WEBVTT

00:00:00.000 --> 00:00:02.490 Support for Yale Cancer Answers

NOTE Confidence: 0.857268

00:00:02.490 --> 00:00:04.980 comes from AstraZeneca, dedicated

NOTE Confidence: 0.857268

00:00:05.057 --> 00:00:07.432 to advancing options and providing

NOTE Confidence: 0.857268

00:00:07.432 --> 00:00:10.420 hope for people living with cancer.

NOTE Confidence: 0.857268

00:00:10.420 --> 00:00:14.080 More information at astrazeneca-us.com.

NOTE Confidence: 0.857268

00:00:14.080 --> 00:00:16.270 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.857268

00:00:16.270 --> 00:00:18.669 your host doctor Anees Chagpar.

NOTE Confidence: 0.857268

00:00:18.670 --> 00:00:20.650 Yale Cancer Answers features the

NOTE Confidence: 0.857268

00:00:20.650 --> 00:00:23.084 latest information on cancer care by

NOTE Confidence: 0.857268

00:00:23.084 --> 00:00:24.644 welcoming oncologists and specialists

NOTE Confidence: 0.857268

00:00:24.644 --> 00:00:27.258 who are on the forefront of the

NOTE Confidence: 0.857268

00:00:27.258 --> 00:00:29.058 battle to fight cancer. This week,

NOTE Confidence: 0.857268

00:00:29.060 --> 00:00:31.281 it's a conversation about Hematologic

NOTE Confidence: 0.857268

00:00:31.281 --> 00:00:33.136 malignancies with Doctor Francesca Montanari.

NOTE Confidence: 0.857268

00:00:33.140 --> 00:00:35.060 Doctor Montanari is an assistant

NOTE Confidence: 0.857268

00:00:35.060 --> 00:00:36.980 professor of clinical medicine and

NOTE Confidence: 0.857268

00:00:37.041 --> 00:00:39.449 hematology at the Yale School of Medicine,

NOTE Confidence: 0.857268

00:00:39.450 --> 00:00:41.676 where Doctor Chagpar is a

NOTE Confidence: 0.857268

00:00:41.676 --> 00:00:43.160 professor of surgical oncology.

NOTE Confidence: 0.857268

00:00:43.160 --> 00:00:43.530 Francesca, can we

00:00:43.900 --> 00:00:46.049 start off by you telling

NOTE Confidence: 0.8311995

00:00:46.049 --> 00:00:48.391 us a little bit about Hematologic

NOTE Confidence: 0.8311995

00:00:48.391 --> 00:00:50.626 malignancies, what they are,

NOTE Confidence: 0.8311995

00:00:50.630 --> 00:00:54.185 how common they are, and how people who have

NOTE Confidence: 0.8311995

00:00:54.185 --> 00:00:57.918 a hematological malignancy can present?

NOTE Confidence: 0.8118239

00:00:57.920 --> 00:00:59.483 Hematological malignancies

NOTE Confidence: 0.8118239

00:00:59.483 --> 00:01:02.609 include all types of blood cancers.

NOTE Confidence: 0.8118239

00:01:02.610 --> 00:01:06.738 So these are cancers that can affect the

NOTE Confidence: 0.8118239

00:01:06.738 --> 00:01:10.950 bone marrow where the blood cells are made,

NOTE Confidence: 0.8118239

00:01:10.950 --> 00:01:13.584 blood cells, lymph nodes and other

NOTE Confidence: 0.8118239

00:01:13.584 --> 00:01:16.626 parts of the lymphatic system and

NOTE Confidence: 0.8118239

00:01:16.626 --> 00:01:18.429 typical hematological malignancies

NOTE Confidence: 0.8118239

00:01:18.429 --> 00:01:21.434 or blood cancers are leukemias,

NOTE Confidence: 0.8118239

00:01:21.440 --> 00:01:22.424 lymphomas, Myelomas,

NOTE Confidence: 0.8118239

00:01:22.424 --> 00:01:26.369 and others that are rare, such as

NOTE Confidence: 0.8118239

00:01:26.369 --> 00:01:28.834 myelodysplastic and Myeloproliferative disorders,

NOTE Confidence: 0.8118239

00:01:28.840 --> 00:01:31.300 and these diseases represent less

NOTE Confidence: 0.8118239

00:01:31.300 --> 00:01:34.262 than 10% of all the cancers,

NOTE Confidence: 0.8118239

00:01:34.262 --> 00:01:36.727 and there are approximately 1.8

NOTE Confidence: 0.8118239

00:01:36.727 --> 00:01:39.773 million new cases of cancer per year

NOTE Confidence: 0.8118239

00:01:39.773 --> 00:01:42.670 in the United States and approximately

NOTE Confidence: 0.8118239

00:01:42.670 --> 00:01:45.600 180,000 cases of blood cancers.

NOTE Confidence: 0.8118239

00:01:45.600 --> 00:01:47.392 So every 3 minutes,

NOTE Confidence: 0.8118239

00:01:47.392 --> 00:01:50.773 one person in the US is diagnosed

NOTE Confidence: 0.8118239

00:01:50.773 --> 00:01:53.109 with one of these diseases.

NOTE Confidence: 0.8118239

00:01:53.110 --> 00:01:56.547 Approximately half of the blood

NOTE Confidence: 0.8118239

00:01:56.550 --> 00:01:58.975 cancers are lymphomas which account

NOTE Confidence: 0.8118239

00:01:58.975 --> 00:02:01.970 for 86,000 cases per year.

NOTE Confidence: 0.8118239

00:02:01.970 --> 00:02:04.425 They are further divided in Hodgkin

NOTE Confidence: 0.8118239

00:02:04.425 --> 00:02:05.898 and non Hodgkin,

NOTE Confidence: 0.8118239

00:02:05.900 --> 00:02:08.360 which are the most common

NOTE Confidence: 0.8118239

00:02:08.360 --> 00:02:10.328 and then Hodgkin is

NOTE Confidence: 0.8118239

00:02:10.330 --> 00:02:13.767 classified into over 60 distinct subtypes.

NOTE Confidence: 0.8118239

00:02:13.770 --> 00:02:16.230 So as you can imagine,

NOTE Confidence: 0.8118239

00:02:16.230 --> 00:02:19.800 numbers tend to become very very small

NOTE Confidence: 0.8118239

00:02:19.800 --> 00:02:23.737 for the most rare of these subtypes.

NOTE Confidence: 0.8118239

00:02:27.090 --> 00:02:29.550 Leukemia is approximately 60,000 cases

NOTE Confidence: 0.8118239

00:02:29.550 --> 00:02:33.302 per year and less than 10% are myelomas,

NOTE Confidence: 0.8118239

00:02:33.302 --> 00:02:35.226 so symptoms and manifestation

NOTE Confidence: 0.8118239

00:02:35.226 --> 00:02:37.600 of these diseases can vary.

NOTE Confidence: 0.8118239

00:02:37.600 --> 00:02:40.645 There is a very wide range of

NOTE Confidence: 0.8118239

00:02:40.645 --> 00:02:43.084 symptoms that can be associated

NOTE Confidence: 0.8118239

00:02:43.084 --> 00:02:46.204 with any of these blood cancers,

NOTE Confidence: 0.8118239

00:02:46.210 --> 00:02:48.595 which depends on the specific

NOTE Confidence: 0.8118239

00:02:48.595 --> 00:02:50.503 disease and the localization.

NOTE Confidence: 0.8118239

00:02:50.510 --> 00:02:51.378 For instance,

NOTE Confidence: 0.8118239

00:02:51.378 --> 00:02:53.982 lymphoma can present with the so-called

NOTE Confidence: 0.8118239

00:02:53.982 --> 00:02:56.720 constitutional symptoms,

NOTE Confidence: 0.8118239

00:02:56.720 --> 00:02:58.493 which are very

NOTE Confidence: 0.8118239

00:02:58.493 --> 00:03:00.857 specific, fever, chills,

NOTE Confidence: 0.8118239

00:03:00.860 --> 00:03:02.740 night sweats,

NOTE Confidence: 0.8118239

00:03:02.740 --> 00:03:05.560 unintentional weight loss.

NOTE Confidence: 0.8118239

00:03:05.560 --> 00:03:08.185 But there are a lot of other

NOTE Confidence: 0.8118239

00:03:08.185 --> 00:03:10.809 symptoms which depend on the specific

NOTE Confidence: 0.8118239

00:03:10.809 --> 00:03:12.697 localization of the disease.

NOTE Confidence: 0.8118239

00:03:12.700 --> 00:03:13.408 For instance,

NOTE Confidence: 0.8118239

00:03:13.408 --> 00:03:15.532 there are lymphomas that like to

NOTE Confidence: 0.8118239

00:03:15.532 --> 00:03:17.739 affect the gastrointestinal tract,

NOTE Confidence: 0.8118239

00:03:17.740 --> 00:03:19.840 and they cause gastrointestinal disturbances.

NOTE Confidence: 0.8118239

00:03:19.840 --> 00:03:21.905 Other lymphoma can involve the

NOTE Confidence: 0.8118239

00:03:21.905 --> 00:03:24.460 eye or the structures around the

NOTE Confidence: 0.8118239

00:03:24.460 --> 00:03:26.560 eye causing trouble with vision,

NOTE Confidence: 0.8118239

00:03:26.560 --> 00:03:29.080 or they can affect the skin.

NOTE Confidence: 0.8118239

00:03:29.080 --> 00:03:31.180 And as you can imagine,

NOTE Confidence: 0.8118239

00:03:31.180 --> 00:03:34.120 depending upon the organ that is involved,

NOTE Confidence: 0.8118239

00:03:34.120 --> 00:03:37.330 you can have very different symptoms.

NOTE Confidence: 0.8118239

00:03:37.330 --> 00:03:39.365 Leukemia tends to present with

NOTE Confidence: 0.8118239

00:03:39.365 --> 00:03:41.912 symptoms related to the bone marrow

NOTE Confidence: 0.8118239

00:03:41.912 --> 00:03:44.087 involvement and the cytopenias such

NOTE Confidence: 0.8118239

00:03:44.087 --> 00:03:46.660 as fatigue from the anemia,

NOTE Confidence: 0.8118239

00:03:46.660 --> 00:03:48.400 bleeding from low platelets,

NOTE Confidence: 0.8118239

00:03:48.400 --> 00:03:51.010 infection from low blood white cell

NOTE Confidence: 0.8118239

00:03:51.087 --> 00:03:53.493 count and multiple myeloma also

NOTE Confidence: 0.8118239

00:03:53.493 --> 00:03:55.989 can present with fatigue from anemia,

NOTE Confidence: 0.8118239

00:03:55.990 --> 00:03:57.542 infection and bone pain.

NOTE Confidence: 0.8118239

00:03:57.542 --> 00:04:01.069 But bone pain is a more distinct

NOTE Confidence: 0.8118239

00:04:01.070 --> 00:04:03.737 sign of a multiple myeloma as

NOTE Confidence: 0.8118239

00:04:03.737 --> 00:04:06.655 it involves the bone structure and

NOTE Confidence: 0.8118239

00:04:06.655 --> 00:04:08.919 can cause pathological fractures.

NOTE Confidence: 0.8118239

00:04:08.920 --> 00:04:11.536 Lethargy and other gastrointestinal

NOTE Confidence: 0.8118239

00:04:11.536 --> 00:04:13.871 symptoms related to the hypercalcemia

NOTE Confidence: 0.8118239

00:04:13.871 --> 00:04:16.937 also can be present at presentation.

00:04:17.420 --> 00:04:20.372 That seems like just an amazing

NOTE Confidence: 0.8141835

00:04:20.372 --> 00:04:23.421 potpourri of symptoms and

NOTE Confidence: 0.8141835

00:04:23.421 --> 00:04:26.373 sites that these blood cancers

NOTE Confidence: 0.8141835

00:04:26.373 --> 00:04:29.220 can harbor in so how

NOTE Confidence: 0.8141835

00:04:29.220 --> 00:04:32.993 do patients find out that they have

NOTE Confidence: 0.8141835

00:04:32.993 --> 00:04:35.348 one of these hematologic malignancies?

NOTE Confidence: 0.8141835

00:04:35.350 --> 00:04:39.270 It seems like they can be

NOTE Confidence: 0.8141835

00:04:39.270 --> 00:04:43.190 anywhere from your bone marrow to your eyes,

NOTE Confidence: 0.8141835

00:04:43.190 --> 00:04:44.990 to your gastrointestinal tract,

NOTE Confidence: 0.8141835

00:04:44.990 --> 00:04:47.690 and the symptoms can be completely

NOTE Confidence: 0.8141835

00:04:47.761 --> 00:04:50.630 nonspecific, like a little bit of

NOTE Confidence: 0.8141835

00:04:50.630 --> 00:04:53.400 fatigue to having visual loss

NOTE Confidence: 0.8141835

00:04:53.400 --> 00:04:55.928 or gastrointestinal problems.

NOTE Confidence: 0.8141835

00:04:55.930 --> 00:05:01.117 So how is the diagnosis actually made?

NOTE Confidence: 0.8141835

00:05:06.230 --> 00:05:09.527 It depends on the various scenarios.

NOTE Confidence: 0.8347193

00:05:11.036 --> 00:05:13.546 Some of these blood cancers

NOTE Confidence: 0.8347193

00:05:13.546 --> 00:05:16.138 tend to be

NOTE Confidence: 0.8347193

00:05:16.140 --> 00:05:19.916 very slow growing and might be picked up

NOTE Confidence: 0.8347193

00:05:19.920 --> 00:05:20.428 incidentally,

NOTE Confidence: 0.8347193

00:05:20.428 --> 00:05:22.968 just performing some routine blood

NOTE Confidence: 0.8347193

00:05:22.968 --> 00:05:25.924 work by the primary care physician

NOTE Confidence: 0.8347193

00:05:25.924 --> 00:05:28.885 on occasion of the well being visit.

NOTE Confidence: 0.8347193

00:05:28.890 --> 00:05:32.173 So finding a new presence of

NOTE Confidence: 0.8347193

00:05:32.173 --> 00:05:34.655 increased protein in the blood

NOTE Confidence: 0.8347193

00:05:34.655 --> 00:05:37.120 might raise the suspicion of myeloma

NOTE Confidence: 0.8347193

00:05:37.120 --> 00:05:41.008 and determine additional

NOTE Confidence: 0.8347193

00:05:41.008 --> 00:05:43.600 testing that eventually lead

NOTE Confidence: 0.8347193

00:05:43.701 --> 00:05:46.809 to the diagnosis and in other

NOTE Confidence: 0.8347193

00:05:46.809 --> 00:05:50.062 cases the symptoms can be more

NOTE Confidence: 0.8347193

00:05:50.062 --> 00:05:52.752 prominent and therefore as part

NOTE Confidence: 0.8347193

00:05:52.752 --> 00:05:56.016 of the initial investigation by

NOTE Confidence: 0.8347193

00:05:56.016 --> 00:05:59.308 the primary care physician,

NOTE Confidence: 0.8347193

00:05:59.310 --> 00:06:01.266 certain signs and symptoms

NOTE Confidence: 0.8347193

00:06:01.266 --> 00:06:04.200 might be detected that raise a

NOTE Confidence: 0.8347193

00:06:04.290 --> 00:06:06.350 flag for this condition,

NOTE Confidence: 0.8347193

00:06:06.350 --> 00:06:07.859 and further evaluation

NOTE Confidence: 0.8347193

00:06:07.859 --> 00:06:09.368 include imaging studies and

NOTE Confidence: 0.8347193

00:06:09.370 --> 00:06:12.970 more in depth blood work

NOTE Confidence: 0.8347193

00:06:12.970 --> 00:06:15.623 and eventually valuation by a blood

NOTE Confidence: 0.8347193

00:06:15.623 --> 00:06:18.929 cancer specialist and so once that

NOTE Confidence: 0.8347369

00:06:18.930 --> 00:06:22.038 happens, once they come to

NOTE Confidence: 0.8347369

00:06:22.038 --> 00:06:26.470 you as a blood cancer specialist,

NOTE Confidence: 0.8347369

00:06:26.470 --> 00:06:29.680 what's the next thing that happens?

NOTE Confidence: 0.8347369

00:06:29.680 --> 00:06:31.108 So typically we

NOTE Confidence: 0.8417714

00:06:31.110 --> 00:06:34.393 do really need to run a

NOTE Confidence: 0.8417714

00:06:34.393 --> 00:06:36.810 little bit more of a work up,

NOTE Confidence: 0.8417714

00:06:36.810 --> 00:06:39.180 and that includes imaging studies,

NOTE Confidence: 0.8417714

00:06:39.180 --> 00:06:43.455 which can be anything from MRI or CT scan,

NOTE Confidence: 0.8417714

00:06:43.460 --> 00:06:46.956 even a newer form of CAT scan

NOTE Confidence: 0.8417714

00:06:46.956 --> 00:06:50.479 that is called PET Scan where we

NOTE Confidence: 0.8417714

00:06:50.479 --> 00:06:54.046 use glucose to track down in the

NOTE Confidence: 0.8417714

00:06:54.046 --> 00:06:57.252 body where there is an increase in

NOTE Confidence: 0.8417714

00:06:57.252 --> 00:06:59.950 the metabolic activity that may

NOTE Confidence: 0.8417714

00:06:59.950 --> 00:07:03.310 reveal the presence of a cancer.

NOTE Confidence: 0.8417714

00:07:03.310 --> 00:07:05.582 And ultimately the diagnosis

NOTE Confidence: 0.8417714

00:07:05.582 --> 00:07:08.422 is made through a pathology,

NOTE Confidence: 0.8417714

00:07:08.430 --> 00:07:13.334 so we would need a tissue sample either

NOTE Confidence: 0.8417714

00:07:13.334 --> 00:07:19.357 from a lymph node or from the bone marrow.

NOTE Confidence: 0.8417714

00:07:19.360 --> 00:07:23.217 Or sometimes a blood sample is

NOTE Confidence: 0.8417714

00:07:23.217 --> 00:07:26.599 sufficient where we do run specific

NOTE Confidence: 0.8417714

00:07:26.599 --> 00:07:30.386 tests to detect these diseases and

NOTE Confidence: 0.8417714

00:07:30.493 --> 00:07:34.213 once we have a pathological confirmation

NOTE Confidence: 0.8417714

00:07:34.213 --> 00:07:37.752 then other tests might be warranted

NOTE Confidence: 0.8417714

00:07:37.752 --> 00:07:41.434 depending on the nature of the disease

NOTE Confidence: 0.8417714

00:07:41.434 --> 00:07:45.777 and typically this test helps us with

NOTE Confidence: 0.8417714

00:07:45.777 --> 00:07:48.257 prognostication and with staging.

NOTE Confidence: 0.86975926

00:07:49.220 --> 00:07:51.746 Let's talk about that.

NOTE Confidence: 0.86975926

00:07:51.750 --> 00:07:53.850 How do we determine prognosis?

NOTE Confidence: 0.86975926

00:07:53.850 --> 00:07:55.890 And in general, what is the

NOTE Confidence: 0.86975926

00:07:55.890 --> 00:07:57.250 prognosis of these hematological

NOTE Confidence: 0.86975926

00:07:57.315 --> 00:07:58.899 malignancies, understanding,

NOTE Confidence: 0.86975926

00:07:58.900 --> 00:08:01.372 however, that this is a

NOTE Confidence: 0.86975926

00:08:01.372 --> 00:08:03.525 varied group of diseases that

NOTE Confidence: 0.86975926

00:08:03.525 --> 00:08:06.057 are lumped into this basket term.

NOTE Confidence: 0.8768639

00:08:07.450 --> 00:08:11.522 Right, so there is a lot of variability

NOTE Confidence: 0.8768639

00:08:11.522 --> 00:08:15.650 in the behavior of these diseases,

NOTE Confidence: 0.8768639

00:08:15.650 --> 00:08:19.857 and as we have improved our knowledge

NOTE Confidence: 0.8768639

00:08:19.857 --> 00:08:23.366 in the biology and mechanism

NOTE Confidence: 0.8768639

00:08:23.366 --> 00:08:26.530 that drives these diseases,

NOTE Confidence: 0.8768639

00:08:26.530 --> 00:08:31.549 we have a very complex way to

NOTE Confidence: 0.8768639

00:08:31.549 --> 00:08:35.280 assess prognosis and prognosis

NOTE Confidence: 0.8768639

00:08:35.280 --> 00:08:40.670 typically depends on very general

NOTE Confidence: 0.8768639

00:08:40.670 --> 00:08:42.176 information

NOTE Confidence: 0.8768639

00:08:42.176 --> 00:08:45.188 such as the burden of

NOTE Confidence: 0.8768639

00:08:45.188 --> 00:08:47.220 disease at presentation, and

NOTE Confidence: 0.8768639

00:08:47.220 --> 00:08:49.800 the performance status of the

NOTE Confidence: 0.8768639

00:08:49.800 --> 00:08:53.586 patient plays a big role and

NOTE Confidence: 0.8768639

00:08:53.586 --> 00:08:56.356 the presence of comorbidities or

NOTE Confidence: 0.8768639

00:08:56.356 --> 00:08:59.778 end organ damage from the disease,

NOTE Confidence: 0.8768639

00:08:59.780 --> 00:09:05.716 and then there are other markers that we

NOTE Confidence: 0.8768639

00:09:05.720 --> 00:09:09.170 gather from the pathology evaluation

NOTE Confidence: 0.8768639

00:09:09.170 --> 00:09:12.735 and from the genetic makeup through

NOTE Confidence: 0.8768639

00:09:12.735 --> 00:09:16.239 molecular studies and based on each

NOTE Confidence: 0.8768639

00:09:16.239 --> 00:09:19.536 disease as a specific list of

NOTE Confidence: 0.8768639

00:09:19.536 --> 00:09:22.572 features that we pay attention to

NOTE Confidence: 0.8768639

00:09:22.580 --> 00:09:25.310 when we determine the risk

NOTE Confidence: 0.8768639

00:09:25.310 --> 00:09:26.948 stratification and ultimately

NOTE Confidence: 0.8768639

00:09:26.948 --> 00:09:29.890 based on all this information,

NOTE Confidence: 0.8768639

00:09:29.890 --> 00:09:32.695 we determine what is the

NOTE Confidence: 0.8768639

00:09:32.695 --> 00:09:34.378 best treatment approach.

NOTE Confidence: 0.816629

00:09:35.670 --> 00:09:39.065 What is the treatment

NOTE Confidence: 0.816629

00:09:39.065 --> 00:09:41.290 approach for these cancers

NOTE Confidence: 0.816629

00:09:41.290 --> 00:09:42.826 in general?

NOTE Confidence: 0.816629

00:09:42.826 --> 00:09:46.400 The type of approach is very variable.

NOTE Confidence: 0.816629

00:09:46.400 --> 00:09:51.026 So first of all, the most important

NOTE Confidence: 0.816629

00:09:51.026 --> 00:09:55.593 point that I'd like to make is that,

NOTE Confidence: 0.816629

00:09:55.600 --> 00:09:58.426 as I mentioned, the behavior of

NOTE Confidence: 0.816629

00:09:58.426 --> 00:10:01.220 blood cancer is very variable.

NOTE Confidence: 0.816629

00:10:01.220 --> 00:10:04.148 There are blood cancers that are

NOTE Confidence: 0.816629

00:10:04.148 --> 00:10:06.900 very indolent and slow growing.

NOTE Confidence: 0.816629

00:10:06.900 --> 00:10:09.890 And we don't necessarily start

NOTE Confidence: 0.816629

00:10:09.890 --> 00:10:11.684 treatment upon diagnosis.

NOTE Confidence: 0.816629

00:10:11.690 --> 00:10:14.090 These diseases are considered

NOTE Confidence: 0.816629

00:10:14.090 --> 00:10:17.088 generally not curable, but very,

NOTE Confidence: 0.816629

00:10:17.088 --> 00:10:19.484 very manageable and treatable

NOTE Confidence: 0.816629

00:10:19.484 --> 00:10:21.880 with certain drugs.

NOTE Confidence: 0.816629

00:10:21.880 --> 00:10:26.092 And the most important thing upon

NOTE Confidence: 0.816629

00:10:26.092 --> 00:10:30.909 diagnosis is determining if a patient

NOTE Confidence: 0.816629

00:10:30.909 --> 00:10:34.683 requires treatment or can be watched.

NOTE Confidence: 0.816629

00:10:34.690 --> 00:10:36.870 We call that

NOTE Confidence: 0.816629

00:10:36.870 --> 00:10:38.505 watchful monitoring,

NOTE Confidence: 0.816629

00:10:38.510 --> 00:10:41.780 and once there is an indication

NOTE Confidence: 0.816629

00:10:41.780 --> 00:10:43.960 when therapy is warranted,

NOTE Confidence: 0.816629

00:10:43.960 --> 00:10:48.880 then the decision of which kind of therapy

NOTE Confidence: 0.816629

00:10:48.880 --> 00:10:53.597 depends on the specific type of disease,

NOTE Confidence: 0.816629

00:10:53.600 --> 00:10:55.825 the staging of the disease,

NOTE Confidence: 0.816629

00:10:55.825 --> 00:10:57.605 and the predicted behavior,

NOTE Confidence: 0.816629

00:10:57.610 --> 00:11:00.396 which is usually based on the genetic

NOTE Confidence: 0.816629

00:11:00.396 --> 00:11:03.388 makeup of the specific blood cancer.

NOTE Confidence: 0.816629

00:11:03.390 --> 00:11:05.170 Another important factor that

NOTE Confidence: 0.816629

00:11:05.170 --> 00:11:07.840 helps the decision about the best

NOTE Confidence: 0.816629

00:11:07.911 --> 00:11:10.096 strategy is based on patients

NOTE Confidence: 0.816629

00:11:10.096 --> 00:11:12.281 characteristics such as the age,

NOTE Confidence: 0.816629

00:11:12.290 --> 00:11:13.625 the performance status,

NOTE Confidence: 0.816629

00:11:13.625 --> 00:11:15.850 the presence of medical conditions

NOTE Confidence: 0.816629

00:11:15.850 --> 00:11:17.860 which might have an impact

NOTE Confidence: 0.816629

00:11:17.860 --> 00:11:19.870 on the tolerability of the

NOTE Confidence: 0.816629

00:11:19.953 --> 00:11:22.077 treatment and if transplant,

NOTE Confidence: 0.816629

00:11:22.080 --> 00:11:25.428 if bone marrow transplant can be

NOTE Confidence: 0.816629

00:11:25.430 --> 00:11:26.693 used for that

NOTE Confidence: 0.816629

00:11:26.693 --> 00:11:27.956 specific patient,

NOTE Confidence: 0.816629

00:11:27.960 --> 00:11:30.480 as part of the treatment strategy.

NOTE Confidence: 0.816629

00:11:30.480 --> 00:11:33.006 Another factor that is very important is

NOTE Confidence: 0.816629

00:11:33.010 --> 00:11:35.300 a patients preference now that

NOTE Confidence: 0.816629

00:11:35.300 --> 00:11:37.590 we have multiple therapy options

NOTE Confidence: 0.816629

00:11:37.660 --> 00:11:39.600 which offer similar results

NOTE Confidence: 0.816629

00:11:39.600 --> 00:11:42.821 in the long term but differ in

NOTE Confidence: 0.816629

00:11:42.821 --> 00:11:44.831 terms of administration

NOTE Confidence: 0.816629

00:11:44.831 --> 00:11:47.071 modality and side effects profile.

NOTE Confidence: 0.816629

00:11:47.071 --> 00:11:49.456 Patient preference might play a

NOTE Confidence: 0.816629

00:11:49.456 --> 00:11:52.217 big role in the final decision.

00:11:55.260 --> 00:11:58.490 During the past year there is another

NOTE Confidence: 0.8295221

00:11:58.490 --> 00:12:01.806 factor that has played

NOTE Confidence: 0.8295221

00:12:01.806 --> 00:12:05.026 a big role in our decision making,

NOTE Confidence: 0.8295221

00:12:05.030 --> 00:12:07.820 which has been the COVID pandemic.

NOTE Confidence: 0.8295221

00:12:07.820 --> 00:12:10.898 So having an aggressive blood cancer

NOTE Confidence: 0.8295221

00:12:10.898 --> 00:12:13.857 that requires treatment and has not

NOTE Confidence: 0.8295221

00:12:13.857 --> 00:12:16.720 had any variation.

NOTE Confidence: 0.8295221

00:12:16.720 --> 00:12:18.978 But because of the presence of the COVID pandemic,

NOTE Confidence: 0.8295221

00:12:18.980 --> 00:12:21.350 for those diseases that are

NOTE Confidence: 0.8295221

00:12:21.350 --> 00:12:23.728 more indolent and not immediately

NOTE Confidence: 0.8295221

00:12:23.728 --> 00:12:25.170 life threatening,

NOTE Confidence: 0.8295221

00:12:25.170 --> 00:12:28.182 we have been shifted away from

NOTE Confidence: 0.8295221

00:12:28.182 --> 00:12:30.913 using certain drugs or certain

NOTE Confidence: 0.8295221

00:12:30.913 --> 00:12:34.663 strategies to maintain the disease in

NOTE Confidence: 0.8295221

00:12:34.663 --> 00:12:38.060 remission for longer period of time.

NOTE Confidence: 0.8295221

00:12:38.060 --> 00:12:40.508 Unless there was an overall survival

NOTE Confidence: 0.8295221

00:12:40.508 --> 00:12:43.148 benefit in order to minimize the

NOTE Confidence: 0.8295221

00:12:43.148 --> 00:12:45.944 risks of increasing the severity and

NOTE Confidence: 0.8295221

00:12:45.944 --> 00:12:48.338 mortality from the infection.

00:12:50.605 --> 00:12:53.790 There's a few points there that you

NOTE Confidence: 0.84698224

00:12:53.882 --> 00:12:56.514 mentioned that I want to pick up

NOTE Confidence: 0.84698224

00:12:56.514 --> 00:12:59.790 on and the first is that some of

NOTE Confidence: 0.84698224

00:12:59.790 --> 00:13:01.840 these diseases are fairly indolent

NOTE Confidence: 0.84698224

00:13:01.920 --> 00:13:04.120 and may not require treatment.

NOTE Confidence: 0.84698224

00:13:04.120 --> 00:13:05.816 This kind of expectant

NOTE Confidence: 0.84698224

00:13:05.816 --> 00:13:07.088 watchful waiting approach.

NOTE Confidence: 0.84698224

00:13:07.090 --> 00:13:09.215 How do you determine whether

NOTE Confidence: 0.84698224

00:13:09.215 --> 00:13:11.340 that's the case for patients,

NOTE Confidence: 0.84698224

00:13:11.340 --> 00:13:13.610 particularly when you mentioned that

NOTE Confidence: 0.84698224

00:13:13.610 --> 00:13:16.840 many of these cancers are not quote

NOTE Confidence: 0.84698224

00:13:16.840 --> 00:13:19.040 curable but they are manageable?

NOTE Confidence: 0.84698224

00:13:19.040 --> 00:13:22.670 And do patients get some anxiety over

NOTE Confidence: 0.84698224

00:13:22.670 --> 00:13:26.660 the idea that they may have a cancer

NOTE Confidence: 0.84698224

00:13:26.660 --> 00:13:29.708 that were simply watching?

NOTE Confidence: 0.878338200000001

00:13:29.710 --> 00:13:32.770 It's very important to have that

NOTE Confidence: 0.878338200000001

00:13:32.770 --> 00:13:35.405 clear communication with the patient

NOTE Confidence: 0.878338200000001

00:13:35.405 --> 00:13:37.445 that initiating treatment earlier

NOTE Confidence: 0.878338200000001

00:13:37.445 --> 00:13:41.053 for this kind of cancer does not

NOTE Confidence: 0.878338200000001

00:13:41.053 --> 00:13:43.488 necessarily translate in a prolongation

NOTE Confidence: 0.878338200000001

00:13:43.488 --> 00:13:46.492 of their life expectancy and the

NOTE Confidence: 0.878338200000001

00:13:46.492 --> 00:13:50.090 goal of the treatment in their case

NOTE Confidence: 0.878338200000001

00:13:50.090 --> 00:13:52.826 is to minimize the toxicity related

NOTE Confidence: 0.878338200000001

00:13:52.826 --> 00:13:56.445 to the use of certain agents and

NOTE Confidence: 0.878338200000001

00:13:56.445 --> 00:13:59.847 maximizing the effect in terms of

NOTE Confidence: 0.878338200000001

00:13:59.847 --> 00:14:03.526 allowing them to live their normal life

NOTE Confidence: 0.878338200000001

00:14:03.526 --> 00:14:06.570 without having any side effects from

NOTE Confidence: 0.878338200000001

00:14:06.570 --> 00:14:09.660 either the treatment or the disease.

NOTE Confidence: 0.8480717

00:14:10.620 --> 00:14:12.610 So important to

NOTE Confidence: 0.8480717

00:14:12.610 --> 00:14:13.804 have good communication.

NOTE Confidence: 0.8480717

00:14:13.810 --> 00:14:16.216 We're going to learn a

NOTE Confidence: 0.8480717

00:14:16.216 --> 00:14:17.820 lot more about hematological

NOTE Confidence: 0.8480717

00:14:17.889 --> 00:14:20.043 malignancies right after we take a

NOTE Confidence: 0.8480717

00:14:20.043 --> 00:14:22.589 short break for a medical minute.

NOTE Confidence: 0.8480717

00:14:22.590 --> 00:14:25.376 Please stay tuned to learn more with

NOTE Confidence: 0.8480717

00:14:25.380 --> 00:14:26.706 my guest Doctor

NOTE Confidence: 0.8480717

00:14:26.706 --> 00:14:28.474 Francesca Montanari.

NOTE Confidence: 0.8480717

00:14:28.474 --> 00:14:30.600 Support for Yale Cancer Answers comes from

NOTE Confidence: 0.8480717

00:14:30.600 --> 00:14:32.420 AstraZeneca, working to eliminate

NOTE Confidence: 0.8480717

00:14:32.420 --> 00:14:34.558 cancer as a cause of death.

NOTE Confidence: 0.8480717

00:14:34.560 --> 00:14:37.948 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.8480717

00:14:37.950 --> 00:14:39.805 This is a medical minute

NOTE Confidence: 0.8480717

00:14:39.805 --> 00:14:41.660 about head and neck cancers,

NOTE Confidence: 0.8480717

00:14:41.660 --> 00:14:43.575 although the percentage of oral

NOTE Confidence: 0.8480717

00:14:43.575 --> 00:14:45.910 and head and neck cancer patients

NOTE Confidence: 0.8480717

00:14:45.910 --> 00:14:48.353 in the United States is only about

NOTE Confidence: 0.8480717

00:14:48.353 --> 00:14:50.302 5% of all diagnosed cancers,

NOTE Confidence: 0.8480717

00:14:50.302 --> 00:14:52.292 there are challenging side effects

NOTE Confidence: 0.8480717

00:14:52.292 --> 00:14:53.739 associated with these types

NOTE Confidence: 0.8480717

00:14:53.739 --> 00:14:55.384 of cancer and their treatment.

NOTE Confidence: 0.8480717

00:14:55.390 --> 00:14:57.006 Clinical trials are currently

NOTE Confidence: 0.8480717

00:14:57.006 --> 00:14:59.026 underway to test innovative new

NOTE Confidence: 0.8480717

00:14:59.026 --> 00:15:00.950 treatments for head and neck cancers,

NOTE Confidence: 0.8480717

00:15:00.950 --> 00:15:02.960 and in many cases less radical

NOTE Confidence: 0.8480717

00:15:02.960 --> 00:15:05.400 surgeries are able to preserve nerves,

NOTE Confidence: 0.8480717

00:15:05.400 --> 00:15:07.626 arteries and muscles in the neck,

NOTE Confidence: 0.8480717

00:15:07.630 --> 00:15:09.600 enabling patients to move, speak,

NOTE Confidence: 0.8480717

00:15:09.600 --> 00:15:12.576 breathe and eat normally after surgery.

NOTE Confidence: 0.8480717

00:15:12.580 --> 00:15:14.564 More information is available

NOTE Confidence: 0.8480717

00:15:14.564 --> 00:15:15.556 at yalecancercenter.org.

NOTE Confidence: 0.8480717

00:15:15.560 --> 00:15:18.548 You're listening to Connecticut Public Radio.

NOTE Confidence: 0.82719344

00:15:19.530 --> 00:15:21.888 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.82719344

00:15:21.890 --> 00:15:24.256 This is doctor Anees Chagpar

NOTE Confidence: 0.82719344

00:15:24.256 --> 00:15:26.622 and I'm joined tonight by my

NOTE Confidence: 0.82719344

00:15:26.622 --> 00:15:28.194 guest doctor Francesca Montanari.

NOTE Confidence: 0.82719344

00:15:28.200 --> 00:15:31.161 We're talking about the care of patients

NOTE Confidence: 0.82719344

00:15:31.161 --> 00:15:32.840 with hematologic malignacies and

NOTE Confidence: 0.82719344

00:15:32.840 --> 00:15:34.940 Francesca right before the break we

NOTE Confidence: 0.82719344

00:15:34.940 --> 00:15:37.639 were talking about the fact that these

NOTE Confidence: 0.82719344

00:15:37.639 --> 00:15:39.619 hematologic malignancies are so varied,

NOTE Confidence: 0.82719344

00:15:39.620 --> 00:15:42.780 varied in terms of where they present,

NOTE Confidence: 0.82719344

00:15:42.780 --> 00:15:45.924 some being in the bone marrow,

NOTE Confidence: 0.82719344

00:15:45.930 --> 00:15:47.900 some being in the lymph nodes,

NOTE Confidence: 0.82719344

00:15:47.900 --> 00:15:50.648 some being organs like

NOTE Confidence: 0.82719344

00:15:50.650 --> 00:15:53.586 eyes and GI track and bone and other

NOTE Confidence: 0.82719344

00:15:53.586 --> 00:15:56.288 places, they are varied in terms of

NOTE Confidence: 0.82719344

00:15:56.288 --> 00:15:58.648 their clinical presentation and the

NOTE Confidence: 0.82719344

00:15:58.648 --> 00:16:01.300 symptoms that they cause

NOTE Confidence: 0.82719344

00:16:01.300 --> 00:16:03.777 in terms of their clinical course.

NOTE Confidence: 0.82719344

00:16:03.777 --> 00:16:06.039 Some being very indolent and slow

NOTE Confidence: 0.82719344

00:16:06.039 --> 00:16:08.565 growing such that they wouldn't even

NOTE Confidence: 0.82719344

00:16:08.565 --> 00:16:10.329 warrant necessarily treatment and

NOTE Confidence: 0.82719344

00:16:10.329 --> 00:16:12.749 others being far more aggressive.

NOTE Confidence: 0.82719344

00:16:12.750 --> 00:16:15.459 Can you tell us a little bit

NOTE Confidence: 0.82719344

00:16:15.459 --> 00:16:17.430 more about the cancers,

NOTE Confidence: 0.82719344

00:16:17.430 --> 00:16:18.854 specifically what you treat?

NOTE Confidence: 0.82719344

00:16:18.854 --> 00:16:20.990 Is there a certain type of

NOTE Confidence: 0.82719344

00:16:21.063 --> 00:16:23.010 these hematologic malignancies

NOTE Confidence: 0.82719344

00:16:23.010 --> 00:16:24.230 that you specialize in?

NOTE Confidence: 0.82052094

00:16:25.430 --> 00:16:29.830 Yes, so in terms of blood cancer

NOTE Confidence: 0.82052094

00:16:29.830 --> 00:16:32.830 my research interest has

NOTE Confidence: 0.82052094

00:16:32.830 --> 00:16:36.430 always been on the lymphoma side.

NOTE Confidence: 0.82052094

00:16:36.430 --> 00:16:39.200 So lymphomas by themselves

NOTE Confidence: 0.82052094

00:16:39.200 --> 00:16:41.970 constitute the

NOTE Confidence: 0.82052094

00:16:42.073 --> 00:16:45.229 biggest part of the blood cancer.

NOTE Confidence: 0.82052094

00:16:45.230 --> 00:16:46.880 They are approximately half

NOTE Confidence: 0.82052094

00:16:46.880 --> 00:16:49.630 of all the blood cancers,

NOTE Confidence: 0.82052094

00:16:49.630 --> 00:16:52.708 but they are very diverse themselves

NOTE Confidence: 0.82052094

00:16:52.708 --> 00:16:56.499 and we do typically

NOTE Confidence: 0.82052094

00:16:56.500 --> 00:17:00.308 divide them into big categories,

NOTE Confidence: 0.82052094

00:17:00.310 --> 00:17:02.810 Hodgkin and non Hodgkin,

NOTE Confidence: 0.82052094

00:17:02.810 --> 00:17:05.310 and then furthermore into

NOTE Confidence: 0.82052094

00:17:05.310 --> 00:17:08.322 aggressive and indolent in the

NOTE Confidence: 0.82052094

00:17:08.322 --> 00:17:11.087 non Hodgkin lymphoma type and

NOTE Confidence: 0.82052094

00:17:11.090 --> 00:17:14.394 so the focus of my research

NOTE Confidence: 0.82052094

00:17:14.394 --> 00:17:17.817 has been in trying to better

NOTE Confidence: 0.82052094

00:17:17.817 --> 00:17:21.597 understand the biology of the more

NOTE Confidence: 0.82052094

00:17:21.597 --> 00:17:25.040 rare of these lymphoma types.

NOTE Confidence: 0.82052094

00:17:25.040 --> 00:17:28.864 And based on the insights in the

NOTE Confidence: 0.82052094

00:17:28.864 --> 00:17:32.452 biology to develop new treatment

NOTE Confidence: 0.82052094

00:17:32.452 --> 00:17:34.976 strategies that are targeted

NOTE Confidence: 0.82052094

00:17:34.976 --> 00:17:38.380 for these less known subtypes.

NOTE Confidence: 0.82052094

00:17:38.380 --> 00:17:39.328 In particular,

NOTE Confidence: 0.82052094

00:17:39.328 --> 00:17:42.172 the focus of my research over

NOTE Confidence: 0.82052094

00:17:42.172 --> 00:17:47.334 the past decade or so has been on

NOTE Confidence: 0.82052094

00:17:47.334 --> 00:17:49.392 posttransplant lymphoproliferative disorders,

NOTE Confidence: 0.82052094

00:17:49.400 --> 00:17:52.837 which are a rare lymphomas that arise

NOTE Confidence: 0.82052094

00:17:52.837 --> 00:17:56.550 as potentially life threatening complication

NOTE Confidence: 0.82052094

00:17:56.550 --> 00:17:58.582 of solid organ transplant.

NOTE Confidence: 0.82052094

00:17:58.582 --> 00:18:02.315 These are lymphomas that arise in the

NOTE Confidence: 0.82052094

00:18:02.315 --> 00:18:05.285 setting of reactivation of infection

NOTE Confidence: 0.82052094

00:18:05.285 --> 00:18:08.263 due to the immunosuppressive treatment

NOTE Confidence: 0.82052094

00:18:08.263 --> 00:18:11.311 or due to the chronic dysregulation

NOTE Confidence: 0.82052094

00:18:11.311 --> 00:18:15.008 of the immune system in the setting

NOTE Confidence: 0.82052094

00:18:15.008 --> 00:18:16.634 of chronic immunosuppression,

NOTE Confidence: 0.82052094

00:18:16.640 --> 00:18:17.750 and historically,

NOTE Confidence: 0.82052094

00:18:17.750 --> 00:18:21.080 the prognosis of these lymphomas have

NOTE Confidence: 0.82052094

00:18:21.080 --> 00:18:24.449 been very poor because of inability

NOTE Confidence: 0.82052094

00:18:24.449 --> 00:18:27.154 to deliver full dose treatment.

NOTE Confidence: 0.82052094

00:18:27.160 --> 00:18:29.904 And due to the frailty and

NOTE Confidence: 0.82052094

00:18:29.904 --> 00:18:32.032 risk of infectious complication

NOTE Confidence: 0.82052094

00:18:32.032 --> 00:18:36.100 that this patients experience with a

NOTE Confidence: 0.82052094

00:18:36.100 --> 00:18:38.630 regular conventional chemotherapy,

NOTE Confidence: 0.82052094

00:18:38.630 --> 00:18:41.600 the risk of dying of infection

NOTE Confidence: 0.82052094

00:18:41.600 --> 00:18:44.285 during treatment in this population

NOTE Confidence: 0.82052094

00:18:44.285 --> 00:18:47.360 has been estimated around 30%,

NOTE Confidence: 0.82052094

00:18:47.360 --> 00:18:49.675 which is extraordinarily high and

NOTE Confidence: 0.82052094

00:18:49.675 --> 00:18:53.423 in order to try to minimize the

NOTE Confidence: 0.82052094

00:18:53.423 --> 00:18:56.095 complication from the treatment,

NOTE Confidence: 0.82052094

00:18:56.100 --> 00:18:58.734 I developed the

NOTE Confidence: 0.82052094

00:18:58.734 --> 00:19:02.246 risk stratified treatment adapted

NOTE Confidence: 0.82052094

00:19:02.246 --> 00:19:07.609 strategies which are based essentially on

NOTE Confidence: 0.82052094

00:19:07.610 --> 00:19:08.108 induction phase

NOTE Confidence: 0.82052094

00:19:08.108 --> 00:19:11.096 where we do

NOTE Confidence: 0.82052094

00:19:11.096 --> 00:19:13.910 not use cytotoxic chemotherapy but

NOTE Confidence: 0.82052094

00:19:13.910 --> 00:19:16.985 more a targeted antibody approach.

NOTE Confidence: 0.82052094

00:19:16.990 --> 00:19:20.230 And then we do reserve escalation

NOTE Confidence: 0.82052094

00:19:20.230 --> 00:19:22.960 to chemotherapy only to patients

NOTE Confidence: 0.82052094

00:19:22.960 --> 00:19:26.271 that do not achieve a full response

NOTE Confidence: 0.82052094

00:19:26.271 --> 00:19:29.688 on the least invasive treatment.

NOTE Confidence: 0.82052094

00:19:29.690 --> 00:19:33.380 And with these strategies we have

NOTE Confidence: 0.82052094

00:19:33.380 --> 00:19:35.225 been able to

NOTE Confidence: 0.82052094

00:19:35.230 --> 00:19:37.996 limit the use of cytotoxic agent

NOTE Confidence: 0.82052094

00:19:37.996 --> 00:19:41.406 to less than half of the patient

NOTE Confidence: 0.82052094

00:19:41.406 --> 00:19:43.358 population that we do treat.

NOTE Confidence: 0.82052094

00:19:43.360 --> 00:19:46.228 Another area

NOTE Confidence: 0.82052094

00:19:46.228 --> 00:19:48.140 where I've been conducting

NOTE Confidence: 0.82052094

00:19:48.140 --> 00:19:50.996 research is in T cell lymphoma.

NOTE Confidence: 0.82052094

00:19:51.000 --> 00:19:53.868 Those are also very rare lymphomas.

NOTE Confidence: 0.82052094

00:19:53.870 --> 00:19:57.198 They are much rarer than the B cell

NOTE Confidence: 0.82052094

00:19:57.198 --> 00:19:59.921 lymphoma which are the most common

NOTE Confidence: 0.82052094

00:19:59.921 --> 00:20:02.171 non Hodgkin lymphoma out there

NOTE Confidence: 0.82052094

00:20:02.171 --> 00:20:04.623 and unfortunately historically we

NOTE Confidence: 0.82052094

00:20:04.623 --> 00:20:06.540 have been using

NOTE Confidence: 0.82052094

00:20:06.540 --> 00:20:08.376 a treatment

NOTE Confidence: 0.82052094

00:20:08.376 --> 00:20:10.671 that has been extrapolated from

NOTE Confidence: 0.82052094

00:20:10.671 --> 00:20:12.639 the B cell counterparts,

NOTE Confidence: 0.82052094

00:20:12.640 --> 00:20:16.042 so not really specific to these

NOTE Confidence: 0.82052094

00:20:16.042 --> 00:20:19.303 subtypes of lymphomas and the

NOTE Confidence: 0.82052094

00:20:19.303 --> 00:20:22.418 results are not as optimal as in

NOTE Confidence: 0.82052094

00:20:22.418 --> 00:20:24.966 the B cell counterpart's.

NOTE Confidence: 0.82052094

00:20:24.966 --> 00:20:27.626 Over the past few years,

NOTE Confidence: 0.82052094

00:20:27.630 --> 00:20:30.262 4 new drugs have been approved in

NOTE Confidence: 0.82052094

00:20:30.262 --> 00:20:32.302 the space for this, specifically

NOTE Confidence: 0.82052094

00:20:32.302 --> 00:20:35.214 for T cell lymphoma and one of

NOTE Confidence: 0.82052094

00:20:35.214 --> 00:20:38.020 the challenges that we have now

NOTE Confidence: 0.82052094

00:20:38.020 --> 00:20:39.868 are trying to identify

NOTE Confidence: 0.82052094

00:20:39.870 --> 00:20:42.481 what is the best sequencing of this

NOTE Confidence: 0.82052094

00:20:42.481 --> 00:20:45.391 agent and what is the best way to

NOTE Confidence: 0.82052094

00:20:45.391 --> 00:20:47.792 combine them to improve the outcome

NOTE Confidence: 0.82052094

00:20:47.792 --> 00:20:50.837 of patients with additional malignancies.

NOTE Confidence: 0.86671746

00:20:51.690 --> 00:20:54.450 It sounds like in both of those

NOTE Confidence: 0.86671746

00:20:54.450 --> 00:20:56.660 scenarios the overarching theme

NOTE Confidence: 0.86671746

00:20:56.660 --> 00:20:58.584 is really personalizing treatment

NOTE Confidence: 0.86671746

00:20:58.584 --> 00:21:01.389 to the patients individual disease,

NOTE Confidence: 0.86671746

00:21:01.390 --> 00:21:05.313 so I wanted to just take a step back

NOTE Confidence: 0.86671746

00:21:05.313 --> 00:21:08.457 and talk a little bit more about

NOTE Confidence: 0.86671746

00:21:08.457 --> 00:21:11.536 the intricacies of each of these.

NOTE Confidence: 0.86671746

00:21:11.540 --> 00:21:14.361 So with regards to the post transplant

NOTE Confidence: 0.86671746

00:21:14.361 --> 00:21:16.616 lymphoma, help us to understand

NOTE Confidence: 0.86671746

00:21:16.616 --> 00:21:19.026 again how these lymphomas occur,

NOTE Confidence: 0.86671746

00:21:19.030 --> 00:21:21.720 'cause certainly there are listeners

NOTE Confidence: 0.86671746

00:21:21.720 --> 00:21:25.216 who may have gone through a solid organ

NOTE Confidence: 0.86671746

00:21:25.216 --> 00:21:28.765 transplant or may know someone who has and

NOTE Confidence: 0.86671746

00:21:28.765 --> 00:21:32.640 these patients are on immunosuppressives.

NOTE Confidence: 0.86671746

00:21:32.640 --> 00:21:34.746 So does that immunosuppressive

NOTE Confidence: 0.86671746

00:21:34.746 --> 00:21:36.328 therapy automatically increase

NOTE Confidence: 0.86671746

00:21:36.328 --> 00:21:38.440 their risk of lymphoma?

NOTE Confidence: 0.86671746

00:21:38.440 --> 00:21:42.598 And is there anything that they can do to

NOTE Confidence: 0.86671746

00:21:42.598 --> 00:21:46.336 reduce their risk of developing lymphoma

NOTE Confidence: 0.90054584

00:21:46.340 --> 00:21:47.918 in that setting?

NOTE Confidence: 0.90054584

00:21:47.918 --> 00:21:50.560 That's a really good question,

NOTE Confidence: 0.90054584

00:21:50.560 --> 00:21:54.592 so we do after the transplant patient

NOTE Confidence: 0.90054584

00:21:54.592 --> 00:21:56.320 received different immunosuppressive

NOTE Confidence: 0.90054584

00:21:56.401 --> 00:21:59.943 treatment which are related to the different

NOTE Confidence: 0.90054584

00:21:59.943 --> 00:22:03.409 kind of transplant that they have received.

NOTE Confidence: 0.90054584

00:22:03.410 --> 00:22:04.546 For transplant,

NOTE Confidence: 0.90054584

00:22:04.546 --> 00:22:06.818 such as intestinal transplant,

NOTE Confidence: 0.90054584

00:22:06.820 --> 00:22:08.593 multi visceral transplant,

NOTE Confidence: 0.90054584

00:22:08.593 --> 00:22:11.548 immunosuppressive treatment is much tougher

NOTE Confidence: 0.90054584

00:22:11.548 --> 00:22:15.358 and much deeper than a patient that

NOTE Confidence: 0.90054584

00:22:15.360 --> 00:22:19.128 for instance receives renal transplant where

NOTE Confidence: 0.90054584

00:22:19.128 --> 00:22:21.012 immunosuppresant treatment required

NOTE Confidence: 0.90054584

00:22:21.012 --> 00:22:24.458 for the recipient to accept the graft is much less.

00:22:33.460 --> 00:22:35.852 And the reason we do see as a

NOTE Confidence: 0.90054584

00:22:35.852 --> 00:22:38.153 consequence of the immune suppression

NOTE Confidence: 0.90054584

00:22:38.153 --> 00:22:40.329 reactivation of common infection,

NOTE Confidence: 0.90054584

00:22:40.330 --> 00:22:41.539 and most important,

NOTE Confidence: 0.90054584

00:22:41.539 --> 00:22:43.957 is the Epstein Barr virus,

NOTE Confidence: 0.90054584

00:22:43.960 --> 00:22:46.788 which is the virus that causes mononucleosis.

NOTE Confidence: 0.90054584

00:22:46.790 --> 00:22:49.653 Most of the adult population has been

NOTE Confidence: 0.90054584

00:22:49.653 --> 00:22:52.846 exposed by adulthood to the virus,

NOTE Confidence: 0.90054584

00:22:52.850 --> 00:22:55.699 and the virus is dormant in

NOTE Confidence: 0.90054584

00:22:55.699 --> 00:22:58.100 a silent state in our body,

NOTE Confidence: 0.90054584

00:22:58.100 --> 00:23:01.736 and is kept at bay by our immune system.

NOTE Confidence: 0.90054584

00:23:01.740 --> 00:23:03.860 So conditions such as immunosupression where

NOTE Confidence: 0.90054584

00:23:04.710 --> 00:23:07.585 our immune system defenses are lowered

NOTE Confidence: 0.90054584

00:23:07.585 --> 00:23:11.058 allow the virus to thrive again

NOTE Confidence: 0.90054584

00:23:11.058 --> 00:23:14.076 and replicate and

NOTE Confidence: 0.90054584

00:23:14.080 --> 00:23:16.830 this particular kind of virus,

NOTE Confidence: 0.90054584

00:23:16.830 --> 00:23:20.876 in the absence of an immune system

NOTE Confidence: 0.90054584

00:23:20.876 --> 00:23:25.097 that fights it and keeps it at bay,

NOTE Confidence: 0.90054584

00:23:25.100 --> 00:23:29.330 is able to transform the blood

NOTE Confidence: 0.90054584

00:23:29.330 --> 00:23:32.660 cells into lymphoma cells so

NOTE Confidence: 0.90054584

00:23:32.660 --> 00:23:34.673 typically in the first year

NOTE Confidence: 0.90054584

00:23:34.673 --> 00:23:35.876 after the transplant,

NOTE Confidence: 0.90054584

00:23:35.880 --> 00:23:39.485 most of the lymphoma that we do

NOTE Confidence: 0.90054584

00:23:39.485 --> 00:23:42.900 see are related to Epstein Barr

NOTE Confidence: 0.90054584

00:23:42.900 --> 00:23:44.756 reactivation in the

NOTE Confidence: 0.90054584

00:23:44.756 --> 00:23:47.076 setting of the immune suppression,

NOTE Confidence: 0.90054584

00:23:47.080 --> 00:23:49.852 the lymphoma that arise after one

NOTE Confidence: 0.90054584

00:23:49.852 --> 00:23:53.158 year still can be

NOTE Confidence: 0.90054584

00:23:53.158 --> 00:23:55.882 linked to the Epstein Barr virus,

NOTE Confidence: 0.90054584

00:23:55.890 --> 00:23:58.584 but approximately half of them happen

NOTE Confidence: 0.90054584

00:23:58.584 --> 00:24:01.460 without a reactivation of Epstein virus,

NOTE Confidence: 0.90054584

00:24:01.460 --> 00:24:04.505 and they do not hardwire the genetic

NOTE Confidence: 0.90054584

00:24:04.505 --> 00:24:07.105 material of the virus and are

NOTE Confidence: 0.90054584

00:24:07.105 --> 00:24:09.517 thought to arise in the setting

NOTE Confidence: 0.90054584

00:24:09.517 --> 00:24:12.599 of a chronic immune dysregulation

NOTE Confidence: 0.90054584

00:24:12.600 --> 00:24:16.110 due to the longstanding immunosuppression.

00:24:16.560 --> 00:24:18.530 Is there anything that

NOTE Confidence: 0.88250816

00:24:18.530 --> 00:24:21.125 people can do to limit that

NOTE Confidence: 0.88250816

00:24:21.125 --> 00:24:23.810 reactivation of Epstein Barr virus?

NOTE Confidence: 0.88250816

00:24:23.810 --> 00:24:26.516 You mentioned that most adults have

NOTE Confidence: 0.88250816

00:24:26.516 --> 00:24:28.790 already experienced Epstein Barr virus,

NOTE Confidence: 0.88250816

00:24:28.790 --> 00:24:31.490 and so should have some degree

NOTE Confidence: 0.88250816

00:24:31.490 --> 00:24:34.230 of natural immunity to the virus,

NOTE Confidence: 0.88250816

00:24:34.230 --> 00:24:35.990 although they're on immunosuppresants.

NOTE Confidence: 0.88250816

00:24:35.990 --> 00:24:39.154 So has anybody looked at ways that

NOTE Confidence: 0.88250816

00:24:39.154 --> 00:24:41.449 people who are on immunosuppresants

NOTE Confidence: 0.88250816

00:24:41.449 --> 00:24:43.740 can prevent that reactivation?

NOTE Confidence: 0.88250816

00:24:43.740 --> 00:24:46.590 That is a really good question, and

NOTE Confidence: 0.88250816

00:24:46.590 --> 00:24:48.910 indeed,

NOTE Confidence: 0.88250816

00:24:48.910 --> 00:24:52.256 a part of these

NOTE Confidence: 0.88250816

00:24:52.256 --> 00:24:56.078 strategies in the period after transplant

NOTE Confidence: 0.88250816

00:24:56.080 --> 00:24:58.800 include close monitoring of the

NOTE Confidence: 0.88250816

00:24:58.800 --> 00:25:02.160 EBV presence in the blood.

NOTE Confidence: 0.88250816

00:25:02.160 --> 00:25:05.466 So after a solid organ transplant,

NOTE Confidence: 0.88250816

00:25:05.470 --> 00:25:09.646 depending on the kind of solid

NOTE Confidence: 0.88250816

00:25:09.646 --> 00:25:12.430 organ transplant there are

NOTE Confidence: 0.88250816

00:25:12.430 --> 00:25:14.266 algorithms

NOTE Confidence: 0.88250816

00:25:14.266 --> 00:25:18.550 and there is a monitoring of the

NOTE Confidence: 0.88250816

00:25:18.665 --> 00:25:22.788 EBV which is done

NOTE Confidence: 0.88250816

00:25:22.788 --> 00:25:26.260 in certain cases twice a month.

NOTE Confidence: 0.88250816

00:25:26.260 --> 00:25:28.920 Other cases once a month,

NOTE Confidence: 0.88250816

00:25:28.920 --> 00:25:32.136 depending on the nature of the

NOTE Confidence: 0.88250816

00:25:32.136 --> 00:25:33.744 immunosuppression and preemptive

NOTE Confidence: 0.88250816

00:25:33.744 --> 00:25:35.299 strategies to intervene.

NOTE Confidence: 0.82128894

00:25:37.790 --> 00:25:40.742 Treating the EBV before the lymphoma

NOTE Confidence: 0.82128894

00:25:40.742 --> 00:25:43.148 appears has been attempted,

NOTE Confidence: 0.82128894

00:25:43.148 --> 00:25:46.660 but the results are not optimal

NOTE Confidence: 0.82128894

00:25:46.660 --> 00:25:50.108 because there is a lot of variation in

NOTE Confidence: 0.82128894

00:25:50.108 --> 00:25:54.020 the levels of EBV that is noted

NOTE Confidence: 0.82128894

00:25:54.020 --> 00:25:57.154 in patients post transplant and not

NOTE Confidence: 0.82128894

00:25:57.154 --> 00:25:59.839 everybody that experience a reactivation

NOTE Confidence: 0.82128894

00:25:59.839 --> 00:26:04.040 of the virus end up developing a

NOTE Confidence: 0.82128894

00:26:04.040 --> 00:26:07.100 lymphoma and therefore there is not

NOTE Confidence: 0.82128894

00:26:07.100 --> 00:26:10.010 good guidance out there regarding

NOTE Confidence: 0.82128894

00:26:10.010 --> 00:26:12.920 who to treat preemptively

NOTE Confidence: 0.82128894

00:26:12.920 --> 00:26:15.332 and who to observe.

NOTE Confidence: 0.82128894

00:26:15.332 --> 00:26:19.610 When I was at Columbia University prior

NOTE Confidence: 0.82128894

00:26:19.610 --> 00:26:23.978 to joining the group here at Yale

NOTE Confidence: 0.82128894

00:26:23.980 --> 00:26:28.372 I was leading the effort to come up with

NOTE Confidence: 0.82128894

00:26:28.372 --> 00:26:33.078 with guidelines to help clinician in the

NOTE Confidence: 0.82128894

00:26:33.078 --> 00:26:37.659 solid organ transplant team to troubleshoot

NOTE Confidence: 0.82128894

00:26:37.660 --> 00:26:39.499 these problems,

NOTE Confidence: 0.82128894

00:26:39.499 --> 00:26:43.177 meaning want to check the EBV

NOTE Confidence: 0.82128894

00:26:43.177 --> 00:26:46.585 at what intervals and what

NOTE Confidence: 0.82128894

00:26:46.585 --> 00:26:50.738 is the threshold of the

NOTE Confidence: 0.82128894

00:26:50.738 --> 00:26:54.118 virus to consider potentially

NOTE Confidence: 0.82128894

00:26:54.120 --> 00:26:57.963 leading to a lymphoma and when

NOTE Confidence: 0.82128894

00:26:57.963 --> 00:27:00.610 to utilize treatment to reduce

NOTE Confidence: 0.82128894

00:27:00.610 --> 00:27:04.186 that virus level and it is still a

NOTE Confidence: 0.82128894

00:27:04.294 --> 00:27:08.158 discussion and a work in progress.

NOTE Confidence: 0.84995484

00:27:09.020 --> 00:27:11.480 And do we know what factors

NOTE Confidence: 0.84995484

00:27:11.480 --> 00:27:14.113 kind of trigger that EBV

NOTE Confidence: 0.84995484

00:27:14.113 --> 00:27:16.807 to turn into a lymphoma?

NOTE Confidence: 0.84995484

00:27:16.810 --> 00:27:18.542 Because potentially that's another

NOTE Confidence: 0.84995484

00:27:18.542 --> 00:27:21.140 place to intervene in thinking about

NOTE Confidence: 0.84995484

00:27:21.140 --> 00:27:24.060 is there a way to

NOTE Confidence: 0.84995484

00:27:24.060 --> 00:27:28.128 potentially mitigate that transformation.

NOTE Confidence: 0.84995484

00:27:28.130 --> 00:27:30.070 That is an excellent

NOTE Confidence: 0.7932247

00:27:30.070 --> 00:27:32.600 question, and unfortunately the reason

NOTE Confidence: 0.7932247

00:27:32.600 --> 00:27:37.070 why EBV can turner in vitro

NOTE Confidence: 0.7932247

00:27:37.070 --> 00:27:39.390 into malignant cells is because

NOTE Confidence: 0.7932247

00:27:39.390 --> 00:27:42.728 one side triggers

NOTE Confidence: 0.7932247

00:27:42.728 --> 00:27:45.616 the proliferation of these cells and

NOTE Confidence: 0.7932247

00:27:45.616 --> 00:27:48.694 the other side blocks an important

NOTE Confidence: 0.7932247

00:27:48.694 --> 00:27:51.849 mechanism that is called apoptosis,

NOTE Confidence: 0.7932247

00:27:51.850 --> 00:27:55.458 by which the cells die but alone is

NOTE Confidence: 0.7932247

00:27:55.458 --> 00:27:59.308 not able to induce lymphoma in vivo.

NOTE Confidence: 0.7932247

00:27:59.310 --> 00:28:03.230 And the thought is that there are,

NOTE Confidence: 0.7932247

00:28:03.230 --> 00:28:08.147 like in all the other kinds of cancer,

NOTE Confidence: 0.7932247

00:28:08.150 --> 00:28:11.832 a multi step process where the

NOTE Confidence: 0.7932247

00:28:11.832 --> 00:28:14.220 cells progressively gain additional

NOTE Confidence: 0.7932247

00:28:14.220 --> 00:28:16.389 mutation and overtime

NOTE Confidence: 0.7932247

00:28:16.390 --> 00:28:19.450 the addition of this mutation together

NOTE Confidence: 0.7932247

00:28:19.450 --> 00:28:24.048 sort of cause the transformation into cancer,

00:28:27.200 --> 00:28:30.735 but we are not able in 2021 to predict

NOTE Confidence: 0.7932247

00:28:30.735 --> 00:28:33.689 which mutation and when these

NOTE Confidence: 0.7932247

00:28:33.689 --> 00:28:35.690 mutations are acquired.

NOTE Confidence: 0.8649993

00:28:36.350 --> 00:28:38.395 Doctor Francesca Montanari is assistant

NOTE Confidence: 0.8649993

00:28:38.395 --> 00:28:40.440 professor of clinical medicine and

NOTE Confidence: 0.8649993

00:28:40.504 --> 00:28:42.828 hematology at the Yale School of Medicine.

NOTE Confidence: 0.8649993

00:28:42.830 --> 00:28:44.358 If you have questions,

NOTE Confidence: 0.8649993

00:28:44.358 --> 00:28:45.886 the address is canceranswers@yale.edu

NOTE Confidence: 0.8649993

00:28:45.886 --> 00:28:47.995 and past editions of the program

NOTE Confidence: 0.8649993

00:28:47.995 --> 00:28:49.921 are available in audio and written

NOTE Confidence: 0.8649993

00:28:49.982 --> 00:28:51.590 form at yalecancercenter.org.

NOTE Confidence: 0.8649993

00:28:51.590 --> 00:28:54.398 We hope you'll join us next week to

NOTE Confidence: 0.8649993

00:28:54.398 --> 00:28:57.137 learn more about the fight against

NOTE Confidence: 0.8649993

00:28:57.137 --> 00:29:00.071 cancer here on Connecticut Public Radio.