245

00:30:07.380 --> 00:30:09.005 and therefore T salambo miss

NOTE Confidence: 0.984753245

00:30:09.005 --> 00:30:11.479 could arise in any of these sites.

NOTE Confidence: 0.984753245

00:30:11.480 --> 00:30:14.007 So one common site is the skin,

NOTE Confidence: 0.984753245

00:30:14.010 --> 00:30:16.392 but I mentioned the intestinal T
NOTE Confidence: 0.984753245

00:30:16.392 --> 00:30:18.480 cell lymphoma in celiac sprue.
NOTE Confidence: 0.984753245

00:30:18.480 --> 00:30:21.112 The sinus is and the oral cavity can
NOTE Confidence: 0.984753245

00:30:21.112 --> 00:30:23.348 be involved in NK T cell lymphoma
NOTE Confidence: 0.984753245

00:30:23.348 --> 00:30:25.793 and then the liver and the spleen
NOTE Confidence: 0.984753245

00:30:25.793 --> 00:30:27.948 in hepatosplenic T cell lymphoma.
NOTE Confidence: 0.984753245

00:30:27.950 --> 00:30:30.015 But pretty much any organ in the
NOTE Confidence: 0.984753245

00:30:30.015 --> 00:30:31.580 body can be involved.
NOTE Confidence: 0.984753245

00:30:31.580 --> 00:30:33.239 And if you look at skin involvement,
NOTE Confidence: 0.984753245

00:30:33.240 --> 00:30:35.613 about 45% of the patients who have
NOTE Confidence: 0.984753245

00:30:35.613 --> 00:30:38.333 lymphoma in this skin have a condition
NOTE Confidence: 0.984753245

00:30:38.333 --> 00:30:40.368 called cutaneous T cell lymphoma,
NOTE Confidence: 0.984753245

00:30:40.370 --> 00:30:43.136 which is mycosis fungus or the
NOTE Confidence: 0.984753245

00:30:43.136 --> 00:30:45.500 Sezary syndrome and then also I
NOTE Confidence: 0.984753245

00:30:45.500 --> 00:30:46.940 mentioned that different viruses,
NOTE Confidence: 0.984753245

00:30:46.940 --> 00:30:49.610 and in particular the EBV virus

NOTE Confidence: 0.984753245

00:30:49.610 --> 00:30:52.592 can cause the extranodal NK T cell

NOTE Confidence: 0.984753245

00:30:52.592 --> 00:30:54.830 lymphomas that occur in your sinus

NOTE Confidence: 0.984753245

00:30:54.830 --> 00:30:57.508 is and a disease called the Angel

NOTE Confidence: 0.984753245

00:30:57.508 --> 00:31:00.032 immuno blastic to self oma as well

NOTE Confidence: 0.984753245

00:31:00.032 --> 00:31:03.070 as others and next slide.

NOTE Confidence: 0.984753245

00:31:03.070 --> 00:31:05.518 Shows you that TICA lymphomas can

NOTE Confidence: 0.984753245

00:31:05.518 --> 00:31:08.845 masquerade in the clinic as a number of

NOTE Confidence: 0.984753245

00:31:08.845 --> 00:31:10.875 other different entities or diseases.

NOTE Confidence: 0.984753245

00:31:10.880 --> 00:31:11.408 For instance,

NOTE Confidence: 0.984753245

00:31:11.408 --> 00:31:13.520 you may or may not have heard of

NOTE Confidence: 0.984753245

00:31:13.579 --> 00:31:14.899 him at oh phagocytosis,

NOTE Confidence: 0.984753245

00:31:14.900 --> 00:31:17.203 which is a condition where you basically

NOTE Confidence: 0.984753245

00:31:17.203 --> 00:31:19.250 have fevers and low blood counts,

NOTE Confidence: 0.984753245

00:31:19.250 --> 00:31:22.225 and that is oftentimes seen with two

NOTE Confidence: 0.984753245

00:31:22.225 --> 00:31:24.187 solemn phomma abdominal pain and

NOTE Confidence: 0.984753245

00:31:24.187 --> 00:31:26.401 perforation can be seen in patients
NOTE Confidence: 0.984753245

00:31:26.401 --> 00:31:28.880 who have intestinal T cell lymphoma,
NOTE Confidence: 0.984753245

00:31:28.880 --> 00:31:31.778 enlarged liver and spleen in hepatosplenic,
NOTE Confidence: 0.984753245

00:31:31.780 --> 00:31:33.830 as well as other types.
NOTE Confidence: 0.984753245

00:31:33.830 --> 00:31:36.470 Vasculitis or autoimmune disease can
NOTE Confidence: 0.984753245

00:31:36.470 --> 00:31:39.110 oftentimes be the first presentation
NOTE Confidence: 0.984753245

00:31:39.183 --> 00:31:41.858 of angioimmunoblastic T cell lymphoma
NOTE Confidence: 0.9843936875

00:31:41.860 --> 00:31:44.588 and a high calcium level can be seen,
NOTE Confidence: 0.9843936875

00:31:44.590 --> 00:31:46.680 in particular with the HTLV
NOTE Confidence: 0.9843936875

00:31:46.680 --> 00:31:48.770 one associated T cell leukemia,
NOTE Confidence: 0.9843936875

00:31:48.770 --> 00:31:50.430 but also other types of
NOTE Confidence: 0.9843936875

00:31:50.430 --> 00:31:52.090 T cell lymphoma as well.
NOTE Confidence: 0.9843936875

00:31:52.090 --> 00:31:53.660 Kidney failure can occur with
NOTE Confidence: 0.9843936875

00:31:53.660 --> 00:31:55.810 different types of T cell lymphoma.
NOTE Confidence: 0.9843936875

00:31:55.810 --> 00:31:58.666 We can see cardiac arrhythmias happening
NOTE Confidence: 0.9843936875

00:31:58.666 --> 00:32:02.267 and of course various kinds of skin rashes.

NOTE Confidence: 0.9843936875

00:32:02.270 --> 00:32:03.914 So oftentimes a patient.

NOTE Confidence: 0.9843936875

00:32:03.914 --> 00:32:05.969 He selling former will present.

NOTE Confidence: 0.9923883

00:32:08.100 --> 00:32:09.792 With one of these symptoms

NOTE Confidence: 0.9923883

00:32:09.792 --> 00:32:10.776 and then eventually,

NOTE Confidence: 0.9923883

00:32:10.780 --> 00:32:13.786 the diagnosis is made next slide.

NOTE Confidence: 0.8741689

00:32:16.100 --> 00:32:19.119 Uh, this site just shows you that many

NOTE Confidence: 0.8741689

00:32:19.119 --> 00:32:20.310 different clinical manifestations,

NOTE Confidence: 0.8741689

00:32:20.310 --> 00:32:22.530 patients with various skin lesions.

NOTE Confidence: 0.8741689

00:32:22.530 --> 00:32:24.396 You can see this gentleman with

NOTE Confidence: 0.8741689

00:32:24.396 --> 00:32:26.928 a tumor at the roof of his mouth.

NOTE Confidence: 0.8741689

00:32:26.930 --> 00:32:29.498 Below that you can see the lining of

NOTE Confidence: 0.8741689

00:32:29.498 --> 00:32:31.609 the intestine which is involved with

NOTE Confidence: 0.8741689

00:32:31.609 --> 00:32:33.626 T cell lymphoma under the microscope

NOTE Confidence: 0.8741689

00:32:33.626 --> 00:32:35.880 on the opposite side you can see

NOTE Confidence: 0.8741689

00:32:35.943 --> 00:32:37.793 circulating leukemia cells and you

NOTE Confidence: 0.8741689

00:32:37.793 --> 00:32:40.320 can see various other skin manifests.
NOTE Confidence: 0.8741689

00:32:40.320 --> 00:32:43.200 Manifestations that ISE lymphomas are
NOTE Confidence: 0.8741689

00:32:43.200 --> 00:32:46.730 broken down in the classification system.
NOTE Confidence: 0.8741689

00:32:46.730 --> 00:32:49.010 Based on how they present clinically,
NOTE Confidence: 0.8741689

00:32:49.010 --> 00:32:51.425 if they present primarily in lymph nodes,
NOTE Confidence: 0.8741689

00:32:51.430 --> 00:32:52.558 they're the nodal group.
NOTE Confidence: 0.8741689

00:32:52.558 --> 00:32:54.929 If they present it in the skin there,
NOTE Confidence: 0.8741689

00:32:54.930 --> 00:32:56.199 the cutaneous group.
NOTE Confidence: 0.8741689

00:32:56.199 --> 00:32:58.737 If they present in these various
NOTE Confidence: 0.8741689

00:32:58.737 --> 00:32:59.630 extranodal sites,
NOTE Confidence: 0.8741689

00:32:59.630 --> 00:33:01.505 they fall into that extranodal
NOTE Confidence: 0.8741689

00:33:01.505 --> 00:33:03.380 category and then finally some
NOTE Confidence: 0.8741689

00:33:03.445 --> 00:33:05.953 of them are leukemic where they
NOTE Confidence: 0.8741689

00:33:05.953 --> 00:33:07.625 predominantly have circulating cells
NOTE Confidence: 0.8741689

00:33:07.692 --> 00:33:09.498 in the blood and the next slide.
NOTE Confidence: 0.956962712307692

00:33:12.020 --> 00:33:15.464 Shows you the complete classification of T

NOTE Confidence: 0.956962712307692

00:33:15.464 --> 00:33:18.822 cell lymphomas and you can see there are lot

NOTE Confidence: 0.956962712307692

00:33:18.822 --> 00:33:20.950 of different subtypes of T cell Oklahoma.

NOTE Confidence: 0.956962712307692

00:33:20.950 --> 00:33:23.164 So one thing to be careful about if you

NOTE Confidence: 0.956962712307692

00:33:23.164 --> 00:33:25.543 have a T cell lymphoma and you're doing

NOTE Confidence: 0.956962712307692

00:33:25.543 --> 00:33:27.703 some reading about this disease is to

NOTE Confidence: 0.956962712307692

00:33:27.703 --> 00:33:29.841 look more specifically at what type you

NOTE Confidence: 0.956962712307692

00:33:29.841 --> 00:33:32.088 have because some of these are indolent

NOTE Confidence: 0.956962712307692

00:33:32.088 --> 00:33:34.517 and some of them are more aggressive.

NOTE Confidence: 0.956962712307692

00:33:34.520 --> 00:33:36.580 As Doctor Montinari alluded to.

NOTE Confidence: 0.956962712307692

00:33:36.580 --> 00:33:38.939 With B cell lymphoma there are many,

NOTE Confidence: 0.956962712307692

00:33:38.940 --> 00:33:40.095 many different types.

NOTE Confidence: 0.956962712307692

00:33:40.095 --> 00:33:42.405 Then they have different clinical behavior.

NOTE Confidence: 0.956962712307692

00:33:42.410 --> 00:33:45.407 But overall, the most common type of T cell

NOTE Confidence: 0.956962712307692

00:33:45.407 --> 00:33:47.930 lymphoma are these nodal T cell lymphomas,

NOTE Confidence: 0.956962712307692

00:33:47.930 --> 00:33:49.670 and that's in the box.

NOTE Confidence: 0.956962712307692

00:33:49.670 --> 00:33:53.625 You can see that that includes PTCLNOS,
NOTE Confidence: 0.956962712307692

00:33:53.625 --> 00:33:56.000 which is peripheral T cell
NOTE Confidence: 0.956962712307692

00:33:56.000 --> 00:33:57.900 lymphoma not otherwise specified.
NOTE Confidence: 0.956962712307692

00:33:57.900 --> 00:34:00.532 Angioimmunoblastic T cell lymphoma
NOTE Confidence: 0.956962712307692

00:34:00.532 --> 00:34:03.822 anaplastic large T cell lymphoma,
NOTE Confidence: 0.956962712307692

00:34:03.830 --> 00:34:05.954 which is ALCL that could be
NOTE Confidence: 0.956962712307692

00:34:05.954 --> 00:34:08.130 out positive or alk negative,
NOTE Confidence: 0.956962712307692

00:34:08.130 --> 00:34:10.559 and then the follicular helper and nodal
NOTE Confidence: 0.956962712307692

00:34:10.559 --> 00:34:12.710 follicular helper type of T cell lymphoma.
NOTE Confidence: 0.956962712307692

00:34:12.710 --> 00:34:15.110 So that comprises a significant
NOTE Confidence: 0.956962712307692

00:34:15.110 --> 00:34:17.030 number of our cases,
NOTE Confidence: 0.956962712307692

00:34:17.030 --> 00:34:19.238 the next slide.
NOTE Confidence: 0.956962712307692

00:34:19.240 --> 00:34:21.515 Gives you an idea of the distribution
NOTE Confidence: 0.956962712307692

00:34:21.515 --> 00:34:23.080 of these different subtypes,
NOTE Confidence: 0.956962712307692

00:34:23.080 --> 00:34:24.820 and Doctor Montanari showed you
NOTE Confidence: 0.956962712307692

00:34:24.820 --> 00:34:27.119 this for B cell lymphoma as well.

NOTE Confidence: 0.956962712307692
00:34:27.120 --> 00:34:28.580 You can see that peripheral
NOTE Confidence: 0.956962712307692
00:34:28.580 --> 00:34:30.400 T cell lymphoma in the blue,
NOTE Confidence: 0.956962712307692
00:34:30.400 --> 00:34:33.280 the angioimmunoblastic in the red
NOTE Confidence: 0.956962712307692
00:34:33.280 --> 00:34:36.166 are the two most common types.
NOTE Confidence: 0.956962712307692
00:34:36.170 --> 00:34:38.618 The anaplastic large cell lymphomas are
NOTE Confidence: 0.956962712307692
00:34:38.618 --> 00:34:42.028 shown in the in the purple at 5 and 6%.
NOTE Confidence: 0.956962712307692
00:34:42.030 --> 00:34:44.963 Then you have those NK T cell
NOTE Confidence: 0.956962712307692
00:34:44.963 --> 00:34:47.054 lymphomas presenting in the sinus
NOTE Confidence: 0.956962712307692
00:34:47.054 --> 00:34:49.693 is the skin and the nasal cavity.
NOTE Confidence: 0.956962712307692
00:34:49.700 --> 00:34:51.630 And then in the light,
NOTE Confidence: 0.956962712307692
00:34:51.630 --> 00:34:54.549 the light green color is adult T
NOTE Confidence: 0.956962712307692
00:34:54.549 --> 00:34:56.729 cell leukemia lymphoma which is
NOTE Confidence: 0.956962712307692
00:34:56.729 --> 00:34:59.285 associated with that HTLV one virus.
NOTE Confidence: 0.956962712307692
00:34:59.290 --> 00:35:01.278 But the thing to notice about this
NOTE Confidence: 0.956962712307692
00:35:01.278 --> 00:35:03.701 is that many of these T solid foam
NOTE Confidence: 0.956962712307692

00:35:03.701 --> 00:35:06.005 is are very infrequent, 1 to 3%.

NOTE Confidence: 0.956962712307692

00:35:06.005 --> 00:35:09.747 As you can see on the on the left

NOTE Confidence: 0.956962712307692

00:35:09.747 --> 00:35:14.860 side of this circle. The next slide.

NOTE Confidence: 0.956962712307692

00:35:14.860 --> 00:35:15.197 Uhm,

NOTE Confidence: 0.956962712307692

00:35:15.197 --> 00:35:17.893 it shows you the cutaneous T cell lymphomas,

NOTE Confidence: 0.956962712307692

00:35:17.900 --> 00:35:20.518 and I'll just say one word about

NOTE Confidence: 0.956962712307692

00:35:20.518 --> 00:35:22.990 this disease because Yale is one of

NOTE Confidence: 0.956962712307692

00:35:22.990 --> 00:35:25.380 about eight or nine centers in the

NOTE Confidence: 0.956962712307692

00:35:25.380 --> 00:35:27.840 United States that sees many patients

NOTE Confidence: 0.956962712307692

00:35:27.840 --> 00:35:30.100 with cutaneous T cell lymphoma.

NOTE Confidence: 0.956962712307692

00:35:30.100 --> 00:35:32.675 We have total skin radiation

NOTE Confidence: 0.956962712307692

00:35:32.675 --> 00:35:33.705 therapy available,

NOTE Confidence: 0.956962712307692

00:35:33.710 --> 00:35:35.887 which is only available in a handful

NOTE Confidence: 0.956962712307692

00:35:35.887 --> 00:35:37.589 of places around the country.

NOTE Confidence: 0.956962712307692

00:35:37.590 --> 00:35:39.582 And that's a key treatment for

NOTE Confidence: 0.956962712307692

00:35:39.582 --> 00:35:41.853 this disease as well as expertise

NOTE Confidence: 0.956962712307692

00:35:41.853 --> 00:35:44.033 in dermatology with Doctor Edelson

NOTE Confidence: 0.956962712307692

00:35:44.033 --> 00:35:45.341 and Doctor Gerardi.

NOTE Confidence: 0.956962712307692

00:35:45.350 --> 00:35:48.017 Who are both world leaders in this

NOTE Confidence: 0.956962712307692

00:35:48.017 --> 00:35:50.609 area and myself and my colleagues.

NOTE Confidence: 0.956962712307692

00:35:50.610 --> 00:35:51.080 Dr.

NOTE Confidence: 0.956962712307692

00:35:51.080 --> 00:35:51.550 Dr.

NOTE Confidence: 0.956962712307692

00:35:51.550 --> 00:35:53.430 Sethi and Martin Montanari,

NOTE Confidence: 0.956962712307692

00:35:53.430 --> 00:35:55.596 as well as our bone marrow

NOTE Confidence: 0.956962712307692

00:35:55.596 --> 00:35:57.518 transplant colleagues who see many

NOTE Confidence: 0.956962712307692

00:35:57.518 --> 00:35:59.166 patients with this disease.

NOTE Confidence: 0.956962712307692

00:35:59.170 --> 00:36:01.015 So cutaneous T cell lymphomas

NOTE Confidence: 0.956962712307692

00:36:01.015 --> 00:36:02.860 can occur in the skin.

NOTE Confidence: 0.956962712307692

00:36:02.860 --> 00:36:05.470 They can be patches or plaques.

NOTE Confidence: 0.956962712307692

00:36:05.470 --> 00:36:08.428 They can be hyper or hypopigmented.

NOTE Confidence: 0.956962712307692

00:36:08.430 --> 00:36:10.299 They can occur as tumors as you

NOTE Confidence: 0.956962712307692

00:36:10.299 --> 00:36:12.500 can see on this gentleman space,
NOTE Confidence: 0.956962712307692

00:36:12.500 --> 00:36:14.648 or they can occur as redness
NOTE Confidence: 0.956962712307692

00:36:14.648 --> 00:36:16.080 all over your body.
NOTE Confidence: 0.956962712307692

00:36:16.080 --> 00:36:18.198 Which is called the Sezary syndrome.
NOTE Confidence: 0.956962712307692

00:36:18.200 --> 00:36:18.910 And again,
NOTE Confidence: 0.956962712307692

00:36:18.910 --> 00:36:21.040 this is the most common type
NOTE Confidence: 0.956962712307692

00:36:21.040 --> 00:36:23.386 of T cell lymphoma involving
NOTE Confidence: 0.956962712307692

00:36:23.386 --> 00:36:25.329 the skin the next slide.
NOTE Confidence: 0.945993505555556

00:36:28.210 --> 00:36:30.500 The next slide alludes to
NOTE Confidence: 0.945993505555556

00:36:30.500 --> 00:36:32.332 what Doctor Montinari very,
NOTE Confidence: 0.945993505555556

00:36:32.340 --> 00:36:34.482 very elegantly talked to you about
NOTE Confidence: 0.945993505555556

00:36:34.482 --> 00:36:36.932 with B cell lymphoma and that is
NOTE Confidence: 0.945993505555556

00:36:36.932 --> 00:36:39.158 that in order to treat these diseases
NOTE Confidence: 0.945993505555556

00:36:39.227 --> 00:36:41.135 effectively we need to really hone
NOTE Confidence: 0.945993505555556

00:36:41.135 --> 00:36:43.162 in on what the molecular problems
NOTE Confidence: 0.945993505555556

00:36:43.162 --> 00:36:45.794 are and we need to develop drugs

NOTE Confidence: 0.945993505555556
00:36:45.794 --> 00:36:47.626 that can specifically reverse
NOTE Confidence: 0.945993505555556
00:36:47.626 --> 00:36:49.478 those specific molecular issues
NOTE Confidence: 0.945993505555556
00:36:49.478 --> 00:36:51.810 that we find in the tumor.
NOTE Confidence: 0.945993505555556
00:36:51.810 --> 00:36:55.146 So there are multiple pathways that
NOTE Confidence: 0.945993505555556
00:36:55.146 --> 00:36:57.370 are aberrant or overexpressed,
NOTE Confidence: 0.945993505555556
00:36:57.370 --> 00:36:58.624 or perhaps mutated.
NOTE Confidence: 0.945993505555556
00:36:58.624 --> 00:37:00.714 That contribute to the malignancy
NOTE Confidence: 0.945993505555556
00:37:00.714 --> 00:37:03.063 in lymphoma and and many of those
NOTE Confidence: 0.945993505555556
00:37:03.063 --> 00:37:05.261 are shown on this slide and the
NOTE Confidence: 0.945993505555556
00:37:05.261 --> 00:37:07.307 important point for this slide and
NOTE Confidence: 0.945993505555556
00:37:07.307 --> 00:37:09.720 the reason I'm showing it to you
NOTE Confidence: 0.945993505555556
00:37:09.720 --> 00:37:11.958 is that we actually have developed
NOTE Confidence: 0.945993505555556
00:37:11.958 --> 00:37:14.290 a program that targets many of
NOTE Confidence: 0.945993505555556
00:37:14.290 --> 00:37:15.834 these different abnormalities and
NOTE Confidence: 0.945993505555556
00:37:15.834 --> 00:37:18.389 some of the drugs that we have
NOTE Confidence: 0.945993505555556

00:37:18.389 --> 00:37:20.273 in clinical trials are shown on
NOTE Confidence: 0.945993505555556

00:37:20.273 --> 00:37:22.438 the left hand side of the slide.
NOTE Confidence: 0.945993505555556

00:37:22.440 --> 00:37:24.519 I won't go into them in detail,
NOTE Confidence: 0.945993505555556

00:37:24.520 --> 00:37:27.880 but many of these are early stage studies.
NOTE Confidence: 0.945993505555556

00:37:27.880 --> 00:37:30.498 Phase one such as the Cobra Marson.
NOTE Confidence: 0.945993505555556

00:37:30.500 --> 00:37:33.209 Where we actually were among the first
NOTE Confidence: 0.945993505555556

00:37:33.209 --> 00:37:35.984 centers to put this into people as a
NOTE Confidence: 0.945993505555556

00:37:35.984 --> 00:37:38.170 kind of first in man the tipifarnib,
NOTE Confidence: 0.945993505555556

00:37:38.170 --> 00:37:40.445 I'll show you a slide to show
NOTE Confidence: 0.945993505555556

00:37:40.445 --> 00:37:42.567 you a responder in that trial,
NOTE Confidence: 0.945993505555556

00:37:42.570 --> 00:37:45.546 and then several of these others as well.
NOTE Confidence: 0.945993505555556

00:37:45.550 --> 00:37:48.422 Some of these such as TIGIT are novel
NOTE Confidence: 0.945993505555556

00:37:48.422 --> 00:37:50.324 immuno therapies that attacked the
NOTE Confidence: 0.945993505555556

00:37:50.324 --> 00:37:52.928 actual the T cells that are preventing
NOTE Confidence: 0.945993505555556

00:37:52.999 --> 00:37:55.659 our body from having an immune response.
NOTE Confidence: 0.945993505555556

00:37:55.660 --> 00:37:58.481 So all of these are important and

NOTE Confidence: 0.945993505555556
00:37:58.481 --> 00:38:00.719 again clinical trials are critical.
NOTE Confidence: 0.945993505555556
00:38:00.720 --> 00:38:02.730 To the understanding of the disease
NOTE Confidence: 0.945993505555556
00:38:02.730 --> 00:38:04.700 and to developing novel therapies.
NOTE Confidence: 0.945993505555556
00:38:04.700 --> 00:38:09.120 Next slide. It shows you why.
NOTE Confidence: 0.945993505555556
00:38:09.120 --> 00:38:10.820 Perhaps you should consider
NOTE Confidence: 0.945993505555556
00:38:10.820 --> 00:38:12.910 participating in a clinical trial,
NOTE Confidence: 0.945993505555556
00:38:12.910 --> 00:38:14.702 so this is one of our patients
NOTE Confidence: 0.945993505555556
00:38:14.702 --> 00:38:16.279 with aggressive T cell lymphoma.
NOTE Confidence: 0.945993505555556
00:38:16.280 --> 00:38:18.305 The peripheral T cell lymphoma
NOTE Confidence: 0.945993505555556
00:38:18.305 --> 00:38:19.520 not otherwise specified.
NOTE Confidence: 0.945993505555556
00:38:19.520 --> 00:38:22.100 He had advanced stage four disease.
NOTE Confidence: 0.945993505555556
00:38:22.100 --> 00:38:24.360 He had our conventional chemotherapy,
NOTE Confidence: 0.945993505555556
00:38:24.360 --> 00:38:26.412 which is the first line treatment
NOTE Confidence: 0.945993505555556
00:38:26.412 --> 00:38:27.096 for lymphoma.
NOTE Confidence: 0.945993505555556
00:38:27.100 --> 00:38:29.278 As you heard from Doctor Montinari,
NOTE Confidence: 0.945993505555556

00:38:29.280 --> 00:38:31.572 the chop type regimen is our
NOTE Confidence: 0.945993505555556

00:38:31.572 --> 00:38:33.810 kind of our standard therapy,
NOTE Confidence: 0.945993505555556

00:38:33.810 --> 00:38:35.340 so this gentleman had that treatment
NOTE Confidence: 0.945993505555556

00:38:35.340 --> 00:38:36.940 and then he developed progression.
NOTE Confidence: 0.945993505555556

00:38:36.940 --> 00:38:37.696 In his skin,
NOTE Confidence: 0.945993505555556

00:38:37.696 --> 00:38:39.838 and if you can look at the pet
NOTE Confidence: 0.945993505555556

00:38:39.838 --> 00:38:41.398 the pet scan at baseline,
NOTE Confidence: 0.945993505555556

00:38:41.400 --> 00:38:43.493 all of those those white dots that
NOTE Confidence: 0.945993505555556

00:38:43.493 --> 00:38:46.091 you see on the arms and the legs
NOTE Confidence: 0.945993505555556

00:38:46.091 --> 00:38:48.120 are cancer cells within the skin.
NOTE Confidence: 0.945993505555556

00:38:48.120 --> 00:38:50.460 So this gentleman has very
NOTE Confidence: 0.945993505555556

00:38:50.460 --> 00:38:51.396 extensive involvement.
NOTE Confidence: 0.945993505555556

00:38:51.400 --> 00:38:52.548 He got the tipifarnib,
NOTE Confidence: 0.945993505555556

00:38:52.548 --> 00:38:53.696 which by the way,
NOTE Confidence: 0.945993505555556

00:38:53.700 --> 00:38:55.842 is an oral therapy that you basically
NOTE Confidence: 0.945993505555556

00:38:55.842 --> 00:38:58.002 just take the pill every day and

NOTE Confidence: 0.945993505555556

00:38:58.002 --> 00:38:59.994 he had a near complete response.

NOTE Confidence: 0.945993505555556

00:39:00.000 --> 00:39:02.639 After eight weeks you can see that

NOTE Confidence: 0.945993505555556

00:39:02.639 --> 00:39:05.068 second pet scan showing that almost

NOTE Confidence: 0.945993505555556

00:39:05.068 --> 00:39:07.917 all of these spots have gone away.

NOTE Confidence: 0.945993505555556

00:39:07.920 --> 00:39:09.440 In only eight weeks,

NOTE Confidence: 0.945993505555556

00:39:09.440 --> 00:39:10.580 and then subsequently,

NOTE Confidence: 0.945993505555556

00:39:10.580 --> 00:39:12.110 as he got more therapy,

NOTE Confidence: 0.945993505555556

00:39:12.110 --> 00:39:13.738 had a complete clinical response

NOTE Confidence: 0.945993505555556

00:39:13.738 --> 00:39:15.040 to this drug,

NOTE Confidence: 0.945993505555556

00:39:15.040 --> 00:39:16.546 and he moved on to transplant.

NOTE Confidence: 0.945993505555556

00:39:16.550 --> 00:39:18.860 So again we have some very

NOTE Confidence: 0.945993505555556

00:39:18.860 --> 00:39:20.015 impressive impressive therapies

NOTE Confidence: 0.945993505555556

00:39:20.015 --> 00:39:22.359 that were developing the next slide.

NOTE Confidence: 0.989057857

00:39:24.370 --> 00:39:26.302 Shows you that in addition to

NOTE Confidence: 0.989057857

00:39:26.302 --> 00:39:27.590 looking at those pathways,

NOTE Confidence: 0.989057857

00:39:27.590 --> 00:39:30.680 we're also doing molecular studies were
NOTE Confidence: 0.989057857

00:39:30.680 --> 00:39:33.599 actually sequencing these tumors to try
NOTE Confidence: 0.989057857

00:39:33.599 --> 00:39:36.350 to identify mutations that can be targeted
NOTE Confidence: 0.989057857

00:39:36.350 --> 00:39:39.106 again by new drugs and new approaches,
NOTE Confidence: 0.989057857

00:39:39.110 --> 00:39:42.438 and so by doing sequencing on many tumors,
NOTE Confidence: 0.989057857

00:39:42.440 --> 00:39:44.732 what we've learned is that there
NOTE Confidence: 0.989057857

00:39:44.732 --> 00:39:47.019 are certain pathways that seemed to
NOTE Confidence: 0.989057857

00:39:47.019 --> 00:39:49.420 be a barent in many patients with
NOTE Confidence: 0.989057857

00:39:49.420 --> 00:39:51.480 specific types of T cell lymphoma.
NOTE Confidence: 0.989057857

00:39:51.480 --> 00:39:54.080 So in the follicular helper T cell lymphoma.
NOTE Confidence: 0.989057857

00:39:54.080 --> 00:39:56.738 Such as Angioimmunoblastic and other types
NOTE Confidence: 0.989057857

00:39:56.738 --> 00:39:59.540 of follicular helper T cell lymphoma.
NOTE Confidence: 0.989057857

00:39:59.540 --> 00:40:01.852 You can look at the red bar across
NOTE Confidence: 0.989057857

00:40:01.852 --> 00:40:04.739 the top and you can see that just
NOTE Confidence: 0.989057857

00:40:04.739 --> 00:40:06.599 about every patient actually had
NOTE Confidence: 0.989057857

00:40:06.599 --> 00:40:08.967 a mutation in this Step 2 gene and

NOTE Confidence: 0.989057857

00:40:08.967 --> 00:40:11.874 then below that in the blue you can

NOTE Confidence: 0.989057857

00:40:11.874 --> 00:40:13.939 see another gene DNMT three.

NOTE Confidence: 0.989057857

00:40:13.940 --> 00:40:16.747 These jeans are what we call epigenetic

NOTE Confidence: 0.989057857

00:40:16.747 --> 00:40:19.013 genes and we interestingly have

NOTE Confidence: 0.989057857

00:40:19.013 --> 00:40:21.971 treatments that we can actually use

NOTE Confidence: 0.989057857

00:40:21.971 --> 00:40:24.660 to target these gene mutations.

NOTE Confidence: 0.989057857

00:40:24.660 --> 00:40:25.515 In these patients,

NOTE Confidence: 0.989057857

00:40:25.515 --> 00:40:28.015 and when we know that and we direct

NOTE Confidence: 0.989057857

00:40:28.015 --> 00:40:30.235 specific therapies to those patients,

NOTE Confidence: 0.989057857

00:40:30.240 --> 00:40:33.006 we actually can get very impressive

NOTE Confidence: 0.989057857

00:40:33.006 --> 00:40:36.240 clinical responses. The next slide.

NOTE Confidence: 0.989057857

00:40:36.240 --> 00:40:38.502 Showed you some work that Doctor

NOTE Confidence: 0.989057857

00:40:38.502 --> 00:40:41.016 Montinari did while she was still in

NOTE Confidence: 0.989057857

00:40:41.016 --> 00:40:43.186 New York before she came to Yale,

NOTE Confidence: 0.989057857

00:40:43.190 --> 00:40:46.028 so she was working with these

NOTE Confidence: 0.989057857

00:40:46.028 --> 00:40:47.920 epigenetic mutations and using
NOTE Confidence: 0.989057857

00:40:48.008 --> 00:40:50.660 drugs like ROMIDEPSIN and a society
NOTE Confidence: 0.989057857

00:40:50.660 --> 00:40:53.300 Dean to target those mutations.
NOTE Confidence: 0.989057857

00:40:53.300 --> 00:40:55.706 And so she was participating in
NOTE Confidence: 0.989057857

00:40:55.706 --> 00:40:57.310 the T cell consortium,
NOTE Confidence: 0.989057857

00:40:57.310 --> 00:40:59.566 which is a grouping of investigators
NOTE Confidence: 0.989057857

00:40:59.566 --> 00:41:02.047 around the world who are developing
NOTE Confidence: 0.989057857

00:41:02.047 --> 00:41:04.777 novel platforms to treat TICA lymphoma
NOTE Confidence: 0.989057857

00:41:04.777 --> 00:41:06.680 using primarily immunotherapy.
NOTE Confidence: 0.989057857

00:41:06.680 --> 00:41:08.976 And in this case you can see that
NOTE Confidence: 0.989057857

00:41:08.976 --> 00:41:10.828 there are combining multiple drugs
NOTE Confidence: 0.989057857

00:41:10.828 --> 00:41:13.234 and again all of these drugs,
NOTE Confidence: 0.989057857

00:41:13.240 --> 00:41:18.478 such as azacitidine, romidepsin, develop mab.
NOTE Confidence: 0.989057857

00:41:18.480 --> 00:41:22.315 These are all drugs that are immunotherapy's,
NOTE Confidence: 0.989057857

00:41:22.315 --> 00:41:23.740 not specifically chemotherapy.
NOTE Confidence: 0.989057857

00:41:23.740 --> 00:41:24.690 And again,

NOTE Confidence: 0.989057857

00:41:24.690 --> 00:41:27.448 they're targeting what we know are the

NOTE Confidence: 0.989057857

00:41:27.448 --> 00:41:29.819 molecular aberrations in these tumor cells.

NOTE Confidence: 0.989057857

00:41:29.820 --> 00:41:32.011 So this is really very exciting for

NOTE Confidence: 0.989057857

00:41:32.011 --> 00:41:34.592 us and the future of treatment of T

NOTE Confidence: 0.989057857

00:41:34.592 --> 00:41:37.118 cell info may in fact be chemo free

NOTE Confidence: 0.989057857

00:41:37.120 --> 00:41:39.220 Doctor Moncton. Ari has brought this.

NOTE Confidence: 0.989057857

00:41:39.220 --> 00:41:40.600 To us here at Yale,

NOTE Confidence: 0.989057857

00:41:40.600 --> 00:41:42.748 and we're about to actually get

NOTE Confidence: 0.989057857

00:41:42.748 --> 00:41:46.580 these trials open. Next slide.

NOTE Confidence: 0.989057857

00:41:46.580 --> 00:41:47.174 Just briefly,

NOTE Confidence: 0.989057857

00:41:47.174 --> 00:41:48.956 to talk about stem cell transplant

NOTE Confidence: 0.989057857

00:41:48.956 --> 00:41:50.170 stem cell transplant.

NOTE Confidence: 0.989057857

00:41:50.170 --> 00:41:52.138 You heard about for B cell.

NOTE Confidence: 0.989057857

00:41:52.140 --> 00:41:54.280 Lymphoma plays a critical role

NOTE Confidence: 0.989057857

00:41:54.280 --> 00:41:55.564 in relapse patients.

NOTE Confidence: 0.989057857

00:41:55.570 --> 00:41:57.286 Autologous transplant involves taking
NOTE Confidence: 0.989057857

00:41:57.286 --> 00:42:00.337 your own cells and then giving them
NOTE Confidence: 0.989057857

00:42:00.337 --> 00:42:02.387 back after high dose chemotherapy,
NOTE Confidence: 0.989057857

00:42:02.390 --> 00:42:04.862 and this is actually used in T cell
NOTE Confidence: 0.989057857

00:42:04.862 --> 00:42:07.528 lymphoma as part of the frontline therapy.
NOTE Confidence: 0.989057857

00:42:07.530 --> 00:42:09.805 So when you're first present you get
NOTE Confidence: 0.989057857

00:42:09.805 --> 00:42:11.756 your chemotherapy and then if you
NOTE Confidence: 0.989057857

00:42:11.756 --> 00:42:13.586 have a good response to chemotherapy,
NOTE Confidence: 0.989057857

00:42:13.590 --> 00:42:16.229 we would try to do an autologous
NOTE Confidence: 0.989057857

00:42:16.229 --> 00:42:17.360 stem cell transplant.
NOTE Confidence: 0.989057857

00:42:17.360 --> 00:42:18.985 And that would hopefully prolong
NOTE Confidence: 0.989057857

00:42:18.985 --> 00:42:21.230 their time that you're in remission.
NOTE Confidence: 0.989057857

00:42:21.230 --> 00:42:23.075 The autologous transplant can also
NOTE Confidence: 0.989057857

00:42:23.075 --> 00:42:24.920 be used if you've relapsed.
NOTE Confidence: 0.989057857

00:42:24.920 --> 00:42:27.352 If you didn't have it as part of
NOTE Confidence: 0.989057857

00:42:27.352 --> 00:42:28.593 your frontline therapy,

NOTE Confidence: 0.989057857

00:42:28.593 --> 00:42:31.758 and then finally allogeneic transplant,

NOTE Confidence: 0.989057857

00:42:31.760 --> 00:42:33.690 which involves getting donor cells

NOTE Confidence: 0.989057857

00:42:33.690 --> 00:42:35.780 from somebody else, a family member,

NOTE Confidence: 0.989057857

00:42:35.780 --> 00:42:37.640 or an unrelated donor from the

NOTE Confidence: 0.989057857

00:42:37.640 --> 00:42:39.618 bone marrow transplant registry,

NOTE Confidence: 0.989057857

00:42:39.620 --> 00:42:41.525 which is an international registry

NOTE Confidence: 0.989057857

00:42:41.525 --> 00:42:43.430 of folks who are volunteering

NOTE Confidence: 0.9302637555

00:42:43.492 --> 00:42:44.977 to give you their bone

NOTE Confidence: 0.9302637555

00:42:44.977 --> 00:42:46.462 marrow or their stem cells.

NOTE Confidence: 0.9302637555

00:42:46.470 --> 00:42:47.763 The allogeneic transplant.

NOTE Confidence: 0.9302637555

00:42:47.763 --> 00:42:50.780 Is often used for patients with T

NOTE Confidence: 0.9302637555

00:42:50.853 --> 00:42:53.781 cell lymphoma who have relapsed after

NOTE Confidence: 0.9302637555

00:42:53.781 --> 00:42:56.582 autologous transplant but also is is

NOTE Confidence: 0.9302637555

00:42:56.582 --> 00:42:58.898 used sometimes as a first transplant.

NOTE Confidence: 0.9302637555

00:42:58.900 --> 00:43:01.378 For patients with some of those very

NOTE Confidence: 0.9302637555

00:43:01.378 --> 00:43:03.458 aggressive types of T cell lymphoma
NOTE Confidence: 0.9302637555

00:43:03.460 --> 00:43:05.300 and allogeneic transplant is now
NOTE Confidence: 0.9302637555

00:43:05.300 --> 00:43:07.633 being used for patients with mycosis
NOTE Confidence: 0.9302637555

00:43:07.633 --> 00:43:09.748 fungoides and the Sezary syndrome.
NOTE Confidence: 0.9302637555

00:43:09.750 --> 00:43:12.342 Those cutaneous T cell lymphomas we
NOTE Confidence: 0.9302637555

00:43:12.342 --> 00:43:15.243 have a very large experience using
NOTE Confidence: 0.9302637555

00:43:15.243 --> 00:43:18.489 transplant in Tucson Phomma at Yale.
NOTE Confidence: 0.9302637555

00:43:18.490 --> 00:43:20.919 And we're we've published some of our
NOTE Confidence: 0.9302637555

00:43:20.919 --> 00:43:23.118 data which actually looks pretty good.
NOTE Confidence: 0.9302637555

00:43:23.120 --> 00:43:25.030 So both are tollison allogeneic
NOTE Confidence: 0.9302637555

00:43:25.030 --> 00:43:27.372 transplant are ways that we can
NOTE Confidence: 0.9302637555

00:43:27.372 --> 00:43:29.177 cure patients with two solid
NOTE Confidence: 0.9302637555

00:43:29.177 --> 00:43:32.680 phomma and then the last slide.
NOTE Confidence: 0.9302637555

00:43:32.680 --> 00:43:35.599 I'm sorry the the next slide shows
NOTE Confidence: 0.9302637555

00:43:35.599 --> 00:43:37.736 that what happens if you actually do
NOTE Confidence: 0.9302637555

00:43:37.736 --> 00:43:39.420 allogeneic transplant for T cell info.

NOTE Confidence: 0.9302637555

00:43:39.420 --> 00:43:40.406 More patients,

NOTE Confidence: 0.9302637555

00:43:40.406 --> 00:43:43.636 so this is actually a study that was

NOTE Confidence: 0.9302637555

00:43:43.636 --> 00:43:46.040 done with many transplant and T cell

NOTE Confidence: 0.9302637555

00:43:46.040 --> 00:43:48.280 lymphoma centers around the country.

NOTE Confidence: 0.9302637555

00:43:48.280 --> 00:43:50.520 We all put all of our patients

NOTE Confidence: 0.9302637555

00:43:50.520 --> 00:43:52.910 together and we looked at the outcomes

NOTE Confidence: 0.9302637555

00:43:52.910 --> 00:43:55.626 and you can see again that if you

NOTE Confidence: 0.9302637555

00:43:55.626 --> 00:43:57.719 look at that round pie chart you

NOTE Confidence: 0.9302637555

00:43:57.719 --> 00:43:59.670 can see that it's pretty similar to

NOTE Confidence: 0.9302637555

00:43:59.670 --> 00:44:01.780 what I showed you at the beginning.

NOTE Confidence: 0.9302637555

00:44:01.780 --> 00:44:02.770 Many of these.

NOTE Confidence: 0.9302637555

00:44:02.770 --> 00:44:04.750 Patients had peripheral T cell lymphoma,

NOTE Confidence: 0.9302637555

00:44:04.750 --> 00:44:07.074 angioimmunoblastic and cutaneous T

NOTE Confidence: 0.9302637555

00:44:07.074 --> 00:44:11.106 cell lymphoma and you can see that

NOTE Confidence: 0.9302637555

00:44:11.106 --> 00:44:13.696 about 50% of these patients are still

NOTE Confidence: 0.9302637555

00:44:13.696 --> 00:44:16.519 alive at five years and so effectively,
NOTE Confidence: 0.9302637555

00:44:16.520 --> 00:44:19.283 that means that we've cured 50%
NOTE Confidence: 0.9302637555

00:44:19.283 --> 00:44:21.821 of patients with T cell afoma
NOTE Confidence: 0.9302637555

00:44:21.821 --> 00:44:23.090 with alginic transplant,
NOTE Confidence: 0.9302637555

00:44:23.090 --> 00:44:25.720 and I think this is really great news for us.
NOTE Confidence: 0.9302637555

00:44:25.720 --> 00:44:28.296 In great news for patients as well,
NOTE Confidence: 0.9302637555

00:44:28.300 --> 00:44:30.680 what's what what we are doing now
NOTE Confidence: 0.9302637555

00:44:30.680 --> 00:44:33.370 to try to improve on that 50%?
NOTE Confidence: 0.9302637555

00:44:33.370 --> 00:44:35.895 Is we're using other treatments
NOTE Confidence: 0.9302637555

00:44:35.895 --> 00:44:36.905 after transplant?
NOTE Confidence: 0.9302637555

00:44:36.910 --> 00:44:39.339 Hoping to try to augment the effect
NOTE Confidence: 0.9302637555

00:44:39.339 --> 00:44:41.465 of the transplant so that patients
NOTE Confidence: 0.9302637555

00:44:41.465 --> 00:44:43.845 actually do better in the long run.
NOTE Confidence: 0.9302637555

00:44:43.850 --> 00:44:44.742 And finally,
NOTE Confidence: 0.9302637555

00:44:44.742 --> 00:44:47.930 the last slide talks about car T cell.
NOTE Confidence: 0.9302637555

00:44:47.930 --> 00:44:48.809 You taught you.

NOTE Confidence: 0.9302637555

00:44:48.809 --> 00:44:50.860 You heard about car T cell from

NOTE Confidence: 0.9302637555

00:44:50.925 --> 00:44:52.609 Doctor Montanari and again,

NOTE Confidence: 0.9302637555

00:44:52.610 --> 00:44:55.700 CAR T cell is approved for a B cell lymphoma.

NOTE Confidence: 0.9302637555

00:44:55.700 --> 00:44:58.404 It is not yet approved by the FDA

NOTE Confidence: 0.9302637555

00:44:58.404 --> 00:45:01.380 for T cell lymphoma and there are

NOTE Confidence: 0.9302637555

00:45:01.380 --> 00:45:03.540 two different types of car therapy.

NOTE Confidence: 0.9302637555

00:45:03.540 --> 00:45:05.754 What you heard about from Doctor

NOTE Confidence: 0.9302637555

00:45:05.754 --> 00:45:07.849 Montanari is where we take the

NOTE Confidence: 0.9302637555

00:45:07.850 --> 00:45:09.068 patient's own cells.

NOTE Confidence: 0.9302637555

00:45:09.068 --> 00:45:11.910 We take those cells out by a

NOTE Confidence: 0.9302637555

00:45:11.997 --> 00:45:14.067 pheresis and and then we.

NOTE Confidence: 0.9302637555

00:45:14.070 --> 00:45:16.596 Engineer those cells by injecting a

NOTE Confidence: 0.9302637555

00:45:16.596 --> 00:45:19.170 specific gene protein into those cells,

NOTE Confidence: 0.9302637555

00:45:19.170 --> 00:45:21.039 and then we give them back to

NOTE Confidence: 0.9302637555

00:45:21.039 --> 00:45:23.104 the patient in this whole process

NOTE Confidence: 0.9302637555

00:45:23.104 --> 00:45:25.390 takes about three or four weeks.

NOTE Confidence: 0.9302637555

00:45:25.390 --> 00:45:27.952 A newer approach is to use what

NOTE Confidence: 0.9302637555

00:45:27.952 --> 00:45:29.578 we call allogeneic T cells,

NOTE Confidence: 0.9302637555

00:45:29.578 --> 00:45:32.090 and that's shown on the bottom of this slide.

NOTE Confidence: 0.9302637555

00:45:32.090 --> 00:45:34.490 What we do is we get healthy donors.

NOTE Confidence: 0.9302637555

00:45:34.490 --> 00:45:36.390 We take their T cells,

NOTE Confidence: 0.9302637555

00:45:36.390 --> 00:45:38.763 we inject the gene and we manipulate

NOTE Confidence: 0.9302637555

00:45:38.763 --> 00:45:41.403 those T cells so that we can give

NOTE Confidence: 0.9302637555

00:45:41.403 --> 00:45:43.374 them back basically to any donor

NOTE Confidence: 0.9302637555

00:45:43.374 --> 00:45:44.730 and they won't get.

NOTE Confidence: 0.9302637555

00:45:44.730 --> 00:45:46.600 Projected so those are what

NOTE Confidence: 0.9302637555

00:45:46.600 --> 00:45:49.159 we call off the shelf T cells.

NOTE Confidence: 0.9302637555

00:45:49.160 --> 00:45:49.518 Basically,

NOTE Confidence: 0.9302637555

00:45:49.518 --> 00:45:51.308 once we identify a patient

NOTE Confidence: 0.9302637555

00:45:51.308 --> 00:45:52.740 who might need that

NOTE Confidence: 0.975829871428571

00:45:52.809 --> 00:45:54.500 kind of a car, T cell therapy,

NOTE Confidence: 0.975829871428571

00:45:54.500 --> 00:45:57.222 all we need to do is call the company

NOTE Confidence: 0.975829871428571

00:45:57.222 --> 00:45:59.889 order their T cells have them delivered,

NOTE Confidence: 0.975829871428571

00:45:59.890 --> 00:46:01.990 which is generally fairly quick and then

NOTE Confidence: 0.975829871428571

00:46:01.990 --> 00:46:04.430 go ahead and give them to the patients.

NOTE Confidence: 0.975829871428571

00:46:04.430 --> 00:46:07.048 So I think this is exciting for

NOTE Confidence: 0.975829871428571

00:46:07.048 --> 00:46:10.165 the future and right now this is a

NOTE Confidence: 0.975829871428571

00:46:10.165 --> 00:46:13.016 clinical trial that is open at Yale

NOTE Confidence: 0.975829871428571

00:46:13.016 --> 00:46:15.578 for patients with T cell lymphoma.

NOTE Confidence: 0.975829871428571

00:46:15.580 --> 00:46:17.750 So I think that is my last slide and I

NOTE Confidence: 0.975829871428571

00:46:17.807 --> 00:46:19.919 believe will stop here for questions.

NOTE Confidence: 0.975829871428571

00:46:19.920 --> 00:46:21.560 I'll turn it back over to Doctor Lee.

NOTE Confidence: 0.9749931

00:46:22.590 --> 00:46:23.990 Great, thank you very much.

NOTE Confidence: 0.9749931

00:46:23.990 --> 00:46:26.942 That was fantastic and it really is exciting

NOTE Confidence: 0.9749931

00:46:26.942 --> 00:46:30.345 and I just want to echo our two speakers.

NOTE Confidence: 0.9749931

00:46:30.350 --> 00:46:32.947 And you know all these advances and

NOTE Confidence: 0.9749931

00:46:32.947 --> 00:46:35.646 and come through research and also on
NOTE Confidence: 0.9749931

00:46:35.646 --> 00:46:38.274 the research that are being done all
NOTE Confidence: 0.9749931

00:46:38.274 --> 00:46:42.102 over and of course and hours just yell
NOTE Confidence: 0.9749931

00:46:42.102 --> 00:46:44.778 in particular and we need researchers.
NOTE Confidence: 0.9749931

00:46:44.778 --> 00:46:47.480 When patients population and we need to
NOTE Confidence: 0.9749931

00:46:47.552 --> 00:46:49.952 support and one of the things that we
NOTE Confidence: 0.9749931

00:46:49.952 --> 00:46:53.188 hope to be able to offer is that with
NOTE Confidence: 0.9749931

00:46:53.188 --> 00:46:55.815 our hopefully new Cancer Center and
NOTE Confidence: 0.9749931

00:46:55.815 --> 00:46:58.070 they will have investigational trials.
NOTE Confidence: 0.9749931

00:46:58.070 --> 00:47:01.174 And then I made available to our community
NOTE Confidence: 0.9749931

00:47:01.174 --> 00:47:04.199 and our patients in our in our area.
NOTE Confidence: 0.9749931

00:47:04.200 --> 00:47:05.568 We've got a number of wonderful
NOTE Confidence: 0.9749931

00:47:05.568 --> 00:47:06.884 questions and Dr Mountain Airy has
NOTE Confidence: 0.9749931

00:47:06.884 --> 00:47:08.158 I think I answered some of them,
NOTE Confidence: 0.9749931

00:47:08.160 --> 00:47:09.816 but I have a, you know,
NOTE Confidence: 0.9749931

00:47:09.820 --> 00:47:12.574 given the age that we live in and I'd

NOTE Confidence: 0.9749931

00:47:12.574 --> 00:47:15.771 like to ask the two of you a couple of

NOTE Confidence: 0.9749931

00:47:15.771 --> 00:47:17.880 questions about COVID and vaccination

NOTE Confidence: 0.9749931

00:47:17.880 --> 00:47:21.112 so you know among your patients at your

NOTE Confidence: 0.9749931

00:47:21.112 --> 00:47:24.520 tree for B cell and Forman T cell lymphoma.

NOTE Confidence: 0.9749931

00:47:24.520 --> 00:47:26.422 My first question would be shoood

NOTE Confidence: 0.9749931

00:47:26.422 --> 00:47:28.937 are of course I'm going to send them.

NOTE Confidence: 0.9749931

00:47:28.940 --> 00:47:30.565 Our pictures have received and

NOTE Confidence: 0.9749931

00:47:30.565 --> 00:47:31.540 then the vaccine.

NOTE Confidence: 0.9749931

00:47:31.540 --> 00:47:32.728 Should they be receiving

NOTE Confidence: 0.9749931

00:47:32.728 --> 00:47:34.213 a booster vaccine and if.

NOTE Confidence: 0.9749931

00:47:34.220 --> 00:47:34.501 Yes,

NOTE Confidence: 0.9749931

00:47:34.501 --> 00:47:35.906 when should they receive it?

NOTE Confidence: 0.980713045714286

00:47:39.590 --> 00:47:42.297 Oh I, I can start with the, UM,

NOTE Confidence: 0.980713045714286

00:47:42.297 --> 00:47:44.673 you know we shall inform are the most

NOTE Confidence: 0.980713045714286

00:47:44.673 --> 00:47:46.619 common treatment that we most common

NOTE Confidence: 0.980713045714286

00:47:46.619 --> 00:47:48.796 drugs that we use are antecedent
NOTE Confidence: 0.980713045714286

00:47:48.796 --> 00:47:50.928 while yet monoclonal antibodies.
NOTE Confidence: 0.980713045714286

00:47:50.930 --> 00:47:53.962 And these are the cells that depletes this
NOTE Confidence: 0.980713045714286

00:47:53.962 --> 00:47:56.348 other produce antibodies in our body.
NOTE Confidence: 0.980713045714286

00:47:56.350 --> 00:47:58.050 So these are excellent treatment
NOTE Confidence: 0.980713045714286

00:47:58.050 --> 00:47:59.070 for the lymphoma.
NOTE Confidence: 0.980713045714286

00:47:59.070 --> 00:48:02.524 But the downside is that they sort of
NOTE Confidence: 0.980713045714286

00:48:02.524 --> 00:48:04.848 target the same sound that should protect
NOTE Confidence: 0.980713045714286

00:48:04.848 --> 00:48:09.034 us from from from from the COVID so.
NOTE Confidence: 0.980713045714286

00:48:09.034 --> 00:48:10.342 Patients, yes.
NOTE Confidence: 0.980713045714286

00:48:10.342 --> 00:48:12.958 Should that country receive
NOTE Confidence: 0.980713045714286

00:48:12.960 --> 00:48:14.780 vision will have cancer diagnosis.
NOTE Confidence: 0.980713045714286

00:48:14.780 --> 00:48:17.020 Solid organ transplant recipient
NOTE Confidence: 0.980713045714286

00:48:17.020 --> 00:48:19.820 and patient actively on treatment
NOTE Confidence: 0.980713045714286

00:48:19.820 --> 00:48:22.290 should be should receive a booster
NOTE Confidence: 0.980713045714286

00:48:22.290 --> 00:48:26.178 and and that is that is really

NOTE Confidence: 0.980713045714286

00:48:26.178 --> 00:48:29.134 important to maximize their their

NOTE Confidence: 0.980713045714286

00:48:29.134 --> 00:48:30.926 production against the bias.

NOTE Confidence: 0.989876278571429

00:48:32.040 --> 00:48:35.024 And I also think that we don't understand

NOTE Confidence: 0.989876278571429

00:48:35.024 --> 00:48:37.823 enough yet because we're so early in

NOTE Confidence: 0.989876278571429

00:48:37.823 --> 00:48:40.181 the evolution of COVID to understand

NOTE Confidence: 0.989876278571429

00:48:40.181 --> 00:48:42.762 what really constitutes a good a good

NOTE Confidence: 0.989876278571429

00:48:42.762 --> 00:48:44.427 immune response against the virus.

NOTE Confidence: 0.989876278571429

00:48:44.430 --> 00:48:46.298 As Doctor Montanari mentioned,

NOTE Confidence: 0.989876278571429

00:48:46.298 --> 00:48:47.699 antibodies are critical,

NOTE Confidence: 0.989876278571429

00:48:47.700 --> 00:48:50.390 but also we know that T cells play a very

NOTE Confidence: 0.989876278571429

00:48:50.458 --> 00:48:53.146 important role and many of our therapies.

NOTE Confidence: 0.989876278571429

00:48:53.150 --> 00:48:55.582 Of course, for two Salama deplete T cells

NOTE Confidence: 0.989876278571429

00:48:55.582 --> 00:48:58.089 so our patients oftentimes asked me,

NOTE Confidence: 0.989876278571429

00:48:58.090 --> 00:48:59.763 well, can I just get that COVID

NOTE Confidence: 0.989876278571429

00:48:59.763 --> 00:49:00.670 antibody level drawn in?

NOTE Confidence: 0.989876278571429

00:49:00.670 --> 00:49:02.378 Is that going to tell me weather?
NOTE Confidence: 0.989876278571429

00:49:02.380 --> 00:49:04.235 Whether or not I need a booster
NOTE Confidence: 0.989876278571429

00:49:04.235 --> 00:49:06.114 and and you know, I've talked
NOTE Confidence: 0.989876278571429

00:49:06.114 --> 00:49:07.899 extensively to our infectious disease,
NOTE Confidence: 0.989876278571429

00:49:07.900 --> 00:49:09.420 folks about that as well.
NOTE Confidence: 0.989876278571429

00:49:09.420 --> 00:49:11.576 And the answer is that we actually
NOTE Confidence: 0.989876278571429

00:49:11.576 --> 00:49:13.943 don't know yet whether those antibody
NOTE Confidence: 0.989876278571429

00:49:13.943 --> 00:49:15.775 titers really mean anything.
NOTE Confidence: 0.989876278571429

00:49:15.780 --> 00:49:17.754 And if a patient is immunocompromised
NOTE Confidence: 0.989876278571429

00:49:17.754 --> 00:49:21.558 and there as you said, a cancer patient,
NOTE Confidence: 0.989876278571429

00:49:21.560 --> 00:49:23.942 the harm in getting a booster
NOTE Confidence: 0.989876278571429

00:49:23.942 --> 00:49:25.133 is probably minimal.
NOTE Confidence: 0.989876278571429

00:49:25.140 --> 00:49:26.600 The benefit is unknown,
NOTE Confidence: 0.989876278571429

00:49:26.600 --> 00:49:28.425 so I generally recommend that
NOTE Confidence: 0.989876278571429

00:49:28.425 --> 00:49:29.967 patients do get the booster.
NOTE Confidence: 0.983279006

00:49:31.360 --> 00:49:33.460 Fantastic thank you very much.

NOTE Confidence: 0.983279006

00:49:33.460 --> 00:49:35.710 So I have one of the

NOTE Confidence: 0.983279006

00:49:35.710 --> 00:49:37.638 questions from our audience.

NOTE Confidence: 0.982725268888889

00:49:39.960 --> 00:49:41.210 I think will direct us

NOTE Confidence: 0.982725268888889

00:49:41.210 --> 00:49:42.210 back to mountain airy.

NOTE Confidence: 0.982725268888889

00:49:42.210 --> 00:49:44.646 Do we know what causes B

NOTE Confidence: 0.982725268888889

00:49:44.646 --> 00:49:45.864 cell follicular lymphoma?

NOTE Confidence: 0.982725268888889

00:49:45.870 --> 00:49:48.000 Or maybe you know you could.

NOTE Confidence: 0.982725268888889

00:49:48.000 --> 00:49:49.434 Are there any known risk factors

NOTE Confidence: 0.982725268888889

00:49:49.434 --> 00:49:50.840 for follicular B cell lymphoma?

NOTE Confidence: 0.952308797777778

00:49:53.010 --> 00:49:54.120 Made in China.

NOTE Confidence: 0.952308797777778

00:49:54.120 --> 00:49:56.340 Lisa risk factors for calling for.

NOTE Confidence: 0.952308797777778

00:49:56.340 --> 00:49:58.825 In general, anything that essentially

NOTE Confidence: 0.952308797777778

00:49:58.825 --> 00:50:00.813 triggers the immune system,

NOTE Confidence: 0.952308797777778

00:50:00.820 --> 00:50:03.988 so chronic infection there is a

NOTE Confidence: 0.952308797777778

00:50:03.988 --> 00:50:07.030 long list of viruses, bacteria that

NOTE Confidence: 0.952308797777778

00:50:07.030 --> 00:50:09.355 have been implicated in lymphoma,
NOTE Confidence: 0.952308797777778

00:50:09.360 --> 00:50:12.222 Genesis and more from for marginal
NOTE Confidence: 0.952308797777778

00:50:12.222 --> 00:50:14.798 zone infamous subtypes than than
NOTE Confidence: 0.952308797777778

00:50:14.798 --> 00:50:17.138 fully pellicular landform itself,
NOTE Confidence: 0.952308797777778

00:50:17.140 --> 00:50:21.094 but other neon diseases where your
NOTE Confidence: 0.952308797777778

00:50:21.094 --> 00:50:23.730 immune system is dysregulated.
NOTE Confidence: 0.952308797777778

00:50:23.730 --> 00:50:25.024 Their setup,
NOTE Confidence: 0.952308797777778

00:50:25.024 --> 00:50:28.259 they make patients more susceptible
NOTE Confidence: 0.952308797777778

00:50:28.259 --> 00:50:30.200 to develop lymphoproliferative
NOTE Confidence: 0.952308797777778

00:50:30.287 --> 00:50:32.512 disorder and finally also
NOTE Confidence: 0.952308797777778

00:50:32.512 --> 00:50:33.754 immunosuppressive treatment.
NOTE Confidence: 0.952308797777778

00:50:33.754 --> 00:50:37.480 So these are all risk factors
NOTE Confidence: 0.952308797777778

00:50:37.572 --> 00:50:40.808 specifically for particular lymphoma.
NOTE Confidence: 0.952308797777778

00:50:40.810 --> 00:50:43.744 There has not been any specific
NOTE Confidence: 0.952308797777778

00:50:43.744 --> 00:50:46.297 virus or bacteria implicated in
NOTE Confidence: 0.952308797777778

00:50:46.297 --> 00:50:50.650 the pathogenesis and as of 2021.

NOTE Confidence: 0.97916469

00:50:52.080 --> 00:50:54.336 OK, thank you. I have another

NOTE Confidence: 0.97916469

00:50:54.336 --> 00:50:57.130 question and this is for Doctor Foss.

NOTE Confidence: 0.97916469

00:50:57.130 --> 00:50:58.228 Here's a patient.

NOTE Confidence: 0.97916469

00:50:58.228 --> 00:50:59.692 It's president asking the

NOTE Confidence: 0.97916469

00:50:59.692 --> 00:51:01.620 question I believe is a patient.

NOTE Confidence: 0.97916469

00:51:01.620 --> 00:51:04.371 What role does age play in selection

NOTE Confidence: 0.97916469

00:51:04.371 --> 00:51:06.918 being selected for stem cell therapy?

NOTE Confidence: 0.97916469

00:51:06.920 --> 00:51:09.755 I am 76 and I've been led to believe

NOTE Confidence: 0.97916469

00:51:09.755 --> 00:51:12.408 that I'm too old for stem cell therapy.

NOTE Confidence: 0.986259875

00:51:13.060 --> 00:51:15.363 Well, you're absolutely not too old for

NOTE Confidence: 0.986259875

00:51:15.363 --> 00:51:17.744 stem cell therapy because I have a number

NOTE Confidence: 0.986259875

00:51:17.744 --> 00:51:20.188 of patients who are in their mid 70s

NOTE Confidence: 0.986259875

00:51:20.188 --> 00:51:21.948 who've had very successful allogeneic

NOTE Confidence: 0.986259875

00:51:21.948 --> 00:51:24.284 stem cell transplants. So excuse me,

NOTE Confidence: 0.986259875

00:51:24.284 --> 00:51:27.400 we don't actually go by age anymore.

NOTE Confidence: 0.986259875

00:51:27.400 --> 00:51:30.820 We go by what we call a comorbidity score,
NOTE Confidence: 0.986259875

00:51:30.820 --> 00:51:31.981 which involves basically
NOTE Confidence: 0.986259875

00:51:31.981 --> 00:51:33.916 assessing how good your heart,
NOTE Confidence: 0.986259875

00:51:33.920 --> 00:51:36.400 your lungs, your kidneys do.
NOTE Confidence: 0.986259875

00:51:36.400 --> 00:51:37.570 You have diabetes.
NOTE Confidence: 0.986259875

00:51:37.570 --> 00:51:39.910 Do you have other medical problems?
NOTE Confidence: 0.986259875

00:51:39.910 --> 00:51:42.395 And we kind of take all those
NOTE Confidence: 0.986259875

00:51:42.395 --> 00:51:43.460 factors into consideration.
NOTE Confidence: 0.986259875

00:51:43.460 --> 00:51:45.868 And so really the decision is made
NOTE Confidence: 0.986259875

00:51:45.868 --> 00:51:48.300 based on not based on your age,
NOTE Confidence: 0.986259875

00:51:48.300 --> 00:51:50.729 but based on your overall health situation.
NOTE Confidence: 0.985672965384616

00:51:52.060 --> 00:51:54.076 Thank you very much and you know this
NOTE Confidence: 0.985672965384616

00:51:54.076 --> 00:51:55.580 next question for Doctor Montana.
NOTE Confidence: 0.985672965384616

00:51:55.580 --> 00:51:57.365 I think we were addressed it but
NOTE Confidence: 0.985672965384616

00:51:57.365 --> 00:51:59.757 I just want to make sure that this
NOTE Confidence: 0.985672965384616

00:51:59.757 --> 00:52:01.322 question is clear since someone

NOTE Confidence: 0.985672965384616
00:52:01.384 --> 00:52:03.533 the artist is asking so I will
NOTE Confidence: 0.985672965384616
00:52:03.533 --> 00:52:05.472 rephrase this question as someone
NOTE Confidence: 0.985672965384616
00:52:05.472 --> 00:52:08.508 waiting a stem cell transplant for
NOTE Confidence: 0.985672965384616
00:52:08.508 --> 00:52:10.978 diffuse large B cell lymphoma.
NOTE Confidence: 0.985672965384616
00:52:10.980 --> 00:52:12.700 Should I get a booster?
NOTE Confidence: 0.985672965384616
00:52:12.700 --> 00:52:13.504 Will it meaning?
NOTE Confidence: 0.985672965384616
00:52:13.504 --> 00:52:15.748 The booster would be wiped out by the
NOTE Confidence: 0.985672965384616
00:52:15.748 --> 00:52:17.590 process of the stem cell transplant?
NOTE Confidence: 0.959722
00:52:19.600 --> 00:52:22.525 So this is one of the
NOTE Confidence: 0.959722
00:52:22.525 --> 00:52:23.910 instances where we we might
NOTE Confidence: 0.98154645375
00:52:23.978 --> 00:52:25.850 decide to hold off the booster,
NOTE Confidence: 0.98154645375
00:52:25.850 --> 00:52:28.316 especially if the transplant is imminent,
NOTE Confidence: 0.98154645375
00:52:28.320 --> 00:52:30.105 because even after the booster
NOTE Confidence: 0.98154645375
00:52:30.105 --> 00:52:31.890 it will require approximately two
NOTE Confidence: 0.98154645375
00:52:31.950 --> 00:52:33.558 or three weeks for your immune
NOTE Confidence: 0.98154645375

00:52:33.558 --> 00:52:35.190 system to mount a response,
NOTE Confidence: 0.98154645375

00:52:35.190 --> 00:52:38.060 and by then if you're undergoing the
NOTE Confidence: 0.98154645375

00:52:38.060 --> 00:52:40.080 intensive chemotherapy and transplant,
NOTE Confidence: 0.98154645375

00:52:40.080 --> 00:52:41.910 you might lose the benefit.
NOTE Confidence: 0.98154645375

00:52:41.910 --> 00:52:46.726 Typically, we do recommend to be vaccinated.
NOTE Confidence: 0.98154645375

00:52:46.730 --> 00:52:48.281 After the transplant,
NOTE Confidence: 0.98154645375

00:52:48.281 --> 00:52:50.866 that when your immune reconstitution
NOTE Confidence: 0.98154645375

00:52:50.866 --> 00:52:52.710 happens approximately 3 months
NOTE Confidence: 0.98154645375

00:52:52.710 --> 00:52:54.555 after the stem cell transplant,
NOTE Confidence: 0.98154645375

00:52:54.560 --> 00:52:56.450 that's when we do generally recommend
NOTE Confidence: 0.98154645375

00:52:56.450 --> 00:52:58.400 for patient to undergo vaccination.
NOTE Confidence: 0.98385281625

00:52:59.940 --> 00:53:03.036 And also something I just wanted to mention.
NOTE Confidence: 0.98385281625

00:53:03.040 --> 00:53:05.440 It's critically important in these situations
NOTE Confidence: 0.98385281625

00:53:05.440 --> 00:53:07.939 for family members to be vaccinated.
NOTE Confidence: 0.98385281625

00:53:07.940 --> 00:53:10.348 We've run into that in our transplant
NOTE Confidence: 0.98385281625

00:53:10.348 --> 00:53:13.180 clinic and a couple of instances where

NOTE Confidence: 0.98385281625

00:53:13.180 --> 00:53:15.595 some of the family members have not

NOTE Confidence: 0.98385281625

00:53:15.595 --> 00:53:17.488 been vaccinated and we discussed the

NOTE Confidence: 0.98385281625

00:53:17.488 --> 00:53:19.792 importance of that for the for the patient,

NOTE Confidence: 0.98385281625

00:53:19.800 --> 00:53:21.280 for their loved one.

NOTE Confidence: 0.98385281625

00:53:21.280 --> 00:53:23.500 Who's going to be immunocompromised for,

NOTE Confidence: 0.98385281625

00:53:23.500 --> 00:53:25.110 you know, months and months.

NOTE Confidence: 0.98385281625

00:53:25.110 --> 00:53:27.585 So we really like to stress that to families

NOTE Confidence: 0.98385281625

00:53:27.585 --> 00:53:29.765 that you play a critical role as well.

NOTE Confidence: 0.981938842

00:53:30.580 --> 00:53:32.436 Thank you, that's great.

NOTE Confidence: 0.981938842

00:53:32.436 --> 00:53:35.220 I'm glad that you said that.

NOTE Confidence: 0.981938842

00:53:35.220 --> 00:53:37.304 This next question goes

NOTE Confidence: 0.981938842

00:53:37.304 --> 00:53:39.388 to Doctor Fauci again.

NOTE Confidence: 0.981938842

00:53:39.390 --> 00:53:40.650 And I, I believe you've asked

NOTE Confidence: 0.981938842

00:53:40.650 --> 00:53:42.618 this in your lecture, but again,

NOTE Confidence: 0.981938842

00:53:42.618 --> 00:53:45.870 I'm really question how does car T

NOTE Confidence: 0.981938842

00:53:45.870 --> 00:53:48.210 therapy work if you're healthy now.

NOTE Confidence: 0.981938842

00:53:48.210 --> 00:53:51.150 But if you relapse down the road,

NOTE Confidence: 0.981938842

00:53:51.150 --> 00:53:52.982 can you have your own cells taken at

NOTE Confidence: 0.981938842

00:53:52.982 --> 00:53:55.063 the time of relapse or do you need to

NOTE Confidence: 0.981938842

00:53:55.063 --> 00:53:56.860 have them taken while you're healthy?

NOTE Confidence: 0.943508094545454

00:53:59.000 --> 00:54:01.072 Are we talking about car T cell

NOTE Confidence: 0.943508094545454

00:54:01.072 --> 00:54:03.240 or stem cell transplant party?

NOTE Confidence: 0.943508094545454

00:54:03.240 --> 00:54:05.148 We do not. I mean,

NOTE Confidence: 0.943508094545454

00:54:05.148 --> 00:54:06.516 it's an interesting concept,

NOTE Confidence: 0.943508094545454

00:54:06.520 --> 00:54:09.082 but we actually do not take your

NOTE Confidence: 0.943508094545454

00:54:09.082 --> 00:54:11.849 own T cells unless you're sick.

NOTE Confidence: 0.943508094545454

00:54:11.850 --> 00:54:14.166 You know with lymphoma and about

NOTE Confidence: 0.943508094545454

00:54:14.166 --> 00:54:16.848 to undergo the car T cell process

NOTE Confidence: 0.943508094545454

00:54:16.850 --> 00:54:18.790 primarily because this cost involved

NOTE Confidence: 0.943508094545454

00:54:18.790 --> 00:54:21.078 and there's storage or freezing of

NOTE Confidence: 0.943508094545454

00:54:21.078 --> 00:54:22.788 the cells may affect the viability

NOTE Confidence: 0.943508094545454
00:54:22.788 --> 00:54:25.010 of the cells may or may not be as
NOTE Confidence: 0.943508094545454
00:54:25.010 --> 00:54:27.196 good when we need them down the road.
NOTE Confidence: 0.943508094545454
00:54:27.196 --> 00:54:29.440 So the answer to the question is.
NOTE Confidence: 0.943508094545454
00:54:29.440 --> 00:54:31.344 This moment in time we're not doing that.
NOTE Confidence: 0.98999774
00:54:32.810 --> 00:54:37.610 OK, next question is reflected lymphoma.
NOTE Confidence: 0.98999774
00:54:37.610 --> 00:54:40.250 Euro stated that follicular lymphoma
NOTE Confidence: 0.98999774
00:54:40.250 --> 00:54:43.190 has multiple relapses and measured OK.
NOTE Confidence: 0.98999774
00:54:43.190 --> 00:54:45.374 Is there also a certain percentage of
NOTE Confidence: 0.98999774
00:54:45.374 --> 00:54:47.340 patients where no relapse happened?
NOTE Confidence: 0.98999774
00:54:47.340 --> 00:54:49.244 I? I guess the question is asked in
NOTE Confidence: 0.98999774
00:54:49.244 --> 00:54:50.879 person is asking what percentage of
NOTE Confidence: 0.98999774
00:54:50.879 --> 00:54:52.960 people who guess who get a follicular
NOTE Confidence: 0.98999774
00:54:52.960 --> 00:54:54.815 lymphoma treatment will never relapse
NOTE Confidence: 0.98999774
00:54:54.815 --> 00:54:56.920 after the first round of treatment.
NOTE Confidence: 0.979620926666667
00:54:57.610 --> 00:54:59.902 Yeah, so we typically think about
NOTE Confidence: 0.979620926666667

00:54:59.902 --> 00:55:01.569 follicular lymphoma is incurable,
NOTE Confidence: 0.979620926666667

00:55:01.569 --> 00:55:03.645 infamous chronic disease where
NOTE Confidence: 0.979620926666667

00:55:03.645 --> 00:55:05.721 multiple relapses typically happen
NOTE Confidence: 0.979620926666667

00:55:05.721 --> 00:55:07.947 in the lifetime of patients.
NOTE Confidence: 0.979620926666667

00:55:07.950 --> 00:55:10.568 UM, stage one is would be additional
NOTE Confidence: 0.979620926666667

00:55:10.568 --> 00:55:14.075 would be an exception for that because in
NOTE Confidence: 0.979620926666667

00:55:14.075 --> 00:55:17.240 those instances in those rare instances.
NOTE Confidence: 0.979620926666667

00:55:17.240 --> 00:55:19.192 It could be curative,
NOTE Confidence: 0.979620926666667

00:55:19.192 --> 00:55:21.426 but typically we do expect the disease
NOTE Confidence: 0.979620926666667

00:55:21.426 --> 00:55:23.579 to come back at a certain point.
NOTE Confidence: 0.979620926666667

00:55:23.580 --> 00:55:25.212 For certain patients,
NOTE Confidence: 0.979620926666667

00:55:25.212 --> 00:55:28.476 the time from treatment until the
NOTE Confidence: 0.979620926666667

00:55:28.476 --> 00:55:30.876 recurrence can be very, very long.
NOTE Confidence: 0.979620926666667

00:55:30.876 --> 00:55:34.784 It can be decades and the patient
NOTE Confidence: 0.979620926666667

00:55:34.784 --> 00:55:37.924 might have other medical problems that
NOTE Confidence: 0.979620926666667

00:55:37.924 --> 00:55:40.129 will ultimately be more important

NOTE Confidence: 0.979620926666667

00:55:40.129 --> 00:55:42.249 than the particular lymphoma,

NOTE Confidence: 0.979620926666667

00:55:42.250 --> 00:55:44.427 but we don't keep think about for

NOTE Confidence: 0.979620926666667

00:55:44.427 --> 00:55:46.270 determining format, typically cured,

NOTE Confidence: 0.979620926666667

00:55:46.270 --> 00:55:46.880 curveball,

NOTE Confidence: 0.979620926666667

00:55:46.880 --> 00:55:51.150 kind of kind of lymphoma with treatment.

NOTE Confidence: 0.979620926666667

00:55:51.150 --> 00:55:53.910 OK, yeah.

NOTE Confidence: 0.979620926666667

00:55:53.910 --> 00:55:55.490 Thank you

NOTE Confidence: 0.979028489

00:55:55.490 --> 00:55:57.646 and this. This is a very straightforward

NOTE Confidence: 0.979028489

00:55:57.646 --> 00:55:59.667 question and I believe there's answer

NOTE Confidence: 0.979028489

00:55:59.667 --> 00:56:02.096 can be sell the former patients undergo

NOTE Confidence: 0.979028489

00:56:02.154 --> 00:56:04.434 stem cell transplant and I think as we

NOTE Confidence: 0.979028489

00:56:04.434 --> 00:56:06.830 discussed in in in our lecture that

NOTE Confidence: 0.979028489

00:56:06.830 --> 00:56:08.960 investing is the answer's resounding yes.

NOTE Confidence: 0.979028489

00:56:08.960 --> 00:56:10.694 But again, you know it depends

NOTE Confidence: 0.979028489

00:56:10.694 --> 00:56:11.850 on your performance status.

NOTE Confidence: 0.979028489

00:56:11.850 --> 00:56:15.460 You know how you're in.
NOTE Confidence: 0.979028489

00:56:15.460 --> 00:56:18.394 So, uhm. Doctor fast,
NOTE Confidence: 0.979028489

00:56:18.394 --> 00:56:20.279 this question comes from someone
NOTE Confidence: 0.979028489

00:56:20.279 --> 00:56:22.625 that you and I know quite well
NOTE Confidence: 0.979028489

00:56:22.625 --> 00:56:24.755 and she asked how will you notify
NOTE Confidence: 0.979028489

00:56:24.755 --> 00:56:27.170 your patience if they are a good
NOTE Confidence: 0.979028489

00:56:27.170 --> 00:56:29.126 candidate for the upcoming trial.
NOTE Confidence: 0.979028489

00:56:29.126 --> 00:56:32.179 For patients with T cell T cell lymphoma.
NOTE Confidence: 0.981693214285714

00:56:34.560 --> 00:56:37.224 Exception is if someone is still has a
NOTE Confidence: 0.981693214285714

00:56:37.224 --> 00:56:40.289 T seven former and undergoing treatment.
NOTE Confidence: 0.981693214285714

00:56:40.290 --> 00:56:42.710 How can a patient find out that they may be
NOTE Confidence: 0.981693214285714

00:56:42.768 --> 00:56:45.018 eligible for an investigational therapy?
NOTE Confidence: 0.981693214285714

00:56:45.020 --> 00:56:46.500 You know, it's let's see if they are
NOTE Confidence: 0.981693214285714

00:56:46.500 --> 00:56:48.484 not a patient of our practice, how can
NOTE Confidence: 0.981693214285714

00:56:48.484 --> 00:56:50.248 someone find out if they are eligible?
NOTE Confidence: 0.981693214285714

00:56:50.250 --> 00:56:52.110 What? What is the typical process?

NOTE Confidence: 0.973997644

00:56:52.530 --> 00:56:54.306 So if a patient is being seen in

NOTE Confidence: 0.973997644

00:56:54.306 --> 00:56:56.137 any one of our our care centers,

NOTE Confidence: 0.973997644

00:56:56.140 --> 00:56:58.456 anyone of the smile care centers

NOTE Confidence: 0.973997644

00:56:58.460 --> 00:57:00.392 were all attuned to what those

NOTE Confidence: 0.973997644

00:57:00.392 --> 00:57:02.448 clinical trials are and we all have

NOTE Confidence: 0.973997644

00:57:02.448 --> 00:57:04.320 a list that we can refer to an.

NOTE Confidence: 0.973997644

00:57:04.320 --> 00:57:06.886 And it's online. In fact, on the on,

NOTE Confidence: 0.973997644

00:57:06.886 --> 00:57:09.490 the Yale Cancer Center website you can

NOTE Confidence: 0.973997644

00:57:09.565 --> 00:57:12.445 actually access what these trials are.

NOTE Confidence: 0.973997644

00:57:12.450 --> 00:57:13.880 You can ask your physician.

NOTE Confidence: 0.973997644

00:57:13.880 --> 00:57:15.596 You can always call in and

NOTE Confidence: 0.973997644

00:57:15.596 --> 00:57:17.788 and talk to to any one of us.

NOTE Confidence: 0.973997644

00:57:17.790 --> 00:57:19.670 We get calls all the time from folks

NOTE Confidence: 0.973997644

00:57:19.670 --> 00:57:21.609 who want to know more about the trials

NOTE Confidence: 0.973997644

00:57:21.609 --> 00:57:23.549 and it might be eligible for them.

NOTE Confidence: 0.973997644

00:57:23.550 --> 00:57:25.620 We are always screening patients because

NOTE Confidence: 0.973997644

00:57:25.620 --> 00:57:28.011 we obviously want to give give these

NOTE Confidence: 0.973997644

00:57:28.011 --> 00:57:30.230 novel therapies to people who need them,

NOTE Confidence: 0.973997644

00:57:30.230 --> 00:57:32.114 so we're always screening patients to

NOTE Confidence: 0.973997644

00:57:32.114 --> 00:57:34.438 see whether or not they are eligible.

NOTE Confidence: 0.973997644

00:57:34.440 --> 00:57:36.010 Patients may not realize it,

NOTE Confidence: 0.973997644

00:57:36.010 --> 00:57:38.386 but often times before we go in the room,

NOTE Confidence: 0.973997644

00:57:38.390 --> 00:57:40.334 we're talking in the backroom about

NOTE Confidence: 0.973997644

00:57:40.334 --> 00:57:42.606 the trials and, you know, looking at.

NOTE Confidence: 0.973997644

00:57:42.606 --> 00:57:44.226 Various factors like maybe the

NOTE Confidence: 0.973997644

00:57:44.226 --> 00:57:45.638 crap needs to hire you.

NOTE Confidence: 0.973997644

00:57:45.640 --> 00:57:47.350 You know your heart isn't functioning

NOTE Confidence: 0.973997644

00:57:47.350 --> 00:57:49.464 well or you know other issues that

NOTE Confidence: 0.973997644

00:57:49.464 --> 00:57:51.294 might exclude you from the trials,

NOTE Confidence: 0.973997644

00:57:51.300 --> 00:57:54.884 but the bottom line is that there there's

NOTE Confidence: 0.973997644

00:57:54.884 --> 00:57:57.119 information online available to you,

NOTE Confidence: 0.973997644

00:57:57.120 --> 00:57:58.947 and you're welcome to call and talk

NOTE Confidence: 0.973997644

00:57:58.947 --> 00:58:00.992 to anybody at any of the care centers

NOTE Confidence: 0.973997644

00:58:00.992 --> 00:58:02.902 at any time to access the information

NOTE Confidence: 0.973997644

00:58:02.902 --> 00:58:04.858 about the trials would certainly love

NOTE Confidence: 0.973997644

00:58:04.858 --> 00:58:07.495 to hear from anybody who wants more

NOTE Confidence: 0.973997644

00:58:07.495 --> 00:58:09.083 information about clinical trials.

NOTE Confidence: 0.969158398333334

00:58:09.890 --> 00:58:11.378 And thank you for the fast.

NOTE Confidence: 0.969158398333334

00:58:11.380 --> 00:58:13.846 I think that's absolutely right that

NOTE Confidence: 0.969158398333334

00:58:13.846 --> 00:58:16.402 that many patients really don't realize

NOTE Confidence: 0.969158398333334

00:58:16.402 --> 00:58:18.934 that behind the scene your clinician,

NOTE Confidence: 0.969158398333334

00:58:18.940 --> 00:58:20.575 the research coordinators,

NOTE Confidence: 0.969158398333334

00:58:20.575 --> 00:58:22.824 we're all reviewing the records

NOTE Confidence: 0.969158398333334

00:58:22.824 --> 00:58:24.666 and to consider whether that person

NOTE Confidence: 0.969158398333334

00:58:24.666 --> 00:58:26.904 can be better served through one

NOTE Confidence: 0.969158398333334

00:58:26.904 --> 00:58:28.468 of the investigational trial.

NOTE Confidence: 0.969158398333334

00:58:28.470 --> 00:58:29.721 And of course,
NOTE Confidence: 0.969158398333334

00:58:29.721 --> 00:58:32.223 simply just asking us would be,
NOTE Confidence: 0.969158398333334

00:58:32.230 --> 00:58:34.116 you know, we work to come as
NOTE Confidence: 0.969158398333334

00:58:34.116 --> 00:58:35.887 the time is running out of this.
NOTE Confidence: 0.969158398333334

00:58:35.890 --> 00:58:37.920 If there's one more question,
NOTE Confidence: 0.969158398333334

00:58:37.920 --> 00:58:39.880 I think the last question.
NOTE Confidence: 0.969158398333334

00:58:39.880 --> 00:58:41.132 If IMBRUVICA only works
NOTE Confidence: 0.969158398333334

00:58:41.132 --> 00:58:42.697 for two to three years,
NOTE Confidence: 0.969158398333334

00:58:42.700 --> 00:58:44.356 what kind of a treatment is
NOTE Confidence: 0.969158398333334

00:58:44.356 --> 00:58:45.900 possible for be selling former?
NOTE Confidence: 0.969158398333334

00:58:45.900 --> 00:58:47.108 After I think Dr.
NOTE Confidence: 0.969158398333334

00:58:47.108 --> 00:58:48.316 Mountain area answered that,
NOTE Confidence: 0.969158398333334

00:58:48.320 --> 00:58:49.802 but I'll let her take another
NOTE Confidence: 0.969158398333334

00:58:49.802 --> 00:58:50.790 crack at this question.
NOTE Confidence: 0.894370022

00:58:52.310 --> 00:58:54.700 Thank you so improving outcome.
NOTE Confidence: 0.894370022

00:58:54.700 --> 00:58:56.728 Hopefully it's gonna work for more

NOTE Confidence: 0.894370022

00:58:56.728 --> 00:58:59.401 than two to three years for most of

NOTE Confidence: 0.894370022

00:58:59.401 --> 00:59:01.815 the patient it has been approved in

NOTE Confidence: 0.894370022

00:59:01.815 --> 00:59:03.750 2013 and there are questions that

NOTE Confidence: 0.894370022

00:59:03.750 --> 00:59:06.256 are still on the drug from 2013

NOTE Confidence: 0.894370022

00:59:06.256 --> 00:59:09.184 and now with benefit problem that

NOTE Confidence: 0.894370022

00:59:09.184 --> 00:59:12.526 sometimes these drugs long term can be

NOTE Confidence: 0.894370022

00:59:12.526 --> 00:59:15.276 associated with side effects and there

NOTE Confidence: 0.894370022

00:59:15.276 --> 00:59:18.364 is a drop half due to adverse event.

NOTE Confidence: 0.894370022

00:59:18.370 --> 00:59:20.746 Luckily to newer drugs have been

NOTE Confidence: 0.894370022

00:59:20.746 --> 00:59:22.330 developed after IMBRUVICA too.

NOTE Confidence: 0.894370022

00:59:22.330 --> 00:59:25.042 Sort of offset that problem there

NOTE Confidence: 0.894370022

00:59:25.042 --> 00:59:27.166 with glass of target effects.

NOTE Confidence: 0.894370022

00:59:27.166 --> 00:59:29.378 I mean, try to minimize side effects

NOTE Confidence: 0.894370022

00:59:29.378 --> 00:59:31.566 and making the drug more tolerable and

NOTE Confidence: 0.894370022

00:59:31.566 --> 00:59:33.630 then mentioned there is a new very,

NOTE Confidence: 0.894370022

00:59:33.630 --> 00:59:36.570 very interesting drug that is probably
NOTE Confidence: 0.894370022

00:59:36.570 --> 00:59:39.804 become available soon and just the last
NOTE Confidence: 0.894370022

00:59:39.804 --> 00:59:42.192 three or five that works similarly
NOTE Confidence: 0.894370022

00:59:42.192 --> 00:59:44.966 and has a better toxicity profile.
NOTE Confidence: 0.894370022

00:59:44.970 --> 00:59:45.978 So we have option.
NOTE Confidence: 0.986067876666667

00:59:46.740 --> 00:59:49.540 Great, thank you very much and I
NOTE Confidence: 0.986067876666667

00:59:49.540 --> 00:59:51.739 believe this brings still close.
NOTE Confidence: 0.986067876666667

00:59:51.740 --> 00:59:53.345 Thank you very much Doctor
NOTE Confidence: 0.986067876666667

00:59:53.345 --> 00:59:55.326 Foss doctor Martin Eric this is
NOTE Confidence: 0.986067876666667

00:59:55.326 --> 00:59:57.186 great and I hope our audience
NOTE Confidence: 0.986067876666667

00:59:57.186 --> 00:59:58.760 really got something out of it.
NOTE Confidence: 0.986067876666667

00:59:58.760 --> 01:00:00.860 So thank you everybody.
NOTE Confidence: 0.986067876666667

01:00:00.860 --> 01:00:04.000 Thank you. Thank you. Bye bye.