WEBVTT

00:00:00.000 --> 00:00:03.563 Support for Yale Cancer Answers comes from

NOTE Confidence: 0.8613589

00:00:03.563 --> 00:00:07.288 AstraZeneca, working to change how cancer

NOTE Confidence: 0.8613589

00:00:07.288 --> 00:00:09.933 is treated with personalized medicine.

NOTE Confidence: 0.8613589

00:00:09.940 --> 00:00:13.268 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.8613589

00:00:13.270 --> 00:00:14.650 Welcome to Yale Cancer

NOTE Confidence: 0.8613589

00:00:14.650 --> 00:00:16.030 Answers with your host

NOTE Confidence: 0.8613589

00:00:16.030 --> 00:00:17.760 Doctor Anees Chagpar.

NOTE Confidence: 0.8613589

00:00:17.760 --> 00:00:19.600 Yale Cancer Answers features the

NOTE Confidence: 0.8613589

00:00:19.600 --> 00:00:21.864 latest information on cancer care by

NOTE Confidence: 0.8613589

00:00:21.864 --> 00:00:23.316 welcoming oncologists and specialists

NOTE Confidence: 0.8613589

00:00:23.316 --> 00:00:25.744 who are on the forefront of the

NOTE Confidence: 0.8613589

00:00:25.744 --> 00:00:27.418 battle to fight cancer. This week,

NOTE Confidence: 0.8613589

00:00:27.420 --> 00:00:29.230 it's a conversation about health

NOTE Confidence: 0.8613589

00:00:29.230 --> 00:00:30.678 disparities in cancer with

NOTE Confidence: 0.8613589

00:00:30.678 --> 00:00:32.249 doctor Kim Blenman.

NOTE Confidence: 0.8613589

00:00:32.250 --> 00:00:34.360 Dr. Blenman is an associate research

NOTE Confidence: 0.8613589

00:00:34.360 --> 00:00:36.048 scientist in medical oncology

NOTE Confidence: 0.8613589

00:00:36.048 --> 00:00:38.230 at the Yale School of Medicine

NOTE Confidence: 0.8613589

00:00:38.230 --> 00:00:40.411 where Doctor Chagpar is a

NOTE Confidence: 0.8613589

00:00:40.411 --> 00:00:42.099 professor of surgical oncology.

00:00:42.450 --> 00:00:45.267 Maybe we can start off by you telling

NOTE Confidence: 0.84142846

00:00:45.267 --> 00:00:48.354 us a little bit more about your research

NOTE Confidence: 0.84142846

00:00:48.354 --> 00:00:51.146 and what exactly it is that you've been

NOTE Confidence: 0.84142846

00:00:51.150 --> 00:00:53.280 doing.

NOTE Confidence: 0.84142846

00:00:53.280 --> 00:00:55.405 I'm an immunologist and clinical chemists with expertise in drug

NOTE Confidence: 0.84142846

00:00:55.405 --> 00:00:57.020 discovery and clinical development and

NOTE Confidence: 0.84142846

00:00:57.020 --> 00:00:59.497 in aspects of pathology as you mentioned

NOTE Confidence: 0.84142846

00:00:59.500 --> 00:01:01.929 I am in the Yale Department of

NOTE Confidence: 0.84142846

00:01:01.929 --> 00:01:03.671 internal medicine, section of medical

NOTE Confidence: 0.84142846

00:01:03.671 --> 00:01:05.753 oncology and Yale Cancer Center.

NOTE Confidence: 0.84142846

00:01:05.760 --> 00:01:08.161 Briefly, I study the immune system of

NOTE Confidence: 0.84142846

00:01:08.161 --> 00:01:10.681 patients to try to understand how the

NOTE Confidence: 0.84142846

00:01:10.681 --> 00:01:13.390 immune system is involved in their disease

NOTE Confidence: 0.84142846

00:01:13.390 --> 00:01:15.586 and their responses to therapy treatments.

NOTE Confidence: 0.84142846

00:01:15.590 --> 00:01:17.498 I have done research in Melanoma

NOTE Confidence: 0.84142846

00:01:17.498 --> 00:01:19.846 and I am currently working in breast

NOTE Confidence: 0.84142846

00:01:19.846 --> 00:01:22.205 cancer as part of the breast medical

NOTE Confidence: 0.84142846

00:01:22.267 --> 00:01:23.639 oncology translational

NOTE Confidence: 0.8704139

00:01:23.640 --> 00:01:25.662 research group.

NOTE Confidence: 0.8704139

00:01:25.662 --> 00:01:27.875 Tell us some of the studies that you've been

NOTE Confidence: 0.8704139

00:01:27.875 --> 00:01:29.860 doing in breast cancer looking

NOTE Confidence: 0.8704139

00:01:29.860 --> 00:01:32.058 at the immune system.

NOTE Confidence: 0.8704139

00:01:32.060 --> 00:01:33.520 Our work is primarily conducted

NOTE Confidence: 0.8704139

00:01:33.520 --> 00:01:34.615 through clinical trials.

NOTE Confidence: 0.8704139

00:01:34.620 --> 00:01:36.657 As I mentioned, our goals are to

NOTE Confidence: 0.8704139

00:01:36.657 --> 00:01:38.446 really try to identify components

NOTE Confidence: 0.8704139

00:01:38.446 --> 00:01:40.990 or mechanisms of the immune system that

NOTE Confidence: 0.8704139

00:01:40.990 --> 00:01:43.490 will either help patients to respond

NOTE Confidence: 0.8704139

00:01:43.490 --> 00:01:46.250 or respond better to therapy or help them

NOTE Confidence: 0.8704139

00:01:46.250 --> 00:01:48.840 to reduce the therapy.

NOTE Confidence: 0.8704139

00:01:48.840 --> 00:01:52.190 The way that we do this is

NOTE Confidence: 0.8704139

00:01:52.275 --> 00:01:55.555 that we look at both genes and proteins

NOTE Confidence: 0.8704139

00:01:55.555 --> 00:01:58.388 of the immune system and of the tumor

NOTE Confidence: 0.8704139

00:01:58.390 --> 00:02:00.418 to accomplish our goals we use

NOTE Confidence: 0.8704139

00:02:00.418 --> 00:02:02.590 many platforms,

NOTE Confidence: 0.8704139

00:02:02.590 --> 00:02:05.206 research platforms such as next generation

NOTE Confidence: 0.8704139

00:02:05.206 --> 00:02:07.938 sequencing to identify genes in RNA and DNA.

NOTE Confidence: 0.8704139

00:02:07.940 --> 00:02:10.460 And we also use Histology to

NOTE Confidence: 0.8704139

00:02:10.460 --> 00:02:12.140 identify proteins and different

NOTE Confidence: 0.8704139

00:02:12.217 --> 00:02:14.177 immune and tumor cell types.

NOTE Confidence: 0.8704139

00:02:14.180 --> 00:02:18.590 And with that being said,

NOTE Confidence: 0.8704139

00:02:18.590 --> 00:02:20.194 my research is really

NOTE Confidence: 0.8704139

00:02:20.194 --> 00:02:22.199 interested in looking at many,

NOTE Confidence: 0.8704139

00:02:22.200 --> 00:02:23.804 mostly biological factors.

NOTE Confidence: 0.8704139

00:02:23.804 --> 00:02:25.007 As I said,

NOTE Confidence: 0.8704139

00:02:25.010 --> 00:02:27.404 they are responsible for the disparities

NOTE Confidence: 0.8704139

00:02:27.404 --> 00:02:29.820 that we have in disease and therapy,

NOTE Confidence: 0.8704139

00:02:29.820 --> 00:02:32.226 and I am currently working on

NOTE Confidence: 0.8704139

00:02:32.226 --> 00:02:33.830 triple negative breast cancer.

00:02:35.174 --> 00:02:36.966 You noted cancer

NOTE Confidence: 0.8704139

00:02:36.966 --> 00:02:38.606 accounts for approximately 10

NOTE Confidence: 0.8704139

00:02:38.606 --> 00:02:40.468 to 15% of all breast cancers.

NOTE Confidence: 0.8704139

00:02:40.468 --> 00:02:41.896 This subtype of breast

NOTE Confidence: 0.8704139

00:02:41.896 --> 00:02:43.850 cancer is estrogen receptor

NOTE Confidence: 0.8704139

00:02:43.850 --> 00:02:45.762 negative progesterone receptor negative,

NOTE Confidence: 0.8704139

00:02:45.762 --> 00:02:49.398 and HER 2 negative in regards to the

NOTE Confidence: 0.8704139

00:02:49.398 --> 00:02:51.827 biomarkers that we use to classify the

NOTE Confidence: 0.8704139

00:02:51.830 --> 00:02:53.326 type of breast cancer

NOTE Confidence: 0.8704139

00:02:53.326 --> 00:02:56.090 in order to appropriately treat the cancer,

NOTE Confidence: 0.8704139

00:02:56.090 --> 00:02:57.634 it's often more aggressive,

NOTE Confidence: 0.8704139

00:02:57.634 --> 00:03:00.340 meaning that it grows and spreads fast,

NOTE Confidence: 0.8704139

00:03:00.340 --> 00:03:02.554 and so it tends to occur

NOTE Confidence: 0.8704139

00:03:02.554 --> 00:03:04.600 more often in younger women,

NOTE Confidence: 0.8704139

00:03:04.600 --> 00:03:07.696 and those were the BRCA gene mutations,

NOTE Confidence: 0.8704139

00:03:07.700 --> 00:03:09.902 so triple negative breast cancers have

NOTE Confidence: 0.8704139

00:03:09.902 --> 00:03:11.950 poorer prognosis than other subtypes,

NOTE Confidence: 0.8704139

00:03:11.950 --> 00:03:13.090 partially because treatment

NOTE Confidence: 0.8704139

00:03:13.090 --> 00:03:14.610 advances have lagged behind

NOTE Confidence: 0.8704139

00:03:14.610 --> 00:03:16.210 other breast cancers,

NOTE Confidence: 0.8704139

00:03:16.210 --> 00:03:18.424 but although treatment options are more

NOTE Confidence: 0.8704139

00:03:18.424 --> 00:03:20.860 limited than the other breast cancers,

NOTE Confidence: 0.8704139

00:03:20.860 --> 00:03:22.980 there are still several offices

NOTE Confidence: 0.8704139

00:03:22.980 --> 00:03:24.676 available to these patients.

NOTE Confidence: 0.8704139

00:03:24.680 --> 00:03:26.610 And these individuals are treated

NOTE Confidence: 0.8704139

00:03:26.610 --> 00:03:28.540 with some combinations of surgery,

NOTE Confidence: 0.8704139

00:03:28.540 --> 00:03:30.056 radiation therapy or chemotherapy.

NOTE Confidence: 0.8704139

00:03:30.056 --> 00:03:32.780 And right now I'm working on two

NOTE Confidence: 0.8704139

00:03:32.780 --> 00:03:35.090 clinical studies and one study is

NOTE Confidence: 0.8704139

00:03:35.090 --> 00:03:37.066 a retrospective evaluation of genes

NOTE Confidence: 0.8704139

00:03:37.066 --> 00:03:38.956 and proteins from Histology tissue.

NOTE Confidence: 0.8704139

00:03:38.960 --> 00:03:40.376 From the tumor page,

NOTE Confidence: 0.8704139

00:03:40.376 --> 00:03:42.500 two more patients with these triple

NOTE Confidence: 0.8704139

00:03:42.567 --> 00:03:44.955 negative breast cancers to try to

NOTE Confidence: 0.8704139

00:03:44.955 --> 00:03:47.009 identify immune components or mechanisms

NOTE Confidence: 0.8704139

00:03:47.009 --> 00:03:49.361 that may be responsible

NOTE Confidence: 0.8704139

00:03:49.361 --> 00:03:52.100 for the variations that we see in

NOTE Confidence: 0.8704139

00:03:52.100 --> 00:03:54.050 different racial and ethnic groups

NOTE Confidence: 0.8704139

00:03:54.050 --> 00:03:56.249 before the patients are treated.

NOTE Confidence: 0.8704139

00:03:56.250 --> 00:03:58.490 And then the other study is an ongoing

NOTE Confidence: 0.8704139

00:03:58.490 --> 00:04:00.051 clinical trial that is evaluating

NOTE Confidence: 0.8704139

00:04:00.051 --> 00:04:01.947 the benefit of giving our triple

NOTE Confidence: 0.8704139

00:04:01.947 --> 00:04:03.540 negative breast cancer patients

NOTE Confidence: 0.8704139

00:04:03.540 --> 00:04:05.898 anti PDL one immunotherapy with chemotherapy

NOTE Confidence: 0.8704139

00:04:05.898 --> 00:04:08.000 before they're taken to surgery.

NOTE Confidence: 0.85787785

00:04:08.960 --> 00:04:12.306 Those both sound like really

NOTE Confidence: 0.85787785

00:04:12.306 --> 00:04:15.442 interesting studies and I want to

NOTE Confidence: 0.85787785

00:04:15.442 --> 00:04:18.440 talk about each one of them in turn.

NOTE Confidence: 0.85787785

00:04:18.440 --> 00:04:21.156 So the first one, the retrospective study

NOTE Confidence: 0.85787785

00:04:21.156 --> 00:04:24.365 where you're looking at kind of the immune

NOTE Confidence: 0.85787785

00:04:24.365 --> 00:04:26.340 factors in these cancers retrospectively.

NOTE Confidence: 0.85787785

00:04:26.340 --> 00:04:28.902 So these are cancers that have already

NOTE Confidence: 0.85787785

00:04:28.902 --> 00:04:31.651 been taken out of patients and you're

NOTE Confidence: 0.85787785

00:04:31.651 --> 00:04:34.640 looking at immune factors in these cancers.

NOTE Confidence: 0.85787785

00:04:34.640 --> 00:04:36.555 Now I understand that triple

NOTE Confidence: 0.85787785

00:04:36.555 --> 00:04:38.470 negative cancers perhaps more than

NOTE Confidence: 0.85787785

00:04:38.534 --> 00:04:40.358 other breast cancers actually

NOTE Confidence: 0.85787785

00:04:40.360 --> 00:04:42.348 are immunogenic, they tend to have a

NOTE Confidence: 0.85787785

00:04:42.348 --> 00:04:44.898 lot of infiltrating cells in them,

NOTE Confidence: 0.85787785

00:04:44.900 --> 00:04:45.872 is that right?

NOTE Confidence: 0.85787785

00:04:45.872 --> 00:04:48.140 Is that what you're looking at?

NOTE Confidence: 0.85787785

00:04:49.760 --> 00:04:52.667 or are you looking at other factors as well?

NOTE Confidence: 0.85787785

00:04:52.670 --> 00:04:53.642 That's absolutely right.

NOTE Confidence: 0.85787785

00:04:53.642 --> 00:04:54.290 And actually

NOTE Confidence: 0.8489524

00:04:54.290 --> 00:04:55.910 we're looking at all the

NOTE Confidence: 0.8489524

00:04:55.910 --> 00:04:57.206 above and

NOTE Confidence: 0.8489524

00:04:57.210 --> 00:05:00.117 actually we're doing as I said,

NOTE Confidence: 0.8489524

00:05:00.120 --> 00:05:01.745 looking at different populations

NOTE Confidence: 0.8489524

00:05:01.745 --> 00:05:03.690 of people within that particular space,

NOTE Confidence: 0.8489524

00:05:03.690 --> 00:05:05.604 and the reason is because the

NOTE Confidence: 0.8489524

00:05:05.604 --> 00:05:07.275 percentage of triple negative breast

NOTE Confidence: 0.8489524

00:05:07.275 --> 00:05:09.285 cancers among the total breast cancers

NOTE Confidence: 0.8489524

00:05:09.285 --> 00:05:11.219 diagnosed in non Hispanic whites.

NOTE Confidence: 0.8489524

00:05:14.480 --> 00:05:16.555 Hispanics, American Indians or

NOTE Confidence: 0.8489524

00:05:16.555 --> 00:05:19.199 Alaska Natives is between 10 and 20%.

NOTE Confidence: 0.8489524

00:05:19.200 --> 00:05:21.946 I'm sorry 10 to 12% and non

NOTE Confidence: 0.8489524

00:05:21.946 --> 00:05:23.518 Hispanic Blacks is 21%,

NOTE Confidence: 0.8489524

00:05:23.520 --> 00:05:26.848 and so we're trying to understand why that

NOTE Confidence: 0.8489524

00:05:26.848 --> 00:05:29.419 difference exists and more of the biology,

NOTE Confidence: 0.8489524

00:05:29.420 --> 00:05:32.150 more of the biological questions

NOTE Confidence: 0.8489524

00:05:32.150 --> 00:05:34.788 and so we're looking at the immune

NOTE Confidence: 0.8489524

00:05:34.788 --> 00:05:37.670 system to see if there are different

00:05:38.374 --> 00:05:41.190 immune players in terms of the amount of

NOTE Confidence: 0.8489524

00:05:41.268 --> 00:05:44.016 infiltration that we see between these

NOTE Confidence: 0.8489524

00:05:44.020 --> 00:05:45.484 different populations of people

NOTE Confidence: 0.8489524

00:05:45.484 --> 00:05:47.314 or the type of inflation.

NOTE Confidence: 0.8489524

00:05:47.320 --> 00:05:49.522 What type of cells are being

NOTE Confidence: 0.8489524

00:05:49.522 --> 00:05:50.990 infiltrated in these patients?

NOTE Confidence: 0.8489524

00:05:50.990 --> 00:05:54.158 And so we're doing that by

NOTE Confidence: 0.8489524

00:05:54.158 --> 00:05:56.270 looking at the Histology.

NOTE Confidence: 0.8489524

00:05:56.270 --> 00:05:59.014 Taking the samples of the tumor doing

NOTE Confidence: 0.8489524

00:05:59.014 --> 00:06:01.608 next generation sequencing on those,

NOTE Confidence: 0.8489524

00:06:01.610 --> 00:06:04.474 look at the genes and then looking

NOTE Confidence: 0.8489524

00:06:04.474 --> 00:06:07.087 at different types of immune

NOTE Confidence: 0.8489524

00:06:07.087 --> 00:06:09.823 cells from the Histology tissue itself,

NOTE Confidence: 0.8489524

00:06:09.830 --> 00:06:13.390 as well as just using our standard

NOTE Confidence: 0.8489524

00:06:13.390 --> 00:06:16.946 hematoxylin eosin to look at the

NOTE Confidence: 0.8489524

00:06:16.946 --> 00:06:19.531 actual global tumor infiltrating lymphocyte

NOTE Confidence: 0.8489524

00:06:19.540 --> 00:06:21.290 into these populations

NOTE Confidence: 0.8489524

00:06:21.290 --> 00:06:23.040 sorry into these patients samples.

NOTE Confidence: 0.8489524

00:06:23.740 --> 00:06:26.436 I want to make sure that I understood

NOTE Confidence: 0.8747181

00:06:26.436 --> 00:06:29.545 because I mean it sounds like such a cool

NOTE Confidence: 0.8747181

00:06:29.545 --> 00:06:32.140 project with so much there to unpack.

NOTE Confidence: 0.8747181

00:06:32.140 --> 00:06:33.540 And maybe you're looking

NOTE Confidence: 0.8747181

00:06:33.540 --> 00:06:35.290 at all of these questions.

NOTE Confidence: 0.8747181

00:06:35.290 --> 00:06:37.635 But the first thing that it sounds

NOTE Confidence: 0.8747181

00:06:37.635 --> 00:06:40.068 like you're doing is really looking at

NOTE Confidence: 0.8747181

00:06:40.068 --> 00:06:42.543 these cancers to see whether

NOTE Confidence: 0.8747181

00:06:42.543 --> 00:06:44.703 various immune pathways are turned on

NOTE Confidence: 0.8747181

00:06:44.703 --> 00:06:47.478 or turned off in the cancer themselves,

NOTE Confidence: 0.8747181

00:06:47.478 --> 00:06:50.470 whether the they have more or less

NOTE Confidence: 0.8747181

00:06:50.470 --> 00:06:52.398 infiltration with the immune

NOTE Confidence: 0.8747181

00:06:52.398 --> 00:06:54.326 system in these cells.

NOTE Confidence: 0.8747181

00:06:54.330 --> 00:06:57.498 So do you find that there are biologic

NOTE Confidence: 0.8747181

00:06:57.498 --> 00:07:00.156 differences in triple negative breast

NOTE Confidence: 0.8747181

00:07:00.156 --> 00:07:02.544 cancer between African Americans,

NOTE Confidence: 0.8747181

00:07:02.550 --> 00:07:03.846 and say, Caucasians?

NOTE Confidence: 0.8747181

00:07:03.846 --> 00:07:06.870 And do you think that really

NOTE Confidence: 0.8747181

00:07:06.950 --> 00:07:08.998 explains why African Americans

NOTE Confidence: 0.8747181

00:07:08.998 --> 00:07:12.070 tend to have more triple negative

NOTE Confidence: 0.8747181

00:07:12.150 --> 00:07:14.590 breast cancers than other non

NOTE Confidence: 0.8747181

00:07:14.590 --> 00:07:16.542 African American races?

NOTE Confidence: 0.8747181

00:07:16.550 --> 00:07:18.970 So this is one of

NOTE Confidence: 0.8449536

00:07:18.970 --> 00:07:22.246 the things that we actually are

NOTE Confidence: 0.8449536

00:07:22.250 --> 00:07:24.602 trying to tease out with this particular

NOTE Confidence: 0.8449536

00:07:24.602 --> 00:07:27.259 study and all the data is not back yet.

NOTE Confidence: 0.8449536

00:07:27.260 --> 00:07:29.340 And of course there are other factors as

NOTE Confidence: 0.8449536

00:07:29.340 --> 00:07:31.639 well that contributes to those differences,

NOTE Confidence: 0.8449536

00:07:31.640 --> 00:07:33.518 but as I said,

NOTE Confidence: 0.8449536

00:07:33.520 --> 00:07:35.470 we're really trying to

NOTE Confidence: 0.8449536

00:07:35.470 --> 00:07:37.410 focus on these differences in the

NOTE Confidence: 0.8449536

00:07:37.410 --> 00:07:39.144 system that we have seen initially,

NOTE Confidence: 0.8449536

00:07:39.150 --> 00:07:41.369 and as we're putting more patients on

NOTE Confidence: 0.8449536

00:07:41.369 --> 00:07:43.529 these studies and look at more things,

NOTE Confidence: 0.8449536

00:07:43.530 --> 00:07:46.146 we're trying to see if

00:07:47.890 --> 00:07:50.480 that gives us any reason to

NOTE Confidence: 0.8449536

00:07:50.480 --> 00:07:52.700 believe that there are different,

NOTE Confidence: 0.8449536

00:07:52.700 --> 00:07:55.196 as I said, immune cell populations

NOTE Confidence: 0.8449536

00:07:55.196 --> 00:07:57.314 that are being introduced that

NOTE Confidence: 0.8449536

00:07:57.314 --> 00:07:59.219 are different between those two

NOTE Confidence: 0.8449536

00:07:59.219 --> 00:08:01.930 groups and as well as other groups.

NOTE Confidence: 0.8449536

00:08:01.930 --> 00:08:04.527 But also if there's maybe a difference

NOTE Confidence: 0.8449536

00:08:04.527 --> 00:08:06.997 in the amount of those immune

NOTE Confidence: 0.8449536

00:08:06.997 --> 00:08:09.137 cells that are being introduced,

NOTE Confidence: 0.8449536

00:08:09.140 --> 00:08:11.546 and so we're still

NOTE Confidence: 0.8449536

00:08:11.550 --> 00:08:12.783 evaluating the data,

NOTE Confidence: 0.8449536

00:08:12.783 --> 00:08:15.249 but hopefully that'll give us some

NOTE Confidence: 0.8449536

00:08:15.249 --> 00:08:17.157 insight if that's indeed true.

00:08:19.176 --> 00:08:21.206 Because that would mean that

NOTE Confidence: 0.8449536

00:08:21.206 --> 00:08:23.620 we may need to

NOTE Confidence: 0.88424355

00:08:23.620 --> 00:08:25.900 think about how we treat the

NOTE Confidence: 0.88424355

00:08:25.900 --> 00:08:26.931 patients differently, right?

NOTE Confidence: 0.88424355

00:08:26.931 --> 00:08:29.099 And it may give you

NOTE Confidence: 0.88424355

00:08:29.099 --> 00:08:31.284 some insight into potentially why

NOTE Confidence: 0.88424355

00:08:31.284 --> 00:08:33.594 certain people get triple negative

NOTE Confidence: 0.88424355

00:08:33.594 --> 00:08:35.780 breast cancers more than others.

NOTE Confidence: 0.88424355

00:08:35.780 --> 00:08:37.745 Maybe some populations of people

NOTE Confidence: 0.88424355

00:08:37.745 --> 00:08:40.157 automatically have a more robust immune

NOTE Confidence: 0.88424355

00:08:40.157 --> 00:08:42.824 response to cancer cells as they are

NOTE Confidence: 0.88424355

00:08:42.824 --> 00:08:44.698 initially beginning such that they

NOTE Confidence: 0.88424355

00:08:44.698 --> 00:08:46.792 don't develop into full blown tumors,

NOTE Confidence: 0.88424355

00:08:46.800 --> 00:08:51.363 and so you may be able to see differences.

00:08:52.682 --> 00:08:55.257 Are you looking also at the immune

NOTE Confidence: 0.88424355

00:08:55.257 --> 00:08:57.927 factors versus stage at presentation?

NOTE Confidence: 0.88424355

00:08:57.930 --> 00:09:00.390 Because that too might play

NOTE Confidence: 0.88424355

00:09:00.390 --> 00:09:02.440 into that whole story, right?

NOTE Confidence: 0.88424355

00:09:02.440 --> 00:09:03.670 Correct, and so

NOTE Confidence: 0.8569951

00:09:03.670 --> 00:09:06.130 we're looking at

NOTE Confidence: 0.8569951

00:09:06.130 --> 00:09:08.590 that as well.

00:09:13.510 --> 00:09:15.970 That could definitely play a difference

NOTE Confidence: 0.8569951

00:09:15.970 --> 00:09:18.592 in what makeup looks

NOTE Confidence: 0.8569951

00:09:18.592 --> 00:09:21.490 like at the end of the day?

NOTE Confidence: 0.8569951

00:09:21.490 --> 00:09:23.812 Because we want to make sure

NOTE Confidence: 0.8569951

00:09:23.812 --> 00:09:26.134 that we are comparing

NOTE Confidence: 0.8569951

00:09:26.134 --> 00:09:28.069 apples to apples.

00:09:29.622 --> 00:09:33.490 And so for this part of the study,

NOTE Confidence: 0.8789886

00:09:33.490 --> 00:09:34.651 you're actually looking

NOTE Confidence: 0.8789886

00:09:34.651 --> 00:09:36.558 at the tumors DNA, right?

NOTE Confidence: 0.8789886

00:09:36.558 --> 00:09:38.348 You're taking these tumor

NOTE Confidence: 0.8789886

00:09:38.348 --> 00:09:40.261 sections and doing next generation

NOTE Confidence: 0.8789886

00:09:40.261 --> 00:09:43.215 sequencing on the tumor and the micro

NOTE Confidence: 0.8789886

00:09:43.215 --> 00:09:44.709 environment surrounding the tumor,

NOTE Confidence: 0.8789886

00:09:44.710 --> 00:09:47.335 has anybody really looked at the immune

NOTE Confidence: 0.8789886

00:09:47.335 --> 00:09:49.750 system of different racial groups to

NOTE Confidence: 0.8789886

00:09:49.750 --> 00:09:51.780 see whether there are differences

NOTE Confidence: 0.8789886

00:09:51.780 --> 00:09:54.710 in immune cell production between

NOTE Confidence: 0.8789886

00:09:54.710 --> 00:09:57.640 different races that might

NOTE Confidence: 0.8789886

00:09:57.734 --> 00:10:00.440 give you some insight into

NOTE Confidence: 0.8789886

00:10:00.440 --> 00:10:02.020 how people mount immune responses.

NOTE Confidence: 0.8789886

00:10:02.020 --> 00:10:03.910 Whether that's the same for everybody,

NOTE Confidence: 0.8789886

00:10:03.910 --> 00:10:05.480 or whether there are nuances

NOTE Confidence: 0.8789886

00:10:05.480 --> 00:10:06.736 and so actually we

NOTE Confidence: 0.83661216

00:10:06.740 --> 00:10:08.952 have some

NOTE Confidence: 0.83661216

00:10:08.952 --> 00:10:10.520 evidence to that.

00:10:12.472 --> 00:10:14.087 As you think about things like autoimmune diseases

NOTE Confidence: 0.83661216

00:10:14.087 --> 00:10:16.235 autoimmune diseases tend to be

NOTE Confidence: 0.83661216

00:10:16.235 --> 00:10:18.318 more prevalent in certain

NOTE Confidence: 0.83661216

00:10:18.318 --> 00:10:19.654 populations,

NOTE Confidence: 0.83661216

00:10:23.120 --> 00:10:25.038 and they tend to have as you

NOTE Confidence: 0.83661216

00:10:25.038 --> 00:10:26.900 look at the immune system,

NOTE Confidence: 0.83661216

00:10:26.900 --> 00:10:28.160 the immune systems tends

NOTE Confidence: 0.83661216

00:10:28.160 --> 00:10:29.420 to be very overactive,

NOTE Confidence: 0.83661216

00:10:29.420 --> 00:10:31.436 and so these are things that can

NOTE Confidence: 0.83661216

00:10:31.436 --> 00:10:33.864 give us clues that maybe

NOTE Confidence: 0.83661216

00:10:33.864 --> 00:10:35.364 in different populations

NOTE Confidence: 0.83661216

00:10:35.370 --> 00:10:37.074 we may need to think differently

NOTE Confidence: 0.83661216

00:10:37.074 --> 00:10:38.530 about how we approach this,

NOTE Confidence: 0.83661216

00:10:38.530 --> 00:10:40.266 and so there are studies that have

NOTE Confidence: 0.83661216

00:10:40.266 --> 00:10:41.970 been done in different fields,

NOTE Confidence: 0.83661216

00:10:41.970 --> 00:10:44.266 and I think that we can utilize that

NOTE Confidence: 0.83661216

00:10:44.270 --> 00:10:46.442 to try to

NOTE Confidence: 0.83661216

00:10:46.442 --> 00:10:48.980 understand how this is applicable to

NOTE Confidence: 0.83661216

00:10:48.980 --> 00:10:49.826 cancer as well,

NOTE Confidence: 0.83661216

00:10:49.826 --> 00:10:51.518 and this is actually one of

NOTE Confidence: 0.83661216

00:10:51.518 --> 00:10:53.007 the main goals of this

NOTE Confidence: 0.83661216

00:10:53.010 --> 00:10:54.314 particular

NOTE Confidence: 0.83661216

00:10:54.314 --> 00:10:56.270 study that we're doing is to

NOTE Confidence: 0.83661216

00:10:56.329 --> 00:10:57.904 try to tease that out as well,

NOTE Confidence: 0.83661216

00:10:57.910 --> 00:10:59.919 and hopefully we can expand on that

00:11:00.480 --> 00:11:02.160 in terms of digging a bit

NOTE Confidence: 0.83661216

00:11:02.160 --> 00:11:03.379 more deeper into them,

NOTE Confidence: 0.83661216

00:11:03.380 --> 00:11:04.820 these different

NOTE Confidence: 0.83661216

00:11:04.820 --> 00:11:05.396 patient populations.

NOTE Confidence: 0.83661216

00:11:05.400 --> 00:11:07.409 So what I'd like to

NOTE Confidence: 0.83661216

00:11:07.410 --> 00:11:08.594 look at,

NOTE Confidence: 0.83661216

00:11:08.594 --> 00:11:10.580 although this particular site is looking at,

NOTE Confidence: 0.83661216

00:11:10.580 --> 00:11:12.308 individuals of African descent,

NOTE Confidence: 0.83661216

00:11:12.308 --> 00:11:13.460 individuals of Caucasian descent,

NOTE Confidence: 0.83661216

00:11:13.460 --> 00:11:15.170 I would also like to expand

NOTE Confidence: 0.83661216

00:11:15.170 --> 00:11:16.623 that to individuals of Asian

NOTE Confidence: 0.83661216

00:11:16.623 --> 00:11:18.422 descent as well and

NOTE Confidence: 0.83661216

00:11:18.422 --> 00:11:20.110 other populations because

NOTE Confidence: 0.83661216

00:11:20.110 --> 00:11:22.108 I believe that that's actually very

NOTE Confidence: 0.83661216

00:11:22.108 --> 00:11:24.419 important for us to be represented

NOTE Confidence: 0.83661216

00:11:24.420 --> 00:11:26.460 in order for

NOTE Confidence: 0.83661216

00:11:26.460 --> 00:11:28.266 us to understand exactly what's

NOTE Confidence: 0.83661216

00:11:28.266 --> 00:11:30.156 going on with cancers globally.

00:11:30.520 --> 00:11:32.977 And the other thing that

NOTE Confidence: 0.85846186

00:11:32.977 --> 00:11:35.505 you had mentioned just in passing was

NOTE Confidence: 0.85846186

00:11:35.505 --> 00:11:38.060 looking at different types of immune cells,

NOTE Confidence: 0.85846186

00:11:38.060 --> 00:11:39.860 so we often

NOTE Confidence: 0.85846186

00:11:39.860 --> 00:11:42.008 when we've been on this show,

NOTE Confidence: 0.85846186

00:11:42.010 --> 00:11:43.800 have talked about these

NOTE Confidence: 0.85846186

00:11:43.800 --> 00:11:44.874 tumor infiltrating lymphocytes.

NOTE Confidence: 0.85846186

00:11:44.880 --> 00:11:47.040 And we talk about T cells,

NOTE Confidence: 0.85846186

00:11:47.040 --> 00:11:49.644 but there are other immune factors

NOTE Confidence: 0.85846186

00:11:49.644 --> 00:11:51.780 and other immune cells as well.

NOTE Confidence: 0.85846186

00:11:51.780 --> 00:11:54.436 Do we have any sense of

NOTE Confidence: 0.85846186

00:11:54.436 --> 00:11:56.925 how these immune cells vary in

NOTE Confidence: 0.85846186

00:11:56.925 --> 00:11:59.535 terms of their response to tumors?

NOTE Confidence: 0.85846186

00:11:59.540 --> 00:12:01.092 Either different types of

NOTE Confidence: 0.85846186

00:12:01.092 --> 00:12:03.420 tumors or to the same tumor,

NOTE Confidence: 0.85846186

00:12:03.420 --> 00:12:04.968 but in different people?

NOTE Confidence: 0.85846186

00:12:04.968 --> 00:12:06.903 Actually that's a really

NOTE Confidence: 0.8454794

00:12:06.910 --> 00:12:09.010 great question, and I've done some

NOTE Confidence: 0.8454794

00:12:09.010 --> 00:12:11.960 work in this in breast cancer itself,

NOTE Confidence: 0.8454794

00:12:11.960 --> 00:12:14.352 and so I'd like to share a little

NOTE Confidence: 0.8454794

00:12:14.352 --> 00:12:17.151 bit about a study that was recently

NOTE Confidence: 0.8454794

00:12:17.151 --> 00:12:18.851 published looking at breast

NOTE Confidence: 0.8454794

00:12:18.851 --> 00:12:20.880 cancers in predicting disease.

NOTE Confidence: 0.8454794

00:12:20.880 --> 00:12:23.310 I'm sorry B cells in predicting

NOTE Confidence: 0.8454794

00:12:23.310 --> 00:12:25.015 disease free survival in breast

NOTE Confidence: 0.8454794

00:12:25.015 --> 00:12:26.720 cancer patients and just as

NOTE Confidence: 0.8454794

00:12:26.786 --> 00:12:28.346 a little bit of background,

NOTE Confidence: 0.8454794

00:12:28.350 --> 00:12:30.562 metastasis is a frequent

NOTE Confidence: 0.8454794

00:12:30.562 --> 00:12:32.380 early event in many cancers,

NOTE Confidence: 0.8454794

00:12:32.380 --> 00:12:34.060 and so in breast cancer,

NOTE Confidence: 0.8454794

00:12:34.060 --> 00:12:36.405 lymph node invasion is a key determinant in

NOTE Confidence: 0.8454794

00:12:36.410 --> 00:12:37.520 prognosis and treatment.

NOTE Confidence: 0.8454794

00:12:37.520 --> 00:12:39.740 So our previous studies have shown

NOTE Confidence: 0.8454794

00:12:39.740 --> 00:12:42.325 that T cells and injured cells in the

NOTE Confidence: 0.8454794

00:12:42.325 --> 00:12:44.258 tumor draining lymph nodes may be

NOTE Confidence: 0.8454794

00:12:44.258 --> 00:12:46.166 altered in some breast cancer patients

NOTE Confidence: 0.8454794

00:12:46.166 --> 00:12:47.826 and can predict clinical outcome.

NOTE Confidence: 0.8454794

00:12:47.826 --> 00:12:50.259 But B cells are another major immune

NOTE Confidence: 0.8454794

00:12:50.259 --> 00:12:52.437 cell population for their role

NOTE Confidence: 0.8454794

00:12:52.437 --> 00:12:54.717 in solid cancers and is not well studied.

NOTE Confidence: 0.8454794

00:12:54.720 --> 00:12:56.590 So B cells isolated from

NOTE Confidence: 0.8454794

00:12:56.590 --> 00:12:58.086 tumor draining lymph nodes,

NOTE Confidence: 0.8454794

00:12:58.090 --> 00:12:59.530 specifically Sentinel lymph nodes,

NOTE Confidence: 0.8454794

00:12:59.530 --> 00:13:02.075 which are the first set of lymph nodes

NOTE Confidence: 0.8454794

00:13:02.075 --> 00:13:04.019 that the tumor drains into

NOTE Confidence: 0.8454794

00:13:04.019 --> 00:13:05.483 can recognize cancer associated

NOTE Confidence: 0.8454794

00:13:05.483 --> 00:13:08.033 antigens and are capable of producing

NOTE Confidence: 0.8454794

00:13:08.033 --> 00:13:09.693 antibodies against those antigens,

NOTE Confidence: 0.8454794

00:13:09.693 --> 00:13:11.991 and so in our study that

NOTE Confidence: 0.8454794

00:13:11.991 --> 00:13:13.420 we recently published

NOTE Confidence: 0.8454794

00:13:13.420 --> 00:13:15.290 we looked at the cells,

NOTE Confidence: 0.8454794

00:13:15.290 --> 00:13:17.534 and since all lymph nodes in

NOTE Confidence: 0.8454794

00:13:17.534 --> 00:13:18.656 breast cancer patients,

NOTE Confidence: 0.8454794

00:13:18.660 --> 00:13:20.958 we found that patients with higher

NOTE Confidence: 0.8454794

00:13:20.958 --> 00:13:23.269 numbers of these had longer

NOTE Confidence: 0.8454794

00:13:23.269 --> 00:13:25.049 disease free survival overall as

NOTE Confidence: 0.8454794

00:13:25.049 --> 00:13:27.509 well as in those patients with

NOTE Confidence: 0.8454794

00:13:27.510 --> 00:13:29.090 triple negative breast cancer

NOTE Confidence: 0.8454794

00:13:29.090 --> 00:13:31.065 that had actually good prognosis.

00:13:31.794 --> 00:13:33.604 Interestingly this can

NOTE Confidence: 0.8454794

00:13:33.604 --> 00:13:36.450 be seen in Melanoma patients and we

NOTE Confidence: 0.8454794

00:13:36.450 --> 00:13:38.982 recently also published this and

NOTE Confidence: 0.8454794

00:13:38.990 --> 00:13:41.475 we have found higher numbers

NOTE Confidence: 0.8454794

00:13:41.475 --> 00:13:43.044 correspond

NOTE Confidence: 0.8454794

00:13:43.044 --> 00:13:45.234 to longer progression free survival

NOTE Confidence: 0.8454794

00:13:45.234 --> 00:13:47.419 in patients with metastatic Melanoma

NOTE Confidence: 0.8454794

00:13:47.419 --> 00:13:49.690 treated with anti PDL1 immunotherapy.

NOTE Confidence: 0.87024033

00:13:51.250 --> 00:13:54.066 And so have we found a difference in

NOTE Confidence: 0.87024033

00:13:54.066 --> 00:13:57.215 terms of the number of B cells that are

NOTE Confidence: 0.87024033

00:13:57.215 --> 00:14:00.677 in tumors of people of African American

NOTE Confidence: 0.87024033

00:14:00.677 --> 00:14:03.290 descent versus Caucasians. So this

NOTE Confidence: 0.87024033

00:14:03.290 --> 00:14:06.188 is one of the things that we're

NOTE Confidence: 0.87024033

00:14:06.188 --> 00:14:08.680 looking at and that

NOTE Confidence: 0.87024033

00:14:08.680 --> 00:14:10.760 data is still to be evaluated.

NOTE Confidence: 0.87024033

00:14:10.760 --> 00:14:12.830 Certainly,

NOTE Confidence: 0.87024033

00:14:12.830 --> 00:14:15.518 if it's true that B cells do

NOTE Confidence: 0.87024033

00:14:15.518 --> 00:14:17.400 predict differences in survival,

NOTE Confidence: 0.87024033

00:14:17.400 --> 00:14:20.305 it sounds like it is a relatively

NOTE Confidence: 0.87024033

00:14:20.305 --> 00:14:22.298 simple prognostic factor.

00:14:24.920 --> 00:14:27.404 And it could give people an idea of

NOTE Confidence: 0.87024033

00:14:27.404 --> 00:14:30.129 how this biology is going to play out,

NOTE Confidence: 0.87024033

00:14:30.130 --> 00:14:32.223 particularly as it interfaces with

NOTE Confidence: 0.87024033

00:14:32.223 --> 00:14:34.456 the immune system.

NOTE Confidence: 0.87024033

00:14:34.460 --> 00:14:36.190 You're absolutely right, and

NOTE Confidence: 0.875178999999999

00:14:36.190 --> 00:14:38.080 the other thing that I'd like to

NOTE Confidence: 0.875178999999999

00:14:38.080 --> 00:14:40.031 point out too is that

NOTE Confidence: 0.875178999999999

00:14:40.031 --> 00:14:41.651 the immune system is called a

NOTE Confidence: 0.875178999999999

00:14:41.713 --> 00:14:43.705 system for a very specific reason.

NOTE Confidence: 0.875178999999999

00:14:43.710 --> 00:14:45.150 It works as a system,

NOTE Confidence: 0.875178999999999

00:14:45.150 --> 00:14:47.470 so B cells do not work in isolation.

NOTE Confidence: 0.875178999999999

00:14:47.470 --> 00:14:49.486 T cells do not work in isolation,

NOTE Confidence: 0.875178999999999

00:14:49.490 --> 00:14:52.790 and so all these things require

NOTE Confidence: 0.875178999999999

00:14:52.790 --> 00:14:54.925 to be working together

NOTE Confidence: 0.875178999999999

00:14:54.925 --> 00:14:57.277 and so this is one of the things

NOTE Confidence: 0.875178999999999

00:14:57.277 --> 00:14:59.839 that we need to think about when we

NOTE Confidence: 0.875178999999999

00:14:59.839 --> 00:15:01.724 make these prognostics and predict

NOTE Confidence: 0.875178999999999

00:15:01.724 --> 00:15:04.120 the tools is to consider all

NOTE Confidence: 0.875178999999999

00:15:04.120 --> 00:15:05.432 these different immune systems

NOTE Confidence: 0.875178999999999

00:15:05.432 --> 00:15:07.378 and put them together to make

NOTE Confidence: 0.875178999999999

00:15:07.378 --> 00:15:08.933 choices that we move forward.

NOTE Confidence: 0.8639356

00:15:08.940 --> 00:15:11.524 We're going to pick up on

NOTE Confidence: 0.8639356

00:15:11.524 --> 00:15:13.498 that conversation right after we take

NOTE Confidence: 0.8639356

00:15:13.498 --> 00:15:15.400 a short break for medical minute.

NOTE Confidence: 0.8639356

00:15:15.400 --> 00:15:17.738 Please stay tuned to learn more about

NOTE Confidence: 0.8639356

00:15:17.738 --> 00:15:19.714 health disparities and cancer and the

NOTE Confidence: 0.8639356

00:15:19.714 --> 00:15:21.860 immune system with my guest doctor Kim Blenman.

NOTE Confidence: 0.8639356

00:15:21.860 --> 00:15:23.900 Support comes from AstraZeneca,

NOTE Confidence: 0.8639356

00:15:23.900 --> 00:15:26.670 working side by side with

NOTE Confidence: 0.8639356

00:15:26.670 --> 00:15:28.614 leading scientists to better

NOTE Confidence: 0.8639356

00:15:28.614 --> 00:15:33.573 understand how complex data can be

NOTE Confidence: 0.8639356

00:15:33.573 --> 00:15:35.331 converted into

NOTE Confidence: 0.8639356

00:15:35.331 --> 00:15:36.210 innovative treatments. More information at astrazeneca-us.com.

NOTE Confidence: 0.8766435

00:15:38.220 --> 00:15:40.280 This is a medical minute

NOTE Confidence: 0.8766435

00:15:40.280 --> 00:15:41.516 about colorectal cancer.

NOTE Confidence: 0.8766435

00:15:41.520 --> 00:15:42.759 When detected early,

NOTE Confidence: 0.8766435

00:15:42.759 --> 00:15:44.824 colorectal cancer is easily treated

NOTE Confidence: 0.8766435

00:15:44.830 --> 00:15:47.714 and highly curable and as a result,

NOTE Confidence: 0.8766435

00:15:47.720 --> 00:15:49.940 it's recommended that men and women

NOTE Confidence: 0.8766435

00:15:49.940 --> 00:15:52.856 over the age of 50 have regular

NOTE Confidence: 0.8766435

00:15:52.856 --> 00:15:55.568 colonoscopies to screen for the disease.

NOTE Confidence: 0.8766435

00:15:55.570 --> 00:15:58.072 Tumor gene analysis has helped improve

NOTE Confidence: 0.8766435

00:15:58.072 --> 00:15:59.740 management of colorectal cancer

NOTE Confidence: 0.8766435

00:15:59.809 --> 00:16:01.834 by identifying the patients most

NOTE Confidence: 0.8766435

00:16:01.834 --> 00:16:03.859 likely to benefit from chemotherapy

NOTE Confidence: 0.8766435

00:16:03.928 --> 00:16:05.480 and newer targeted agents,

NOTE Confidence: 0.8766435

00:16:05.480 --> 00:16:07.380 resulting in more patient

NOTE Confidence: 0.8766435

00:16:07.380 --> 00:16:08.330 specific treatments.

NOTE Confidence: 0.8766435

00:16:08.330 --> 00:16:10.374 More information is available

NOTE Confidence: 0.8766435

00:16:10.374 --> 00:16:11.396 at yalecancercenter.org.

NOTE Confidence: 0.8766435

00:16:11.400 --> 00:16:15.600 You're listening to Connecticut public radio.

NOTE Confidence: 0.8766435

00:16:15.600 --> 00:16:16.000 Welcome

NOTE Confidence: 0.86405337

00:16:16.000 --> 00:16:18.020 back to Yale Cancer Answers.

NOTE Confidence: 0.86405337

00:16:18.020 --> 00:16:21.368 This is doctor Anees Chagpar and I'm

NOTE Confidence: 0.86405337

00:16:21.368 --> 00:16:24.886 joined tonight by my guest doctor Kim Blenman

NOTE Confidence: 0.86405337

00:16:24.890 --> 00:16:27.326 and we're talking about health disparities

NOTE Confidence: 0.86405337

00:16:27.326 --> 00:16:30.140 in cancer and right before the break

NOTE Confidence: 0.86405337

00:16:30.140 --> 00:16:32.222 Kim, you were talking to us

NOTE Confidence: 0.86405337

00:16:32.222 --> 00:16:34.639 about some of the studies that

NOTE Confidence: 0.86405337

00:16:34.639 --> 00:16:37.009 you're doing in breast cancer,

NOTE Confidence: 0.86405337

00:16:37.010 --> 00:16:39.470 and specifically one study in triple

NOTE Confidence: 0.86405337

00:16:39.470 --> 00:16:41.622 negative breast cancers where you're

NOTE Confidence: 0.86405337

00:16:41.622 --> 00:16:43.386 looking retrospectively at the

NOTE Confidence: 0.86405337

00:16:43.386 --> 00:16:45.591 various immune systems and immune

NOTE Confidence: 0.86405337

00:16:45.662 --> 00:16:48.086 responses that are mounted by patients

NOTE Confidence: 0.86405337

00:16:48.090 --> 00:16:50.694 with triple negative breast cancer and

NOTE Confidence: 0.86405337

00:16:50.694 --> 00:16:54.409 you kind of left us hanging

NOTE Confidence: 0.86405337

00:16:54.409 --> 00:16:57.954 in terms of the details of whether this

NOTE Confidence: 0.86405337

00:16:57.954 --> 00:17:00.569 is really different between African

NOTE Confidence: 0.86405337

00:17:00.569 --> 00:17:02.522 Americans and Caucasian patients.

NOTE Confidence: 0.86405337

00:17:02.522 --> 00:17:04.326 We know, for example,

NOTE Confidence: 0.86405337

00:17:04.330 --> 00:17:06.634 that in triple negative breast cancer

NOTE Confidence: 0.86405337

00:17:06.634 --> 00:17:10.314 it seems to be more prevalent in African

NOTE Confidence: 0.86405337

00:17:10.314 --> 00:17:12.899 Americans than in Caucasian patients.

NOTE Confidence: 0.86405337

00:17:12.900 --> 00:17:15.852 Can you shed some more light on how

NOTE Confidence: 0.86405337

00:17:15.852 --> 00:17:17.861 different cancers affect different

NOTE Confidence: 0.86405337

00:17:17.861 --> 00:17:19.658 racial groups differently?

NOTE Confidence: 0.84283894

00:17:20.750 --> 00:17:23.515 Yes, and as I mentioned,

NOTE Confidence: 0.84283894

00:17:23.520 --> 00:17:26.360 my research interest is in the

NOTE Confidence: 0.84283894

00:17:26.360 --> 00:17:28.437 biological factors responsible for

NOTE Confidence: 0.84283894

00:17:28.437 --> 00:17:31.047 disparities and disease and their responses.

NOTE Confidence: 0.84283894

00:17:31.050 --> 00:17:32.630 So in that context,

NOTE Confidence: 0.84283894

00:17:32.630 --> 00:17:34.605 Melanoma is a great example.

NOTE Confidence: 0.84283894

00:17:34.610 --> 00:17:37.571 So Melanoma is a skin cancer that

NOTE Confidence: 0.84283894

00:17:37.571 --> 00:17:40.339 occurs most commonly when the DNA in

NOTE Confidence: 0.84283894

00:17:40.339 --> 00:17:42.930 melanocytes is damaged by UV rays.

NOTE Confidence: 0.84283894

00:17:42.930 --> 00:17:44.382 That is sun exposure.

NOTE Confidence: 0.84283894

00:17:44.382 --> 00:17:46.197 So melanocytes are the

NOTE Confidence: 0.84283894

00:17:46.197 --> 00:17:48.068 cells that produce melanin,

NOTE Confidence: 0.84283894

00:17:48.070 --> 00:17:50.900 which gives skin its color.

NOTE Confidence: 0.84283894

00:17:50.900 --> 00:17:53.868 Eumelanin is a type of melanin that

NOTE Confidence: 0.84283894

00:17:53.868 --> 00:17:56.447 is responsible for darkening the skin

NOTE Confidence: 0.84283894

00:17:56.447 --> 00:17:59.783 and it has the ability to protect the

NOTE Confidence: 0.84283894

00:17:59.783 --> 00:18:02.534 skin from UV damage so when individuals

NOTE Confidence: 0.84283894

00:18:02.534 --> 00:18:06.218 tan as a result of exposure to the sun,

NOTE Confidence: 0.84283894

00:18:06.220 --> 00:18:08.656 youe melanin is responsible for the

NOTE Confidence: 0.84283894

00:18:08.656 --> 00:18:12.430 visible color that you see as the tan so

NOTE Confidence: 0.84283894

00:18:12.430 --> 00:18:14.500 individuals with naturally darker skin,

NOTE Confidence: 0.84283894

00:18:14.500 --> 00:18:17.062 have more eumelanin and are therefore

NOTE Confidence: 0.84283894

00:18:17.062 --> 00:18:19.384 at lower risk for developing

NOTE Confidence: 0.84283894

00:18:19.384 --> 00:18:21.496 UV induced skin cancer.

NOTE Confidence: 0.84283894

00:18:21.500 --> 00:18:22.733 So for decades,

NOTE Confidence: 0.84283894

00:18:22.733 --> 00:18:25.610 the messages that were shared in general

NOTE Confidence: 0.84283894

00:18:25.691 --> 00:18:28.722 and in communities of people of color

NOTE Confidence: 0.84283894

00:18:28.722 --> 00:18:31.204 with naturally darker skin was that

NOTE Confidence: 0.84283894

00:18:31.204 --> 00:18:33.773 people of color do not get Melanoma.

NOTE Confidence: 0.84283894

00:18:33.780 --> 00:18:34.125 However,

NOTE Confidence: 0.84283894

00:18:34.125 --> 00:18:36.885 today we know that the most common form

NOTE Confidence: 0.84283894

00:18:36.885 --> 00:18:39.492 of Melanoma found in individuals with

NOTE Confidence: 0.84283894

00:18:39.492 --> 00:18:42.370 naturally darker skin is acral Melanoma,

NOTE Confidence: 0.84283894

00:18:42.370 --> 00:18:45.598 which is often found under nails.

NOTE Confidence: 0.84283894

00:18:45.600 --> 00:18:49.240 On the palms of hands and the soles of feet,

NOTE Confidence: 0.84283894

00:18:49.240 --> 00:18:51.788 and disease of face.

NOTE Confidence: 0.84283894

00:18:51.790 --> 00:18:53.610 The musician Bob Marley from

NOTE Confidence: 0.84283894

00:18:53.610 --> 00:18:55.430 Jamaica died of acral Melanoma.

NOTE Confidence: 0.84283894

00:18:55.430 --> 00:18:58.112 And so this is a good

NOTE Confidence: 0.84283894

00:18:58.112 --> 00:19:00.672 example of why it's

NOTE Confidence: 0.84283894

00:19:00.672 --> 00:19:02.615 important that we actually take into

NOTE Confidence: 0.84283894

00:19:02.615 --> 00:19:04.690 account these biological factors and

NOTE Confidence: 0.84283894

00:19:04.690 --> 00:19:08.082 try to find or look for things that

NOTE Confidence: 0.84283894

00:19:08.082 --> 00:19:11.742 may give us some clues as to why

NOTE Confidence: 0.84283894

00:19:11.742 --> 00:19:14.634 things are different that are not

NOTE Confidence: 0.84283894

00:19:14.640 --> 00:19:16.842 a part of social determinants of Health

NOTE Confidence: 0.84283894

00:19:16.842 --> 00:19:20.316 and so this is how we really got

NOTE Confidence: 0.84283894

00:19:20.316 --> 00:19:22.251 interested in looking into these

NOTE Confidence: 0.84283894

00:19:24.612 --> 00:19:26.450 different factors for

NOTE Confidence: 0.87070274

00:19:26.450 --> 00:19:27.958 these different cancers.

NOTE Confidence: 0.87070274

00:19:27.958 --> 00:19:31.019 That makes sense in in Melanoma,

NOTE Confidence: 0.87070274

00:19:31.020 --> 00:19:33.652 in breast cancer we were

NOTE Confidence: 0.87070274

00:19:33.652 --> 00:19:35.599 talking about before the break

NOTE Confidence: 0.87070274

00:19:35.600 --> 00:19:38.424 it's a little bit more

NOTE Confidence: 0.87070274

00:19:38.424 --> 00:19:40.863 tricky in the sense that there doesn't

NOTE Confidence: 0.87070274

00:19:40.863 --> 00:19:43.980 seem to be a particular factor.

NOTE Confidence: 0.87070274

00:19:43.980 --> 00:19:45.285 Something like eumelanin,

NOTE Confidence: 0.87070274

00:19:45.285 --> 00:19:47.895 which would be different between African

NOTE Confidence: 0.87070274

00:19:47.895 --> 00:19:49.709 Americans and Caucasian patients,

NOTE Confidence: 0.87070274

00:19:49.710 --> 00:19:52.097 which I guess is how you

NOTE Confidence: 0.87070274

00:19:52.097 --> 00:19:54.909 got into thinking about

NOTE Confidence: 0.87070274

00:19:54.910 --> 00:19:57.955 why is it that triple negative

NOTE Confidence: 0.87070274

00:19:57.955 --> 00:20:00.580 breast cancer is more common in

NOTE Confidence: 0.87070274

00:20:00.580 --> 00:20:03.040 African American patients

NOTE Confidence: 0.87070274

00:20:03.040 --> 00:20:06.094 and could this have something

NOTE Confidence: 0.87070274

00:20:06.094 --> 00:20:09.124 to do with their immune system?

NOTE Confidence: 0.87070274

00:20:09.130 --> 00:20:11.890 Because certainly we know that triple

NOTE Confidence: 0.87070274

00:20:11.890 --> 00:20:14.660 negative breast cancers are immunogenic.

NOTE Confidence: 0.8269527

00:20:15.550 --> 00:20:16.429 Exactly, and actually,

NOTE Confidence: 0.8269527

00:20:16.429 --> 00:20:17.894 that's the link with

NOTE Confidence: 0.8269527

00:20:17.894 --> 00:20:19.358 the acral Melanoma as well.

NOTE Confidence: 0.8269527

00:20:19.360 --> 00:20:21.076 So the thing about acral

NOTE Confidence: 0.8269527

00:20:21.076 --> 00:20:23.388 Melanoma is that it actually has a

NOTE Confidence: 0.8269527

00:20:23.388 --> 00:20:25.218 lot of infiltrating immune cells.

NOTE Confidence: 0.8269527

00:20:25.220 --> 00:20:27.740 and are a little bit less

NOTE Confidence: 0.8269527

00:20:27.740 --> 00:20:30.018 involved in individuals of Caucasian descent,

NOTE Confidence: 0.8269527

00:20:30.020 --> 00:20:32.260 and so

NOTE Confidence: 0.8269527

00:20:32.260 --> 00:20:33.540 you're thinking about, okay

NOTE Confidence: 0.8269527

00:20:33.540 --> 00:20:35.780 let's look at the immune cells.

NOTE Confidence: 0.8269527

00:20:35.780 --> 00:20:37.060 You know there's something

NOTE Confidence: 0.8269527

00:20:37.060 --> 00:20:38.660 different about the immune cells.

NOTE Confidence: 0.8269527

00:20:38.660 --> 00:20:41.220 and the types of cells also infiltrated

NOTE Confidence: 0.8269527

00:20:41.220 --> 00:20:44.230 that's making these differences that we see.

00:20:44.610 --> 00:20:47.546 And I suppose you did

NOTE Confidence: 0.87743926

00:20:47.546 --> 00:20:49.509 mention before the break about

NOTE Confidence: 0.87743926

00:20:49.509 --> 00:20:51.807 your study looking at B cells,

NOTE Confidence: 0.87743926

00:20:51.810 --> 00:20:54.253 and I believe you mentioned that you

NOTE Confidence: 0.87743926

00:20:54.253 --> 00:20:57.224 found that B cells were tied to prognosis

NOTE Confidence: 0.87743926

00:20:57.224 --> 00:21:00.150 in both Melanoma and in breast cancer,

NOTE Confidence: 0.87743926

00:21:00.150 --> 00:21:02.988 correct?

NOTE Confidence: 0.87743926

00:21:02.990 --> 00:21:06.554 I guess that leads us to the next study

NOTE Confidence: 0.87743926

00:21:06.554 --> 00:21:10.190 that you had mentioned before the break,

NOTE Confidence: 0.87743926

00:21:10.190 --> 00:21:12.440 which is a prospective trial

NOTE Confidence: 0.87743926

00:21:12.440 --> 00:21:14.240 looking at immunotherapy because,

NOTE Confidence: 0.87743926

00:21:14.240 --> 00:21:17.840 as we've talked about on the show previously,

NOTE Confidence: 0.87743926

00:21:17.840 --> 00:21:21.440 and as many of our listeners may know,

NOTE Confidence: 0.87743926

00:21:21.440 --> 00:21:22.790 immunotherapy actually has

NOTE Confidence: 0.87743926

00:21:22.790 --> 00:21:25.040 really taken hold in Melanoma

NOTE Confidence: 0.87743926

00:21:25.040 --> 00:21:27.791 and is just starting to get evaluated

NOTE Confidence: 0.87743926

00:21:27.791 --> 00:21:30.607 in breast cancer and specifically in

NOTE Confidence: 0.87743926

00:21:30.607 --> 00:21:32.910 triple negative breast cancer, so

NOTE Confidence: 0.87743926

00:21:32.910 --> 00:21:34.450 maybe you can tell us a little

NOTE Confidence: 0.87743926

00:21:34.450 --> 00:21:36.067 bit more about your work there.

00:21:40.034 --> 00:21:42.113 In the last five to 10 years or so

NOTE Confidence: 0.85514045

00:21:42.120 --> 00:21:43.610 you've mentioned,

NOTE Confidence: 0.85514045

00:21:43.610 --> 00:21:45.175 we've started to really recognize

NOTE Confidence: 0.85514045

00:21:45.175 --> 00:21:47.345 that the immune system has a role in

NOTE Confidence: 0.85514045

00:21:47.345 --> 00:21:48.995 how cancer patients will respond to

NOTE Confidence: 0.85514045

00:21:48.995 --> 00:21:51.057 many of the therapies that we give,

NOTE Confidence: 0.85514045

00:21:51.060 --> 00:21:51.654 including chemotherapy.

NOTE Confidence: 0.85514045

00:21:51.654 --> 00:21:53.733 So to take advantage of that fact,

NOTE Confidence: 0.85514045

00:21:53.740 --> 00:21:55.230 we are, as you mentioned,

NOTE Confidence: 0.85514045

00:21:55.230 --> 00:21:56.904 starting to identify and use therapies

NOTE Confidence: 0.85514045

00:21:56.904 --> 00:21:58.703 that directly impact the immune system

NOTE Confidence: 0.85514045

00:21:58.703 --> 00:22:00.593 alone or in combination with chemotherapy.

NOTE Confidence: 0.85514045

00:22:00.600 --> 00:22:01.389 So, for example,

NOTE Confidence: 0.85514045

00:22:01.389 --> 00:22:03.597 we have an ongoing study that

NOTE Confidence: 0.85514045

00:22:03.597 --> 00:22:05.802 is evaluating the benefit of giving our

NOTE Confidence: 0.85514045

00:22:05.802 --> 00:22:07.699 triple negative breast cancer patients

NOTE Confidence: 0.85514045

00:22:07.700 --> 00:22:10.085 Anti PDL1 immunotherapy with

NOTE Confidence: 0.85514045

00:22:10.085 --> 00:22:11.993 chemotherapy before they're taken

NOTE Confidence: 0.85514045

00:22:11.993 --> 00:22:14.783 to surgery and the advantage of that

NOTE Confidence: 0.85514045

00:22:14.783 --> 00:22:17.319 is that we're trying to understand

NOTE Confidence: 0.85514045

00:22:17.320 --> 00:22:19.780 whether or not this

NOTE Confidence: 0.85514045

00:22:19.780 --> 00:22:21.970 particular regiment of giving that

NOTE Confidence: 0.85514045

00:22:21.970 --> 00:22:24.340 immunotherapy could help boost

NOTE Confidence: 0.85514045

00:22:24.340 --> 00:22:26.592 the immune system's ability to

NOTE Confidence: 0.85514045

00:22:26.592 --> 00:22:28.856 see the cancer or to break it down

NOTE Confidence: 0.85514045

00:22:28.856 --> 00:22:30.716 so that the chemotherapy itself

NOTE Confidence: 0.85514045

00:22:30.716 --> 00:22:33.080 can respond better to the cancer.

NOTE Confidence: 0.85514045

00:22:33.080 --> 00:22:34.656 And, as I said,

NOTE Confidence: 0.85514045

00:22:34.656 --> 00:22:36.626 the study is still ongoing,

NOTE Confidence: 0.85514045

00:22:36.630 --> 00:22:39.633 but we are starting to see some

NOTE Confidence: 0.85514045

00:22:39.633 --> 00:22:41.466 very interesting results that

NOTE Confidence: 0.85514045

00:22:41.466 --> 00:22:43.766 have some positive benefit

NOTE Confidence: 0.85514045

00:22:43.770 --> 00:22:46.656 for Anti PDL1.

NOTE Confidence: 0.8417335

00:22:46.660 --> 00:22:49.060 Now how does

NOTE Confidence: 0.8417335

00:22:49.060 --> 00:22:50.500 that immunotherapy work,

NOTE Confidence: 0.8417335

00:22:50.500 --> 00:22:52.964 particularly for people who

NOTE Confidence: 0.8417335

00:22:52.964 --> 00:22:57.689 have PD L1 or PDL or PD one

NOTE Confidence: 0.8417335

00:22:57.690 --> 00:23:00.216 receptors or would it work

NOTE Confidence: 0.8417335

00:23:00.216 --> 00:23:02.320 for any triple negative?

NOTE Confidence: 0.8511913

00:23:02.320 --> 00:23:04.870 Actually this is

NOTE Confidence: 0.8511913

00:23:04.870 --> 00:23:07.146 kind of interesting because we're

NOTE Confidence: 0.8511913

00:23:07.146 --> 00:23:10.110 actually finding that we are getting

NOTE Confidence: 0.8511913

00:23:10.110 --> 00:23:12.466 affected regardless of whether or

NOTE Confidence: 0.8511913

00:23:12.466 --> 00:23:14.860 not the individuals have PD L1

NOTE Confidence: 0.8511913

00:23:14.860 --> 00:23:16.770 as part of their tumor,

NOTE Confidence: 0.8511913

00:23:16.770 --> 00:23:19.122 and so there are other things

NOTE Confidence: 0.8511913

00:23:19.122 --> 00:23:21.420 going on there that are mediating

NOTE Confidence: 0.8511913

00:23:21.420 --> 00:23:23.850 this response that we're still trying

NOTE Confidence: 0.8511913

00:23:23.850 --> 00:23:26.318 to learn for this particular PD1

NOTE Confidence: 0.8511913

00:23:26.320 --> 00:23:28.960 PD L1 Axis.

NOTE Confidence: 0.86525035

00:23:28.960 --> 00:23:31.456 So it's certainly a really interesting

NOTE Confidence: 0.86525035

00:23:31.456 --> 00:23:34.080 and novel thing to think about,

NOTE Confidence: 0.86525035

00:23:34.080 --> 00:23:37.136 and I know many of our listeners are

NOTE Confidence: 0.86525035

00:23:37.136 --> 00:23:39.210 always intrigued by immunotherapy.

NOTE Confidence: 0.86525035

00:23:39.210 --> 00:23:42.618 It seems to be a really hot topic,

NOTE Confidence: 0.86525035

00:23:42.620 --> 00:23:45.176 but when we think about immunotherapy,

NOTE Confidence: 0.86525035

00:23:45.180 --> 00:23:48.636 one of the things that we always caution

NOTE Confidence: 0.86525035

00:23:48.636 --> 00:23:51.158 patients about is the side effects,

NOTE Confidence: 0.86525035

00:23:51.160 --> 00:23:54.020 which tend to be

NOTE Confidence: 0.86525035

00:23:54.020 --> 00:23:57.576 side effects that are an exacerbation of

NOTE Confidence: 0.86525035

00:23:57.576 --> 00:24:00.637 the immune system because essentially you

NOTE Confidence: 0.86525035

00:24:00.637 --> 00:24:04.799 rev up your immune system or as you say,

NOTE Confidence: 0.86525035

00:24:04.800 --> 00:24:07.620 you can make tumor cells more

NOTE Confidence: 0.86525035

00:24:07.620 --> 00:24:10.190 susceptible to the immune system,

NOTE Confidence: 0.86525035

00:24:10.190 --> 00:24:12.926 now have you noticed a difference

NOTE Confidence: 0.86525035

00:24:12.926 --> 00:24:15.889 in terms of racial groups with

NOTE Confidence: 0.86525035

00:24:15.889 --> 00:24:18.519 regards to those side effects?

NOTE Confidence: 0.86525035

00:24:18.520 --> 00:24:20.945 Because you mentioned that there

NOTE Confidence: 0.86525035

00:24:20.945 --> 00:24:23.996 is a racial difference in terms

NOTE Confidence: 0.86525035

00:24:23.996 --> 00:24:26.140 of autoimmune diseases so

NOTE Confidence: 0.86525035

00:24:26.140 --> 00:24:28.228 one would imagine that there might

NOTE Confidence: 0.86525035

00:24:28.228 --> 00:24:31.232 be a difference in terms of the side

NOTE Confidence: 0.86525035

00:24:31.232 --> 00:24:33.162 effects with immunotherapy as well.

NOTE Confidence: 0.86525035

00:24:33.170 --> 00:24:34.280 Have you found

NOTE Confidence: 0.89420384

00:24:34.280 --> 00:24:36.518 that so?

NOTE Confidence: 0.89420384

00:24:36.518 --> 00:24:38.424 That's a great question and something that

NOTE Confidence: 0.89420384

00:24:38.424 --> 00:24:40.199 we are actually evaluating now.

NOTE Confidence: 0.89420384

00:24:40.200 --> 00:24:42.420 And so as I said,

NOTE Confidence: 0.89420384

00:24:42.420 --> 00:24:44.270 the study is still ongoing,

NOTE Confidence: 0.89420384

00:24:44.270 --> 00:24:46.208 so we don't have enough patients

NOTE Confidence: 0.89420384

00:24:46.208 --> 00:24:48.422 collected yet in the different groups

NOTE Confidence: 0.89420384

00:24:48.422 --> 00:24:50.557 to actually make any statements.

NOTE Confidence: 0.89420384

00:24:50.560 --> 00:24:52.455 But this is actually something

NOTE Confidence: 0.89420384

00:24:52.455 --> 00:24:54.630 that I am very interested in.

NOTE Confidence: 0.89420384

00:24:54.630 --> 00:24:56.580 And is one of my

NOTE Confidence: 0.89420384

00:24:56.580 --> 00:24:58.938 major goals of this study is

NOTE Confidence: 0.89420384

00:24:58.938 --> 00:25:01.728 to try to tease out NOTE Confidence: 0.89420384

00:25:01.728 --> 00:25:04.032 those potential differences that we see

NOTE Confidence: 0.89420384

00:25:04.032 --> 00:25:06.129 between different populations of people,

NOTE Confidence: 0.89420384

00:25:06.130 --> 00:25:08.120 but no, we don't

NOTE Confidence: 0.89420384

00:25:08.120 --> 00:25:10.508 have that information yet,

NOTE Confidence: 0.89420384

00:25:10.510 --> 00:25:13.597 but I suspect that we will be able to

NOTE Confidence: 0.89420384

00:25:13.597 --> 00:25:16.880 see in these studies and other studies

NOTE Confidence: 0.8644986

00:25:16.880 --> 00:25:18.248 that others are doing.

NOTE Confidence: 0.8644986

00:25:18.248 --> 00:25:19.958 Do we know whether different

NOTE Confidence: 0.8644986

00:25:19.958 --> 00:25:21.803 racial groups will respond

NOTE Confidence: 0.8644986

00:25:21.803 --> 00:25:23.246 differently to immunotherapy?

NOTE Confidence: 0.8644986

00:25:23.250 --> 00:25:26.092 For example, if patients have a

NOTE Confidence: 0.8644986

00:25:26.092 --> 00:25:28.818 similar tumor in terms of their PDL1

NOTE Confidence: 0.8644986

00:25:28.820 --> 00:25:32.446 status. The size of the tumor,

NOTE Confidence: 0.8644986

00:25:32.450 --> 00:25:35.122 the B cells and the T cells that

NOTE Confidence: 0.8644986

00:25:35.122 --> 00:25:38.261 are in the micro environment and

NOTE Confidence: 0.8644986

00:25:38.261 --> 00:25:40.637 you give them immunotherapy.

NOTE Confidence: 0.8644986

00:25:40.640 --> 00:25:42.372 Do we know whether,

NOTE Confidence: 0.8644986

00:25:42.372 --> 00:25:45.640 just by fact of different racial groups,

NOTE Confidence: 0.8644986

00:25:45.640 --> 00:25:48.376 they will Mount a different immune

NOTE Confidence: 0.8644986

00:25:48.376 --> 00:25:51.172 response that will then result in

NOTE Confidence: 0.8644986

00:25:51.172 --> 00:25:53.830 differences in terms of the effect?

NOTE Confidence: 0.8712113

00:25:55.770 --> 00:25:58.826 So I think one of the first things

NOTE Confidence: 0.8712113

00:25:58.826 --> 00:26:01.874 that we need to think about is

NOTE Confidence: 0.8712113

00:26:01.874 --> 00:26:04.610 the individual and

NOTE Confidence: 0.8712113

00:26:04.610 --> 00:26:07.074 for that purpose you know

NOTE Confidence: 0.8712113

00:26:07.074 --> 00:26:09.439 the health of the individuals is

NOTE Confidence: 0.8712113

00:26:09.440 --> 00:26:11.048 influenced by many interconnected

NOTE Confidence: 0.8712113

00:26:11.048 --> 00:26:13.460 factors such as their individual biology,

NOTE Confidence: 0.8712113

00:26:13.460 --> 00:26:14.410 their behavior,

NOTE Confidence: 0.8712113

00:26:14.410 --> 00:26:16.310 environmental and physical influences.

NOTE Confidence: 0.8712113

00:26:16.310 --> 00:26:18.501 The type of medical care that they're

NOTE Confidence: 0.8712113

00:26:18.501 --> 00:26:20.293 getting and the social determinants

NOTE Confidence: 0.8712113

00:26:20.293 --> 00:26:22.669 which are influenced by both the

NOTE Confidence: 0.8712113

00:26:22.669 --> 00:26:24.819 socio economic and political factors.

NOTE Confidence: 0.8712113

00:26:24.820 --> 00:26:27.428 And so we now know that each of

NOTE Confidence: 0.8712113

00:26:27.428 --> 00:26:30.187 these factors can lead to the health

NOTE Confidence: 0.8712113

00:26:30.187 --> 00:26:32.217 disparities that exist in cancer,

NOTE Confidence: 0.8712113

00:26:32.220 --> 00:26:35.116 and so these are the things that we

NOTE Confidence: 0.8712113

00:26:35.116 --> 00:26:37.400 actually need to consider when we

NOTE Confidence: 0.8712113

00:26:37.400 --> 00:26:39.250 talk about potentially,

NOTE Confidence: 0.8712113

00:26:39.250 --> 00:26:41.100 one population being

NOTE Confidence: 0.8712113

00:26:41.100 --> 00:26:42.580 different than the other,

NOTE Confidence: 0.8712113

00:26:42.580 --> 00:26:46.436 and so I think the individual health is

NOTE Confidence: 0.8712113

00:26:46.440 --> 00:26:49.715 something that we should

NOTE Confidence: 0.8712113

00:26:49.715 --> 00:26:52.990 consider versus the entire population

NOTE Confidence: 0.8712113

00:26:53.089 --> 00:26:54.919 of that individual.

NOTE Confidence: 0.8712113

00:26:54.920 --> 00:26:58.350 So with that being said,

NOTE Confidence: 0.8712113

00:26:58.350 --> 00:27:00.331 it's going to be determinant on what

NOTE Confidence: 0.8712113

00:27:00.331 --> 00:27:01.810 their biology is that individual

NOTE Confidence: 0.8712113

00:27:01.810 --> 00:27:04.114 biology and how they are going

NOTE Confidence: 0.8712113

00:27:04.171 --> 00:27:06.199 to respond to that individual therapy,

NOTE Confidence: 0.8712113

00:27:06.200 --> 00:27:08.441 and so I don't want to generalize to an

NOTE Confidence: 0.8712113

00:27:08.441 --> 00:27:10.429 entire population on that perspective,

NOTE Confidence: 0.8712113

00:27:10.430 --> 00:27:12.656 but I think you know the more

NOTE Confidence: 0.8712113

00:27:12.656 --> 00:27:14.050 pressing question for me is,

NOTE Confidence: 0.8712113

00:27:14.748 --> 00:27:17.191 how can we overcome these

NOTE Confidence: 0.8712113

00:27:17.191 --> 00:27:19.286 disparities that I just mentioned and for

NOTE Confidence: 0.8712113

00:27:19.286 --> 00:27:21.909 me I think that we need to

NOTE Confidence: 0.8712113

00:27:22.512 --> 00:27:24.619 do more inclusive research.

NOTE Confidence: 0.8712113

00:27:24.620 --> 00:27:26.629 We need to recognize that as human

NOTE Confidence: 0.8712113

00:27:26.629 --> 00:27:29.016 beings we are part of a collective that

NOTE Confidence: 0.8712113

00:27:29.016 --> 00:27:31.260 is made up of different populations.

NOTE Confidence: 0.8712113

00:27:31.260 --> 00:27:33.316 And then in order for us to move

NOTE Confidence: 0.8712113

00:27:33.316 --> 00:27:35.150 forward in science and medicine,

NOTE Confidence: 0.8712113

00:27:35.150 --> 00:27:37.286 we need to include all of our populations

NOTE Confidence: 0.8712113

00:27:37.286 --> 00:27:39.329 in all of our research endeavors.

NOTE Confidence: 0.8712113

00:27:39.330 --> 00:27:41.255 And this level of diversity is not only

NOTE Confidence: 0.8712113

00:27:41.255 --> 00:27:43.517 required in the populations that we study,

NOTE Confidence: 0.8712113

00:27:43.520 --> 00:27:45.608 but it also needs to be equally represented

NOTE Confidence: 0.8712113

00:27:45.608 --> 00:27:47.445 in the faculty members that are

NOTE Confidence: 0.8712113

00:27:47.445 --> 00:27:49.800 performing and or involved in these studies.

NOTE Confidence: 0.8712113

00:27:49.800 --> 00:27:51.290 So again, representing the diversity

NOTE Confidence: 0.8712113

00:27:51.290 --> 00:27:52.482 of our global population.

NOTE Confidence: 0.8712113

00:27:52.490 --> 00:27:53.044 But again,

NOTE Confidence: 0.8712113

00:27:53.598 --> 00:27:55.260 giving us some concept of the

NOTE Confidence: 0.8712113

00:27:55.324 --> 00:27:56.380 individual as well.

NOTE Confidence: 0.8872093

00:27:56.960 --> 00:27:58.052 Doctor Kim Blenman

NOTE Confidence: 0.8872093

00:27:58.052 --> 00:27:59.872 is an associate research

NOTE Confidence: 0.8872093

00:27:59.872 --> 00:28:01.413 scientist in medical oncology

NOTE Confidence: 0.8872093

00:28:01.413 --> 00:28:03.639 at the Yale School of Medicine.

NOTE Confidence: 0.8872093

00:28:03.640 --> 00:28:05.128 If you have questions,

NOTE Confidence: 0.8872093

00:28:05.128 --> 00:28:06.616 the address is canceranswers@yale.edu

NOTE Confidence: 0.8872093

00:28:06.616 --> 00:28:08.671 and past editions of the program

NOTE Confidence: 0.8872093

00:28:08.671 --> 00:28:10.549 are available in audio and written

NOTE Confidence: 0.8872093

00:28:10.604 --> 00:28:12.170 form at Yalecancercenter.org.

NOTE Confidence: 0.8872093

00:28:12.170 --> 00:28:14.626 We hope you'll join us next week to

NOTE Confidence: 0.8872093

00:28:14.626 --> 00:28:17.020 learn more about the fight against

NOTE Confidence: 0.8872093

00:28:17.020 --> 00:28:19.582 cancer here on Connecticut public radio.